OPMB file Copy

Smithsonian

FY 2003 Budget Justification to OMB

September 2001

ADMINISTRATIVELY CONFIDENTIAL
Information not to be released until after the President's Budget is submitted to the Congress in 2002

Smithsonian Institution
Fiscal Year 2003 Budget Request to OMB
TABLE OF CONTENTS

The Smithsonian Institution in the 21st Century

As the guardian of our nation's greatest historic, cultural, and scientific treasures, the Smithsonian takes its task of serving the American public very seriously. For more than 155 years, this Institution has worked hard to fulfill its mission, "the increase and diffusion of knowledge." Over the decades, commitment to that mission has raised new challenges. In the first decade of the 21st century, the Smithsonian faces serious fiscal issues. It is not an exaggeration to say the Institution is at a turning point.

The Smithsonian is a unique entity, an independent trust instrumentality, that is dependent on the federal government for nearly 70 percent of its funding. Ever mindful of and grateful for this support, the Smithsonian is committed to improving its communications with both OMB and Congress, and to providing each with the information necessary to justify their continued support.

Part of that communication includes a frank assessment of where the Institution currently stands. The recently released National Academy of Public Administration's (NAPA) report, *A Study of the Smithsonian Institution's Repair, Restoration and Alteration of Facilities Program*, confirms what the Institution has also concluded—there is a significant amount of expensive work to do to modernize the Smithsonian's aging buildings and infrastructure. Namely, the NAPA report concurs that the Smithsonian needs to spend more than $1 billion over the next decade to fully repair, renovate, and improve its facilities. In fact, NAPA believes the Smithsonian's previous estimate of $1.2 billion for such work could be low, and the actual cost could be closer to $1.5 billion. NAPA also concurs that the Institution needs to replace its outdated, inadequate financial and human resources systems.

The Institution views the NAPA report as a valuable blueprint for the future, and has used it to help structure the FY 2003 budget request and define some of the Smithsonian's priorities. Many of the NAPA recommendations, however, have resulted in the Smithsonian escalating its request in FY 2003 and subsequent years above previously provided control totals for both Salaries and Expenses and Repair, Restoration and Alterations (RR&A).

Given such realities, Smithsonian priorities fall into three categories: first, funding to keep Institution museums in operation, collections safe, and research programs intact; in other words, what are referred to as mandatory costs. These include what is necessary to meet current requirements in staff salaries and benefits, including pay raises, and utilities, postage, communications, and rent.

The Smithsonian's second priority is funding increases for NAPA-recommended activities such as addressing the Institution's information technology and RR&A needs. The Smithsonian proposes to continue its information technology initiatives, including the Enterprises Resource Planning project and the infrastructure modernization effort. The Smithsonian has also developed a facilities revitalization and maintenance plan that will for the first time address the real needs of the mechanical systems and structural elements of its buildings. Within the total estimated RR&A increase required of at least $1.2 billion, the Institution's priorities are as follows: the Patent Office Building, the National Zoological Park, the National Museum of American History, the National Museum of Natural History, the Arts & Industries Building, and finally, the Smithsonian Castle.

The Institution's third priority is financial resources to fulfill the Smithsonian's mandate to open and operate two new museums: the National Museum of the American Indian on the national Mall, and the National Air and Space Museum's new Steven F. Udvar-Hazy Center, adjacent to Dulles Airport in Northern Virginia.

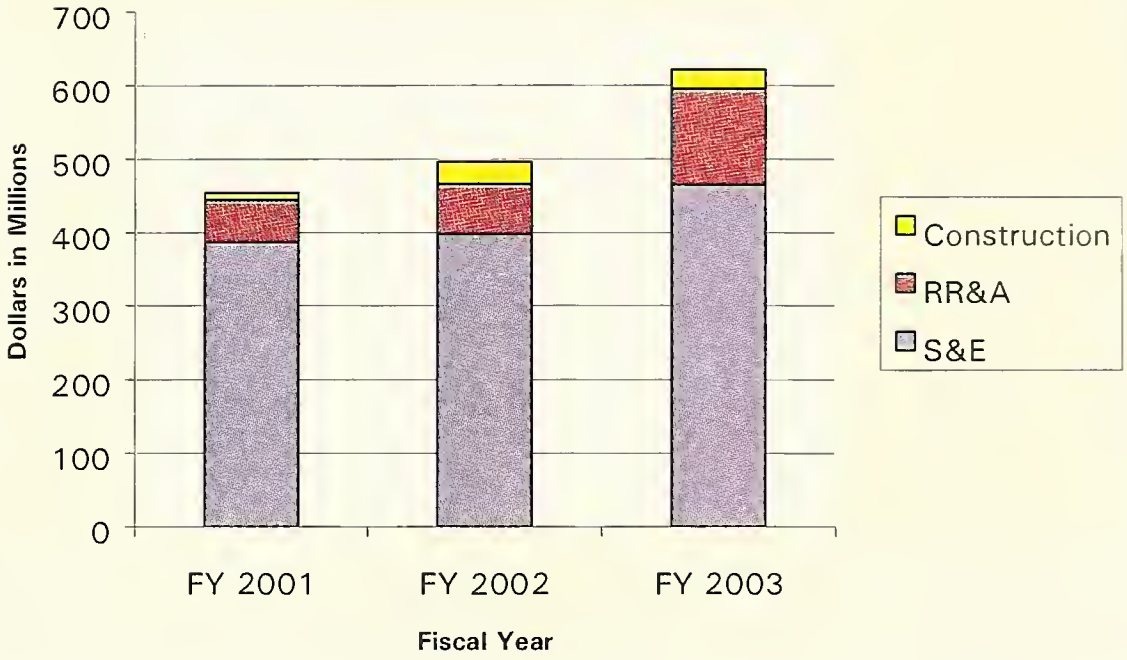
As the Smithsonian looks to the future and considers how best to revitalize and modernize this great Institution and bring it into the 21st century, it is clear that success actually leads to increasing resource requirements. As the Institution renovates older buildings, as it opens new, exciting exhibits such as *The American Presidency* or *Explore the Universe,* as it opens new buildings such as the Udvar-Hazy Center at Dulles or the National Museum of the American Indian on the Mall, it is reasonable to anticipate even more visitors—more than the 40 million who annually visit the Smithsonian now. The greater its success, the greater the effect on buildings, budgets, and staff. How this Institution sustains the projected growth while preserving its infrastructure in the face of inflation and increasing use will be a critical issue in the future. Above all, the high quality of programs and service the American people have come to expect and value must be maintained.

FY 2003 Hierarchy of Needs
($ in 000's)

	Amount of Increase	Full Request
Salaries and Expenses:		
FY 2002 Base		398,122[1]
Fixed, Non-Discretionary Costs		
Pay and Related Costs	17,423	
Utilities, Postage, and Communications	11,110	
Rent	805	
National Zoological Park - Farm Exhibit	375	
Holocaust Restitution Research	100	
Non-recurring Costs and Additional Full-Year Savings from FY 2002 Reductions	-2,098	
Subtotal	***27,715***	
NAPA-Driven		
IT: Enterprise Resource Planning	5,800	
IT: Managed Information Technology Infrastructure	3,400	
IT: Information Resources Management Pool	2,196	
Staff Support for RR&A	4,800	
Security System Modernization	1,100	
Subtotal	***17,296***	
NMAI & NASM Udvar-Hazy – Operating Costs		
NMAI: Mall Museum/Cultural Resources Center	11,736	
NMAI: Mall Museum Program Support (Office of Physical Plant and Office of Safety and Environmental Management)	616	
NASM: Collections Preparation for Move to the Udvar-Hazy Center	7,900	
Subtotal	***20,252***	
Discretionary		
Smithsonian Institution Libraries: Serials Inflation	300	
National Museum of Natural History: Collections Infrastructure	500	
Smithsonian Astrophysical Observatory: VERITAS	1,157	
Subtotal	***1,957***	
Subtotal, Salaries and Expenses		*465,342*
NAPA-Driven		
Repair, Restoration and Alteration of Facilities:		
RR&A: Major Renewal of the Patent Office Building		45,000
RR&A: Major Renewal of the National Museum of Natural History		22,000
RR&A: Major Renewal of the Arts and Industries Building		2,000
RR&A: Major Renewal of the National Zoological Park		11,300
RR&A: Other Program Funding		47,200
RR&A: Maintenance		2,100
Subtotal		129,600
Construction:		
Smithsonian Astrophysical Observatory: VERITAS		4,500
National Museum of the American Indian: Mall Museum		20,000
Museum Support Center: Pod 5 Design		2,000
Subtotal		26,500
Total, FY 2003 Request		*621,442*

[1]Includes restored funding for Smithsonian Center for Materials Research and Education and National Zoological Park, pending final resolution by Congress.

Summary by Account



Account	FY 2001 Appropriation	FY 2002 Estimate	FY 2003 Request
Salaries and Expenses	$386,902,000	$398,122,000[1]	$465,342,000
Repair, Restoration and Alteration of Facilities	57,473,000	67,900,000	129,600,000
Construction	9,479,000	30,000,000	26,500,000
Total	$453,854,000	$496,022,000	$621,442,000

[1]Includes estimated funding ($1.9 million) for Smithsonian Center for Materials Research and Education and the National Zoological Park, pending final resolution by Congress.

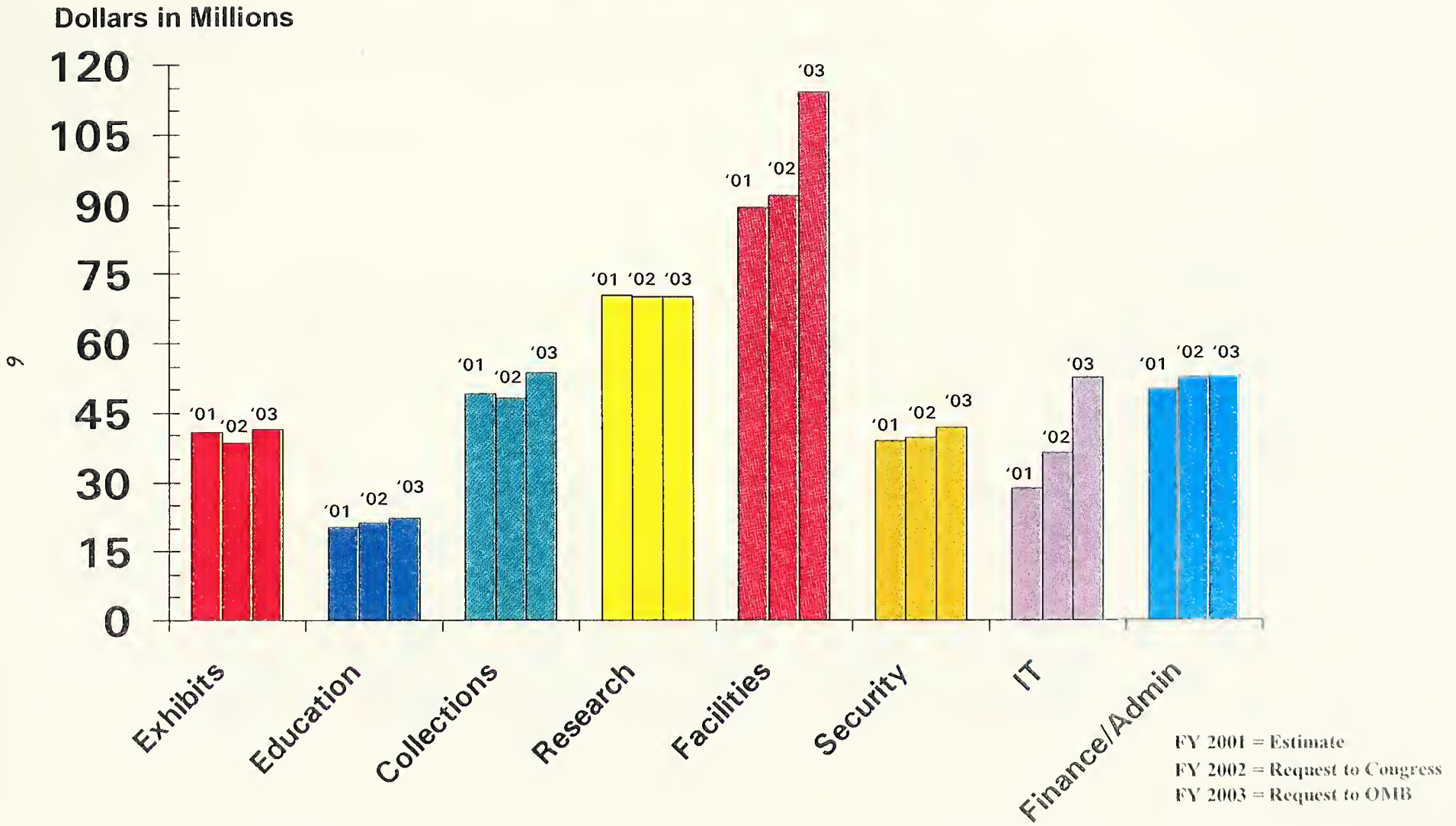
Introduction to Budget Summary by Function

Within the past year, the Smithsonian has been taking a fresh look at how to measure institutional outcomes and link resources to performance. Prior to developing plans, performance measures, and benchmarks that will be used to measure progress toward attaining the Institution's goals of public impact, scientific research, management excellence, and financial strength, the Institution has begun to array its budget information by function. Included are four programmatic functions: exhibitions, education, collections, and research; and four administrative functions: facilities, security, information technology (IT), and finance/administration.

The data, which are based on estimated results for FY 2001 and budget requests for FY 2002 and FY 2003, show that the largest category of expenditures is the facilities category. In the programmatic area, the largest category of expenditures is research, followed by collections and exhibitions, each of which receives approximately equal amounts of money. On the other hand, education is consistently budgeted at less than half of the funds spent on collections and exhibitions.

The distribution of the Institution's budget is the beginning of a discussion concerning the designation of priorities and the resulting distribution of funds among functions. The National Academy of Public Administration's report, which makes a strong case for renewed public investment in the repair, restoration, and alteration of the Institution's facilities, is one source for making these decisions. Additional sources of information that will contribute to decisions on priorities and related budget decisions include the recommendations to be generated by the Blue Ribbon Commission that is studying scientific research at the Smithsonian, and the analyses of detailed data the Institution is currently collecting on exhibitions, collections, and education across all units.

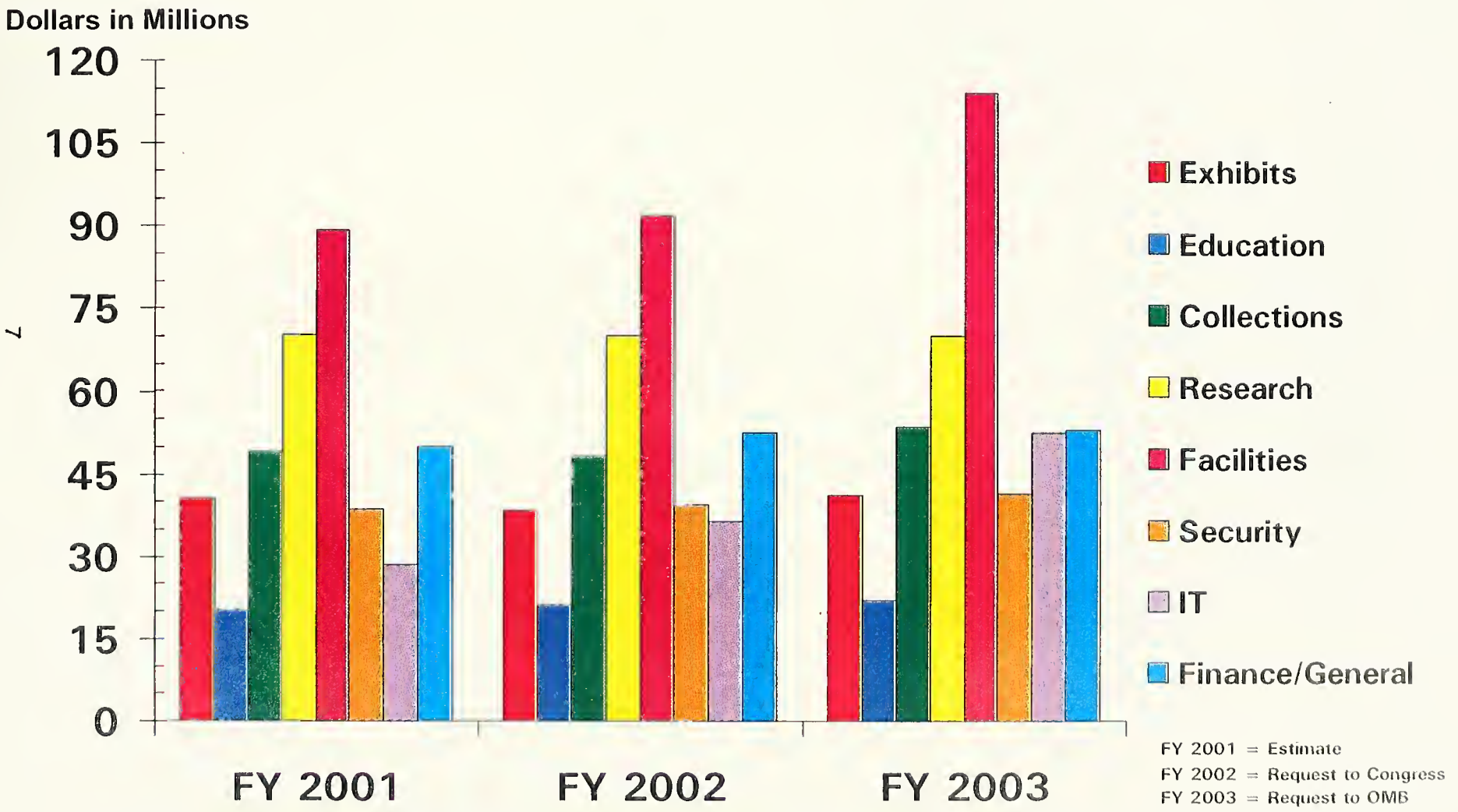
Smithsonian Federal Budget
Summary by Function



The functional breakdowns are based upon information submitted by units in response to the Call for Budgets in May 2001

FY 2003 excludes necessary pay - $17.3M

Smithsonian Federal Budget
Summary by Function



The functional breakdowns are based upon information submitted by units in response to the Call for Budgets in May 2001

FY 2003 excludes necessary pay - $17.3M

SMITHSONIAN INSTITUTION
FEDERAL BUDGET BY FUNCTION TABLE
Salaries & Expenses
(Dollars in Thousands)

Function	FY 2001 Appropriation	FY 2002 Estimate	FY 2003 Request
Exhibits	$ 40,659	$ 38,509	$ 41,338
Education	20,340	21,104	21,981
Collections	49,127	48,236	53,721
Research	70,224	70,044	69,903
Administration			
Facilities	89,320	91,918	114,016
Security	38,653	39,401	41,615
Information Technology	28,522	36,383	52,509
Finance/General Administration	50,057	52,527	52,997
Total, Smithsonian	$386,902	$398,122	$448,080[1]

[1]FY 2003 Request excludes Necessary Pay of $17,262,000.

SI Activities	Support IT [c] FTEs	Support IT [c] Amount	Finance/ General Admn. [d] FTEs	Finance/ General Admn. [d] Amount	Necessary Pay	FY 2003 Request FTEs	FY 2003 Request Amount
FY 2000 Actual							
FY 2001 Appropriation							
FY 2002 Request							
FY 2003 Request	**176**	**52,509**	**607**	**52,997**	**17,262**	**4,418**	**465,342**
MUSEUMS AND RESEARCH INSTITUTES							
American Museums							
Anacostia Museum/Center for African American History and Culture	0	14	9	536	51	21	1,983
**Adjustment to Base to Reflect FY 2003 Plan	0	0	(3)	16			
Archives of American Art	1	39	5	597	67	24	1,805
Center for Folklife and Cultural Heritage	1	96	2	193	45	14	1,895
Cooper-Hewitt, National Design Museum	1	125	4	411	101	40	3,043
National Air and Space Museum	4	1,021	20	1,671	529	246	24,963
**Preparations of Collections for Move to Udvar-Hazy Center	0	1,286	3	251			
**FY 2002 Reductions for Redirection	0	0	0	0			
National Museum of American History	11	958	18	2,289	767	286	20,929
National Postal Museum	0	20	2	124	29	9	667
National Museum of the American Indian	17	1,746	71	6,005	602	304	40,237
**NMAI Mall Museum	3	3,436	8	485			
National Portrait Gallery							
--NPG	3	245	11	684	162	62	4,769
**Realignment of NPG library to SI Libraries	0	0	0	0			
**Adjustment to Base to Reflect FY 2003 Plan	0	5	0	10			
--1/2 SAAM/NPG Bldg. Mgr.	0	0	0	0	17	15	769
Smithsonian American Art Museum							
--SAAM	11	927	12	894	263	95	7,533
**Realignment of SAAM library to SI Libraries	0	0	0	0			
--1/2 SAAM/NPG Bldg. Mgr.	0	0	0	0	26	16	780
International Art Museums							
Arthur M. Sackler Gallery/Freer Gallery of Art	3	346	5	567	199	74	6,160
**Realignment of Sackler/Freer library to SI Libraries	0	0	0	0			
Hirshhorn Museum & Sculpture Garden	0	0	12	902	144	68	4,719
**Realignment of HMSG library to SI Libraries	0	0	0	0			
National Museum of African Art	1	140	8	786	127	54	4,461
Science Museums and Research Institutes							
National Museum of Natural History	12	1,835	25	1,650	1,524	579	45,428
**Collections Infrastructure	0	0	0	0			
National Zoological Park [2]	3	500	24	2,024	748	331	23,643
**American Agriculture Exhibit	0	0	0	0			
**Repair, Restoration and Alteration: Support	0	0	0	0			
Smithsonian Astrophysical Observatory	1	499	5	449	557	142	21,260
**VERITAS	0	0	0	0			
Smithsonian Center for Materials Research and Education [2]	0	85	5	433	102	34	3,354
**Adjustment to Base to Reflect FY 2003 Plan	0	0	0	0			
Smithsonian Environmental Research Center	3	177	5	261	119	45	3,510
Smithsonian Tropical Research Institute	4	218	31	2,345	313	242	10,894
**Technical adjustment to reflect STRI workyear usage	0	0	10	0			
TOTAL MUSEUMS AND RESEARCH INSTITUTES	79	13,718	292	23,583	6,492	2,701	232,802

SMITHSONIAN INSTITUTION FEDERAL BUDGET
BY FUNCTION AND ACTIVITY
(Thousands of Dollars)

SI Activities	FY 2000 Actual [1]		FY 2001 Appropriation		FY 2002 Request		FY 2002 Request w/ FY 2003 Increases and Decreases																FY 2003 Request	
							Functions																	
							Exhibitions		Education		Collections		Research		Mission Support									
															Facilities [a]		Security [b]		IT [c]		Finance/ General Admn. [d]		Necessary Pay	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
FY 2000 Actual	**4,341**	**396,192**																						
FY 2001 Appropriation			**4,221**	**386,902**																				
FY 2002 Request					**4,221**	**398,122**																		
FY 2003 Request							**436**	**41,338**	**288**	**21,981**	**660**	**53,721**	**682**	**69,903**	**1,076**	**114,016**	**797**	**41,615**	**176**	**52,509**	**607**	**52,997**	**17,262**	**4,418**	**465,342**
MUSEUMS AND RESEARCH INSTITUTES																								
American Museums																								
Anacostia Museum/Center for African American History and Culture	25	1,862	25	1,910	25	1,932	1	131	5	464	3	176	6	461	1	150	0	0	0	14	9	536	51	21	1,983
**Adjustment to Base to Reflect FY 2003 Plan							0	157	(1)	(27)	0	1	0	(149)	0	2	0	0	0	0	(3)	16			
Archives of American Art	24	1,653	24	1,716	24	1,738	1	102	7	365	10	635	0	0	0	0	0	0	1	39	5	597	67	24	1,805
Center for Folklife and Cultural Heritage	14	1,809	14	1,780	14	1,850	3	878	5	406	2	138	1	129	0	0	0	10	1	96	2	193	45	14	1,895
Cooper-Hewitt, National Design Museum	43	2,888	43	2,934	40	2,942	6	400	4	248	10	800	1	60	14	898	0	0	1	125	4	411	101	40	3,043
National Air and Space Museum	214	13,219	233	16,126	236	16,599	34	3,042	5	839	60	3,854	37	3,400	76	2,772	0	0	4	1,021	20	1,671	529	246	24,963
**Preparations of Collections for Move to Udvar-Hazy Center							2	973	1	78	0	3,361	0	0	0	576	5	1,375	0	1,286	3	251			
**FY 2002 Reductions for Redirection							0	0	0	0	0	0	0	0	(1)	(65)	0	0	0	0	0	0			
National Museum of American History	306	20,131	306	22,444	286	20,162	53	3,793	45	2,816	95	7,024	18	1,912	46	1,370	0	0	11	958	18	2,289	767	286	20,929
National Postal Museum	9	520	9	615	9	638	2	137	0	0	4	257	1	100	0	0	0	0	0	20	2	124	29	9	667
National Museum of the American Indian	235	22,409	257	27,261	257	27,899	17	6,244	53	4,143	67	7,074	0	0	32	2,687	0	0	17	1,746	71	6,005	602	304	40,237
**NMAI Mall Museum							5	1,341	13	1,587	5	545	0	0	13	4,342	0	0	3	3,436	8	485			
National Portrait Gallery																								
--NPG	70	4,828	69	4,907	66	4,874	16	1,302	10	575	23	1,849	3	219	0	0	0	0	3	245	11	684	162	62	4,769
**Realignment of NPG library to SI Libraries							0	0	(4)	(267)	0	0	0	0	0	0	0	0	0	0	0	0			
**Adjustment to Base to Reflect FY 2003 Plan							0	14	0	(40)	0	8	0	3	0	0	0	0	0	5	0	10			
--1/2 SAAM/NPG Bldg. Mgr	15	679	15	717	15	752	0	0	0	0	0	0	0	0	15	752	0	0	0	0	0	0	17	15	769
Smithsonian American Art Museum																								
--SAAM	107	8,303	107	8,105	99	7,511	21	1,527	21	1,575	30	2,173	4	415	0	0	0	0	11	927	12	894	263	95	7,533
**Realignment of SAAM library to SI Libraries							0	0	(2)	(170)	(2)	(71)	0	0	0	0	0	0	0	0	0	0			
--1/2 SAAM/NPG Bldg Mgr	16	680	16	718	16	754	0	0	0	0	0	0	0	0	16	754	0	0	0	0	0	0	26	16	780
International Art Museums																								
Arthur M. Sackler Gallery/Freer Gallery of Art	77	6,096	77	6,182	75	6,098	20	1,587	11	877	16	1,324	9	871	11	526	0	0	3	346	5	567	199	74	6,160
**Realignment of Sackler/Freer library to SI Libraries							0	0	(1)	(137)	0	0	0	0	0	0	0	0	0	0	0	0			
Hirshhorn Museum & Sculpture Garden	71	4,547	71	4,712	71	4,771	8	649	12	839	11	827	9	660	18	820	1	74	0	0	12	902	144	68	4,719
**Realignment of HMSG library to SI Libraries							0	0	(3)	(196)	0	0	0	0	0	0	0	0	0	0	0	0			
National Museum of African Art	54	4,073	54	4,324	54	4,334	15	1,543	14	719	14	1,038	0	0	2	108	0	0	1	140	8	786	127	54	4,461
Science Museums and Research Institutes																								
National Museum of Natural History	582	45,968	579	42,744	579	43,404	51	3,896	25	1,125	107	7,116	271	24,887	88	2,895	0	0	12	1,835	25	1,650	1,524	579	45,428
**Collections Infrastructure							0	0	0	0	0	500	0	0	0	0	0	0	0	0	0	0			
National Zoological Park [2]	317	20,489	319	21,033	319	22,001	87	5,339	5	497	41	3,581	22	1,892	114	6,893	23	1,275	3	500	24	2,024	748	331	23,643
**American Agriculture Exhibit							7	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
**Repair, Restoration and Alteration: Support							0	0	0	0	0	0	0	0	5	519	0	0	0	0	0	0			
Smithsonian Astrophysical Observatory	141	19,883	141	20,382	141	20,546	0	0	3	484	0	0	115	16,240	17	2,874	0	0	1	499	5	449	557	142	21,260
**VERITAS							0	0	0	0	0	0	1	157	0	0	0	0	0	0	0	0			
Smithsonian Center for Materials Research and Education [2]	36	3,077	36	3,229	34	3,252	1	107	8	668	4	310	16	1,649	0	0	0	0	0	85	5	433	102	34	3,354
**Adjustment to Base to Reflect FY 2003 Plan							0	(31)	0	21	0	10	0	0	0	0	0	0	0	0	0	0			
Smithsonian Environmental Research Center	45	3,227	45	3,337	45	3,391	0	0	1	58	0	0	28	2,215	8	680	0	0	3	177	5	261	119	45	3,510
Smithsonian Tropical Research Institute	176	10,624	176	10,440	176	10,581	0	0	7	265	0	0	75	5,264	40	1,861	19	628	4	218	31	2,345	313	242	10,894
**Technical adjustment to reflect STRI workyear usage							0	0	0	0	0	0	43	0	7	0	6	0	0	0	10	0			
TOTAL MUSEUMS AND RESEARCH INSTITUTES	2,577	196,965	2,616	205,616	2,581	206,029	350	33,506	244	17,812	500	42,530	660	60,385	522	31,414	54	3,362	79	13,718	292	23,583	6,492	2,701	232,802

SI Activities	Support				Necessary Pay	FY 2003 Request	
	IT [c]		Finance/ General Admn. [d]				
	FTEs	Amount	FTEs	Amount		FTEs	Amount
PROGRAM SUPPORT AND OUTREACH							
Outreach							
--Smithsonian Institution Traveling Exhibition Service	1	35	7	341	105	45	4,241
--Smithsonian Center for Education and Museum Programs	1	63	3	195	53	20	1,791
--The Smithsonian Associates - TSA and Museums	0	0	0	0	0	0	325
--Smithsonian Affiliation Program	1	187	4	615	23	7	1,000
--National Science Resources Center [3]	0	0	2	161	5	2	166
--Office of Fellowships	0	0	5	263	6	5	323
--Smithsonian Press [3]	0	0	4	194	56	22	1,570
**Adjustment to Base to Reflect FY 2003 Plan	0	0	0	(61)			
Communications							
--VIARC	0	1	0	6	8	6	469
--Office of Public Affairs	0	0	9	857	29	9	886
--Smithsonian Productions	0	0	1	299	0	0	0
**FY 2002 Reductions for Redirection	0	0	(1)	(299)			
Institution-wide Programs							
--Research Equipment - No Year	0	0	0	0	0	0	1,706
--Information Resources - No Year	9	10,004	0	0	0	5	3,154
**FY 2003 Information Technology Increase	5	2,196	0	0			
**Transfer of FTEs and resources to OIT	(9)	(9,046)	0	0			
--Latino Programming - No Year	0	0	0	0	0	0	996
Office of Exhibits Central	0	0	4	238	85	40	2,579
Major Scientific Instumentation	0	0	0	0	0	0	6,000
**Submillimeter Telescope Array	0	0	0	0			
**Multiple Mirror Telescope	0	0	0	0			
**VERITAS	0	0	0	0			
Museum Support Center	2	165	0	0	107	69	3,181
Smithsonian Institution Archives	1	85	2	187	63	24	1,674
**Adjustments to Base to Reflect FY2003 Plan	0	3	0	10			
Smithsonian Institution Libraries	0	0	8	412	263	109	8,588
**SIL Serials Inflation	0	0	0	0			
**Realignment of HMSG, Sackler/Freer, NPG, and SAAM Libraries to SI Libraries	0	0	0	0			
**FY 2002 Reductions for Redirections	0	0	0	0			
TOTAL PROGRAM SUPPORT AND OUTREACH	11	3,693	48	3,418	803	363	38,649

SMITHSONIAN INSTITUTION FEDERAL BUDGET
BY FUNCTION AND ACTIVITY
(Thousands of Dollars)

SI Activities	FY 2000 Actual [1]		FY 2001 Appropriation		FY 2002 Request		FY 2002 Request w/ FY 2003 Increases and Decreases																
							Functions															FY 2003 Request	
							Exhibitions		Education		Collections		Research		Mission Support: Facilities [a]		Mission Support: Security [b]		Mission Support: IT [c]		Mission Support: Finance/ General Admn. [d]		Necessary Pay		
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount			
PROGRAM SUPPORT AND OUTREACH																									
Outreach																									
--Smithsonian Institution Traveling Exhibition Service	45	3,123	47	3,250	45	4,136	37	3,760	0	0	0	0	0	0	0	0	0	0	1	35	7	341	105	45	4,241
--Smithsonian Center for Education and Museum Programs	20	1,552	20	1,608	20	1,738	0	0	16	1,480	0	0	0	0	0	0	0	0	1	63	3	195	53	20	1,791
--The Smithsonian Associates - TSA and Museums	0	0	0	0	0	325	0	0	0	325	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325
--Smithsonian Affiliation Program	0	0	3	312	7	977	0	0	2	175	0	0	0	0	0	0	0	0	1	187	4	615	23	7	1,000
--National Science Resources Center [3]	3	230	2	153	2	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	161	5	2	166
--Office of Fellowships	7	470	7	506	5	317	0	0	0	0	0	0	0	54	0	0	0	0	0	0	5	263	6	5	323
--Smithsonian Press [3]	22	1,447	22	1,486	22	1,514	0	0	7	498	0	0	11	822	0	0	0	0	0	0	4	194	56	22	1,570
**Adjustment to Base to Reflect FY 2003 Plan							0	0	0	21	0	0	0	40	0	0	0	0	0	0	0	(61)			
Communications																									
--VIARC	6	425	6	449	6	461	0	5	6	449	0	0	0	0	0	0	0	0	0	1	0	6	8	6	469
--Office of Public Affairs	9	794	9	818	9	857	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	857	29	9	886
--Smithsonian Productions	4	369	4	305	1	299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	299	0	0	0
**FY 2002 Reductions for Redirection							0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1)	(299)			
Institution-wide Programs																									
--Research Equipment - No Year	0	3,133	0	1,881	0	1,706	0	0	0	0	0	0	0	1,706	0	0	0	0	0	0	0	0	0	0	1,706
--Information Resources - No Year	0	3,526	0	2,804	9	10,004	0	0	0	0	0	0	0	0	0	0	0	0	9	10,004	0	0	0	5	3,154
**FY 2003 Information Technology Increase							0	0	0	0	0	0	0	0	0	0	0	0	5	2,196	0	0			
**Transfer of FTEs and resources to OIT							0	0	0	0	0	0	0	0	0	0	0	0	(9)	(9,046)	0	0			
--Latino Programming - No Year	0	1,695	0	996	0	996	0	996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	996
Office of Exhibits Central	40	2,362	40	2,382	40	2,494	36	2,256	0	0	0	0	0	0	0	0	0	0	0	0	4	238	85	40	2,579
Major Scientific Instumentation	0	11,028	0	7,228	0	6,229	0	0	0	0	0	0	0	6,229	0	0	0	0	0	0	0	0	0	0	6,000
**Submillimeter Telescope Array							0	0	0	0	0	0	0	(729)	0	0	0	0	0	0	0	0			
**Multiple Mirror Telescope							0	0	0	0	0	0	0	(500)	0	0	0	0	0	0	0	0			
**VERITAS							0	0	0	0	0	0	0	1,000	0	0	0	0	0	0	0	0			
Museum Support Center	69	17,855	69	3,533	69	3,074	0	0	0	0	35	1,679	0	0	32	1,230	0	0	2	165	0	0	107	69	3,181
Smithsonian Institution Archives	24	1,491	24	1,537	24	1,611	0	0	3	163	15	903	3	273	0	0	0	0	1	85	2	187	63	24	1,674
**Adjustments to Base to Reflect FY2003 Plan							0	0	0	7	0	43	0	(63)	0	0	0	0	0	3	0	10			
Smithsonian Institution Libraries	109	7,147	109	7,458	97	7,237	0	20	0	0	89	6,805	0	0	0	0	0	0	0	0	8	412	263	109	8,588
**SIL Serials Inflation							0	0	0	0	0	300	0	0	0	0	0	0	0	0	0	0			
**Realignment of HMSG, Sackler/Freer, NPG, and SAAM Libraries to SI Libraries							0	0	0	0	12	841	0	0	0	0	0	0	0	0	0	0			
**FY 2002 Reductions for Redirections							0	0	0	0	0	(53)	0	0	0	0	0	0	0	0	0	0			
TOTAL PROGRAM SUPPORT AND OUTREACH	358	56,647	362	36,706	356	44,136	73	7,037	34	3,118	151	10,518	14	8,832	32	1,230	0	0	11	3,693	48	3,418	803	363	38,649

SI Activities	Support IT [c] FTEs	Support IT [c] Amount	Finance/ General Admn. [d] FTEs	Finance/ General Admn. [d] Amount	Necessary Pay	FY 2003 Request FTEs	FY 2003 Request Amount
ADMINISTRATION							
Office of the Secretary	0	0	8	728	25	8	753
Office of Inspector General	0	0	13	1,435	48	13	1,483
Office of Policy and Analysis	0	0	0	0	10	3	287
Office of Diversity Initiatives (Eq Emp & Min Affairs & Accessibility Pgm)	0	0	11	933	39	12	1,087
Director for International Art Museums Division	0	0	2	230	10	3	441
**Holocaust Restitution Research	0	0	0	0			
Office of the Under Secretary for Science (w/ Diving Pgm)	0	0	5	561	33	9	1,131
**Transfer of FTEs and resources from International Relations	0	0	1	229			
Office of Under Sec for Am Mus and Nat'l Progs (w/A&I Exh & AsPacAm Init)	0	0	5	449	18	6	530
Director for National Programs	0	0	0	0	6	1	144
Smithsonian Center for Latino Initiatives	0	0	1	77	4	2	154
Office of Government Relations	0	0	0	0	16	6	483
Office of Special Events/Conference Services	0	0	2	0	5	2	162
Office of the Under Sec for Finance and Administration	0	0	6	563	5	6	568
Chief Financial Officer							
Office of the Chief Financial Officer	0	0	1	68	4	1	72
--SI Audit Costs	0	0	0	101	0	0	101
Office of the Treasurer	0	0	0	24	0	0	24
--Insurance Costs	0	0	0	0	0	0	0
Office of Planning, Management and Budget	0	0	14	1,307	53	14	1,360
--Unallocated	0	0	0	24	0	0	24
Office of Contracting	0	0	37	2,536	100	39	2,872
**Repair, Restoration and Alteration: Support	0	0	0	0			
--Paper	0	0	0	179	0	0	179
Office of the Comptroller	9	650	38	3,326	114	38	3,440
**Transfer of FTEs and resources to the Office of Information Technology	(9)	(650)	0	0			
--National Finance Center Costs	0	0	0	613	0	0	613
--Bank Service Fees	0	0	0	0	0	0	0
Office of Internat'l Relations	0	0	1	332	0	0	0
**FY 2002 Reductions for Redirection	0	0	0	(103)			
**Transfer of FTEs and resources to U/S Science	0	0	(1)	(229)			
Chief Technology Officer							
Office of Information Technology (w/Chief Technology Officer)	44	5,374	0	0	256	76	24,526
**Enterprise Resource Planning (ERP)	12	5,800	0	0			
**Managed IT Infrastructure	2	3,400	0	0			
**Transfer of FTEs and resources from Office of the Comptroller	9	650	0	0			
**Transfer of FTEs and resources from IRM Pool	9	9,046	0	0			
Office of Imaging, Printing and Photographic Services	0	0	8	1,304	74	23	2,281
Office of General Counsel	0	0	12	1,259	46	12	1,305
Office of Human Resources							
--Office of Human Resources	0	0	67	4,622	179	67	4,801
--Workers' Compensation	0	0	0	2,495	0	0	2,656
**FY 2003 Workers' Compensation Increase	0	0	0	161			
--Unemployment Compensation	0	0	0	420	0	0	420

SMITHSONIAN INSTITUTION FEDERAL BUDGET
BY FUNCTION AND ACTIVITY
(Thousands of Dollars)

SI Activities	FY 2000 Actual [1]		FY 2001 Appropriation		FY 2002 Request		FY 2002 Request w/ FY 2003 Increases and Decreases																FY 2003 Request	
							Functions																	
							Exhibitions		Education		Collections		Research		Mission Support									
															Facilities [a]		Security [b]		IT [c]		Finance/ General Admn [d]		Necessary Pay	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount		
ADMINISTRATION																								
Office of the Secretary	9	665	8	698	8	728	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	728	25	8	753
Office of Inspector General	14	1,322	14	1,459	13	1,435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1,435	48	13	1,483
Office of Policy and Analysis	0	0	3	262	3	277	0	0	0	0	0	0	3	277	0	0	0	0	0	0	0	0	10	3	287
Office of Diversity Initiatives (Eq Emp & Min Affairs & Accessibility Pgm)	10	843	12	1,000	12	1,048	0	0	1	115	0	0	0	0	0	0	0	0	0	0	11	933	39	12	1,087
Director for International Art Museums Division	0	0	3	317	3	331	0	0	1	101	0	0	0	0	0	0	0	0	0	0	2	230	10	3	441
**Holocaust Restitution Research							0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0			
Office of the Under Secretary for Science (w/ Diving Pgm)	25	1,846	6	705	6	749	0	0	0	0	0	0	0	18	0	0	1	170	0	0	5	561	33	9	1,131
**Transfer of FTEs and resources from International Relations							0	0	0	0	0	0	2	120	0	0	0	0	0	0	1	229			
Office of Under Sec for Am Mus and Nat'l Progs (w/A&I Exh & AsPacAm Init)	0	0	6	493	6	512	1	63	0	0	0	0	0	0	0	0	0	0	0	0	5	449	18	6	530
Director for National Programs	0	0	3	235	1	138	0	0	1	138	0	0	0	0	0	0	0	0	0	0	0	0	6	1	144
Smithsonian Center for Latino Initiatives	1	103	2	140	2	150	0	0	1	73	0	0	0	0	0	0	0	0	0	0	1	77	4	2	154
Office of Government Relations	6	423	6	443	6	467	0	0	6	467	0	0	0	0	0	0	0	0	0	0	0	0	16	6	483
Office of Special Events/Conference Services	2	139	2	146	2	157	0	0	0	157	0	0	0	0	0	0	0	0	0	0	2	0	5	2	162
Office of the Under Sec for Finance and Administration	7	395	6	771	6	563	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	563	5	6	568
Chief Financial Officer																									
Office of the Chief Financial Officer	2	187	1	60	1	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	68	4	1	72
--SI Audit Costs	0	267	0	101	0	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	0	0	101
Office of the Treasurer	0	23	0	24	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24
--Insurance Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Office of Planning, Management and Budget	15	1,412	14	1,246	14	1,307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1,307	53	14	1,360
--Unallocated	0	1,352	0	24	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24
Office of Contracting	37	2,739	37	2,434	37	2,536	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	2,536	100	39	2,872
**Repair, Restoration and Alteration Support							0	0	0	0	0	0	0	0	2	236	0	0	0	0	0	0			
--Paper	0	159	0	179	0	179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179	0	0	179
Office of the Comptroller	52	3,921	52	3,881	47	3,976	0	0	0	0	0	0	0	0	0	0	0	0	9	650	38	3,326	114	38	3,440
**Transfer of FTEs and resources to the Office of Information Technology							0	0	0	0	0	0	0	0	0	0	0	0	(9)	(650)	0	0			
--National Finance Center Costs	0	516	0	613	0	613	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	613	0	0	613
--Bank Service Fees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Office of Internat'l Relations	5	480	5	543	3	452	0	0	0	0	0	0	2	120	0	0	0	0	0	0	1	332	0	0	0
**FY 2002 Reductions for Redirection							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(103)			
**Transfer of FTEs and resources to U/S Science							0	0	0	0	0	0	(2)	(120)	0	0	0	0	0	0	(1)	(229)			
Chief Technology Officer																									
Office of Information Technology (w/Chief Technology Officer)	42	5,152	44	5,494	44	5,374	0	0	0	0	0	0	0	0	0	0	0	0	44	5,374	0	0	256	76	24,526
**Enterprise Resource Planning (ERP)							0	0	0	0	0	0	0	0	0	0	0	0	12	5,800	0	0			
**Managed IT Infrastructure							0	0	0	0	0	0	0	0	0	0	0	0	2	3,400	0	0			
**Transfer of FTEs and resources from Office of the Comptroller							0	0	0	0	0	0	0	0	0	0	0	0	9	650	0	0			
**Transfer of FTEs and resources from IRM Pool							0	0	0	0	0	0	0	0	0	0	0	0	9	9,046	0	0			
Office of Imaging, Printing and Photographic Services	32	2,373	33	2,264	23	2,207	12	732	0	0	0	0	3	171	0	0	0	0	0	0	8	1,304	74	23	2,281
Office of General Counsel	12	1,300	12	1,203	12	1,259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1,259	46	12	1,305
Office of Human Resources																									
--Office of Human Resources	67	4,361	67	4,424	67	4,622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	4,622	179	67	4,801
--Workers' Compensation	0	1,984	0	2,122	0	2,495	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,495	0	0	2,656
**FY 2003 Workers' Compensation Increase							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161			
--Unemployment Compensation	0	181	0	420	0	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420	0	0	420

SI Activities	Support IT [c] FTEs	Support IT [c] Amount	Finance/ General Admn. [d] FTEs	Finance/ General Admn. [d] Amount	Necessary Pay	FY 2003 Request FTEs	FY 2003 Request Amount
Office of Facilities Engineering and Operations	0	0	0	0	14	35	4,255
**Repair, Restoration and Alteration: Support	0	0	0	0			
Office of Safety & Environmental Management	0	0	0	0	123	39	3,694
**NMAI Mall Museum	0	0	0	0			
**Repair, Restoration and Alteration: Support	0	0	0	0			
**FY 2002 Reductions for Redirection	0	0	0	0			
TOTAL ADMINISTRATION	76	24,270	231	23,644	1,182	415	59,846
FACILITIES SERVICES							
Office of Protection Services	3	237	27	1,659	1,332	736	38,072
**Security Modernization	0	0	0	0			
Office of Physical Plant							
--Immed. Ofc. of Phy. Plant	7	799	9	693	1,070	432	30,154
**NMAI Mall Museum	0	0	0	0			
**FY 2002 Reductions for Redirection	0	0	0	0			
--Utilities	0	9,792	0	0	0	0	45,802
**FY 2003 Utilities/Postage Increase	0	0	0	0			
--Rent	0	0	0	0	0	0	10,553
**FY 2003 Rent Increase	0	0	0	0			
--Building Manager, South Group	0	0	0	0	51	38	1,656
--Building Manager, Quadrangle	0	0	0	0	48	37	1,524
TOTAL FACILITIES SERVICES	10	10,828	36	2,352	2,501	1,243	127,761
SI-WIDE MANDATORY INCREASES							
Additional CSRS Costs					6,284	0	6,284
TOTAL SI-WIDE MANDATORY INCREASES					6,284	0	6,284
UNUSED ALLOCATED FTEs						(304)	
Total Smithsonian Insitution	76	52,509	607	52,997	17,262	4,418	465,342

Definitions:

(a) Facilities Services - Housekeeping, physical plant and grounds mainte supporting facility maintenance and construction who do not report to

(b) Security - Protection and safeguarding of staff, visitors, collections an

(c) Information Technology - Information technology infrastructure (opera data management (defining metadata and capturing and maintaining exchanges used by Smithsonian staff and the public), and computer-b and enhancing computer-based application software; training staff; ad

(d) Finance/General Admn. - Includes Finance, Human Resources, Archi administrative activities. For purposes of this table, the National Muse have been included under this functional category.

Notes:

(1) Reflects allocated FTEs and actual expenses

(2) The presentation assumes that for FY 2002 and FY 2003, SCRME re of these issues awaits final Congressional action.

(3) The FY 2002 Request for the National Science Resources Center (NS redirection of a $4,000 cost reduction from NSRC to SIP.

SMITHSONIAN INSTITUTION FEDERAL BUDGET
BY FUNCTION AND ACTIVITY
(Thousands of Dollars)

SI Activities	FY 2000 Actual [1]		FY 2001 Appropriation		FY 2002 Request		FY 2002 Request w/ FY 2003 Increases and Decreases																FY 2003 Request	
							Functions																	
							Exhibitions		Education		Collections		Research		Mission Support									
															Facilities [a]		Security [b]		IT [c]		Finance/ General Admn. [d]		Necessary Pay	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount		FTEs	Amount
Office of Facilities Engineering and Operations	4	405	4	415	4	432	0	0	0	0	0	0	0	0	4	432	0	0	0	0	0	0	14	35	4,255
**Repair, Restoration and Alteration: Support							0	0	0	0	0	0	0	0	31	3,809	0	0	0	0	0	0			
Office of Safety & Environmental Management	42	3,400	42	3,416	36	3,500	0	0	0	0	0	0	0	0	0	0	36	3,500	0	0	0	0	123	39	3,694
**NMAI Mall Museum							0	0	0	0	0	0	0	0	1	96	0	0	0	0	0	0			
**Repair, Restoration and Alteration: Support							0	0	0	0	0	0	0	0	2	236	0	0	0	0	0	0			
**FY 2002 Reductions for Redirection							0	0	0	0	0	0	0	0	0	0	0	(261)	0	0	0	0			
TOTAL ADMINISTRATION	384	35,948	382	35,532	356	36,144	13	795	10	1,051	0	0	8	686	40	4,809	37	3,409	76	24,270	231	23,644	1,182	415	59,846
FACILITIES SERVICES																									
Office of Protection Services	775	37,624	775	34,934	736	35,640	0	0	0	0	0	0	0	0	0	0	706	33,744	3	237	27	1,659	1,332	736	38,072
**Security Modernization							0	0	0	0	0	0	0	0	0	0	0	1,100	0	0	0	0			
Office of Physical Plant																									
--Immed. Ofc of Phy Plant	441	26,811	442	28,513	425	28,652	0	0	0	0	9	673	0	0	400	26,487	0	0	7	799	9	693	1,070	432	30,154
**NMAI Mall Museum							0	0	0	0	0	0	0	0	7	520	0	0	0	0	0	0			
**FY 2002 Reductions for Redirection							0	0	0	0	0	0	0	0	0	(88)	0	0	0	0	0	0			
--Utilities	0	31,181	0	32,897	0	34,692	0	0	0	0	0	0	0	0	0	24,900	0	0	0	9,792	0	0	0	0	45,802
**FY 2003 Utilities/Postage Increase							0	0	0	0	0	0	0	0	0	11,110	0	0	0	0	0	0			
--Rent	0	8,051	0	9,748	0	9,748	0	0	0	0	0	0	0	0	0	9,748	0	0	0	0	0	0	0	0	10,553
**FY 2003 Rent Increase							0	0	0	0	0	0	0	0	0	805	0	0	0	0	0	0			
--Building Manager, South Group	38	1,580	38	1,543	38	1,605	0	0	0	0	0	0	0	0	38	1,605	0	0	0	0	0	0	51	38	1,656
--Building Manager, Quadrangle	37	1,385	37	1,413	37	1,476	0	0	0	0	0	0	0	0	37	1,476	0	0	0	0	0	0	48	37	1,524
TOTAL FACILITIES SERVICES	1,291	106,632	1,292	109,048	1,236	111,813	0	0	0	0	9	673	0	0	482	76,563	706	34,844	10	10,828	36	2,352	2,501	1,243	127,761
SI-WIDE MANDATORY INCREASES																									
Additonal CSRS Costs																							6,284	0	6,284
TOTAL SI-WIDE MANDATORY INCREASES																							6,284	0	6,284
UNUSED ALLOCATED FTEs	(269)		(431)		(308)																			(304)	
Total Smithsonian Insitution	4,341	396,192	4,221	386,902	4,221	398,122	436	41,338	288	21,981	660	53,721	682	69,903	1,076	114,016	797	41,615	176	52,509	607	52,997	17,262	4,418	465,342

Definitions:

(a) Facilities Services - Housekeeping, physical plant and grounds maintenance, environmental management, health and safety, engineers and architects supporting facility maintenance and construction who do not report to the Office of Physical Plant

(b) Security - Protection and safeguarding of staff, visitors, collections and buildings

(c) Information Technology - Information technology infrastructure (operating, maintaining and evolving the information technology infrastructure), data management (defining metadata and capturing and maintaining data in electronic form for internal databases, web sites, and data exchanges used by Smithsonian staff and the public), and computer-based applications (designing, acquiring or developing, maintaining, and enhancing computer-based application software; training staff, advising on hardware and software specifications and capabilities)

(d) Finance/General Admn. - Includes Finance, Human Resources, Archives, Public Affairs, Administrative Management, Central Staff and other general administrative activities For purposes of this table, the National Museum of the American Indian's development costs (17 FTEs and $1,378,000) have been included under this functional category

Notes:

(1) Reflects allocated FTEs and actual expenses

(2) The presentation assumes that for FY 2002 and FY 2003, SCRME remains in existence and that the proposed NZP reduction is not taken. Resolution of these issues awaits final Congressional action.

(3) The FY 2002 Request for the National Science Resources Center (NSRC) and Smithsonian Institution Press (SIP) have been adjusted to reflect a redirection of a $4,000 cost reduction from NSRC to SIP.

Non-recurring Costs - Fiscal year 2003 non-recurring costs of $2,098,000 include the following:

Additional savings from FY 2002 reductions ($869,000) - reflects the additional FY 2003 decreases related to the FY 2002 cost reduction proposals pending before Congress.

Major Scientific Instrumentation:

- ***Smithsonian Astrophysical Observatory Multiple Mirror Telescope Conversion ($500,000)*** - to reduce base funding as the conversion of the Multiple Mirror Telescope in Arizona nears completion.

- ***Smithsonian Astrophysical Observatory Submillimeter Telescope Array ($729,000)*** - to reduce base funding as the construction of the Submillimeter Telescope Array in Hawaii nears completion.

Salary and Related Costs - The Institution requests an increase of $17,423,000 for higher projected salary and benefits costs in FY 2003 for staff as described below.

Salary and Related Cost Increases:	
Annualization of FY 2002 Pay Raises	2,833,000
Proposed FY 2003 Pay Raises	8,145,000
Workers' Compensation	161,000
CSRS Additional Costs	6,284,000
Total, Salary and Related Cost Increases	**$17,423,000**

- **Annualization of FY 2002 Pay Raises ($2,833,000)** - to annualize funding of the anticipated 3.6 percent January 2002 pay raise for one-quarter of a year.

- **Proposed FY 2003 Pay Raises ($8,145,000)** - to fund the anticipated 3.9 percent January 2003 pay raise for three-quarters of a year.

- **Workers' Compensation ($161,000)** - to support the provisions of Section 8147(b) of Title 5, United States Code, as amended April 21, 1976 by Public Law 94-273. Workers' Compensation is based on actual costs incurred in FY 2000, as provided by the Department of Labor. With an amount of $2,495,000 in its FY 2002 Request to Congress for workers'

compensation, the Institution requests a total of $2,656,000 in FY 2003, an increase of $161,000.

- **CSRS Additional Costs ($6,284,000)** - to fund the FY 2003 incremental retirement costs for Civil Service Retirement System employees as prescribed by the FY 2001 Circular A-11. Proposed legislation requires agencies, beginning in FY 2003, to contribute the agency share of the full actuarial cost of 17.2 percent.

Utilities, Postage, and Communications ($11,110,000) - The Institution requests an increase of $11,110,000 for utilities, postage, and communications in FY 2003 to cover additional costs attributable to increased consumption, projected rate and inflationary increases, and project needs. The following table displays estimates from FY 2001 through FY 2003. Detailed explanations of each line item follow.

Federal Utilities, Postage and Communications Costs
FY 2001–FY 2003

(Dollars in Thousands)	FY 2001 Appropriated	FY 2002 Estimate	FY 2003 Estimate	Change
Electricity	11,120	11,471	20,368	8,897
Steam	3,396	3,955	4,942	987
Gas	1,628	1,993	2,862	869
D.C. Gov't Water/Sewer	3,976	4,570	4,218	(352)
Other Water and Fuel	365	434	646	212
Postage	2,466	2,528	2,470	(58)
Communications/Networks	10,020	9,815	10,370	555
Total	32,971	34,766	45,876	11,110

- ***Electricity ($8,897,000)*** - Electricity is used to operate large air conditioning equipment that cools Smithsonian facilities. Equipment in most of the facilities on the south side of the Mall is now old and in need of replacement. The Smithsonian has contracted with the General Services Administration (GSA) to supply chilled water from their central plant to all Smithsonian facilities on the south side of the Mall. This $35 million project is being implemented through an Energy Saving Agreement under a GSA Area Wide Contract. GSA has contracted for the installation with one of the larger utility companies in the Washington area. This project will enable the Smithsonian to remove old equipment and improve the aesthetics of the National Mall by removing cooling towers from the roofs of these museums and also will enable better control of the interior environment, and provide energy savings. The net cost of this project is being funded from the utility account over fifteen years at a cost of $5,700,000 annually.

  The cost to operate new facilities as initial start-up occurs is also included. These facilities include the National Air & Space Museum's Steven F. Udvar-Hazy Center at Dulles ($1,339,000); the National Museum of the American Indian on the Mall ($200,000); the Smithsonian Hilo base building in Hawaii ($40,000); and the cost to operate the new

telescopes on Mauna Kea, Hawaii ($625,000). The FY 2003 estimate also includes a 3 percent inflation factor ($366,000).

- ***Steam ($987,000)*** - The Smithsonian uses steam for heating and humidification and to produce hot water in facilities on the Mall and in New York City. The request includes a $937,000 GSA surcharge for escalating fuel prices and a 3-percent inflation factor ($127,000) above the base due to additional steam costs for museums in Washington DC and in New York City, offset by anticipated reimbursements.
- ***Natural Gas ($869,000)*** - Natural gas prices have risen 50 percent over the last two years due to demand, and are expected to remain high over the next two years. The major buildings that use natural gas include the Museum Support Center and the National Museum of the American Indian located in Suitland, Maryland; the National Zoological Park; and the Smithsonian Institution Service Center located in Washington DC. The FY 2003 estimate includes an increase of $222,000 to cover these costs. The new Dulles Center will use natural gas to generate heat for the museum. An estimate of $587,000 is included for heating the new museum. The request also includes an inflation factor of 3 percent ($60,000).
- ***DC Government Water/Sewer (-$352,000)*** - The FY 2003 estimate for water and sewer costs is based on cost projections provided by the District of Columbia Water and Sewer Authority in June 2001.
- ***Other Water and Fuel ($212,000)*** - Water consumption at satellite facilities in Maryland and Virginia should remain constant. The FY 2003 estimate includes an increase of $150,000 for water and fuel costs for the new Dulles Center. The request also includes a 3 percent inflation factor ($11,000) above the base.
- ***Postage (-$58,000)*** - The FY 2003 estimate for postage reflects a projected net decrease of $58,000. Postage costs have decreased dramatically over the last couple of years due to a reduction in volume, as a result of an increase in the use of email and fax as a means of communication. The estimate also reflects partial funding of increased costs for the NMAI Mall Museum ($55,000) and for the Dulles Center ($59,000). In addition, the estimate includes $300,000 to replace aging postal equipment on schedule. The request includes a 3-percent inflation factor ($56,000). A portion of the estimated savings will be retained to fund these necessary increases.
- ***Communications/Networks ($555,000)*** - The FY 2003 estimate for communications includes an inflation factor of 3 percent ($324,000) and increases to support project needs, including the costs of operating the Hilo, Hawaii telescopes ($172,000); replacement of telephone operators'

consoles ($75,000); funding to complete conversion from GSA/Federal Telecommunications Services 2000 to GSA/Federal Telecommunications Services 2001($50,000); and communications costs at the NMAI Mall Museum ($50,000), Dulles Center ($35,000), SAO Base Camp ($17,000), and SERC Lab ($5,000). These increases are offset by anticipated reimbursements.

Rental Space - The Institution requests $805,000 for necessary rental increases, as described below.

- **Inflationary Increases** - $613,000 is required to pay annual increases agreed to as part of lease terms in current contracts. These annual increases are based on the consumer price index for the geographic area.
- **Archives of American Art** - $192,000 is required to fund the renewal of leased space in New York that is occupied by the Archives of American Art (AAA). AAA has occupied this space since 1987. The current owners of this space are in the process of selling the property and the projected lease rate will be higher than the amount currently being paid by the Institution. The offered rate reflects the actual fair market value for the building and its location within New York City. The fair market value was verified by the Institution through a comparison of lease rates for other tenants in the same building, as well as comparable lease spaces in the vicinity. The Institution does not have exclusive rights to the property and the owner could have negotiated with another prospective tenant if the Institution did not negotiate a new lease. The new lease is for 10 years effective June 16, 2001.

The following table reflects projected costs for Federal central rental space for FY 2001 through FY 2003.

Federal Central Rental Costs

FY 2001–FY 2003

(Dollars in Thousands)	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	Change
Office Space	4,464	4,373	5,085	712
Warehouse Space/Other	3,014	3,105	3,198	93
NMAA/NPG Relocation	2,270	2,270	2,270	0
Total	9,748	9,748	10,553	805

ANACOSTIA MUSEUM AND CENTER FOR AFRICAN AMERICAN HISTORY AND CULTURE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	25	1,910	4	695	0	37	0	100
FY 2002 ESTIMATE	25	1,932	4	588	0	782	0	100
FY2003 ESTIMATE	21	1,983	4	588	0	6,400	0	100

ABSTRACT - The Anacostia Museum and Center for African American History and Culture is devoted to increasing public knowledge and awareness of the historical, social, and cultural heritage of people of African descent living in the Americas. The Museum presents exhibitions in the Arts and Industries Building and at its facility in southeast Washington. The Museum sponsors scholarly programs, and presents a variety of learning opportunities for families and students in the metropolitan Washington area. The museum also assists in the planning and implementation of African American-focused projects and exhibitions nationally.

EXPLANATION OF PROGRAM - Federal Salaries and Expenses funds support a variety of programmatic activities at the Museum that provide local, national, and international audiences with greater understanding of the historical experiences and cultural expressions of people of African descent living in the Americas. Although only minor changes will occur in the level of funding between FY 2001 and FY 2003, there will be a change in focus in these areas. In addition, four unfunded FTEs will be eliminated in FY 2003.

Building on a history of leadership in the development of African American-focused exhibitions, community engagement projects, and learning opportunities for citizens of all ages, the Museum intends to expand its leadership role to include serving as the nation's leading voice for the collection and preservation of African American artifacts, art objects, and documents. The Museum will take a leadership role in the examination of family and community traditions and customs and African American popular culture. In addition, the Museum will develop model programs that meet the need for increased intergenerational learning, and out-of-school activities for elementary and junior high students, such as the creation of the African American Family Learning Center.

Using the renovation of its southeast Washington facility as a stimulus for an enhanced collections development and care focus, the Museum will allocate more resources in FY 2002 to collections and research. This will enable the Museum to develop a series of exhibitions, publications, and educational activities beginning in FY 2002 and 2003 that highlight individual and institutional collecting trends and traditions, enhance the capacity of citizens to care for materials in their possession, and provide in-depth scholarly examinations of collections, traditions, and cultural expression.

The Collector's Passion, featuring six regional collectors and focusing on the care and collection of African American art, will serve as the inaugural exhibition in the renovated facility in FY 2002. Other exhibitions will follow that examine collections in African American museums and historically black colleges and universities, corporations, and the community of collectors nationally. Workshops, seminars, and programs will be held in conjunction with each exhibition. *Let Us Break Bread Together*, a nationally focused community outreach project, will team museum staff with residents of 25 U.S. cities to document African American spiritual traditions.

ANACOSTIA MUSEUM

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
When the Spirit Moves	-	150	-	-	-	-
Reflections in Black	-	14	-	-	-	-
Speak to My Heart	-	10	-	-	-	-
Collector's Passion	-	88	-	50	-	-
Precious Memories	-	-	-	-	-	150
Dressed In Black	-	40	-	-	-	-
Jubilee	-	-	-	20	-	35
African American Family Learning Center	-	-	-	-	-	40
Personnel Costs	1	87	1	56	1	58
Support Costs	-	4	-	5	-	5
Subtotal, Exhibitions	**1**	**393**	**1**	**131**	**1**	**288**
Education						
Martin Luther King Program	-	7	-	-	-	-
Moten School Project	-	34	-	-	-	-
Porter Colloquium	-	20	-	-	-	-
Outreach Programming	-	33	-	15	-	10
National Public Programming	-	-	-	15	-	-
Precious Memories	-	-	-	22	-	-
Summer Academy	-	6	-	-	-	-
Let Us Break Bread Together	-	-	-	20	-	20
Personnel Costs	5	371	5	387	4	402
Support Costs	-	10	-	5	-	5
Subtotal, Education	**5**	**481**	**5**	**464**	**4**	**437**
Collections						
Collection Operations	-	46	-	15	-	10
Personnel Costs	3	54	3	159	3	165
Support Costs	-	-	-	2	-	2
Subtotal, Collections	**3**	**100**	**3**	**176**	**3**	177
Research						
Book Publications	-	14	-	-	-	-
Family Learning Center	-	-	-	30	-	-
Exhibitions	-	-	-	150	-	20
Program: Personnel Costs	6	199	6	278	6	289
Program: Support Costs	-	-	-	3	-	3
Subtotal, Research	**6**	**213**	**6**	**461**	**6**	**312**
Administration						
Facilities	1	297	1	150	1	152
Information Technology	-	13	-	14	-	14
Finance/General Administration						
Public Affairs	-	12	-	-	-	-
Central Staff	6	249	6	351	3	361
Administrative Management	3	152	3	185	3	191
Subtotal, Administration	**10**	**723**	**10**	**700**	**7**	**718**
Necessary Pay	-	-	-	-	-	51
TOTAL	**25**	**1,910**	**25**	**1,932**	**21**	**1,983**

ARCHIVES OF AMERICAN ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	24	1,716	0	333	14	688	0	0
FY 2002 ESTIMATE	24	1,738	0	240	14	773	0	0
FY 2003 ESTIMATE	24	1,805	0	220	13	752	0	0

ABSTRACT - The Archives of American Art (AAA) is the world's largest repository of primary source documentation on the history of the visual arts and culture in America. For nearly 50 years, the Archives has collected, preserved, and made available to the public such diverse materials as letters and diaries of artists and craft persons; manuscripts of critics and scholars; records of museums, galleries, and schools; photographs; works of art on paper; and recorded oral and video interviews. More than 14.6 million documents constitute an indispensable resource for researchers, who may consult original papers at AAA's Washington DC headquarters, or access selected holdings on microfilm through interlibrary loan or at Archives reference centers in Washington, New York, and San Marino, California, and affiliated facilities in Boston and San Francisco. Through its website and automated catalog, the Archives provides Internet access to online exhibits, oral histories, finding aids and guides, selected digital images, and visitor services.

EXPLANATION OF PROGRAM - In FY 2003, the Archives of American Art will continue to fulfill its mission to collect, preserve, and make available diverse materials documenting the history of the visual arts in America, increasing accessibility to its unique collections through a variety of means. The Archives reaches a diverse constituency in every state and around the world through exhibitions (both in-person and online), collection loans, nation-wide reference facilities, a worldwide online inquiry and interlibrary loan service, a multi-faceted website that is constantly updated and enhanced, publications, and through training for interns and fellows and other educational programs.

Exhibitions - In FY 2003, the Archives will continue to produce small exhibitions of high quality that reflect the richness of its collections and its role as an invaluable source of primary documentation used by the general public and the scholarly community. Building on a tradition of excellent

reviews, the Archives will complement its walk-in exhibits with online counterparts that can reach Internet users worldwide.

Education and Collections - Staying abreast of current Web-based technologies and maintaining and enhancing an informative and vibrant website will continue to be a priority for the Archives in FY 2003. In the areas of collections acquisitions and collections processing, the Archives will maintain its current level of activities in order to provide sufficient accessibility to the primary sources of art in America from the eighteenth century to the present. Increasingly, Archives users seek information on contemporary art, so collecting priorities will continue to emphasize artists from the latter half of the twentieth century. The Archives' plans for digitization will also provide for increased access to its collection of more than 3,000 oral histories, oral history transcripts, and finding aids to collections. The Archives will also continue its longstanding tradition of collecting widely in all art media.

Administration - A key priority in FY 2003 is maintaining the highest standards in management excellence, ensuring that financial and human resources are used in accordance with applicable policies and procedures. Primary goals include reinforcing the standards of equal employment opportunity, training an effective work force, and practicing fiscal discipline.

ARCHIVES OF AMERICAN ART

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	1	-	1	-	1	-
Diaries	-	19	-	-	-	-
Craft and the Creative Process	-	20	-	-	-	-
Wayne Thiebaud	-	23	-	-	-	-
Folk Art	-	-	-	19	-	-
Marcel Breuer	-	-	-	19	-	-
American Crafts	-	-	-	5	-	-
Benefit Exhibition	-	-	-	19	-	-
Erle Loran	-	-	-	-	-	20
Douglas Leigh	-	-	-	-	-	21
Crafts II	-	-	-	-	-	21
On-Line Exhibitions	-	18	-	19	-	19
Loan Program	-	20	-	21	-	21
Subtotal, Exhibitions	**1**	**100**	**1**	**102**	**1**	**102**
Education						
Reference Services	5	299	5	302	5	302
Website Management	1	45	1	48	1	48
Publications Program	1	5	1	5	1	5
Intern/Fellow Program	-	5	-	5	-	5
Lecture and Seminar Series	-	5	-	5	-	5
Subtotal, Education	**7**	**359**	**7**	**365**	**7**	**365**
Collections						
Collections Acquisition	2	185	2	187	2	187
Collections Processing	6	390	6	394	6	394
Catalog Management	1	40	1	42	1	42
Registarial Program	1	11	1	12	1	12
Subtotal, Collections	**10**	**626**	**10**	**635**	**10**	**635**
Research	-	-	-	-	-	-
Administration						
Information Technology	1	38	1	39	1	39
Finance/General Administration						
Central Staff	2	345	2	347	2	347
Administrative Management	3	248	3	250	3	250
Subtotal, Administration	**6**	**631**	**6**	**636**	**6**	**636**
Necessary Pay	-	-	-	-	-	67
TOTAL	**24**	**1,716**	**24**	**1,738**	**24**	**1,805**

CENTER FOR FOLKLIFE AND CULTURAL HERITAGE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	14	1,780	15	1,245	12	1,852	5	375
FY 2002 ESTIMATE	14	1,850	15	1,153	6	3,637	0	375
FY 2003 ESTIMATE	14	1,895	15	1,173	2	714	0	0

ABSTRACT - The Center for Folklife and Cultural Heritage (CFCH) conducts scholarly research and public programs that promote understanding and continuity of traditional grass roots regional, ethnic, tribal, and occupational heritage in the United States and abroad. The Center maintains the Ralph Rinzler Folklife Archives and Collections. It produces the annual Smithsonian Folklife Festival; Smithsonian Folkways Recordings; documentary films, videos, and print publications; training programs and educational materials; and museum and traveling exhibitions. The Center cooperates with federal and state agencies to advance the nation's interest in cultural matters.

EXPLANATION OF PROGRAM - The Center for Folklife and Cultural Heritage received a federal appropriation of $1.78 million in FY 2001. Of this total, $1.37 million was allocated for salaries and benefits and $0.41 million for travel and other objects. Personnel costs make up more than 75 percent of the federal budget. Salaries and benefits costs span multiple functional areas reflecting the diverse cross-functional efforts undertaken by the staff to support the Smithsonian Folklife Festival, Folkways Recordings, and educational outreach.

Exhibitions - The Center's primary exhibition program is the Smithsonian Folklife Festival, which is the largest annual cultural event in the nation's capital. Since its founding in 1967, the Festival has taken place outdoors on the National Mall in Washington DC, over a 10-day period coinciding with the Fourth of July holiday. The Festival attracts an average of one million visitors, with approximately half coming from local jurisdictions and the remaining half from across the nation. The Festival is free to all visitors and generates hundreds of media features.

The Smithsonian Folklife Festival celebrates the grass-roots traditional culture of people from America and around the world. It exposes visitors to the living cultural heritage of their neighbors as well as people from afar. Recent Folklife Festival programs have featured the diverse cultures found in New York City, Washington DC, New Hampshire, Rio Grande Valley, Mississippi Delta, Wisconsin, Iowa, South Africa, Romania, and Bermuda. The Festival has presented exhibit programs on Tibetan Americans, Filipino Americans, and Baltic Americans. Future programs planned for the Festival include the Silk Road, Appalachia, and maritime culture. The Festival works closely and collaborates with state, city and regional organizations, educators, scholars, and tradition-bearers to research exhibits and programs. The annual Festival relies heavily on the supporting efforts of many organizations, 800 volunteers, 600 musicians, artisans, storytellers, cooks, and other participants in demonstrations, workshops, and public performances. Festival programs are often restaged back home in featured states.

The Center advises and assists in other special events such as the Millennium on the Mall, presidential inaugural programs, the Olympics, and is currently working with the Presidio Trust to develop a signature event for the Presidio of San Francisco, Golden Gate National Recreation Area. In collaboration with the Smithsonian Institution Traveling Exhibition Service (SITES), the Center has developed exhibitions on Woody Guthrie, the culture of the Maroons, African American quilting, and African American gospel music that are currently touring. Currently under development is El Rio, based on a prior Festival program and scheduled to tour the American Southwest during 2002.

Federal resources support the salaries and benefits of curatorial staff, administrative support, temporary Festival positions, and basic infrastructure for the Festival. In addition, donor and sponsor resources are obtained from corporations, foundations, state, local, and national governments to fund Festival programs, augmented by food concessions and craft sales.

Education - The Smithsonian Folkways Recordings comprises a collection of audio recordings and documentation, as well as a recording and distribution operation that reaches millions of Americans. The Smithsonian Folkways Recordings annually publishes some two to three dozen documentary recordings concentrating on American traditions, but also including communities outside the United States. Recent recordings include *Every Tone a Testimony: An African American Aural History*, *Taquachito Nights*, several children's albums by Ella Jenkins, and *Bosavi: Rainforest Music from Papua New Guinea*.

Folkways collections, curatorial, education, and research functions are overseen by a director/curator supported by federal appropriations. Other Folkways operations including production, distribution, licensing, and accounting are supported by revenues from product sales and licenses, as well as donor and sponsor resources. The Rockefeller Foundation recently provided $750,000 to support a Global Sound Network website to facilitate and expand online distribution of Folkways and other archival collections.

The Center, in collaboration with educators, develops and produces award-winning educational media products (films, radio series, videos, websites and instructor/student materials) for use primarily in grades K-12. Federal resources support staff salaries and benefits of curators and education specialists, while donor and sponsor resources provide for production costs.

Collections - The Ralph Rinzler Folklife Archives and Collections contain more than 70,000 audio recordings, 1 million photographic images and numerous manuscripts, field notes and other materials documenting American and world grass roots traditional culture during the past 100 years. The collection has been largely generated through research and documentation of the Folklife Festival and Folkways Recordings. Among the collection are treasures, including the first-ever recording of *This Land is Your Land*, and original tapes of the speeches of Rev. Martin Luther King, Jr. Federal appropriations support a supervisory curator and an archivist. In 2000, $750,000 was received as a Save America's Treasures grant. This funding, in conjunction with the Library of Congress, is being used to preserve and digitize the most endangered recordings in the collection in order to make them available to the American public. Copies of the collection materials are sent to archives and cultural centers throughout the United States. The collection database is available online. The archival reading room is open to researchers and educators, and there are approximately 300 queries a month serviced by the staff.

Research - The Center for Folklife and Cultural Heritage conducts research documenting the expressive cultural traditions of American and other peoples for the purpose of producing Festival programs, exhibitions, Folkways recordings, or other educational products. Areas of research include American traditional music, American ethnic and occupational culture, family traditions, the African Diaspora, Native American culture, and Latino culture. Federal appropriations support the salaries and benefits of Smithsonian curators who organize and document research activity. Collections generated from research are placed into the Ralph Rinzler Folklife Archives and Collections and are made available for further study.

Administration - The Center for Folklife and Cultural Heritage requires a competent administrative staff to support accounting, procurement, human resources, office management, and information technology functions. Federal appropriations support the deputy director and administrative support personnel, as well as basic office operating expenses. Smithsonian Trust resources—donor and sponsor resources—fund other administrative personnel and functions, including the salary and benefits of a development officer.

CENTER FOR FOLKLIFE AND CULTURAL HERITAGE

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Smithsonian Folklife Festival	3	808	3	878	3	878
Subtotal, Exhibitions	**3**	**808**	**3**	**878**	**3**	**878**
Education						
Folkways	5	75	5	75	5	75
Teacher Training	-	26	-	26	-	26
Education Materials	-	175	-	175	-	175
Cultural Outreach	-	130	-	130	-	130
Subtotal, Education	**5**	**406**	**5**	**406**	**5**	**406**
Collections						
Folkways	2	50	2	50	2	50
Archives	-	88	-	88	-	88
Subtotal, Collections	**2**	**138**	**2**	**138**	**2**	**138**
Research						
Cultural Research	1	115	1	115	1	115
Folkways	-	14	-	14	-	14
Subtotal, Research	**1**	**129**	**1**	**129**	**1**	**129**
Administration						
Security	-	10	-	10	-	10
Information Technology	1	96	1	96	1	96
Finance/General Administration						
Finance	2	156	2	156	2	156
Human Resources	-	16	-	16	-	16
Public Affairs	-	21	-	21	-	21
Subtotal, Administration	3	299	3	299	3	299
Necessary Pay	-	-	-	-	-	45
TOTAL	14	1,780	14	1,850	14	1,895

COOPER-HEWITT, NATIONAL DESIGN 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 2001 ESTIMATE	43	2,934	29	3,234	8	3,229	1	17
FY 2002 ESTIMATE	40	2,942	29	2,850	9	3,975	0	1
FY 2003 ESTIMATE	40	3,043	29	2,850	9	3,241	0	0

ABSTRACT - Cooper-Hewitt, National Design Museum explores the creation and consequences of the designed environment. Design, a process of shaping matter to a purpose, is a fundamental activity. The National Design Museum investigates the structures and effects of these products of design and their roles as forces for communication and change. The Museum is interested in all aspects of design, including urban planning, architecture, industrial design, landscaped design, interior design, textiles, advertising, and graphic arts. Today the scale and pace of change require a new understanding—one that recognizes that individuals, societies, and the natural environment are linked through design.

EXPLANATION OF PROGRAM - Cooper-Hewitt, National Design Museum is the only museum in America devoted exclusively to historical and contemporary design. The Museum pursues its mission through award-winning exhibitions, publications, and educational programs for design professionals, the adult public, and schoolchildren. The Museum continues to fulfill its mission to collect, preserve, and make accessible to the general public its unique collections of over 250,000 objects in the departments of drawings and prints, textiles, wall coverings, and applied arts and industrial design.

Exhibitions - Approximately 13 percent or $400,000 of total S&E funding is allocated to exhibitions. Funding for exhibitions has remained steady for the past three fiscal years. In FY 2003, the Museum will continue to present innovative, state-of-the- art exhibitions that reflect the richness of the collections and the best in contemporary and historical design. With the launch of a new exhibition initiative in FY 2002, museum space will be transformed into a collections gallery to feature selections from the permanent collection. The inaugural exhibition, *What is Design?*, will feature outstanding selections from the Museum's collections.

Education - More than 8 percent or $248,000 of total S&E funding is allocated to education. In FY 2003, a highlight of the Museum's school programs is an expanded Design Directions program, now in its fifth year, for high school audiences. This program includes one-day and multi-session after-school design studios, college/university design visits, portfolio workshops, and internships. The Museum also offers an expanded Summer Design Institute for K-12 and design educators that draws a steadily increasing national audience each year.

Collections and Research - Almost 30 percent or $860,000 of total S&E funding is dedicated to collections and research. The recently renovated Design Resource Center, completed in FY 1998, houses approximately 80,000 objects in the departments of textiles, wall coverings and applied arts and industrial design. Opening in October 2001, the completed Drue Heinz Study Center for Drawings and Prints and Henry Luce Study Room for American Art will make available to the public an additional 160,000 objects. The curatorial departments are set up as a unique resource for designers, scholars, and the general public. The Museum's library contains more than 60,000 volumes, including 5,000 rare books, and has over 2,000 visitors per year.

Administration - Approximately 47 percent or $1,434,000 of total S&E funding is used to support administration, with most going to facilities management. Located in New York City and unable to benefit from many of the Smithsonian's central services (such as horticulture, painters, electricians, central paper supplies), the Museum must rely on its facilities staff to perform many of these services. With the completion of the renovation project in 1998, the Museum has enjoyed increased attendance by being able to offer the public more visitor services such as the café, museum shop, and garden. This, in turn, has placed increased demand on the facilities staff to maintain the public spaces. The loss of one FTE in FY 2002 adds to the challenge. The Museum also continues to address the needs of the administrative support requirements in such areas as information technology, human resources, procurement, contracting, and finance operations.

COOPER-HEWITT, NATIONAL DESIGN MUSEUM

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
The Opulent Eye of Alexander Girard	-	50	-	-	-	-
Masterpieces from the Vitra Museum	-	99	-	-	-	-
Aluminum by Design	-	99	-	-	-	-
Rooms with a View: Landscape & Wallpaper	-	99	-	-	-	-
Glass of the avant-garde	-	50	-	50	-	-
Russel Wright: Creating American Lifestyle	-	-	-	130	-	-
What is Design - FY02	-	-	-	40	-	-
SKIN: Surface and Structure in Contemp Design	-	-	-	140	-	-
Hotel: Contemporary Hotel Design	-	-	-	40	-	100
What is Design - FY03	-	-	-	-	-	40
National Design Triennial - FY03	-	-	-	-	-	200
Blahnik	-	-	-	-	-	28
Sutnar	-	-	-	-	-	32
Subtotal, Exhibitions	**6**	**397**	**6**	**400**	**6**	**400**
Education						
Adult Programs	2	115	2	120	2	120
School / Youth Programs	2	116	1	53	1	53
Public Impact	2	100	1	75	1	75
Subtotal, Education	**6**	**331**	**4**	**248**	**4**	**248**
Collections						
Curatorial	1	131	1	136	1	136
Collection Management	6	405	6	433	6	433
Conservation	2	158	2	164	2	164
Collection Information	1	64	1	67	1	67
Subtotal, Collections	**10**	**758**	**10**	**800**	**10**	**800**
Research						
Collections	-	27	-	30	-	30
Exhibitions	-	27	-	30	-	30
Subtotal, Research	**1**	**54**	**1**	**60**	**1**	**60**
Administration						
Facilities	15	898	14	898	14	898
Information Technology	1	120	1	125	1	125
Finance/General Administration						
Finance	1	52	1	55	1	55
Human Resources	1	68	1	71	1	71
Administrative Management	2	256	2	285	2	285
Subtotal, Administration	**20**	**1,394**	**19**	**1,434**	**19**	**1,434**
Necessary Pay	-	-	-	-	-	**101**
TOTAL	**43**	**2,934**	**40**	**2,942**	**40**	**3,043**

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 2001 ESTIMATE	233	16,126	44	8,479	62	7,632	2	2,966
FY 2002 ESTIMATE	236	16,599	44	4,379	62	10,119	2	245
FY 2003 ESTIMATE	246	24,963	44	4,506	62	6,250	2	54

ABSTRACT - The mission of the National Air and Space Museum (NASM) is to preserve and display aeronautical and space flight equipment and data of historical interest and significance to the progress of aviation and space flight; develop educational materials and conduct programs to increase the public's understanding of, and involvement in, the development of aviation and space flight; and conduct and disseminate new research in the study of aviation and space flight and related technologies. In addition to its Mall location, NASM maintains the Paul E. Garber Preservation, Restoration, and Storage Facility in Suitland, Maryland. In October 2000, ground was officially broken on the Steven F. Udvar-Hazy Center (Dulles Center) in Virginia. The Udvar-Hazy Center will house the Museum's collection and restoration facilities, enabling the Museum to exhibit over 2,600 artifacts, including its largest aircraft and spacecraft.

EXPLANATION OF PROGRAM - In FY 2003, the National Air and Space Museum will begin to move into the new facility, the Steven F. Udvar-Hazy Center. NASM is scheduled to take possession of the north aviation hangar in the second quarter of FY 2003 and will begin transferring aircraft that were restored in FY 2001 and FY 2002. These restorations are the result of federal support provided in FY 2001 and FY 2002. The existing collections preparation staff will work at the Udvar-Hazy Center and at the existing Garber facility to transfer and install artifacts. An additional $3,361,000 in one-time costs will be needed to support the artifact transfer and move-in, as reflected on the table below under the Collections function.

In FY 2003, NASM will expand its work within the Udvar-Hazy Center. Triangular exhibit stations, large display cases, artifact barrier/protective systems, and interactive computer systems will be installed to complement the large artifacts being installed in the aviation hangar. Prior federal support in FY 2001 and FY 2002 provided the funds to develop and construct the exhibit elements. Two FTEs at $123,000 and $850,000 in

one-time costs will be required to support the exhibit installations. In addition, NASM's education department will expand to meet regional educational needs with 1 FTE and $78,000.

In conjunction with taking beneficial occupancy, costs related to the new Udvar-Hazy Center infrastructure, including utilities, cleaning and maintenance, guard services, horticulture, and information technology, will be incurred. NASM and the Smithsonian Institution are planning to competitively bid and outsource the infrastructure support operations including cleaning, maintenance, guard services, horticulture, and information technology. Unlike the NASM Mall location, the Udvar-Hazy Center will be 30 miles from the current infrastructure support operation, and would require significantly greater staffing to support its operations than relying on as-needed contractual support. NASM anticipates cost savings through outsourcing support services. Projected costs for outsourcing facilities ($576,000) and information technology ($1,286,000) total $1,862,000. Support for security management is estimated at 5 FTEs and $428,000, plus $947,000 in outsourced security support.

To manage the infrastructure support outsourcing, the Udvar-Hazy Center will require employees to oversee contractual operations and ensure adherence to Institutional policies. Requirements include 3 FTEs and $251,000 to manage the building support operations.

In FY 2003, NASM will incur a reduction of 1 FTE and $65,000 in facilities to complete the reductions proposed in FY 2002. This vacant position involved some administrative duties in the NASM operations that will be realigned.

Concurrent with the Udvar-Hazy Center's preparation for opening, NASM's locations on the National Mall and Garber Center will maintain current operations. NASM Mall will offer new exhibits and programs, including a celebration of the Wright Brother's achievement; an updated Air Transportation gallery in 2004 and a new Planets exhibit in 2005. The Garber Center will continue its important work of preparing the collections for the move to the Udvar-Hazy Center beginning in FY 2003.

NATIONAL AIR AND SPACE MUSEUM

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Udvar-Hazy, Dulles	2	1,511	2	632	4	1,605
Operations	37	2,746	32	2,410	32	2,410
Subtotal, Exhibitions	39	4,257	34	3,042	36	4,015
Education						
Udvar-Hazy, Dulles	1	10	1	85	2	163
Public Outreach (web site)	-	228	-	225	-	225
Operations	5	538	4	529	4	529
Long Term Planning	-	2	-	-	-	-
Subtotal, Education	6	778	5	839	6	917
Collections						
Udvar-Hazy, Dulles	14	983	9	650	9	4,011
Documentation Refinement	-	4	-	-	-	-
National Outreach	-	268	-	-	-	-
Artifact Documentation	-	291	-	-	-	-
Operations	39	2,383	51	3,204	51	3,204
Subtotal, Collections	53	3,929	60	3,854	60	7,215
Research						
Udvar-Hazy, Dulles	-	2	-	2	-	2
Origin & Evolution of the Planets	-	705	-	-	-	-
Operations	37	2,693	37	3,398	37	3,398
Subtotal, Research	37	3,400	37	3,400	37	3,400
Administration						
Facilities	75	2,972	76	2,772	75	3,283
Security	-	-	-	-	5	1,375
Information technology	4	521	4	478	4	478
Information technology - Udvar-Hazy	-	40	-	543	-	1,829
Finance/General Administration						
Finance	7	700	9	878	9	878
Finance - Udvar-Hazy	1	32	-	-	3	251
Human Resources	1	55	1	55	1	55
Archives	8	600	8	602	8	602
Archives - Udvar-Hazy	1	28	1	54	1	54
Public Affairs	1	82	1	82	1	82
Planned offsetting reductions	-	(1,268)	-	-	-	-
Subtotal, Administration	98	3,762	100	5,464	107	8,887
Necessary Pay	-	-	-	-	-	529
TOTAL	233	16,126	236	16,599	246	24,963

NATIONAL MUSEUM OF AMERICAN HISTORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ACTUAL	315	23,059	19	3,563	66	14,194	48	3,064
FY 2002 ESTIMATE	295	20,800	17	2,629	77	30,465	48	3,100
FY 2003 ESTIMATE	295	21,596	17	2,626	81	82,311	48	3,100

ABSTRACT - The National Museum of American History/Behring Center (NMAH), dedicates its collections and scholarship to inspiring a broader understanding of our nation and its many peoples. It creates learning opportunities, stimulates imaginations, and presents challenging ideas about the country's past. This mission statement serves as a guide to NMAH staff as they develop public programs, open new and update existing exhibitions, conduct research, and enrich the collections.

This line item also includes the National Postal Museum (NPM). The National Postal Museum is dedicated to the preservation, study and presentation of postal history and philately. The Museum uses research, exhibits, education, and public programs to make this rich history available to a wide and diverse audience.

National Museum of American History

EXPLANATION OF PROGRAM - The National Museum of American History is on the verge of completing the conceptual phase of its Public Space Concept Planning Project (PSCPP) which, when implemented, will significantly change the look and dynamics of the Museum. Through the generous gift of Kenneth Behring, NMAH has been able to establish a Blue Ribbon Commission to advise the Museum on strategic exhibition planning and introduce a public space design developer to assist with the new look of the building's public spaces. The advisors will help define the vision needed to move the Museum, its exhibitions and public programs into the 21st century. While largely a trust-funded endeavor, the PSCPP does draw on the federal base funds with an increase in the Exhibitions function in FY 2002. The Museum has a number of permanent exhibitions, largely trust- funded, in various stages of completion and scheduled to open over the next five years. Themes include transportation, achievement, military history, technology, and a great American icon, the Star Spangled Banner. In FY 2002 and FY

2003, an increase in spending of 60 percent over the FY 2001 level is targeted for this very special project. These and other exhibitions, when coupled with the planned major public space renovation, will offer visitors an enhanced educational experience and improved visitor amenities. The Exhibitions function also includes a one-time-only appropriation for FY 2001 in the amount of $2,130,000 for the traveling version of the very popular *The American Presidents* exhibition, which opens in Chicago next year.

For FY 2001–2003, the Museum demonstrates through a spending plan of approximately $2,800,000 per year a firm commitment of federal support to a variety of educational outreach activities under NMAH's education function. Some of these activities encompass a vibrant and growing affiliations program to continued area-wide community events. Supplemented with trust funds, the Museum continues to offer visitors hands-on activities in our history and science centers. The *Hands On History* program allocates over $100,000 a year to targeted audiences. At least two traveling exhibitions per year for the next five years are planned as part of our efforts to reach out to the public. The public programs reach a wide and diverse audience including the ever-popular *Smithsonian Jazz Master Works Orchestra, Holiday Celebration, American Popular Music, Program in Black American Culture,* and the *Chamber Music Quartet*. The Museum's Web program has again received several prestigious awards for its production of permanent exhibition websites.

Federal financial support and anticipated spending for NMAH Collections, Research, and Administration functions remain constant with no significant change in expenditure patterns.

National Postal Museum

EXPLANATION OF PROGRAM - The National Postal Museum's federal base primarily supports nine FTEs, which total approximately $600,000 in salary and benefit costs. In FY 2001, the Museum devoted most of its federal resources to the revitalization of its permanent galleries. With the completion of this effort, focus can resume on temporary and traveling exhibitions in FY 2002 and FY 2003. Also in FY 2002 and FY 2003, additional resources will be directed to major projects in the Museum's collections department, resulting in an increase in spending of 26 percent. The most significant is the digitization project that involves converting digital images to a newly acquired automated central collections information system. In addition, a centralized Postal Image Archive will be created to inventory and record the Museum's various photographic holdings using The Museum System database. Using the same database to manage the photo collection that is used to manage the national philatelic and postal history collection, the

National Postal Museum will be able to provide the best, most efficient image request service possible to researchers, publishers, and the general public.

The Museum intends to increase its level of spending by approximately 60 percent in FY 2002 and FY 2003 in the area of research. The most significant project that will begin in FY 2002 is the expansion of the Museum's collection of U.S. Stamps. In FY 2002, the Museum will hire a philatelist to assist with this project. In FY 2003, the philatelist will have a major impact on the Museum's research projects, its collection acquisitions, and temporary exhibitions, and will improve the Museum's service to the philatelic community. In FY 2002 and 2003, additional resources will be directed to improving and supporting the technological needs of the Museum. Website enhancements and maintaining the central collection information system are top priorities.

The Museum's federal base, totaling $667,000, is small in comparison to the annual operating and program support provided by the United States Postal Service. The Postal Service's grant of $ 2.8 million in FY 2001 supports nearly 80 percent of the operational costs of the Museum. This includes salary and benefit costs for 45 trust funded FTEs, utility expenses, facility maintenance services, security services, educational programs, research, conservation, and exhibitions. Currently, the federal base is the only Smithsonian funding available to support the Museum's operational costs. With the funding challenges currently facing the Postal Service, the Museum anticipates reductions to its operating budget from that source. These anticipated reductions will cause the Museum to become increasingly dependent on its federal base to supplement the operational costs supporting exhibitions, collections, research, and administration.

NATIONAL MUSEUM OF AMERICAN HISTORY

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Public Space Plan	5	410	7	574	7	574
Star Spangled Banner	3	146	4	235	4	235
For Which It Stands	4	228	5	422	5	422
America On The Move	6	392	6	392	6	392
Achievement Hall	4	228	5	422	5	422
Global Connections	3	146	4	235	4	235
Military History Hall	4	228	4	235	4	235
Changing Exhibition Program	11	934	10	949	10	949
Travelling Exhibitions	5	278	6	285	6	285
Presidents	2	2,130	-	-	-	-
Other	10	729	2	44	2	44
Subtotal, Exhibitions	**57**	**5,849**	**53**	**3,793**	**53**	**3,793**
Education						
Hands On History	2	103	2	106	2	106
Affiliations	6	500	8	700	8	700
Public Programs	25	1,185	25	1,220	25	1,220
Tours/School Programs	5	206	5	212	5	212
Other	11	878	5	578	5	578
Subtotal, Education	**49**	**2,872**	**45**	**2,816**	**45**	**2,816**
Collections						
Curatorial	74	4,956	72	4,917	72	4,917
Conservation/Collections Management	25	2,124	23	2,107	23	2,107
Subtotal, Collections	**99**	**7,080**	**95**	**7,024**	**95**	**7,024**
Research	**22**	**1,970**	**18**	**1,912**	**18**	**1,912**
Administration						
Facilities	47	1,390	46	1,370	46	1,370
Information technology	12	967	11	958	11	958
Finance/General Administration						
Finance	10	1,539	9	1,519	9	1,519
Human Resources	1	52	1	51	1	51
Central Staff	3	242	3	240	3	240
Management	6	483	5	479	5	479
Subtotal, Administration	**79**	**4,673**	**75**	**4,617**	**75**	**4,617**
Necessary Pay	-	-	-	-	-	767
TOTAL	**306**	**22,444**	**286**	**20,162**	**286**	**20,929**

NATIONAL POSTAL MUSEUM

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Project Management	1	87	1	93	1	93
Permanent Exhibits	1	45	1	36	1	36
Temporary Exhibits	-	75	-	8	-	8
Subtotal, Exhibitions	**2**	**207**	**2**	**137**	**2**	**137**
Education	-	-	-	-	-	-
Collections						
Collections Management	1	52	2	103	2	103
The Museum System Project	2	152	2	154	2	154
Subtotal, Collections	**3**	**204**	**4**	**257**	**4**	**257**
Research						
Curatorial Research	1	63	1	100	1	100
Subtotal, Research	**1**	**63**	**1**	**100**	**1**	**100**
Administration						
Information technology	-	10	-	20	-	20
Finance/General Administration						
Administrative Management	3	131	2	124	2	124
Subtotal, Administration	**3**	**141**	**2**	**144**	**2**	**144**
Necessary Pay	-	-	-	-	-	29
TOTAL	**9**	**615**	**9**	**638**	**9**	**667**

NATIONAL MUSEUM OF THE AMERICAN INDIAN

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	257	27,261	6	1,680	8	795	0	25
FY 2002 ESTIMATE	257	27,899	6	1,148	8	357	0	0
FY 2003 ESTIMATE	304	40,237	6	1,123	8	323	0	0

ABSTRACT - The National Museum of the American Indian (NMAI), established in 1989 by Public Law 101-185, recognizes and affirms to Native American communities and the non-Native American public the historical and contemporary cultures and cultural achievements of the Native peoples of the Western hemisphere. This is achieved through development and use of its collections and nationwide public programming, research, and exhibitions executed in consultation with Native peoples. The mission of NMAI states that the Museum has a special responsibility, through innovative public programming, research, and collections, to protect, support, and enhance the development, maintenance, and perpetuation of Native American culture and community.

NMAI operates administrative offices in Washington DC, an exhibition center in New York City at the George Gustav Heye Center (GGHC) in the Alexander Hamilton U.S. Custom House, the Cultural Resources Center (CRC) at Suitland, Maryland, and the Research Branch located in the Bronx, New York. The Research Branch temporarily houses most of the Museum's collections. The move of NMAI's collection of 800,000 artifacts from New York to CRC began in March 1999. CRC houses reference, collections, and program support for NMAI. Construction of the museum building on the Mall is underway, with a planned opening in 2004.

EXPLANATION OF PROGRAM - Federal funding supports NMAI programs in four general categories: 1) exhibitions for the Mall Museum and GGHC; 2) education; 3) collections; and 4) administrative, financial, technical and facilities support. For FY 2003, the Smithsonian requests an increase of $11,736,000 and 47 positions associated with the opening of the Mall Museum and operations at the Cultural Resources Center. FY 2003 marks a crucial point in the process of preparing for the opening of the Mall Museum in 2004. Without the prior planning and implementation for facilities and

programs, NMAI will not be ready to open its doors to the public on the scheduled date. The Institution requests that resources for this line item remain available until expended.

Of the total requested increase, $10.4 million is for items essential to the completion of the building for occupancy and public visitation (including communications cabling and other equipment), as well as staff for program support. With a building of this complexity, it is essential that NMAI have facility management staff available for operations as the building systems are installed and completed. An additional increase of $1.4 million is requested for support activities and programmatic efforts directly related to implementation of Mall functions, including essential outreach to Native communities, and the maintenance and enhancement of public offerings at the George Gustav Heye Center in New York City.

Exhibitions - Approximately 19 percent or $7,629,000 is allocated to exhibitions. The lion's share of this amount (90 percent) is dedicated to preparation of exhibitions for the Mall Museum, with the remainder used to support GGHC exhibitions, loaned exhibitions, and NMAI reinstallations.

Within this category of exhibitions, the Smithsonian requests $1,341,000 and 5 FTEs to provide support for exhibition fabrication and installation and the media projects related to exhibits. These positions are required to establish the exhibits operation in the new building and to permit timely contracting within the exhibit development schedule.

Education - Approximately 15 percent or $5,700,000 is allocated to educational activities. Within this category, the Smithsonian requests $1,587,000 and 13 FTES to begin educational activities for the Mall Museum. The increase includes the following:

- ***Publications and Public Programs.*** 1 FTE and $315,000. These start-up funds are needed in FY 2003 to develop and produce printed materials for the Mall Museum ($65,000) and for the Potomac Center ($90,000), the dynamic, interactive program and exhibition space that will be the central hub for Museum activities. A slower production schedule would preclude the availability of these programmatic materials by the opening date of the Museum. The increase will also fund a position needed to provide editorial assistance for educational, developmental, and exhibit material, and will also support the increased printing needs of the Museum for brochures, rack cards, and exhibition-related publications ($160,000).

- ***Education.*** 7 FTEs and $586,000. This increase will provide staff and funds to begin program operations for the Potomac Center and provide educational programs highlighting the vitality of Native American culture.

- ***Resource Center.*** 3 FTEs and $412,000. This increase is needed to develop the Mall Museum's resource center, which will provide visitors with information about current exhibits as well as general reference material on native culture. In addition, this increase will provide resources to gather and develop material for the Mall exhibition Web pages and to prepare other related information for distribution on the NMAI web site.

- ***Public Programming and Interface.*** $135,000. This increase will enable the Mall Museum to contract for planning and implementing elements of public interface including a system of ticketing museum attendance, educational curricula, and program activity planning and implementation in support of the overall museum experience such as the theater, Potomac Center, and exhibitions.

- ***Community Services.*** 2 FTEs and $139,000. These positions will enable NMAI to expand outreach opportunities for Native constituencies as educational programs are launched at the Mall Museum.

Collections - Approximately 18 percent or $7.6 million is allocated for collections work. Almost half of this amount is dedicated for the move of collection objects from the Research Branch in New York to CRC. Within this category, the Smithsonian requests $545,000 and 5 FTEs to expand collection activities at the Museum. The increase includes the following:

- ***Conservation.*** 1 FTE and $81,000. This increase will support the addition of a paper conservation specialist to the staff, enhancing the holdings of the paper archives and increasing access for researchers.

- ***Collections Management.*** 3 FTEs and $283,000. Because the exhibition demands of the Mall Museum are expected to continue and other exhibition development requirements at GGHC are expected to grow, three museum specialist positions are needed to strengthen the staff handling the artifacts collection.

- ***Registration.*** 1 FTE and $181,000. This increase will provide for a computer program administrator to develop, implement, and maintain the collections information system and work on the registration Web applications.

Administration - While NMAI continues to give priority to funding its programmatic areas, it must also address support requirements in such areas as facilities management, information technology, development, finance, and administrative support. A total of 48 percent or $18.7 million of total funds is devoted to this area. Within this category, the Smithsonian requests an additional $8,263,000 and 24 FTEs to support administrative requirements. The increase includes the following:

- ***Communications Cabling, Furnishings, and Equipment.*** $6,684,000. Construction of the Mall Museum is scheduled for completion by May 2004. The planning and installation of communications cabling must be incorporated into the construction schedule in FY 2003. Also included in this increase are funds for equipment for the exhibitions department workshop and some of the furnishings needed for early occupancy. The remainder of the furnishings and equipment will be included in the FY 2004 budget request.

- ***Facility Management at Mall Museum.*** 11 FTEs and $572,000. Facility staff must be added during FY 2003 to prepare for the opening of the Mall Museum and the increase in services required. The facility manager should be in place no later than fall 2002 to be available for constant consultation during the installation of the mechanical systems. The safety coordinator, as well as the custodial and maintenance workers, will be needed for facility support as beneficial occupancy is obtained in 2003 by exhibits staff.

- ***Facility Management at CRC.*** 2 FTEs and $81,000. Due to increased staff and visitor traffic, the demand for maintenance has increased at CRC. Two custodial workers are needed to provide facility support.

- ***Information Resource Management and Technology.*** 3 FTEs and $457,000. The information management component of NMAI is essential to the operation of the museum's outreach programs. Emphasis will be placed on connecting educational content developed for Mall exhibitions to wider audiences. Distribution of information on the Web will also allow access to the Museum's archives and collections records. This increase will support a computer specialist, a programmer, and a standards and vocabulary specialist. This request also includes funds for content management and portal software.

- ***Development.*** 2 FTEs and $114,000. This increase will fund a special events coordinator and an administrative assistant to boost development efforts and help to raise the final construction funds for the Mall Museum.

- ***Administration.*** 4 FTEs and $241,000. As the Museum readies for opening, administrative support requirements for budget, contracting, procurement, and personnel activities will significantly increase. This request will provide funding for a procurement specialist, budget analyst, personnel technician, and procurement technician.

- ***Public Affairs.*** 2 FTEs and $114,000. As construction proceeds, the increased interest in the Mall Museum will generate an increased demand for public information releases and for constructive contacts with representatives of the Native constituency and public officials. This request will fund a public affairs specialist and a public affairs assistant.

Support Services. In addition to the NMAI line item request, the Smithsonian requests $616,000 and 8 FTEs for support services provided by the Office of Physical Plant (OPP) and Office of Safety and Environmental Management (OSEM). Included in this request are $520,000 and 7 FTEs to support OPP operation of the mechanical systems in the Mall Museum by July 2003. This request also includes $96,000 and 1 FTE to support occupational safety and health requirements and to ensure that a safe and healthful environment is maintained for visitors and Smithsonian staff. The relevant increases are reflected in the respective line items for OPP and OSEM.

NATIONAL MUSEUM OF THE AMERICAN INDIAN

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Mall						
Our Lives	2	1,315	-	-	4	2,697
Our Peoples	2	1,040	3	1,380	3	390
Our Universes	2	1,045	3	1,822	3	1,097
Mall General	-	299	2	810	-	-
Potomac	2	252	-	-	3	705
Prep Theater	2	1,084	-	-	3	1,521
Study Collection	1	276	2	142	2	254
NMAI Film	-	-	-	200	-	-
Architectural Service & Fit Out	-	-	-	500	-	211
Wall Construction	-	-	-	552	-	-
GGHC						
Edge of Enchantment	-	-	-	-	2	300
Creations Journey	-	7	-	7	-	7
Across Borders	1	75	2	194	-	-
Loaned Exhibits						
Who Stole The Teepee	-	3	-	3	-	3
Kiowa Cradle Boards	1	234	-	10	-	10
Great Masters of Mexican Folkart	1	83	-	6	2	185
Seth Eastman	1	88	-	9	-	9
The New Old World	1	77	2	174	-	-
Full Circle	-	-	-	-	-	83
NMAI/Reinstallations						
Plains Shirt	-	3	1	153	-	3
Spirit Capture	-	12	1	138	-	95
Northwest Coast	-	15	1	144	-	15
Woven By the Grandmothers	1	78	-	-	-	-
Subtotal, Exhibitions	17	5,986	17	6,244	22	7,585
Education						
Expressive Culture	7	317	7	317	11	543
Intepretive Program	4	317	4	317	7	485
Film & Video	3	169	3	169	3	169
Film Festival	3	169	3	169	3	169
Resource Ctr (CRC & NY)	11	507	11	507	14	919
Publications	8	761	8	761	9	984
Potomac Center	-	-	-	-	-	90
Educational Resource Materials	-	-	-	143	-	218
Seminars/Symposia	-	-	-	100	-	175
Outreach/Fieldwork	-	-	-	50	-	92
Visitor Services	-	-	-	-	-	60
General Operations (Office of the Asst. Director)	-	-	-	15	-	90
Outreach (Community Services)	3	226	3	226	4	309
Radio Project	3	208	3	208	3	208
Native Artist Fellowship	1	80	1	80	1	80
Internship	2	110	2	110	2	110
Technical Assistant/Workshop	2	129	2	129	3	185
Consultation Meetings	1	306	1	306	1	306
Web Site	1	87	1	87	1	87
Photo Services	4	386	4	452	4	452
Subtotal, Education	53	3,769	53	4,143	66	5,730

NATIONAL MUSEUM OF THE AMERICAN INDIAN
(Continued)

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Collections						
Registration/CIS	7	801	7	836	8	1,017
Curatonal	13	969	13	921	13	921
Repatriation	5	359	5	359	5	359
Archives	4	308	4	313	4	313
Collections Management	6	264	7	356	10	639
Conservation	4	339	4	339	5	420
Indian Arts & Crafts Board	1	53	-	10	-	10
Ciber Database Conversion	-	75	-	75	-	75
Acquisitions	-	80	-	80	-	80
Photo Digitization	-	66	-	-	-	100
Contemporary Arts	-	15	-	5	-	5
Move Project	27	3,680	27	3,680	27	3,680
Film & Video Collections	-	-	-	100	-	-
Subtotal, Collections	67	7,009	67	7,074	72	7,619
Research	-	-	-	-	-	-
Administration						
Facilities						
Lease L'Enfant Plaza	-	735	-	772	-	811
CRC Furniture & Equipment	-	263	-	263	-	943
Mall Furniture and Equipment	-	-	-	-	-	2,970
L'Enfant, DC (Architectural Planning)	1	123	1	98	12	670
CRC, MD	13	551	13	649	15	730
GGHC, NY	18	885	18	885	18	885
Research Branch, NY	-	20	-	20	-	20
Information Technology						
Information Technology						
L'Enfant, DC (Mall)	3	139	3	159	3	3,393
CRC, MD	4	292	4	292	5	360
Onetime cost	-	98	-	-	-	-
GGHC, NY	4	379	4	379	4	379
Research Branch, NY	-	15	-	15	-	15
Information Management						
Intranet	2	172	2	172	2	172
Needs Analysis	1	117	1	117	1	117
Information Management Base Operations	3	357	3	612	5	746
Finance/General Administration						
Finance	10	571	10	571	13	766
Development	13	1,029	13	1,150	15	1,264
Human Resources	4	201	4	201	5	247
Public Affairs	5	360	5	360	7	474
Photo Support	-	25	-	25	-	25
Mall Welcome Center	-	96	-	46	-	46
Administrative Management	29	2,858	29	2,442	29	2,458
Central Staff (Ass't Directors & Deputies)	10	1,210	10	1,210	10	1,210
Subtotal, Administration	120	10,496	120	10,438	144	18,701
Necessary Pay	-	-	-	-	-	602
TOTAL	257	27,261	257	27,899	304	40,237

NATIONAL PORTRAIT GALLERY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	84	5,624	2	534	2	22,263	0	0
FY 2002 ESTIMATE	81	5,626	2	391	5	4,000	0	0
FY 2003 ESTIMATE	77	5,538	2	401	5	3,000	0	0

ABSTRACT - The National Portrait Gallery (NPG) is dedicated to the exhibition and study of portraits of people who have made significant contributions to American history and culture and to the study of the artists who created such portraiture. NPG collects, documents and preserves portraits in all media as both historical and artistic artifacts.

EXPLANATION OF PROGRAM - Since January 2000, the Patent Office Building (POB), which NPG shares with the Smithsonian American Art Museum, has been closed to the public while it undergoes major renovation. The project is the first major renovation for the POB in more than 30 years. While the Gallery is closed, approximately 1,000 portraits from NPG's collection will travel to museums and institutions across the United States, Europe and Japan. In addition, a number of smaller exhibitions are on view at selected venues and the Gallery has created the *NPG Around Town* initiative to build its community partnerships throughout Washington DC. NPG's programs, hosted at neighborhood organizations and venues in the city, range from biographical performances, lectures and concerts to mentorship programs, after-school activities, and family days.

The National Portrait Gallery has reorganized its departments and staff distribution. NPG projects over 95 percent of the proposed FY 2002 federal budget for salary and benefits costs with the remaining resources devoted to program support. Consequently, most of its programs are supported through private fundraising. The FY 2003 estimate shows a reduction in the base for its education program because of the transfer of 4 FTEs and funds to the Smithsonian Institution Libraries to reflect a transfer of functions. From FY 2001 to FY 2002, slight increases in exhibitions and general collections activities reflect changes resulting from the Gallery's reorganization, in support of complex program management in temporary quarters during the POB renovation.

NATIONAL PORTRAIT GALLERY

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	**19**	**1,229**	**16**	**1,302**	**16**	**1,316**
Education	**10**	**679**	**10**	**575**	**6**	**268**
Collections	23	1,500	23	1,549	23	1,557
Collections acquisitions	-	360	-	300	-	300
Subtotal, Collections	**23**	**1,860**	**23**	**1,849**	**23**	**1,857**
Research						
Charles Willson Peale Papers	3	208	3	219	3	222
Subtotal, Research	**3**	**208**	**3**	**219**	**3**	**222**
Administration						
Facilities	15	717	15	752	15	752
Security	-	-	-	-	-	-
Information Technology	3	235	3	245	3	250
Finance/General Administration						
Finance	2	91	2	84	2	86
Human Resources	1	40	1	45	1	47
Public Affairs	2	76	2	82	2	84
Central Administration	5	458	5	434	5	436
Rights/Reproductions	1	31	1	39	1	41
Subtotal, Administration	**29**	**1,648**	**29**	**1,681**	**29**	**1,696**
Necessary Pay	**-**	**-**	**-**	**-**	**-**	**179**
TOTAL	**84**	**5,624**	**81**	**5,626**	**77**	**5,538**

SMITHSONIAN AMERICAN ART 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 2001 ESTIMATE	123	8,823	2	2,409	4	3,020	0	0
FY 2002 ESTIMATE	115	8,265	9	1,648	6	4,708	0	0
FY 2003 ESTIMATE	111	8,313	9	1,748	8	4,365	0	0

ABSTRACT - The Smithsonian American Art Museum (SAAM), formerly the National Museum of American Art, is the nation's museum dedicated to the arts and artists of the United States from colonial times to the present. The Museum uses its rich collections and staff expertise to link Americans to their heritage by showing how these works tell the story of their country. The Museum's programs make American art available to national audiences and beyond, as well as to those who visit its two historic landmark buildings in Washington DC, the Renwick Gallery and the Patent Office Building (POB). The latter building is closed for major renovation and due to reopen in 2004. Outreach takes the form of circulating exhibitions, educational materials, publications, automated research resources, and a vast and growing offering of online and educational services that reflect the diversity of the country's citizenry and art.

EXPLANATION OF PROGRAM - The Museum's primary facility, the Patent Office Building, has been closed since January 2000. However, SAAM continues to maintain a full schedule of exhibitions at the Renwick Gallery, and is also circulating 525 key artworks in eight exhibitions that will travel to 72 museums nationwide. This three-year national tour, *Treasures to Go*, has generated strong national publicity and interest in the Museum and the Smithsonian. The tour is contributing significantly toward achieving enhanced public impact in spite of the closure of the Museum at POB and is in turn providing increased opportunities across the country for improving the financial strength of the Museum.

In FY 2003, SAAM will continue to publish books in conjunction with the Renwick Gallery exhibitions and the traveling shows, and continue to upgrade and enhance its website to retain visibility with a diverse audience during this renovation period.

In addition to the staff reductions projected in FY 2002, there will be a few additional reductions in FY 2003. The FY 2003 estimate shows a reduction in the base for its education and collections programs because of the transfer of 4 FTEs and funds to the Smithsonian Institution Libraries to increase efficiency by centralizing the library function among the Institution's museums.

Since SAAM expends more than 80 percent of its federal budget on salaries and benefits costs, financial flexibility to support programmatic functions is limited. In FY 2003, the Museum will need to curtail its art acquisition, loaning of artworks, government loan program, and other public programs while at the same time prepare for the reopening in the POB with enhanced public gallery space.

SMITHSONIAN AMERICAN ART MUSEUM

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	**22**	**1,590**	**21**	**1,527**	**21**	1,527
Education						
All Other Costs	12	775	11	840	9	670
Affiliated with Non-SI Organizations						
Internship	2	65	2	67	2	67
Ask Joan of Art	2	117	2	121	2	121
Electronic Outreach	4	216	4	224	4	224
Distance Learning	1	110	1	114	1	114
Save Outdoor Sculpture	-	300	-	150	-	150
Renwick Educational Programs	1	57	1	59	1	59
Subtotal, Education	**22**	**1,640**	**21**	**1,575**	**19**	**1,405**
Collections	31	2,066	30	1,982	28	1,911
Collections acquisitions	-	341	-	191	-	191
Subtotal, Collections	**31**	**2,407**	**30**	**2,173**	**28**	**2,102**
Research	**5**	**432**	**4**	**415**	**4**	**415**
Administration						
Facilities	16	718	16	754	16	754
Information Technology	12	966	11	927	11	927
Finance/General Administration						
Finance	1	51	1	58	1	58
Human Resources	1	70	1	79	1	79
Public Affairs	3	164	3	173	3	173
Central Staff & Admin	7	604	6	454	6	454
Product Licensing	1	46	-	-	-	-
Special Events	2	135	1	130	1	130
Subtotal, Administration	**43**	**2,754**	**39**	**2,575**	**39**	**2,575**
Necessary Pay	**-**	**-**	**-**	**-**	**-**	**289**
TOTAL	**123**	**8,823**	**115**	**8,265**	**111**	**8,313**

ARTHUR M. SACKLER GALLERY/FREER GALLERY OF ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	77	6,182	0	448	52	6,372	0	2
FY 2002 ESTIMATE	75	6,098	0	375	55	7,936	0	0
FY 2003 ESTIMATE	74	6,160	0	346	54	8,775	0	0

ABSTRACT - The Arthur M. Sackler Gallery was founded in 1982 and opened to the public in 1987 to house a major gift of Asian art from Dr. Arthur M. Sackler and to develop an active program of loan exhibitions. The Freer Gallery of Art, founded in 1906 and opened to the public in 1923 as the first art museum at the Smithsonian Institution, had its origin in Charles Lang Freer's gift of his extensive Asian art collection to the United States. The gift also included an endowment and a specialized collection of American art, focusing on the works of four American artists, including James McNeill Whistler.

EXPLANATION OF PROGRAM - The museums form an important international center dedicated to the collection, preservation, study, and exhibition of both historical and contemporary Asian artistic traditions, and to an active educational program designed to increase public knowledge and awareness of Asian art and culture. Together, the galleries form the national museum of Asian art for the United States.

Of the federal funding supplied to the Freer and Sackler Galleries, over 88 percent is devoted to salaries and benefits. For FY 2002, all units within the Freer and Sackler galleries were required to absorb a 15 percent cut in their discretionary federal funding. In addition, all federal non-personnel funding within the Education Department was eliminated and replaced with privately raised trust funds. The table below reflects only mandatory salary and benefit increases for 2002 and a shifting of remaining discretionary dollars to support functions that do not easily receive private support.

Exhibitions - While the number of exhibitions and rotations remains relatively stable from year to year, the size, scope, cost, and duration vary significantly. The majority of resources used for exhibitions are non-federal. In FY 2003, 26 percent of total federal dollars will support exhibitions. Most of the federal exhibitions funding is allocated to salaries and benefits for

exhibition implementation and some design costs. For FY 2001, $7,000 in one-year federal funds was devoted to exhibition implementation. For FY 2002 and FY 2003, no federal funds will be budgeted for implementation. Ninety percent of the federal one-year exhibition expense is composed of personnel costs. The remaining 10 percent is general operating costs associated with the design and exhibitions departments.

Education – In FY 2003, 12 percent of total federal dollars supports education programs. As noted above, federal one-year funds have been eliminated for general operating use in the Education Department. The decrease in FY 2003 reflects the transfer of Library functions and resources to the Smithsonian Institution Libraries.

Collections and Research - In FY 2003, 21 percent of total federal dollars supports the collections. As part of the FY 2002 budget reduction, the Freer and Sackler Galleries' federal base was reduced by $349,000. Of that amount, $99,000 formerly allocated for collection acquisitions was eliminated. If acquisitions are to be made for other than the Freer collections, funding must be obtained from external sources.

In the photographic services area, funding for equipment purchases has been eliminated from the federal budget and must be obtained from other sources. Freer trust funds will be used to support the further documentation of the Freer collection.

As part of the FY 2002 budget reduction, the Freer and Sackler Galleries agreed to leave unfilled one curatorial FTE. This was for a position in Contemporary Art, which remains an institutional need but cannot currently be accommodated within the budget. However, the position of Curator of South and Southeast Asian Art (which was unfilled in the FY 2001 budget) has now been filled. This curatorial position is critical to the exhibition schedule. That filled position and the estimated mandatory salary increases constitute the dollar increase in federal one-year funds in the FY 2002 budget.

Administration - In FY 2003, 23 percent of total federal dollars supports administrative functions. The increase in Facilities cost in FY 2002 is composed of several elements, including an adjustment to accurately reflect overtime costs. It has also been necessary to replace funds formerly allocated by the Office of Physical Plant to the Museum's facilities department with federal one-year funds. Lastly, during FY 2001 the Museum initiated an across-the-board grade increase (from Grade 2 to Grade 3) for its laborers based upon a comparison with the responsibilities of other

Smithsonian laborers and their grade levels. In this category as in others, about 90 percent of the costs are personnel-related.

As part of the FY 2002 budget reduction discussed above, the Freer and Sackler Galleries agreed to leave unfilled a vacant accounting technician in the finance department. This reduction is possible due to processing efficiencies and a reorganization of responsibilities in that department. The reduction in the Director costs is due in part to moving overtime costs to Facilities, as discussed above, to reflect where they are actually incurred. The balance of the reduction reflects a lower projection for within-grade increases and miscellaneous awards as well as a 15 percent reduction in the Director's federal general operating budget.

ARTHUR M. SACKLER GALLERY AND FREER GALLERY OF ART

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Exhibitions	16	1,166	15	1,188	15	1,188
Publications	4	399	5	399	5	399
Subtotal, Exhibitions	20	1,565	20	1,587	20	1,587
Education						
Public Programs	1	111	1	65	1	65
Docent Programs	2	91	2	104	2	104
Teacher and School Programs	1	72	1	74	1	74
Library	1	141	1	137	-	-
Archives Services	2	151	2	154	2	154
Public Outreach	3	268	3	245	3	245
Other	1	95	1	98	1	98
Subtotal, Education	11	929	11	877	10	740
Collections						
Collections Management	7	530	7	538	7	538
Conservation	9	746	9	757	9	757
Photographic Services	-	75	-	29	-	29
Acquisitions	-	99	-	-	-	-
Subtotal, Collections	16	1,450	16	1,324	16	1,324
Research						
Curatorial Research	10	781	9	871	9	871
Subtotal, Research	10	781	9	871	9	871
Administration						
Facilities	11	456	11	526	11	526
Information Technology	3	328	3	346	3	346
Finance/General Administration						
Finance	4	371	3	321	3	321
Human Resources	1	67	1	59	1	59
General Administration	1	147	1	150	1	150
Director Costs	-	88	-	37	-	37
Subtotal, Administration	20	1,457	19	1,439	19	1,439
Necessary Pay	-	-	-	-	-	199
TOTAL	77	6,182	75	6,098	74	6,160

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	71	4,712	1	1,242	0	5,818	0	0
FY 2002 ESTIMATE	71	4,771	1	1,280	3	5,347	0	0
FY 2003 ESTIMATE	68	4,719	1	1,076	4	5,841	0	0

ABSTRACT - The Hirshhorn Museum and Sculpture Garden (HMSG) is the nation's museum of modern and contemporary visual art. It is dedicated to developing a greater public understanding and appreciation of art through the collection, preservation, study, exhibition, and interpretation of modern and contemporary works of fine art. Exhibitions, which are produced for local, national, and international audiences, and education and public programs draw about 800,000 visitors per year to the museum. Tours to other museums bring Hirshhorn exhibitions to numerous other viewers in the U.S. and abroad. Inauguration of the Museum's new website in fall 2001, will also bring Hirshhorn programs and activities to countless others nationally and internationally.

EXPLANATION OF PROGRAM – In FY 2001, the Hirshhorn received a $4.712 million federal appropriation ($4.565 million in one-year operating funds and $147,000 in no-year collections acquisition funds). Of the total federal operating funds, $3.652 million was allocated for salaries and benefits, and $0.9 million for other objects including space rental, exhibitions, education, collections care and conservation, research, and administration (building management, public affairs, safety, photo services). Salary and benefit costs were almost 80 percent of the budget and other objects about 20 percent; this distribution will continue, although legislated pay increases and no increases for other objects will continue to reduce funds available for non-salary expenses.

In the table below, FY 2002 and FY 2003 should be considered best estimates for actual allocation given the pending appointment of a new director for the Hirshhorn Museum in fall 2001. Salaries and benefits costs for each department are fully assigned to only one functional area, even though many staff assignments span multiple functional areas. For example, curatorial and registrar salaries and benefits costs are solely assigned to

research and collections, respectively, even though curators work on exhibitions, collections, and research; and registrarial staff work on exhibitions and collections. Other object expenses for these two departments are, to the extent possible, allocated to the appropriate functional area. Building management costs are all reported under the facilities functional area although staff support both building maintenance and exhibitions.

While proportionate spending between functional areas for salaries and benefits remains the same from year to year, unless positions are redirected to other functions, other objects spending may vary from year to year depending on the anticipated and actual success of fund raising. Core expenses—for office supplies and basic contracts and travel—are primarily funded with federal funds.

Exhibitions - Exhibition construction expenses and shipping for changing exhibitions (as opposed to long-term, permanent exhibitions) are mostly funded with trust funds. Non-federal support includes gifts, grants and endowment income, some or all of which may or may not be restricted to specific use. Exhibitions organized and toured by the Hirshhorn Museum are more appealing candidates for trust support than exhibitions that are organized by other institutions. Successful fund-raising also affects the spread of the federal allocation throughout the year and adjustments are constantly made to accommodate new resources.

As the cost of producing exhibitions has risen (shipping, rising art and insurance values), the Museum has found it necessary to raise trust funds to supplement federal base support. In FY 2002, the Hirshhorn is planning to open seven exhibitions, in addition to permanent collection installation changes both in galleries and in the Sculpture Garden. In practice, all exhibitions have some degree of federal support—if not direct, then indirect support (salaries and benefits). The apparent decrease in federal support between FY 2001 and 2002 is based on anticipated success in trust fund-raising. If this effort is not as successful as hoped, federal support to exhibitions will need to increase through redirection.

Education - Education and public programs also rely on a mix of federal and trust support. The big increase in funding from FY 2001 to 2002 is due to the anticipated establishment of a new Web master position that is assigned to the Education Department. To support this effort, the Museum will redirect a position from art conservation to Education. Conservation work will be absorbed by existing staff. Selection of a publications manager in early fall 2001 will require an increase in publications expenditures for FY 2002. Library functions and resources have been transferred to the Smithsonian Institution Libraries as reflected by a decrease in FY 2003.

Collections - Federal support of collections acquisitions were reduced in FY 2002 in order to avoid reducing staff positions while maintaining the high-quality exhibitions and programming offered by the Museum.

Research - An increase in research funding anticipates filling a vacant curatorial position. Although this position has been vacant for more than one year, it is important to fill it if the Museum is to expand its exhibition outreach, a Smithsonian-wide goal.

Administration - The increase in public affairs in FY 2002 reflects the expansion of public outreach to bring the nation's collections to a broader, more geographically diverse audience through a redirection of funds.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Exhibits & Design	8	569	8	555	8	555
Curatorial	-	30	-	27	-	27
Registrar	-	70	-	67	-	67
Subtotal, Exhibitions	**8**	**669**	**8**	**649**	**8**	**649**
Education						
Education	6	428	7	515	7	515
Library	3	193	3	196	-	-
Publications	2	48	2	128	2	128
Subtotal, Education	**11**	**669**	**12**	**839**	**9**	**643**
Collections						
Registrar	7	489	7	452	7	452
Conservation	5	363	4	325	4	325
Acquisitions	-	147	-	50	-	50
Subtotal, Collections	**12**	**999**	**11**	**827**	**11**	**827**
Research						
Curatorial	9	622	9	660	9	660
Subtotal, Research	**9**	**622**	**9**	**660**	**9**	**660**
Administration						
Facilities	18	818	18	820	18	820
Security	1	72	1	74	1	74
Finance/General Administration						
Photo Services	3	182	3	198	3	198
Central Staff	7	547	7	550	7	550
Public Affairs	2	134	2	154	2	154
Subtotal, Administration	**31**	**1,753**	**31**	**1,796**	**31**	**1,796**
Necessary Pay	-	-	-	-	-	144
TOTAL	**71**	**4,712**	**71**	**4,771**	**68**	**4,719**

NATIONAL MUSEUM OF AFRICAN ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	54	4,324	2	673	0	129	0	0
FY 2002 ESTIMATE	54	4,334	1	413	0	300	0	0
FY 2003 ESTIMATE	54	4,461	1	388	0	400	0	0

ABSTRACT - As a leading center for the visual arts of Africa, the National Museum of African Art (NMAfA) fosters and sustains through exhibitions, collections, research and public programs an interest in and understanding of that continent's diverse cultures. The Museum's collection represents the visual arts of the entire continent, crossing time from the ancient through the contemporary.

EXPLANATION OF PROGRAM - The National Museum of African Art holds its collections in trust on behalf of the American people. Preservation and presentation of these objects are dual objectives. Through acquisition, care, research, exhibition, and interpretation of these works of art, the museum educates the public and celebrates African aesthetics, history, and culture.

Exhibitions - As reflected in the breakdown of NMAfA's budget, exhibitions are the principal means by which the museum presents African art to the public. Three major exhibitions organized by NMAfA will be opened in FY 2002: *Spectacular Display: The Art of Nkanu Initiation Rituals* will feature objects central to the initiation ceremonies of these Central African peoples and will include a community outreach component focusing on local African American organizations that incorporate initiation rituals into their own area youth programs. *From Royalty to Revival: Textile Arts of Madagascar* features a magnificent Malagasy silk textile presented to President Grover Cleveland by Madagascar's queen in 1886. The exhibition explores the diplomatic history of Madagascar and the U.S. and includes numerous historic and contemporary cloths that define Madagascar's continuing textile traditions. A third exhibition, *A Personal Journey: Central African Art from the Lawrence Gussman Collection*, presents objects collected over many years and recently donated to NMAfA and two other museums that will host the exhibition. Publications accompany all three exhibitions, and extensive public programming is also planned.

In FY 2003, photography, modern African art, and Moroccan textiles and jewelry will highlight the exhibition schedule. A major exhibition showcasing Ethiopian artists, *Ethiopian Passages: Dialogues in the Diaspora*, will include works from NMAfA's collection as well as local, national, and international loans. The museum will also produce a catalogue with photographs of both objects and artists.

NMAfA devotes more than 75 percent of its total federal allocation to personnel costs. Exhibition support includes the entire exhibits staff as well as percentages of those staff, such as curators, who are essential to this program. The museum's exhibition staff is highly skilled and creative; all design and much of the production work can be accomplished in-house, resulting in significant cost savings. The museum is experiencing increased success in its fundraising efforts, especially with regard to exhibitions, and anticipates redirecting the federal funds to meet needs in other functional areas.

Education - As with exhibitions, the greatest portion of federal funds devoted to education and public programs is in support of staff. Many programs are presented directly by museum staff and others are funded by direct grants and other privately raised funds. Major publications are supported by non-federal funds and publication partnerships. An existing but vacant FTE was upgraded to create a new position, Director of Education, which was filled in 2001. Another position, Education Specialist, vacant for several years, will be filled in FY 2002 to further boost the programmatic output.

Collections - Collection growth and development is essential to maintaining dynamic and compelling programming at the museum, but only $129,000 of federal funds is available for collection acquisition. NMAfA's position as the premier museum in the world in the area of collecting and exhibiting modern African art is being strengthened through the work of a talented curator of modern and contemporary African art and discerning purchases from artists and dealers worldwide. At the same time, outstanding traditional objects are also being added to the collection through gift and purchase. In FY 2001, NMAfA added 212 objects to the collection. Highlights among the FY 2001 purchases were an unusual example of modern African art, a digital print, "To Hold in the Palm of the Hand," by South African artist, Berni Searle and a collection of nine ceramic vessels from West and Central Africa.

Administration - The museum's collection is housed and cared for in a modern facility by highly trained conservation and collections management staff. In FY 2001, the museum completed an extensive renovation and

upgrade to the main storage area. NMAfA has also undertaken a major project to enrich its electronic collections database with high quality digital images, to complete the cataloguing of all its objects and to make these records publicly accessible via the World Wide Web.

Administrative support for the above programmatic functions are anticipated to remain basically level.

NATIONAL MUSEUM OF AFRICAN ART

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Permanent exhibitions	-	73	-	59	-	59
Temporary exhibitions (by NMAfA)	-	196	-	167	-	167
Temporary exhibitions/Loan	-	121	-	93	-	93
Exhibition support	15	1,199	15	1,224	15	1,224
Subtotal, Exhibitions	**15**	**1,589**	**15**	**1,543**	**15**	**1,543**
Education						
Public programs	-	126	-	122	-	122
Education support	13	578	14	597	14	597
Subtotal, Education	**13**	**704**	**14**	**719**	**14**	**719**
Collections						
Collections management	-	101	-	94	-	94
Collections acquisition	-	129	-	129	-	129
Collections support	16	788	14	815	14	815
Subtotal, Collections	**16**	**1,018**	**14**	**1,038**	**14**	**1,038**
Research	-	-	-	-	-	-
Administration						
Facilities	2	104	2	108	2	108
Information Technology	1	137	1	140	1	140
Finance/General Administration						
Finance	3	255	3	268	3	268
Public Affairs	2	273	3	280	3	280
General Administration	2	244	2	238	2	238
Subtotal, Administration	**10**	**1,013**	**11**	**1,034**	**11**	**1,034**
Necessary Pay	-	-	-	-	-	127
TOTAL	54	4,324	54	4,334	54	4,461

NATIONAL MUSEUM OF NATURAL HISTORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	579	42,744	17	4,217	42	10,031	10	1,842
FY 2002 ESTIMATE	579	43,404	23	3,012	42	26,761	16	903
FY 2003 ESTIMATE	579	45,428	20	2,377	42	26,247	4	627

ABSTRACT - The National Museum of Natural History (NMNH) studies and interprets the natural world and the human processes that influence it. Museum scientists conduct research that increases understanding of dynamic geological, biological, and cultural patterns and processes that fundamentally shape our world and have done so from the beginning of the solar system. Their work takes place in field settings, laboratories, and within the collections of this Museum and other centers of natural history throughout the world. NMNH collections form an unparalleled encyclopedia of life on earth from its earliest beginnings to contemporary societies. The acquisition and use of collections-based information by NMNH scientists and educators, and increasingly by the public, creates the distinctive value of this Museum to the Smithsonian, the nation, and the world. NMNH outreach programs deliver this information to a diverse national audience, and these interpretive programs are most effective when the authoritative voice of the Museum's science is coupled with an understanding of the needs of the NMNH audience.

EXPLANATION OF PROGRAM -

Exhibitions - - Approximately 9 percent, or $3.9 million, of total S&E funding is allocated to exhibitions. Programs and projects include the renovation of the Kenneth E. Behring Family Hall of Mammals and the accompanying website, and exhibitions including *Forces of Change*, the *Vikings* traveling exhibition, *Whales and Dolphins*, *Lewis and Clark,* and many temporary exhibitions that are still in the planning stages. Programming also includes upgrading and maintaining all exhibits in the Museum.

Education – Education programs amounting to 2 percent ($1.1 million) of the total, are conducted at three facilities: the O. Orkin Insect Zoo, the Discovery Room, and the Naturalist Center located in Loudon County. The

programs and projects carried out within these facilities are many and varied; they include the DC Backpack Program and other public programming (free of charge) that includes films and lectures. The Museum maintains one of the largest docent programs in the country. National education programs partner the Museum with schools and universities using the Education Learning Center and Electronic Fieldtrips. Programs and projects include contracts with Voyager Expanded Learning, Miami Museum of Science, and Ball State in Indiana. A highly anticipated project underway is a Questions & Answers section on the website.

Collections and Research - The majority (72 percent or $32.5 million) of total Salaries and Expenses funding is used to support the museum's collections and research functions. The museum staff includes experts in systematic biology, anthropology, mineral sciences and paleobiology who enhance and work with the collections in core research and support functions including off-site laboratories and field stations. Salaries and benefits expenses constitute over 90 percent of the operating budget in research and collections, with the remaining operating expenses mainly devoted to collections care and dissemination of collections information through continuing implementation of a new multi-media catalogue. Other programs and projects supported include an arctic studies program and a human origins program, both of which focus on research and public outreach, as well as a global volcanism program that is the hub of an international network for monitoring, reporting, and maintaining data related to volcanic activity around the world.

FY 2003 Increase to Collections Infrastructure ($500,000) - The Natural History Museum's collections are a unique, irreplaceable set of valuable information about our natural environment acquired over nearly two centuries of scientific discovery. Contemporary issues ranging from invasive species to global warming require information that can only be derived from the collections of the largest natural history museum in the world. Clear deterioration of care for the collections due to lack of human and financial resources has been established. The multi-media collections information system, due for completion in late 2003, will for the first time allow full access to all of our collections resources by diverse constituencies, especially the public. Of the $500,000 requested, $210,000 will allow the Museum to fill three currently unfunded FTEs in collections management. An additional $140,000 will allow two unfunded informatics specialist positions to be filled, to ensure that the valuable collections data are made readily available. Finally, $150,000 is required for collections care supplies.

Administration - The administration function amounts to approximately 14 percent ($6.4 million) of the total. These resources support finance,

human resources, information technology, development and public affairs, and facilities management in support of the core areas of the Museum.

NATIONAL MUSEUM OF NATURAL HISTORY

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Permanent Exhibits, Renovations	51	2,817	51	2,854	51	2,854
Permanent Exhibits, Upgrades	-	1,069	-	1,042	-	1,042
Subtotal, Exhibitions	51	3,886	51	3,896	51	3,896
Education						
Regional Education	17	938	17	949	17	949
National Education	8	165	8	176	8	176
Subtotal, Education	25	1,103	25	1,125	25	1,125
Collections	1	269	1	71	1	71
Collections Care	84	5,666	84	5,686	84	6,186
Collections Information	22	1,319	22	1,359	22	1,359
Subtotal, Collections	107	7,254	107	7,116	107	7,616
Research	-	20	-	20	-	20
Earth and Planetary Studies	3	289	3	294	3	294
Meteorites and Planet Formation	16	1,302	16	1,338	16	1,338
Volcanic Processes	5	362	5	372	5	372
Evolution, Biodiversity and Conservation	-	340	-	340	-	340
Systematics and Evolution	134	11,743	134	12,120	134	12,120
Paleobiology	36	3,210	36	3,255	36	3,255
Ecolocial Dynamics: Coastal & Estuarine Systems	2	181	2	184	2	184
Biology of Tropical Systems	2	97	2	100	2	100
Human Diversity and Change	6	530	6	540	6	540
Human Interaction with Natural Environment	11	1,174	11	1,196	11	1,196
Human Biology and Cultural Processes	8	866	8	876	8	876
Human Communities and a Changing World	26	2,430	26	2,458	26	2,458
Research Support Services	22	1,774	22	1,794	22	1,794
Subtotal, Research	271	24,318	271	24,887	271	24,887
Administration						
Facilities	88	2,838	88	2,895	88	2,895
Information Technology	12	1,821	12	1,835	12	1,835
Finance/General Administration						
Finance	3	194	3	204	3	204
Human Resources	4	207	4	211	4	211
Public Affairs	8	402	8	408	8	408
Central	10	721	10	827	10	827
Subtotal, Administration	125	6,183	125	6,380	125	6,380
Necessary Pay	-	-	-	-	-	1,524
TOTAL	579	42,744	579	43,404	579	45,428

NATIONAL ZOOLOGICAL PARK

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	319	21,033	5	1,855	13	3,450	3	634
FY 2002 ESTIMATE	319	22,001	5	774	11	2,627	3	631
FY 2003 ESTIMATE	331	23,643	5	768	11	2,007	3	730

ABSTRACT - The National Zoological Park (NZP) exhibits a living animal and plant collection and conducts research in conservation biology and reproductive sciences to provide both an educational and recreational environment for the visiting public. NZP strives to be one of the best zoos in the world in terms of animal collections, facilities (including exhibit as well as visitor services), veterinary medicine, reproductive sciences, and visitation. NZP serves the public and specialized audiences by promoting the conservation of life on earth through exhibit graphics, informal and formal education, website and other outreach programs, research and publications, and animal health programs.

PROGRAM - Federal S&E funding supports NZP's programs in four general categories: 1) exhibits of living animal and plants; 2) conservation, research and education; 3) maintenance and security; and 4) administrative, financial and technical support.

Exhibitions - Approximately 24 percent, or $5.7 million, of total S&E funding is allocated to exhibiting the animal and plant collections. This emphasis is necessary because NZP, the Nation's Zoo, draws 2–3 million visitors a year to its exhibits, a number that is increasing with the arrival of the new Giant Pandas, and that will continue to increase as the Zoo is modernized and revitalized.

Within this category of exhibitions, the Institution requests 7 FTEs and $375,000 to support operating costs for a Farm Exhibit, which is scheduled to open in FY 2003. In FY 2001, Congress provided $5.0 million in construction funds for the Farm Exhibit. The additional funds will support a curator to head the exhibit and serve as the content expert in animal care, husbandry, farming, and educational information; three animal keepers to provide day-to-day animal care and exhibit support; a gardener to maintain gardens, plantings, and walkways; and two operations and maintenance

personnel for daily cleaning, preventive maintenance, repairs, and HVAC operations.

Collections - Only 15 percent, $3.6 million, of total S&E funding supports the various areas listed under collections, but approximately 20 percent of NZP's total non-salary funds are spent in this category, mostly for feeding of animals.

Conservation, Research and Education - A total of 10 percent, $2.4 million, of total S&E funds support conservation, research, and education. Much of these activities are also supported by private sources. Although only minor changes will occur in funding from FY 2001 to FY 2003, there will be a major change in focus in these areas. The goal is to connect the research effort of NZP staff that is ongoing at Rock Creek and Front Royal with Smithsonian staff working at other research centers, as well as in the field, in order to provide more education and outreach to the public without having to increase S&E funding.

Facilities and Security - The majority (37 percent or $8.7 million) of total S&E funding is used to support facilities and security. Maintenance and security of facilities pose a major challenge to NZP, because of the physical size of the two NZP locations and the condition of the facilities. Some of the facilities, such as the sloth bears exhibit, were initially constructed in the 1890's. NZP has over 1 million square feet of facilities, located on 167 acres at Rock Creek Park and 150 acres at the Research Center in Front Royal, Virginia.

Within the category of facilities, the National Zoological Park requests an increase of 5 FTEs and $519,000 to administer the Repair, Restoration and Alterations of facilities program and strengthen overall the effectiveness of the Institution's facilities program. This increase is included in the table on the following page and the justification is contained in the Administration line item of this budget request.

Information Technology and Finance/General Administration - NZP has continued to give priority to funding its exhibits and the other areas discussed above, but it must also address support requirements in such areas as budget and finance, information technology, and personnel and administrative support. A total of 14 percent, or $2.5 million of total S&E funds, are devoted to this area.

NATIONAL ZOOLOGICAL PARK

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Giant Pandas	3	208	3	215	3	215
Sloth Bears	1	60	1	65	1	65
Elephant House	8	412	8	420	8	420
Farm (American Agriculture Exhibit)	-	-	-	-	7	375
Amazonia	7	400	7	410	7	410
Megavertebrates,reptiles,invertebrates	31	1,700	33	1,866	33	1,866
Small mammals, birds	21	1,077	21	1,096	21	1,096
Exhibit Interpretation	14	1,234	14	1,267	14	1,267
Subtotal, Exhibitions	**85**	**5,091**	**87**	**5,339**	**94**	**5,714**
Education						
Education and Outreach	1	127	1	150	1	150
Professional Training	4	347	4	347	4	347
Subtotal, Education	**5**	**474**	**5**	**497**	**5**	**497**
Collections						
Registrar	2	162	2	170	2	170
Animal Health Support	33	2,431	33	2,615	33	2,615
Animal Feeding	6	786	6	796	6	796
Subtotal, Collections	**41**	**3,379**	**41**	**3,581**	**41**	**3,581**
Research						
Conservation Research	17	1,462	14	1,325	14	1,325
Reproductive Science	8	547	8	567	8	567
Subtotal, Research	**25**	**2,009**	**22**	**1,892**	**22**	**1,892**
Administration						
Facilities	114	6,555	114	6,893	119	7,412
Security	23	1,273	23	1,275	23	1,275
Information Technology	3	416	3	500	3	500
Finance/General Administration						
Central Staff	7	609	7	649	7	649
Administrative Management	9	738	9	760	9	760
Finance	2	123	2	140	2	140
Human Resources	1	90	2	150	2	150
Public Affairs	4	276	4	325	4	325
Subtotal, Administration	**163**	**10,080**	**164**	**10,692**	**169**	**11,211**
Necessary Pay	-	-	-	-	-	748
TOTAL	**319**	**21,033**	**319**	**22,001**	**331**	**23,643**

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	141	20,382	64	14,835	17	3,909	285	66,335
FY 2002 ESTIMATE	141	20,546	64	13,005	17	4.189	285	71,100
FY 2003 ESTIMATE	142	21,260	64	12,880	17	4,329	285	71,100

ABSTRACT - The Smithsonian Astrophysical Observatory (SAO) conducts research to increase understanding of the origin and nature of the universe and to communicate this information through publications, teaching, and public presentations. Headquartered in Cambridge, Massachusetts, SAO is a member of the Harvard-Smithsonian Center for Astrophysics (CfA), in collaboration with the Harvard College Observatory. Observation facilities include the Fred Lawrence Whipple Observatory in Arizona, the Oak Ridge Observatory in Massachusetts, the Submillimeter Array under construction in Hawaii, and a millimeter-wave radio telescope at Cambridge, as well as instruments launched into the atmosphere and into space by balloons, rockets, and spacecraft.

EXPLANATION OF PROGRAM - SAO's federal funding provides a base of support for its research and educational programs and related facilities, as well as administrative and program support. Direct federal appropriations also enable SAO to leverage its resources threefold through the securing of approximately $59 million in Government and non-Government grants and contracts funding, and restricted gifts.

Research - Internationally acknowledged for its pioneering work at the cutting edge of astrophysics and astronomy, the Smithsonian Astrophysical Observatory has maintained its leadership role through the development of orbiting observatories and large ground-based telescopes, the application of computers to astrophysical problems, and the integration of laboratory measurements, theoretical astrophysics, and observations across the electromagnetic spectrum. SAO's contributions to the national scientific agenda are demonstrated, for example, by the fact that four of the nineteen recommended national priorities in astronomy identified by the National Academy of Sciences for the next 10 years are based on initiatives in which SAO plays a major role.

FY 2003 Requested Increase - Very Energetic Radiation Imaging Telescope Array System (VERITAS) (1 FTE and $157,000). SAO has been the world's pioneer opening a new field of very high-energy gamma-ray astronomy. To maintain this leadership position, SAO has embarked on a project, VERITAS, to develop second-generation instrumentation for this field, in conjunction with nine other national and international institutions as collaborators. The VERITAS Project will be a major ground-based gamma-ray observatory with an array of seven 10-meter optical reflectors for gamma-ray astronomy proposed to be constructed on a 10-acre parcel of land in the Coronado National Forest in Arizona. This next-generation telescope array will be the most sensitive detector of its type in the world.

For FY 2003, SAO requests an increase of 1 workyear and $157,000 to hire an astrophysicist for this project. Currently, SAO has only one astrophysicist (who was the original pioneer in the field) with this expertise; the new position is critically needed to continue to develop the new instrument. In addition to Smithsonian federal funding, support for the VERITAS project will be provided through contract and grant funding from the National Science Foundation, the U.S. Department of Energy, and the other U.S. and international institutions involved in this initiative. Funding is also requested in the Major Scientific Instrumentation line item ($1,000,000) and Construction account ($4,500,000) to support this request.

Education - During the past decade, SAO has reinforced its long-standing efforts in public education and outreach through a number of initiatives, including the development of science education curriculum materials for pre-college students and teachers using astronomy as a unifying theme; free monthly Observatory Nights (in Cambridge) featuring a non-technical lecture and telescopic observing with similar programs offered twice a year specifically for children; a visitors center at the Whipple Observatory in Arizona; a public website with a broad and diverse selection of general astronomical information and specific program details on SAO projects; and the creation of video programming for and production management of the CPB/Annenberg Channel providing continuous science education curriculum programming directly to schools and cable television systems throughout the United States.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Detail of Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education						
Library	1	244	1	253	1	253
Science Education Department	2	223	2	231	2	231
Subtotal, Education	**3**	**467**	**3**	**484**	**3**	**484**
Collections	-	-	-	-	-	-
Research						
Atomic & Molecular Physics	10	921	10	954	10	954
High Energy Astrophysics	11	1,412	11	1,462	11	1,462
Optical& Infrared Astronomy	25	2,782	25	2,312	25	2,312
Planetary Sciences	5	570	5	591	5	591
Radio and Geoastronomy	16	2,112	16	2,188	16	2,188
Solar & Stellar Physics	9	1,407	9	1,458	9	1,458
Theoretical Astrophysics	4	495	4	513	4	513
MMT	1	869	1	900	1	900
Project IOTA		137		142		142
SMA	34	5,521	34	5,720	34	5,720
VERITAS	-	-	-	-	1	157
Subtotal, Research	**115**	**16,226**	**115**	**16,240**	**116**	**16,397**
Administration						
Facilities						
F.L.Whipple Observatory	15	1,230	15	1,274	15	1,274
Oak Ridge Observatory	2	98	2	102	2	102
Rent & Communications	-	1,446	-	1,498	-	1,498
Information Technology						-
Computation Facility	1	472	1	489	1	489
Telescope Data Center	-	10	-	10	-	10
Finance/General Administration						-
Human Resources	2	58	2	60	2	60
Central Staff (Director's Office)	1	156	1	161	1	161
Contracts, Grants & Property Management	-	14	-	15	-	15
Subcontracts & Procurement	-	76	-	79	-	79
Public Affairs	2	129	2	134	2	134
Subtotal, Administration	**23**	**3,689**	**23**	**3,822**	**23**	**3,822**
Necessary Pay	-	-	-	-	-	**557**
TOTAL	**141**	**20,382**	**141**	**20,546**	**142**	**21,260**

SMITHSONIAN CENTER FOR MATERIALS RESEARCH AND EDUCATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	36	3,229	1	178	0	69	1	42
FY 2002 ESTIMATE	34	3,252	0	18	0	10	0	0
FY 2003 ESTIMATE	34	3,354	0	18	0	10	0	0

ABSTRACT - The Smithsonian Center for Materials Research and Education (SCMRE) is a specialized center for research and training in the preservation and technical study of museum objects, collections and related materials of cultural or scientific importance. It also serves as a resource for scientific and technical support to the various museums within the Smithsonian as well as to the museum profession at large. It also offers education and information programs. Laboratory activities are carried out in three program areas: research and development, education and training, and support and collaboration.

EXPLANATION OF PROGRAM - Federal S&E funding supports SCMRE programs in four general categories: 1) exhibitions as part of its public outreach activities; 2) education that provides training to increase the level of proficiency at which museums and cultural institutions nationwide preserve and care for their collections; 3) collections, which gives support to Smithsonian museums (and on occasion for selected projects of the larger museum community and government agencies); and 4) research to clarify the context of collection materials and improve preservation and conservation of museum collections.

Exhibitions - As part of its public outreach activities, SCMRE organizes exhibitions that center on the interdisciplinary application of scientific methodologies in studies of cultural materials. Several staff contribute intermittently to this type of programming and together represent 1 FTE. Besides salary expenditures, these projects also require direct outlays for production, travel, and related expenses.

Expenditures for the exhibit *Santos: Substance & Soul* will cease after its final venue in Puerto Rico in FY 2002. While immediate plans do not call for another major exhibition of this size, development will begin of several smaller exhibits for which production should be completed during FY 2003.

Such exhibitions will be organized in collaboration with partner institutions, with these partners providing venues and objects, and SCMRE providing content through text and graphic panels.

Education - While funds for the Intern/Fellow program are less in FY 2002 due to the proposed closing, full support for the program (1 FTE and $149,000) is anticipated for FY 2003. Four FTEs and $332,000 will be applied to the development of advanced professional training courses offered by SCMRE.

Collections - For FY 2003, 4 FTEs and $320,000 will support salaries, supplies and maintenance of the scientific equipment. Although most Smithsonian museums care for their collections with in-house conservation staffs, it is not feasible to duplicate in each museum the instrumentation and specialized scientific staff needed to support their conservation efforts. SCMRE staff supply expertise in the use of analytical instrumentation, and the knowledge of museum materials. To meet a growing number of requests, resources have been shifted from other activities to support these functions in FY 2002.

Research - At a support level of 2 FTEs and $272,000, a program of research on materials transported across the northern Spanish frontier will expand to the U.S. southeast in collaboration with partner institutions in California and Texas. After a one-time investment in research equipment during FY 2001, support for the program of chemical characterization of archaeological materials will remain stable at 3 FTEs and $293,000 in FY 2002 and FY 2003.

The program of research on the chemical and physical properties of collections materials (5 FTEs and $466,000) provides basic information for collections care specialists in museums to use. The Art-in-Transit project combines computer modeling and measurements of materials properties to evaluate risks of damage due to shocks, vibrations, and changes in temperature and humidity for objects on travel, and to develop packing methodologies to minimize such risks.

To address the need for improved collections care methods and techniques for natural history specimens, SCMRE plans to increase its support during FY 2002 and to maintain it at that level (2 FTEs and $247,000) during FY2003.

SMITHSONIAN CENTER FOR MATERIALS RESEARCH AND EDUCATION
Detail of Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
California Missions	-	-	-	31	-	40
Santos: Substance & Soul	-	107	-	62	-	-
Spanish American Material Culture (Texas)	-	-	-	14	-	36
Subtotal, Exhibitions	1	107	1	107	1	76
Education						
Intern/Fellow Program	1	134	1	123	1	149
Professional Training Courses	4	307	4	328	4	332
Public Programs	1	105	1	59	1	53
Technical Information Program	1	113	1	97	1	95
Website Management and Development	1	71	1	61	1	60
Subtotal, Education	8	730	8	668	8	689
Collections						
Analytical and Technical Support	4	277	4	310	4	320
Subtotal, Collections	4	277	4	310	4	320
Research						
Collections Based Research						
Northern Spanish Frontier Program	2	277	2	272	2	272
Chemical Character of Archaeological Matls	5	409	3	293	3	293
Ancient/Historical Technologies and Matls	4	371	4	371	4	371
Preservation Research						
Physical & Chemical Prop of Collection Matls	5	435	5	466	5	466
Preservation of Natural History Specimens	2	108	2	247	2	247
Subtotal, Research	18	1,600	16	1,649	16	1,649
Administration						
Information Technology	-	82	-	85	-	85
Finance/General Administration						
Central Staff	2	241	2	241	2	241
Finance/Administrative Management	3	192	3	192	3	192
Subtotal, Administration	5	515	5	518	5	518
Necessary Pay	-	-	-	-	-	102
TOTAL	36	3,229	34	3,252	34	3,354

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	45	3,337	6	884	2	726	26	1,822
FY 2002 ESTIMATE	45	3,391	6	585	1	499	35	2,000
FY 2003 ESTIMATE	45	3,510	6	585	1	450	35	2,000

ABSTRACT - The Smithsonian Environmental Research Center (SERC) undertakes research on the ecological dynamics of estuaries and coastal systems and the human impact on the environment. Utilizing its core site on the Chesapeake Bay, SERC undertakes comparative research at sites across the U.S. and abroad, and communicates research findings to diverse regional and national audiences through a variety of public and professional training programs.

EXPLANATION OF PROGRAM - As the leading environmental research unit of the Smithsonian, SERC expended the majority of funds in FY 2001 (approximately 67 percent) on scientific research for ecosystem dynamics, human interactions with the environment, and science services. In FY 2002, SERC increased FTEs and funding for research as a result of an internal realignment of a fellowship coordinator position from education to research. This realignment more accurately reflects professional training as an important component of research instead of public education. Science services, ecosystem dynamics and human interactions reflect increases to cover promotions for the scientific staff.

Education - In FY 2002, federal education funding will decline when the fellowship coordinator position is realigned internally to research. However, SERC will increase overall funding levels for public education through additional external grant and contract awards. Federal funding levels for education will remain constant in FY 2003.

Administration - Overall, administrative functions will decline slightly in FY 2002, with small increases in facilities, information technology, human resources, and secretarial/clerical. These slight increases are counter-balanced by a decline in finance, which will be supplemented by the

development of external supplemental funding from overhead charges on research grants and contracts. Funding remains constant in FY 2003.

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

Detail of Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education						
Internal to Unit	2	92	1	58	1	58
Subtotal, Education	**2**	**92**	1	58	1	58
Collections	-	-	-	-	-	-
Research						
Ecosystem Dynamics	14	992	14	1,024	14	1,024
Human Interactions	13	993	14	1,024	14	1,024
Science Services		138		167		167
Subtotal, Research	**27**	**2,123**	**28**	**2,215**	**28**	**2,215**
Administration						
Facilities	8	678	8	680	8	680
Information Technology	3	172	3	177	3	177
Finance/General Administration						
Finance	1	112	1	95	1	95
Human Resources	1	51	1	53	1	53
Secretary, Admin Clerk,Receptionist	3	109	3	113	3	113
Subtotal, Administration	**16**	**1,122**	**16**	**1,118**	**16**	**1,118**
Necessary Pay	-	-	-	-	-	119
TOTAL	**45**	**3,337**	**45**	**3,391**	**45**	**3,510**

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	176	10,440	11	1,391	30	2,161	14	1,069
FY 2002 ESTIMATE	176	10,581	10	864	29	2,025	14	1,000
FY 2003 ESTIMATE	242	10,894	10	864	29	2,075	14	1,000

ABSTRACT - The Smithsonian Tropical Research Institute (STRI) is the world's premier center for basic research in the tropics. It is also the only major research institute with a focus on marine and terrestrial biology located in the continental American tropics. STRI's permanent scientific staff conducts collaborative research in some 30 tropical countries on 5 continents. STRI has a unique history with its host nation, the Republic of Panama, that spans more than 75 years. In Panama, the Institute maintains 9 research sites that serve scientists and students from academic and research institutions, in the U.S., Europe, and Latin America. These facilities include a leading research library for tropical studies, well-equipped research stations and laboratories, modern molecular facilities, canopy access systems on both coasts, and a 97-foot research vessel. These facilities provide access to tropical forests and near-shore marine settings, including coral reefs, and enable students and scientists affiliated with STRI to conduct world-class research on critical issues such as tropical biodiversity, global climate change, and the effects of human settlement on biological resources.

EXPLANATION OF PROGRAM - Research at STRI comprises over 50 percent of the federal base funding. The Institute works to maintain a leadership role in tropical research in the areas of ecology, evolution, behavior, and human ecology. For the next three fiscal years, the funding allocated in these research departments will remain constant with relatively little change in spending patterns. During FY 2001, STRI was reviewed by an outside panel of international scientists who concluded that among research institutes dedicated to tropical biology, STRI was the best. They also highlighted the importance to the U.S. of having a research institute dedicated to tropical biology based in the mainland tropics. This fiscal year, 492 visiting researchers and students, 54 percent of them from the U.S., representing 39 states, conducted research at STRI facilities in the Republic of Panama, for

periods ranging from several weeks to a full year or more. In FY 2000, STRI joined a collaborative program between the Smithsonian and Brazil's Institute for Amazonian Research that studies the process of habitat fragmentation in the Amazon Basin. A minor increase in the research budget for FY 2001 in biology of tropical systems reflects travel and administrative expenses related to this program.

During FY 2001, STRI's administration and its office of human resources worked to respond to employees' needs for training and to improve administrative skills. Training in FY 2003 will focus on information-technology-related skills. An increase in administration of approximately 18 percent in FY 2002 resulted from the recruitment of a new deputy director. This position plays a key role in providing continuity to the Institute, since STRI's director travels frequently to the Institution, and is actively involved in travel for fund-raising efforts.

To maintain its level of scientific excellence and enhance administrative excellence without an increase in funding, STRI will need to raise funds from foundations and individual donors. STRI will also seek funds from international sources for research programs that involve international collaborators, both individuals and institutions.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Detail of Federal Base Resources by Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education						
Internal to Unit	7	265	7	265	7	265
Subtotal, Education	**7**	**265**	7	**265**	7	**265**
Collections	-	-	-	-	-	-
Research						
Paleobiology	1	220	1	220	1	220
Biology of Tropical Systems	71	4,622	71	4,650	114	4,650
Human Interaction	1	136	1	136	1	136
Human Ecology	2	258	2	258	2	258
Subtotal, Research	**75**	**5,236**	**75**	**5,264**	**118**	**5,264**
Administration						
Facilities	40	1,849	40	1,861	47	1,861
Security	19	628	19	628	25	628
Information technology	4	218	4	218	4	218
Finance/General Administration						
Director's Office	4	459	4	543	5	543
Finance	10	581	10	586	14	586
International Affairs	2	68	2	68	2	68
Legal	1	68	1	68	1	68
Library	4	189	4	189	5	189
Human Resources	2	179	2	191	3	191
Procurement	6	254	6	254	9	254
Public Affairs	1	70	1	70	1	70
Other	1	376	1	376	1	376
Subtotal, Administration	**94**	**4,939**	**94**	**5,052**	**117**	**5,052**
Necessary Pay	-	-	-	-	-	**313**
TOTAL	**176**	**10,440**	**176**	**10,581**	**242**	**10,894**

OUTREACH

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	101	7,315	50	7,948	12	2,993	5	3,374
FY 2002 ESTIMATE	101	9,168	51	6,044	15	4,041	5	1,055
FY 2003 ESTIMATE	101	9,416	51	5,611	14	3,026	5	1,519

ABSTRACT - Through a coordinated national outreach program, the Institution plans to expand the presence of the Smithsonian Institution across the nation and expose the entire country to the rich heritage of the American people. This national outreach effort will greatly expand roles for the programs that provide the critical mass of Smithsonian outreach activity: the Smithsonian Affiliations, the Smithsonian Institution Traveling Exhibition Service (SITES), and the Smithsonian Center for Education and Museum Studies (SCEMS). The Smithsonian Associates, which receives no federal funding, is also part of this national outreach effort. This line item also includes the National Science Resources Center, Office of Fellowships, and Smithsonian Institution Press. Detailed information follows for SITES and SCEMS.

Smithsonian Institution Traveling Exhibition Service

ABSTRACT - The Smithsonian Institution Traveling Exhibition Service (SITES) circulates exhibitions to cities and towns all across America. Every year, nearly five million people take advantage of these programs, visiting SITES shows in their own local museums, science centers, libraries, historical societies, zoos, aquariums, municipal buildings, and schools. The exhibitions, which reach as many people in small-town America as in large cities, feature collections and research findings from every Smithsonian museum. For many, these exhibitions are once-in-a-lifetime opportunities to experience the scope and vitality of the Smithsonian firsthand.

EXPLANATION OF PROGRAM - With an average of thirty exhibitions on the road at any given time, SITES is wholly committed to reinforcing the Institution's public image as the nation's museum.

Strengthening the Smithsonian's presence across the nation is a current Institutional focus, but it has been SITES' mission for nearly 50 years. SITES fulfills this goal in two ways: by creating exhibitions that highlight Smithsonian collections and research, and by sending exhibitions to every corner of the nation.

Exhibitions - In most years, SITES exhibitions reach all 50 states; on average, a SITES show opens in a new place every other day. The *Museum on Main Street (MoMS)* program is perhaps the best example of SITES' commitment to geographic diversity. In partnership with State Humanities Councils, SITES started *Museum on Main Street* (MoMS) in 1994 to create exhibitions for traditionally underserved communities in rural areas. Through this program, small-town America has benefited from the Smithsonian's collections, high-quality exhibitions, and technical expertise that are otherwise unavailable. *Museum on Main Street* revitalizes community pride by bolstering local philanthropy and volunteerism and encouraging widespread public involvement in the exhibitions and related activities. Additionally, the program encourages organizational partnerships that extend beyond individual towns to encompass broader geographic regions.

The $500,000 increase in no-year funding in FY 2002 and continuing in FY 2003 provides the necessary support for SITES to produce a fourth and fifth MoMS exhibition. Each of these new MoMS exhibitions will circulate in multiple copies as a means of reaching 300 new communities (150 per year) in 24 states (12 per year). To date, MoMS exhibitions have reached 230 rural communities in 31 states.

The $400,000 increase in federal funds in FY 2002 supports SITES' goal of creating a template for *Smithsonian Sampler* shows. These exhibitions will include small—between 15 and 20 artifacts—but potent selections of Smithsonian treasures, and will be designed to accommodate new objects continuously, by substituting items at regular intervals within the same physical exhibition structure. These exhibitions will visit communities for relatively short-term whistle stops of two to three weeks, thus reaching far more locations than are presently available on SITES exhibition tours.

SITES maintains fiscal stability with support from federal funding, corporate sponsorship, foundation awards, and venue participation fees. SITES receives approximately one-third of its annual operating budget from federal and trust dollars and generates the other two-thirds of its budget from rental fees and raised funds.

In FY 2002, as shown on the table, SITES reduced 2 FTEs, by removing two positions earmarked for staffing the International Gallery. Since a 1996 reorganization, SITES had administered Gallery operations, even though they do not involve outreach functions. This change focuses all of SITES' activities on its primary mission.

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
48 SITES traveling exhibitions.	40	2,962	37	2,860	37	2,860
Museum on Main Street (MOMS) exhibitions	-	-	-	500	-	500
Various SI Collection-based "new" exhibitions	-	-	-	400	-	400
Subtotal, Exhibitions	**40**	**2,962**	**37**	**3,760**	**37**	**3,760**
Education	-	-	-	-	-	-
Collections	-	-	-	-	-	-
Research	-	-	-	-	-	-
Administration						
Information Technology	1	33	1	35	1	35
Finance/General Administration						
Central Staff	1	32	1	33	1	33
Finance	3	113	3	112	3	112
Human Resources	1	66	1	68	1	68
Public Affairs	1	44	2	128	2	128
Subtotal, Administration	7	288	8	376	8	376
Necessary Pay	-	-	-	-	-	105
TOTAL	47	3,250	45	4,136	45	4,241

Smithsonian Center for Education and Museum Studies

ABSTRACT - The Smithsonian Center for Education and Museum Studies (SCEMS) is the Institution's leader in museum education. The Center develops programs, writes publications, and researches effective museum practices. These ideas are used to enhance visits to the Smithsonian and to museums and other cultural institutions across the United States. The Center's initiatives increase the Smithsonian's public impact through national outreach.

EXPLANATION OF PROGRAM - In FY 2002 and 2003, SCEMS will continue to produce publications, websites, and programs for education and museum communities nationwide. The emphasis in the upcoming year will be on

developing national outreach programs. The Center will continue to publish curriculum-related materials for teachers in collaboration with national professional associations such as the College Board and International Reading Association. These publications will be supported with professional development workshops in Washington DC, and across the nation. In addition to curriculum-related publications, the Center will publish a resource guide to educational products, websites, and distance learning opportunities at the Smithsonian. SCEMS will continue to produce the Institution's central education website—currently serving more than a million visitors a year—which includes a searchable database, unique sites such as *Smithsonian Kids Collecting*, and links to all units with educational resources.

The increase of $117,000 in FY 2002, which is maintained in FY 2003, will support efforts to increase public impact. Market research and analysis will increase the use of existing publications, programs, and websites, and guide their development in the future. A planned initiative is distribution of publications to every elementary and middle school library, which will increase readership, awareness, and use of Smithsonian resources. Teacher workshops will model how to use these resources in the classroom. Website enhancements will include improved navigation, added features, and increased services.

SMITHSONIAN CENTER FOR EDUCATION AND MUSEUM STUDIES

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education						
Regional Workshops, Summer Seminars, Magnet School, Teachers' Night, etc.	16	1,363	16	1,480	16	1,480
Subtotal, Education	**16**	**1,363**	**16**	**1,480**	**16**	**1,480**
Collections	-	-	-	-	-	-
Research	-	-	-	-	-	-
Administration						
Information Technology	1	52	1	63	1	63
Finance/General Administration						
Administrative Management	1	81	1	83	1	83
Finance	2	112	2	112	2	112
Subtotal, Administration	**4**	**245**	**4**	**258**	**4**	**258**
Necessary Pay	-	-	-	-	-	53
TOTAL	**20**	**1,608**	**20**	**1,738**	**20**	**1,791**

COMMUNICATIONS

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	19	1,572	36	3,236	0	460	0	0
FY 2002 ESTIMATE	16	1,617	36	3,103	0	66	0	0
FY 2003 ESTIMATE	15	1,355	36	3,103	0	66	0	0

ABSTRACT - The Smithsonian's communications programs promote the building of academic, scholarly, and community-based ties with the public and institutions throughout the nation. This line item includes the Office of Public Affairs and the Visitor Information and Associates' Reception Center, both part of the Institution's Office of Communications.

EXPLANATION OF PROGRAM - Office of Public Affairs (OPA) - OPA acquaints the public and staff with the programs and policies of the Institution through a variety of publications and by working with newspapers, magazines, television, and radio to gain media exposure for its exhibits, public events, and research.

Visitor Information and Associates' Reception Center (VIARC) - The Visitor Information and Associates' Reception Center seeks both to broaden the public's knowledge, appreciation, and enjoyment of the Smithsonian and to facilitate and promote participation in its programs and activities. As a central support organization and the principal contact point for information about the Institution, VIARC's work is carried out through: the Internet; the Smithsonian Information Center; 14 information/member reception desks; response services for public and member mail, telephone, and electronic inquiries; outreach to the tourism industry; outdoor way-finding stations; and volunteer programs that provide primary support for the Institution's public information activities and for staff project assistance behind the scenes.

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 2001 ESTIMATE	0	5,681	0	0	0	0	0	0
FY 2002 ESTIMATE	9	12,706	0	0	0	0	0	0
FY 2003 ESTIMATE	5	5,856	0	0	0	0	0	0

ABSTRACT - As part of the restructuring plan reviewed and approved by Congress in 1993, the Smithsonian reallocated funds to create two Institution-wide funding programs: one supports the units' needs to replace, upgrade, and acquire new research equipment; the other enables the myriad of information technology needs across the Institution to be addressed systematically. In FY 1995, the Institution first received funds to support the development of a third Institution-wide program for Latino programming. These funds are important for meeting the ongoing need to acquire state-of-the-art research equipment, for continuing to improve the Institution's information infrastructure and systems, and for increasing Latino programs, research and collections. A similar program exists for Asian-American programming in the Institution, although it receives no federal funds.

EXPLANATION OF PROGRAM - Institution-wide programs consist of the following pools and fund: 1) Latino Exhibitions, Acquisitions, and Educational Programming pool; 2) Research Equipment pool; and 3) Information Resources Management pool (IRM), which includes the Collections Information Systems funding.

Latino Exhibitions, Acquisitions, and Educational Programming - This pool supports exhibitions, research, collections enhancement, and educational initiatives that illuminate and highlight Latino contributions to America and permit a wider sharing of Latino accomplishments in the sciences, humanities, and performing arts.

Research Equipment - Since its inception in 1994, the research equipment pool continues to be the primary vehicle for science units and museum research departments to fund the replacement of outdated and new basic research equipment.

Information Technology and Collections Access - In FY 2001, base resources for the Information Resources Management (IRM) pool and for the Collections Information Systems (CIS) funds supported an Institution-wide network, various automated resources management systems, collections information systems and related imaging projects, as well as software application development and upgrades. A portion of this program provides infrastructure for Web programming to extend the Smithsonian's presence electronically across the nation. The FY 2002 request to Congress includes a redirection of the entire non-CIS funding available, including $1,000,000 for the Institution's centralized financial and human resource management requirements (the Enterprise Resource Planning (ERP) project), and $846,000 to support managed information technology infrastructure. Pending approval by Congress, the Smithsonian proposes to dedicate the entire amount of base non-CIS IRM pool funds to these same two projects in FY 2003 and subsequent years.

In FY 2003, an increase of 5 FTEs and $2,196,000 is requested for the Information Resources Management pool. The additional FTEs and funding will be used for priority information technology requirements, to be determined by the Chief Technology Officer in close collaboration with the Under Secretaries/Director of International Art Museums.

Smithsonian Institution units are becoming increasingly reliant on information technology to perform administrative and program support functions. Over the past several years, the Smithsonian has been digitizing its collections, archives, library, and research information and migrating its legacy collection information systems to commercial software products. Nearly 40% of the unit requests for IRM pool funds were to operate and maintain current collection systems. Smithsonian units plan to leverage information technology to expand exhibition and education programming, and expand Web offerings to bring museum experiences to the broader public. With additional funding, support will be provided for the operation and maintenance of current collection systems as well as to help the Smithsonian meet new demands for information technology products and services. Increased funding will also enhance existing systems by adding new capabilities to help manage collections, improve exhibits, and diffuse information through the Web.

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 2001 ESTIMATE	40	2,382	1	115	1	31	0	0
FY 2002 ESTIMATE	40	2,494	1	109	0	15	0	0
FY 2003 ESTIMATE	40	2,579	1	109	0	15	0	0

ABSTRACT - The Office of Exhibits Central (OEC) is the Smithsonian Institution's most comprehensive exhibit producer. OEC is expert in the specialized needs of traveling, temporary, and permanent exhibitions. The Office also provides services in concept development, project management, object storage, prototyping, and installations. In addition, OEC is very committed and active in supporting training programs and internship initiatives.

EXPLANATION OF PROGRAM - As the Smithsonian's most comprehensive exhibition producer, OEC is completely aligned with the Smithsonian's goals of public impact and national outreach. More than ninety-five percent of OEC's federal budget supports the compensation of OEC's staff of 40. Each year, OEC staff specializing in design, editing, graphics, fabrication, model making, and administrative support services provide a wide variety of exhibition services for 150 projects, both large and small, to clients across the Smithsonian. The small remaining budget supports the operating expenses.

OEC's largest client is The Smithsonian Institution Traveling Exhibition Services (SITES). Two major traveling exhibitions that were designed and produced for SITES this year are the *Yesterday's Tomorrow's* and *Burgess Shale* exhibitions. As in the past, OEC also provided extensive exhibition dispersal and refurbishment services for the many SITES exhibitions traveling throughout the United States. A new area of focus for FY 2002 and beyond will be the establishment of a project management office to designate a clear line of authority and enhance communication throughout the exhibition production process, as well as to facilitate the outsourcing of exhibition production services when unavailable from OEC due to other exhibition commitments.

OFFICE OF EXHIBITS CENTRAL

Detail of Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Exhibit Production	36	2,127	36	2,256	36	2,256
Subtotal, Exhibitions	**36**	**2,127**	**36**	**2,256**	**36**	**2,256**
Education	-	-	-	-	-	-
Collections	-	-	-	-	-	-
Research	-	-	-	-	-	-
Administration						
Finance/General Administration						
Administrative Management & Central Staff	4	255	4	238	4	238
Subtotal, Administration	**4**	**255**	**4**	**238**	**4**	**238**
Necessary Pay	-	-	-	-	-	85
TOTAL	**40**	**2,382**	**40**	**2,494**	**40**	**2,579**

MAJOR SCIENTIFIC INSTRUMENTATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	0	7,228	0	0	0	0	0	0
FY 2002 ESTIMATE	0	6,229	0	0	0	0	0	0
FY 2003 ESTIMATE	0	6,000	0	0	0	0	0	0

ABSTRACT - The Major Scientific Instrumentation line item provides multi-year funding for the development of large-scale instrumentation projects to enable Smithsonian scientists to remain at the forefront of their fields. Currently funded through this line item are two projects for the Smithsonian Astrophysical Observatory (SAO): the development of an array of submillimeter telescopes, and conversion of the Multiple Mirror Telescope (MMT). For FY 2003, funding is also requested for a third SAO project, the Very Energetic Radiation Imaging Telescope Array System (VERITAS). Because of the magnitude of the costs and the time required to fabricate major new instruments and to reconfigure existing ones, the Institution requests funding for these projects to be available until expended.

EXPLANATION OF PROGRAM -

Construction of an Array of Submillimeter Wavelength Telescopes - The last frontier of ground-based astronomy consists of observing the skies with telescopes sensitive to submillimeter waves—light with wavelengths between those of infrared and radio waves. Since FY 1992, SAO, in partnership with the Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taiwan, has been constructing components for its submillimeter array (SMA) of eight moveable telescope antennas, which is located on Mauna Kea in Hawaii. The submillimeter array, with its unprecedented ability to resolve fine spatial details, will enable SAO scientists to play a major role in understanding the processes by which stars and planets form and the mechanisms that generate the prodigious amounts of energy spewing from quasars and active galaxies. It is expected that five antennas will be operational by September 30, 2001. Although construction of the eight antennas is scheduled for completion by the end of 2002, further funding will be necessary to complete the full complement of receivers and to upgrade them on a replacement cycle of six years. Receiver technology is improving rapidly and by 2004 our initial complement of

receivers will be obsolete. New receivers will be needed to ensure that the SMA maintains the best performance and sensitivity feasible and thereby takes full advantage of the large capital investment in the array.

Conversion of the Multiple Mirror Telescope - When dedicated in 1979, the original Multiple Mirror Telescope represented a radical departure in telescope design and was the third largest telescope in the world, utilizing six 1.8-meter telescope mirrors in a single altitude-azimuth mount. With the development of the technology by the late 1980s to cast larger mirrors, SAO, in partnership with the University of Arizona, undertook the conversion of the MMT to a single 6.5-meter mirror instrument to effectively increase its light-collecting power by more than 2.5 times and allow it to view an area of the sky more than 400 times larger, thus permitting large-scale surveys of faint objects in deep space. Following the completion of the installation of the new mirror in March 1999, the MMT resumed operation in May 2000. Base funding in this line item will enable SAO to continue to develop, through FY 2007, the new instruments necessary to fully utilize the capabilities of the converted MMT. In FY 2003, SAO will continue construction of an optical multi-slit spectrograph (BINOSPEC) needed to study the structure of the universe at great distances and early times, and an infrared imager (FLAMINGOS) to study star-formation in distant galaxies as well as in regions of our own galaxy normally hidden by dust.

VERITAS Project - The VERITAS Project (Very Energetic Radiation Imaging Telescope Array System) is a proposed major ground-based observatory consisting of an array of seven 10-meter-diameter imaging telescopes that will pinpoint and study extraterrestrial sources of gamma rays with unprecedented accuracy and sensitivity. The VERITAS Project was included in the report of the Astronomy and Astrophysics Survey Committee of the National Research Council (*Astronomy and Astrophysics in the New Millennium*, released in May 2000) as one of the main priorities for moderate-cost ground and space initiatives. SAO has been asked to take the lead role in this project, which will be built at the Smithsonian's Whipple Observatory in southern Arizona.

VERITAS, which will be the most sensitive gamma-ray telescope in the world, will be developed in collaboration with seven other U.S. institutions and two European institutions. The total estimated cost of the project through FY 2006 is $23.5 million, of which the Smithsonian's contribution amounts to $7.6 million, including base funding (or about one-third of the total cost). The balance of the funding ($15.9 million) will be provided through external support. The U.S. Department of Energy (DOE), the National Science Foundation (NSF), and other partners have extensively reviewed the project and are making significant contributions in support of SAO efforts.

These agencies will also fully support the operations and maintenance of VERITAS (except for road-type repairs which will be covered by Smithsonian RR&A funding).

Funding requested for FY 2003 under this line item ($1 million) will help support the construction of the telescopes and their accompanying instrumentation. (SAO will share the project costs with DOE, NSF, and two funding agencies from abroad.) A related increase of one workyear and $157,000 under the SAO line item will support the addition of a new astrophysicist position for this project. Funding of $4.5 million requested under the Construction account for FY 2003 will support the development of the site infrastructure elements, including roads, utilities, communication lines, foundations, instrument housings, and a control building.

In the next few years, new highly leveraged projects will be initiated in other areas of astrophysics, for which additional MSI funding will be critical.

Focused Ion Beam Instrumentation - With one-time funding provided in FY 2001, the National Museum of Natural History purchased a focused ion beam/time of flight secondary mass spectrometer, which provides the technology to allow researchers to collect chemical data at the sub-micrometer scale while sacrificing astonishingly little of the actual specimen, a key factor for ultra-precious samples such as those returned from space, or historically important gemstones. It allows for processes such as the measurement of solid state diffusion in crystals, the accurate determination of the age of rock and minerals, and the capability to micro-machine specimens at specific locations. In upcoming years, as extraterrestrial materials arrive by spacecraft to Earth, there will be growing requirements for analysis by only those methods that deliver the highest scientific value for the amount of material consumed. With this instrument, the Smithsonian will be well positioned to make some of the first observations on these rare and valuable specimens. The net decrease in FY 2002 reflects completion of this purchase.

MAJOR SCIENTIFIC INSTRUMENTATION

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education	-	-	-	-	-	-
Collections	-	-	-	-	-	-
Research						
Smithsonian Astrophysical Observatory						
Multiple Mirror Telescope (MMT)	-	3,492		3,000		2,500
Submillimeter Telescope Array (SMA)	-	3,262		3,229		2,500
Very Energetic Radiation Imaging Telescope Array System	-	-	-	-	-	1,000
National Museum of Natural History						
Focused Ion Beam Instrumentation	-	474	-	-	-	-
Subtotal, Research	-	7,228	-	6,229	-	6,000
Administration	-	-	-	-	-	-
TOTAL	-	7,228	-	6,229	-	6,000

MUSEUM SUPPORT CENTER

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	69	3,533	0	0	0	1	0	0
FY 2002 ESTIMATE	69	3,074	0	5	0	0	0	0
FY 2003 ESTIMATE	69	3,181	0	0	0	0	0	0

ABSTRACT - The Museum Support Center (MSC) provides for scientific research, conservation, and collections storage in a specially equipped and environmentally controlled facility located in Suitland, Maryland. As in prior years, the Institution requests that the funds for MSC collections storage equipment and move costs remain available until expended.

EXPLANATION OF PROGRAM - Specially-designed, state-of-the-art storage equipment is available at MSC to house the more than 31 million objects and object parts being relocated from the National Museum of Natural History and the National Museum of American History. MSC accommodates collections storage for three general types of needs: collections storage in cabinets, open shelving for biological specimens in alcohol, and high bay storage for very large objects. The facility also houses laboratories for molecular systematics, conservation, and other specialized research. The MSC staff provides administrative, shipping, and receiving services; oversees safety and security operations; and maintains strict environmental and cleaning services required for the proper storage of museum collections. The staff also provides computer support services for administrative, research, and collections management data needs. Base funds continue to be used for the MSC collections move and the redesign of Pod 3.

MUSEUM SUPPORT CENTER

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education	-	-	-	-	-	-
Collections						
Collections Care	35	2,143	35	1,679	35	1,679
Subtotal, Collections	**35**	**2,143**	**35**	**1,679**	**35**	**1,679**
Research	-	-	-	-	-	-
Administration						
Facilities	32	1,250	32	1,230	32	1,230
Information Technology	2	140	2	165	2	165
Subtotal, Administration	**34**	**1,390**	**34**	**1,395**	**34**	**1,395**
Necessary Pay	-	-	-	-	-	107
TOTAL	**69**	**3,533**	**69**	**3,074**	**69**	**3,181**

SMITHSONIAN INSTITUTION ARCHIVES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	24	1,537	2	274	0	59	0	0
FY 2002 ESTIMATE	24	1,611	2	184	0	74	0	0
FY 2003 ESTIMATE	24	1,674	2	183	0	62	0	0

ABSTRACT - The Smithsonian Institution Archives (SIA) is the Institutional memory of a unique American cultural resource and the steward of the national collections. To ensure Institutional accountability and enhance public appreciation of a great national treasure, SIA is committed to serving the Smithsonian community, scholars, and the general public. SIA preserves the documentation for major programs, policies, decisions, and events; provides a resource for the study of American science, culture, and museum development; and provides guidance for management of the national collections.

EXPLANATION OF PROGRAM - In FY 2003, SIA will continue to appraise, acquire, and preserve the records of the Institution and related documentary materials; oversee the Institution's collections management policy; offer a range of reference, research, and records service; and create products and services that promote understanding of the Smithsonian and its history.

Education - Almost 11 percent or $170,000 of total S&E funding supports educational activities. SIA will continue to make the Institutional collection accessible through a variety of outreach efforts including a reference service, virtual exhibitions, collaboration with museums on physical exhibitions, and a close association with the Smithsonian Center for Education and Museum Studies in the preparation of curriculum materials.

Collections - Nearly 59 percent or $946,000 of total S&E funding is dedicated to collection activities. Substantial resources are required to maintain the level of management excellence that characterizes SIA's collections function. The care and preservation of the collection has required increased attention in recent years as the physical facilities in which SIA is housed experience environmental challenges. Enhanced access through more robust cataloging and description, including online finding aids, will continue

in 2003, as will the oral history program and the placement of selected documents online. Support for the larger archival community also has been a traditional role of SIA. The return of a senior archivist, currently detailed to the fledgling archival program of the National Museum of the American Indian, will enhance archival efforts in FY 2003.

Collections care Institution-wide will continue to be the focus of the National Collections Program (NCP). With the approval by senior management of the newly revised collections management policy for the Institution, NCP will be heavily engaged in assisting the museums and other collecting units with revision of their unit-specific collections management policies. In addition, NCP will work with the collections community and the Office of Policy and Analysis in revising the annual *Collections Statistics* for enhanced usability both within and beyond the Institution.

Research - Approximately 13 percent or $210,000 of total S&E funding is allocated to research, specifically for the Joseph Henry Papers Project. This project consists of a multi-volume edition of the selected papers of the Smithsonian's first secretary. Two volumes of the eleven volume series of the *Papers of Joseph Henry* remain to be published. Due to a shift in funds to other archival activities, the completion of the project will be delayed.

Administration - Almost 18 percent or $285,000 of total S&E funding is dedicated to administrative activities. The infrastructure that weaves together and supports the above program relies heavily on technological advancement and the application of new technology to the work of archivists, historians, and collections coordinators. SIA will continue to make investments in new technology at a modest rate.

SMITHSONIAN INSTITUTION ARCHIVES

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education						
Internal to Unit	3	156	3	163	3	170
Subtotal, Education	3	156	3	163	3	170
Collections						
Archives Division	8	501	8	549	8	580
Institutional History	2	81	2	84	2	88
Preservation	3	112	3	129	3	134
National Collections Program	2	134	2	141	2	144
Subtotal, Collections	15	828	15	903	15	946
Research						
Joseph Henry Papers	3	262	3	273	3	210
Subtotal, Research	3	262	3	273	3	210
Administration						
Information Technology	1	80	1	85	1	88
Finance/General Administration						
Admin Staff & Central Management	2	211	2	187	2	197
Subtotal, Administration	3	291	3	272	3	285
Necessary Pay	-	-	-	-	-	63
TOTAL	24	1,537	24	1,611	24	1,674

SMITHSONIAN INSTITUTION LIBRARIES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	109	7,458	12	1,440	0	587	0	3
FY 2002 ESTIMATE	97	7,237	12	1,187	0	852	0	0
FY 2003 ESTIMATE	109	8,588	12	1,196	0	831	0	0

ABSTRACT - In the mid-twentieth century, the Smithsonian Institution Libraries (SIL) was organized to support the research and curatorial activities of the Smithsonian through the purchase of pertinent information sources and provision of reference service. Now, in the 21st century, SIL anticipates the need for information appropriate to the Institution's priorities and fills inquiries from the government, universities, researchers, and the general public worldwide. To that end SIL acquires, organizes, and delivers scholarly, scientific, and educational resources and information in all forms, including electronic. SIL also exhibits and interprets its collections for students, scholars, and lifelong learners; provides factual information in response to queries; and sponsors educational activities for a broad audience through public programs and publications in both paper and electronic forms.

EXPLANATION OF PROGRAM - In FY 2003, SIL will continue to provide high quality, timely information services directly to the Smithsonian community and the public from 19 branch libraries and through the Internet. The Libraries' online catalog is accessible through the Smithsonian Institution Research and Information System (SIRIS). The FY 2003 estimate shows an increase in the base for branch programs because of the transfer of 12 FTEs and funds from four art museums to reflect a consolidation of library functions under SIL.

Collections - More than 95 percent of total S&E funding is allocated to collection activities. Enhancing scientific serials will remain the key priority in FY 2003. SIL has shifted spending priorities within collections management in an attempt to sustain its outstanding collections in support of scientific research. The majority of SIL's most active users are Smithsonian scientists, research assistants, interns, and graduate students, who depend on scientific journals, many of which are now in electronic form, for peer-evaluated data on the latest investigations and discoveries. SIL continues to be the primary

vehicle for providing journals and other critical information to Smithsonian researchers. SIL staff will strive to keep collections strong by maintaining exchanges of books and journals with more than 4,000 institutions worldwide and will continue to borrow and lend books as a substitute for buying crucial titles.

SIL's strength lies in highly qualified staff and extensive subject collections. The effect of reducing staff and branches to meet Institution-wide requirements in FY 2002 is that librarians are in fewer locations to meet the needs of more researchers in a wider variety of fields. Already, SIL librarians train researchers to use new electronic databases; in FY 2003, they will create new aids to help users be more independent in finding the information they seek. SIL will continue a vigilant program of collections maintenance through binding, book repair and restoration, microfilming, and photocopying. For SIL, a major goal in 2003 is to ensure the availability of materials that would otherwise become unusable. SIL will accomplish this by preparing digital editions of fragile, out-of-print, and extremely rare works of strong scholarly and educational value in Smithsonian-specific subject areas.

Within this category of collections, the Institution requests $300,000 to counter the effects of extraordinary inflation on science journal prices. At the Smithsonian, scholarly journals in the sciences consume two-thirds of SIL's journal budget. For over a decade, prices of scientific journals have risen at a rate far greater than the Consumer Price Index. For example, the Consumer Price Index has increased 52 percent since 1986 while the cost of scholarly journals has increased 207 percent and SIL's budget for purchasing library materials has increased 11.5 percent. In 1986, SIL purchased 2,945 subscriptions for $395,400. In 2002, 2,079 subscriptions cost $713,346. As a result of inflation, 30 percent fewer subscriptions now cost 152 percent more. The Smithsonian cannot maintain its scientific reputation without adequate support of its information needs. Access to electronic journals will not remedy the situation. Electronic versions of the scientific journals are priced at the same or higher rates than the paper copies. The journal *Genomics*, for example, costs $2,300 for the paper version and $2,895 for the online version.

Benchmarks to two similar research institutions, the Massachusetts Institute of Technology and the Georgia Institute of Technology, clearly show how far behind SIL has fallen. The chart below shows that those institutes' expenditures for journals overall are more than triple SIL's budget and spending per faculty member is double what the Smithsonian is able to invest.

SERIALS COST COMPARISON, FY 1999							
	Serials Purchased	Cost of Serials Purchased	Average Cost Per Serial	Total Items Borrowed	Total Faculty*	Average Number of Serials per Faculty	Average Cost of Serial per Faculty
Smithsonian Institution Libraries	3,346	$867,515	$259	9,121	460	7.3	$1,886
Georgia Institute of Technology	6,638	$2,952,446	$445	3,700	709	9.4	$4,164
Massachusetts Institute of Technology	9,121	$3,907,607	$428	12,148	951	9.6	$4,109

*Total faculty is an estimate of researchers listed in the database of the Office of Fellowships and Grants. This estimate may be low. The total does not include 190 researchers at Smithsonian Astrophysical Observatory.

Unlike the Library of Congress, SIL has not received an increase to protect buying power for books and journals. SIL has coped with this situation in several ways. First, since 1986, SIL has mounted four major exercises to cancel journal subscriptions in order to stay within budget. It is no longer a matter of canceling duplicate subscriptions or marginal journals; researchers were required in 2001 to choose among the major scholarly journals in their fields. Second, SIL has absorbed a portion of the increases by reducing purchases of scholarly books, increasing attempts to borrow requested articles from other institutions, and greater sharing of remaining subscriptions among SIL branch libraries and across the Institution. Once again, however, inflation has caught up to a point that cannot be absorbed. At the current pace of inflation, SIL's journals will consume 94 percent of the entire materials budget by 2006. As a result, SIL will be unable to acquire any of the new scientific journals emerging as fields develop.

Exhibitions - In FY 2003, SIL will share national treasures with the public through its ongoing program of well-regarded book exhibitions lectures, and symposia. In FY 2002, changing priorities in Smithsonian research reduced services in several areas and forced SIL to reduce the time devoted to exhibitions. SIL will continue to produce small, first-class exhibitions that provide the public an opportunity to share part of its national heritage. SIL supports public programs primarily with non-federal funds.

Administration - In FY 2003, SIL will increase its staff development program to assist SIL employees in meeting the challenges of providing more services in a fiscally constrained environment and increase the current level of administrative support provided to the branches.

SMITHSONIAN INSTITUTION LIBRARIES

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions						
Voyages in New York	-	57	-	20	-	20
Subtotal, Exhibitions	-	57	-	20	-	20
Education	-	-	-	-	-	-
Collections						
Branch Programs	57	3,783	46	3,542	58	4,330
Management & Technical Services Program						
Preservation Services	9	518	8	493	8	493
Catalog Management	17	952	17	990	17	990
Acquisitions Services	9	1,609	9	1,608	9	1,908
Information Systems Programs	9	151	9	172	9	172
Subtotal, Collections	101	7,013	89	6,805	101	7,893
Research	-	-	-	-	-	-
Administration						
Finance/General Administration						
Admin Staff & Central Management	8	388	8	412	8	412
Subtotal, Administration	8	388	8	412	8	412
Necessary Pay	-	-	-	-	-	263
TOTAL	109	7,458	97	7,237	109	8,588

ADMINISTRATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	382	35,532	278	36,829	0	1,123	0	9
FY 2002 ESTIMATE	356	36,144	277	36,833	0	760	0	0
FY 2003 ESTIMATE	415	59,846	277	36,581	0	2,143	0	0

ABSTRACT - Administration includes executive management and related functions provided by the Offices of the Secretary; the Under Secretaries for Science, American Museums and National Programs, and Finance and Administration; and the Director of the International Art Museums Division.

EXPLANATION OF PROGRAM - The Office of the Secretary oversees the Smithsonian Institution and maintains continuous communication with the Board of Regents and its committees. Organizations reporting directly to the Office of the Secretary include the Office of Inspector General, Office of Policy and Analysis, Office of Diversity Initiatives, and Office of Development, as well as the Under Secretaries, Director for International Art Museums, and the Chief Executive Officer of Smithsonian Business Ventures.

The Under Secretary for Science provides leadership and oversight of the activities at the National Museum of Natural History, National Zoological Park, Smithsonian Astrophysical Observatory, Smithsonian Center for Materials Research and Education, Smithsonian Environmental Research Center, Smithsonian Tropical Research Institute, Smithsonian Institution Press, National Science Resources Center, Office of Fellowships, and Office of Sponsored Projects. The functions of the Office of International Relations, formerly under the Under Secretary for Finance and Administration, will move to this office in FY 2002.

The Under Secretary for American Museums and National Programs is responsible for all of the Institution's museums and galleries that focus on the American experience, as well as the Institution's national outreach programs. Museums and galleries include Anacostia Museum and Center for African American History and Culture, National Museum of the American Indian, National Air and Space Museum, National Museum of American History, National Postal Museum, Smithsonian American Art Museum,

National Portrait Gallery, Archives of American Art, and Cooper-Hewitt, National Design Museum. National outreach programs include Smithsonian Affiliations, Smithsonian Institution Traveling Exhibition Service, Smithsonian Center for Education and Museum Studies, and The Smithsonian Associates. Other units include the Visitor Information and Associates Reception Center, Center for Folklife and Cultural Heritage, Smithsonian Center for Latino Initiatives, Office of Government Relations, Office of Public Affairs, and Office of Special Events and Conference Services.

The Under Secretary for Finance and Administration serves as the Institution's chief operating officer with responsibility for the day-to-day administration of the Institution. Essential activities are provided by the Chief Financial Officer; Office of Planning, Management and Budget; Office of the Comptroller; Office of Contracting; Office of the Treasurer; Chief Technology Officer; Office of Information Technology; Office of Imaging, Printing and Photographic Services; Office of Human Resources; Office of the General Counsel; Office of Facilities Engineering and Operations; Office of Safety and Environmental Management; Smithsonian Institution Archives; Smithsonian Institution Libraries; Office of Exhibits Central; Office of Physical Plant; and Office of Protection Services.

The Director, International Art Museums Division, provides leadership and oversight for all policies, programs, and activities of the National Museum of African Art, Freer Gallery of Art, Arthur M. Sackler Gallery, and Hirshhorn Museum and Sculpture Garden.

The FY 2003 request for Administration includes increases of 14 FTEs and $9,200,000 for the Office of Information Technology, and $100,000 for Holocaust Restitution Research. Also justified here is an increase of 40 FTEs and $4,800,000 for staff and related costs to support the Institution's expanded Repair, Restoration and Alteration of Facilities (RR&A) program. Of this amount, 31 FTEs and $3,809,000 are included under this line item for the Office of Facilities Engineering and Operations. The balance of 9 FTEs and $991,000 is included under other line items, as indicated in the write-up that follows.

Office of Information Technology - The Office of the Chief Technology Officer (OCTO) provides the basic infrastructure and resources, leadership, support and guidance for the Smithsonian's uses of information technology. The office provides comprehensive technical support and services, which include day-to-day operation, maintenance, security, and disaster recovery of the Smithsonian Institution's information technology infrastructure. Specific services include operational and maintenance support for the mainframe computer, Help Desk support, office automation and desktop support

services, system and data base software maintenance, and Internet/Intranet support. The Office of Imaging, Printing, and Photographic Services serves the photographic and imaging needs of museums and research institutes. Other offices under OCTO include Smithsonian Institution Archives and Smithsonian Productions, which are included elsewhere in this budget.

As part of its effort to address issues raised in the recent National Academy of Public Administration report, the Smithsonian requests additional funds in FY 2003 to continue two initiatives:

- Enterprise Resource Planning System (12 FTEs and $5,800,000) - The Smithsonian is replacing antiquated financial and human resource management systems incrementally through FY 2005 with a commercial Enterprise Resource Planning software package. The increased funding will enable OCTO to operate and maintain three financial modules that will be deployed in FY 2002 and to develop and deploy the procurement, projects, budgets, grants, assets, and accounts receivable modules. OCTO will also begin development of the first phase of the human resources components, which includes the human resources, time and labor and payroll modules.

  The 12 additional FTEs requested in FY 2003 are needed to provide system development and integration support for the human resource management modules of the ERP system. Development of these modules will begin in FY 2003. The 12 FTEs also will provide operational support for the development, testing, and production environments for the ERP system. There will be an increased demand for network support due to an increased demand for external interfaces, such as SAO in Massachusetts and STRI in Panama, to the ERP system. This will require additional resources to ensure ERP service level commitments are met.

- Managed Information Technology Infrastructure (2 FTEs and $3,400,000) - The Smithsonian plans to make several major enhancements to its information technology infrastructure to make it more robust, reliable, and secure. This modernization will occur incrementally through FY 2005. The OCTO will focus on co-locating and consolidating file, print, and application servers, and centralizing local area network management. The requested funds will enable OCTO to replace aging NetWare equipment and implement a server architecture that will enable implementation of standard management practices to address issues of security and backup.

  The network management staff at the Smithsonian is inadequately staffed and operations-oriented, resulting in a confusing environment and constant reactive state. Currently, the Institution has only 5 FTEs to

support wide area network, cabling services, email, and network operating services on a network that serves more than 6,000 users. The 2 additional FTEs requested in FY 2003 are needed to support network engineering and operations activities. The additional resources will support the implementation of a Network Operations Center and improved Help Desk; upgrade of directory, email, and network operating systems; and consolidation and co-location of application servers.

Director, International Art Museums Division. An increase of $100,000 is requested for Holocaust Restitution research. The restitution of assets illegally seized during World War II is an important ethical and political issue for the U.S. government, the media, the public, and the museum world. In December 2000, the Presidential Advisory Commission on Holocaust Assets in the United States issued its recommendations and reached an agreement with the American Association of Museums and the Association of Art Museum Directors concerning the way in which the museum community should implement standards of full disclosure.

The Director, International Art Museums (IAMD), is coordinating efforts at the Smithsonian to comply with this agreement and to identify potential restitution problems within the Smithsonian's collections based on gaps in provenance during the Nazi era (1933-1945). The funds will be used for a research historian and an assistant to survey collections throughout the Smithsonian. An initial assessment of collections in the art museums and at the National Museum of American History has been completed. Significant additional work remains, and the period of performance may extend through the next seven years.

Office of Facilities Engineering and Operations - The Office of Facilities Engineering and Operations (formerly the Office of Facilities Services) oversees the Institution's facility functions to ensure comprehensive, integrated facilities programs. The Office of Safety and Environmental Management administers employee and visitor safety programs, environmental management, fire protection and prevention, and occupational health programs. Other facility functions reside with the Office of Physical Plant and Office of Protection Services; these offices are included in separate chapters in this budget.

The Institution last received a staff increase to administer the RR&A program in FY 1990 (20 FTEs and $1,030,000). Since that time permanent staff to support the RR&A program has remained the same despite the doubling in RR&A funding from $36.9 million appropriated in FY 1990 to $67.9 million requested in FY 2002. The $129.6 million request for FY 2003 will nearly double the program again.

The Institution has identified an increase of 88 FTEs to the current staff required to manage this increased workload and to modernize its facilities operation. The approximate cost of these positions is $11,132,000. The total planned in-house FTE increase is only about 20 percent against a projected workload increase of potentially 300 percent, and is the minimum required to successfully accomplish the large program ahead. These additional staff will allow the Institution to advance its facilities operation into the 21st century and to achieve the Smithsonian's long-range modernization program. Upon conclusion of this 10-year effort, workforce demographics will be such that today's junior managers will have significant technical knowledge, competencies, and leadership skills to be able to compete successfully for senior technical positions vacated by retiring managers, engineers, and technicians.

To meet the immediate need, the Institution is proposing to hire 34 people in FY 2002 to staff the field offices for the construction of the three largest projects now underway: NASM's Udvar-Hazy Center, the Patent Office Building and the NMAI Mall Museum; and to strengthen internal capacity to design, contract, and administer repair and restoration projects.

Recognizing the extraordinary burden the significantly increased capital program places on the Institution's salary and expenses, OFEO will seek authority to use project supervision and administration funds within RR&A and the major projects to hire permanent employees for a portion of the 34 positions needed in FY 2002. Another 20 on-board staff would also be similarly paid from project funds, freeing up this amount in salaries and expenses to hire other expertise in new technologies and methodologies needed elsewhere in OFEO's facility organization. Funds have already been budgeted in each project within line items for construction supervision and administration to cover A/E and construction management services. However, instead of continuing to add contract A/E support without increasing in-house staff, OFEO will balance the two elements with measured increases in both. Thus, there will be no net increase in any project cost for the additional project staff for two reasons: previous project budget planning and lower costs of in-house staff versus A/E contract support. This project funding approach will be limited to those positions directly related to field activities, and the Institution will manage it in exactly the same way the Army Corps of Engineers managed the process they used in the same way for many years.

In FY 2003, the Institution requests 40 FTEs and $4,800,000. This amount includes $4,200,000 for salaries and benefits, and $600,000 in other object support for supplies, services, and equipment and for leased space to

house new staff. These resources are requested as part of this line item, although some of the new staff will be assigned to new organizations formerly part of the Office of Physical Plant, as well as the National Zoological Park, the Office of Safety and Environmental Management, and the Office of Contracting.

These positions will fully staff the largest construction sites, expand staff support in the Office of Contracting and the Office of Safety and Environmental Management, and ensure an appropriate level of design and construction project management and supervision for the RR&A program. The table below details the affected units.

Office of Safety and Environmental Management	2	$236,000
Office of Contracting	2	236,000
OFEO:		
Office of Facilities Planning, Finance and Administration	3	392,000
Office of Project Management	3	471,000
Office of Engineering, Design and Construction	24	2,828,000
Office of Museum Support Services	1	118,000
Subtotal	31	3,809,000
National Zoological Park	5	519,000
TOTAL	**40**	**$4,800,000**

In addition to the requested resources, the Institution will continue to match construction supervision and administration staff with actual workload requirements, using the project funding mechanism, in order to complete the facilities modernization program.

OFFICE OF PROTECTION SERVICES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ACTUAL	775	34,934	0	212	0	0	0	0
FY 2002 ESTIMATE	736	35,640	0	160	0	0	0	0
FY 2003 ESTIMATE	736	38,072	0	160	0	0	0	0

ABSTRACT - The Office of Protection Services (OPS) protects and secures the National Collections entrusted to the Smithsonian Institution and ensures the safety and security of staff and visitors, while permitting an appropriate level of public access to collections and properties.

EXPLANATION OF PROGRAM - The Office of Protection Services employs a combination of electronic security and uniformed officers to provide optimum security and safety for the Smithsonian's collections, facilities, staff, and visitors. As part of its long-term strategy for security system upgrades and modernization, OPS continues to collaborate with industry experts to implement a master plan to support planning, procurement, and integration of electronic security systems at the Smithsonian. This modernization program replaces security systems in all Smithsonian buildings and will integrate access-card readers, CCTV cameras, and alarm zones.

An upward trend in the demand for security services poses a special challenge for OPS as FTEs and resources available for security personnel constrict in FY 2002. Smithsonian visitation has increased an average of 10 percent a year between FY 1996 and FY 2000, to over 31 million. Museum directors have requested increased uniformed officer presence, particularly at peak visitation periods. Events outside the Smithsonian, such as meetings of the International Monetary Fund, require heightened staff response, including overtime. Renovation plans in the works for existing facilities, including the installation of new exhibitions, will place demands on security not only after opening day but also during the renovation process when security escorts are required for contractors working in sensitive areas. The inauguration of new facilities, such as the Steven J. Udvar-Hazy Center at Dulles International Airport and the National Museum of the American Indian on the Mall, will require resources beyond what is currently available in the base.

An efficient hiring process, consistent and rigorous training, and a well-below-industry-average attrition rate of 10 percent, contribute to the workforce stability that permits flexible response to short term spikes in security demand, within a facility or among facilities. Workforce stability also ensures that security personnel are able to deliver consistent, high quality customer service for the benefit of Smithsonian visitors and staff. In FY 2002, OPS will complete another full review of its force deployment strategy, in cooperation with museum and facility directors; this review will include the location and number of posts and the hours those posts need to be staffed.

Also crucial to the success of the Office of Protection Services' mission is a variety of trained administrative staff that support the matrix of uniformed officers and electronic security systems. In FY 2003, the Office of Protection Services proposes to fund administrative support for its security operations at the same level as in FY 2002. This support includes maintenance of the local information technology network and resident software applications tailored to OPS's needs; an efficient hiring and employee relations process; delivery of professional training programs by qualified instructors; and fiscal accountability. In addition, OPS staff continually review and recommend improvements to current practices, while ensuring compliance with in-house, Smithsonian, and statutory policies and regulations.

For FY 2003, the Office of Protection Services requests an increase of $1,100,000 for security system modernization, maintenance, and renewal.

Security System Modernization ($-250,000) - In FY 2002, the Smithsonian requested $800,000 for security modernization projects. For FY 2003, the Institution requests $550,000 to complete the modernization of Smithsonian security systems at the National Air and Space Museum ($200,000), and the Freer Gallery of Art and the Quadrangle ($350,000). The Quadrangle includes the National Museum of African Art and the Arthur M. Sackler Gallery. Funding will complete the replacement of old components and installation of new technical security equipment in these facilities' galleries and collection storage areas. Based on experience with contract scheduling requirements, the Smithsonian requests these funds as no-year.

Security System Maintenance and Renewal ($1,350,000) - In FY 2003, the Institution requests $1,350,000 in permanent base funding for ongoing renewal and maintenance of Smithsonian security systems. In FY 2001, the Smithsonian received a permanent increase for this purpose in the amount of $650,000; the requested increase will provide the

$2,000,000 needed on an annual basis for these purposes. Maintenance of the system will include software upgrades, technical inspections, cleaning, repairs on front-end equipment (computers, switchers, and monitors), field devices, and data-gathering panels. Renewal costs include replacing installed equipment because of equipment failure, life-cycle termination, changes in technological approach, or additional requirements placed upon the systems, such as new exhibits or alarms. Hardware renewal is based on a three-to-five-year cycle. Wiring renewal is based on a 10-15-year life cycle, beginning two years after installation. Since the installation program is phased over a four-year time period, the renewal costs are expected to stabilize after four years. Because annual spending will vary from year to year, the Smithsonian requests these funds as no-year. Beginning in FY 2003, maintenance and renewal costs will remain stable at approximately $2,000,000 per year.

OFFICE OF PROTECTION SERVICES

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education	-	-	-	-	-	-
Collections	-	-	-	-	-	-
Research	-	-	-	-	-	-
Administration						
Security	745	33,094	706	33,744	706	34,844
Information technology	3	230	3	237	3	237
Finance/General Administration						
Finance	5	343	5	353	5	353
Human Resources	11	588	11	606	11	606
Central Administration	11	679	11	700	11	700
Subtotal, Administration	**775**	**34,934**	**736**	**35,640**	**736**	**36,740**
Necessary Pay	-	-	-	-	-	1,332
TOTAL	**775**	**34,934**	**736**	**35,640**	**736**	**38,072**

OFFICE OF PHYSICAL PLANT

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 2001 ESTIMATE	517	74,114	4	5,449	1	13,582	0	155
FY 2002 ESTIMATE	500	76,173	4	5,216	1	96,819	0	0
FY 2003 ESTIMATE	507	89,689	4	5,215	1	40,659	0	0

ABSTRACT - The Office of Physical Plant (OPP) creates, preserves, restores, and protects a physical environment that enables the Smithsonian to achieve its goals. OPP creates an environment in which the Smithsonian buildings and grounds are recognized as a benchmark of quality; and provides a functional, pleasing, safe, and accessible environment to maintain the collections. OPP also creates an environment in which visitors experience an appreciation for our heritage, and for the Smithsonian, its buildings, and the collections held as a national treasure.

EXPLANATION OF PROGRAM - Federal funding is the foundation that supports OPP's mission to create, preserve, restore, and protect the Smithsonian's physical environment. OPP uses these vital resources in four general areas: facilities operations and maintenance, collections management, information technology, and general administration.

Facilities - Eighty-four percent of OPP's Federal S&E funds are devoted to the operation and maintenance of Smithsonian facilities. In FY 2001, this funding supports 492 FTEs in OPP as well as the South Group and Quadrangle Building Management groups. In addition, funds support the Smithsonian's central utility and rent accounts.

The continued aging of Smithsonian facilities has created an environment where more maintenance resources are required to sustain the buildings each year. As a result, OPP has looked at all of its functional responsibilities and reduced or eliminated non-core services. The table below reflects a reduction of 17 FTEs in the Facilities line in FY 2002 as a result of these evaluations. They represent a reduction to mail services, cargo and dispatch operations, and vehicle maintenance.

For FY 2003, the Smithsonian requests 7 FTEs and $520,000, included in this line item but justified under the National Museum of the American Indian, to support operation of the utility systems in the NMAI Mall Museum. A net increase of $11,915,000, included in this line item but justified under Mandatory Increases, will support increases in the Institution's central utilities, communications, postage, and rental accounts.

Collections - Two OPP units are actively engaged in collections management activities, Horticultural Services and Architectural History and Historic Preservation. These two program areas represent less than 1 percent of OPP's federal S&E funds. The units' collections include archival materials, furnishings used in Smithsonian buildings and gardens, as well as a world-renowned collection of rare orchids.

Information Technology - OPP's federal S&E funds support a small staff (7 FTEs), which manages the facility management systems used by OPP and the museums to track operations and maintenance workloads. The group also provides vital support for the building automation system that is the backbone of OPP's HVAC systems. These funds are also used to pay for the voice and data communications portion of the utility accounts.

Finance/General Administration - OPP devotes a small (less than 1 percent) portion of its federal S&E funds to provide a strong central focus on fiscal management, procurement, and human resource activities.

OFFICE OF PHYSICAL PLANT

Detail of Federal Base Resources By Function

	FY 2001		FY 2002		FY 2003	
	FTEs	$ (000's)	FTEs	$ (000's)	FTEs	$ (000's)
Exhibitions	-	-	-	-	-	-
Education	-	-	-	-	-	-
Collections						
AAHP	5	380	5	392	5	392
Horticulture	4	275	4	281	4	281
Subtotal, Collections	**9**	**655**	**9**	**673**	**9**	**673**
Research	-	-	-	-	-	-
Administration						
Facilities	492	62,014	475	64,216	482	76,563
Information technology	7	10,776	7	10,591	7	10,591
Finance/General Administration						
Finance	5	381	5	395	5	395
Human Resources	4	288	4	298	4	298
Subtotal, Administration	**508**	**73,459**	**491**	**75,500**	**498**	**87,847**
Necessary Pay	-	-	-	-	-	1,169
TOTAL	**517**	**74,114**	**500**	**76,173**	**507**	**89,689**

FACILITIES SUMMARY

The federal Salaries and Expenses (S&E) funding allocated to the various museums for facilities management is used to provide custodial, labor, minor maintenance, re-lamping, shipping and receiving, and safety and occupational health services for the museums. The labor forces in the facilities management offices of the museums are also responsible for special events setup and takedown. These offices also act as liaisons between the occupants of the buildings and the Office of Physical Plant (OPP), which is the principal operating unit responsible for carrying out facilities maintenance and operations for the Institution.

The estimates for the museums and units on the table below reflect projected expenditures for housekeeping, physical plant and grounds maintenance, environmental management, and general facility maintenance for work not performed by those who report to OPP. The estimates for facilities services reflect those services that are performed to create, preserve, restore, and protect a physical environment that enables the Smithsonian to achieve its goals. The goals of the primary facility maintenance units (OPP and the National Zoological Park [NZP]) are to create an environment in which the Smithsonian buildings and grounds are recognized as a benchmark of quality and to provide a functional, pleasing, safe, and accessible environment in which to maintain the collections, and in which visitors come to appreciate the Smithsonian as custodian of America's heritage. OPP and NZP use their federal resources in four general areas: facilities operations and maintenance, collections management, information technology, and general administration.

The Facilities Services Group, consisting of the Office of Physical Plant, South Group Building Manager, and the Quadrangle Building Manager, projects that 70 percent of their FY 2003 expenditures will go for these purposes. Currently, approximately 84 percent of OPP's federal S&E funds are devoted to the operation and maintenance of Smithsonian facilities. Their funds also are used to pay the Smithsonian's utility bills and its rent on leased space.

SMITHSONIAN INSTITUTION
Facilities
(Dollars in Thousands)

Unit	FY2001 Base		FY2002 Request		FY2003 Request	
	FTEs	Amount	FTEs	Amount	FTEs	Amount
MUSEUMS AND RESEARCH INSTITUTES						
American Museums						
Anacostia Museum/Center for African American History and Culture	1	297	1	150	1	152
Cooper-Hewitt, National Design Museum	15	898	14	898	14	898
National Air and Space Museum	75	2,972	76	2,772	75	3,283
National Museum of American History	47	1,390	46	1,370	46	1,370
National Museum of the American Indian	32	2,577	32	2,687	45	7,029
National Portrait Gallery	15	717	15	752	15	752
Smithsonian American Art Museum	16	718	16	753	16	754
International Art Museums						
Arthur M. Sackler Gallery/Freer Gallery of Art	11	456	11	526	11	526
Hirshhorn Museum & Sculpture Garden	18	818	18	820	18	820
National Museum of African Art	2	104	2	108	2	108
Science Museums and Research Institutes						
National Museum of Natural History	88	2,838	88	2,895	88	2,895
National Zoological Park	114	6,555	114	6,893	119	7,412
Smithsonian Astrophysical Observatory	17	2,774	17	2,874	17	2,874
Smithsonian Environmental Research Center	8	678	8	680	8	680
Smithsonian Tropical Research Institute	40	1,849	40	1,861	47	1,861
TOTAL MUSEUMS AND RESEARCH INSTITUTES	499	25,641	498	26,039	522	31,414
PROGRAM SUPPORT AND OUTREACH						
Museum Support Center	32	1,250	32	1,230	32	1,230
TOTAL PROGRAM SUPPORT AND OUTREACH	32	1,250	32	1,230	32	1,230
ADMINISTRATION						
Office of Contracting	0	0	0	0	2	236
Office of Facilities Services	4	415	4	432	35	4,241
Office of Safety & Environmental Management	0	0	0	0	3	332
TOTAL ADMINISTRATION	4	415	4	432	40	4,809
FACILITIES SERVICES						
Office of Physical Plant						
--Immed. Ofc. of Phy. Plant	417	26,410	400	26,487	407	26,919
--Utilities	0	22,900	0	24,900	0	36,010
--Rent	0	9,748	0	9,748	0	10,553
--Building Manager, South Group	38	1,543	38	1,605	38	1,605
--Building Manager, Quadrangle	37	1,413	37	1,476	37	1,476
TOTAL FACILITIES SERVICES	492	62,014	475	64,216	482	76,563
TOTAL SMITHSONIAN INSTITUTION	1,027	89,320	1,009	91,917	1,076	114,016

INFORMATION TECHNOLOGY SUMMARY

The Smithsonian Institution is becoming increasingly more reliant on information technology to perform administrative and program functions. In FY 2003, information technology (IT) funds will provide support in several areas throughout the Institution, including network maintenance and enhancement, mainframe operations and maintenance, server administration, desktop support services, help desk support, software application maintenance and enhancement, Web services, and database administration.

The Office of the Chief Technology Officer provides support for the operation and maintenance of the Smithsonian's wide area network (Sinet), mainframe computer operations, system and database software maintenance, software licenses and general server backup, security, and firewall operations. Units must operate and maintain GroupWise email servers and Novell and Windows NT/2000 office automation servers located within the museums. IT funding also supports maintenance of Internet/Intranet websites and Web development and desktop support for printers, scanners, and personal computers.

The Smithsonian has six commercial software systems that are used to manage collections, archives, library, and research information. These systems support the six art museums, the National Air and Space Museum, the National Museum of American History, the National Museum of Natural History, and 35 libraries and archives offices. Requested funding will support maintenance and enhancement and content enrichment of these critical systems. In addition, Smithsonian units have their own systems to manage financial activities. There are 27 systems throughout the Institution that require maintenance and operational support. The Smithsonian will replace antiquated financial and human resource management systems incrementally through FY 2005. The need to fund these systems will be eliminated with the implementation of the Enterprise Resource Planning System beginning in FY 2003. The Smithsonian units also have a number of other smaller program support systems that must be maintained.

In FY 2003, the Smithsonian will continue work to enhance and improve its information technology infrastructure. Aging NetWare equipment will be replaced and a new server architecture will be implemented to address issues of security and backup.

SMITHSONIAN INSTITUTION
Information Technology
(Dollars in Thousands)

Unit	FY 2001 Base		FY 2002 Request		FY 2003 Request	
	FTEs	Amount	FTEs	Amount	FTEs	Amount
MUSEUMS AND RESEARCH INSTITUTES						
American Museums						
Anacostia Museum/Ctr for African American History & Culture	0	13	0	14	0	14
Archives of American Art	1	38	1	39	1	39
Center for Folklife and Cultural Heritage	1	96	1	96	1	96
Cooper-Hewitt, National Design Museum	1	120	1	125	1	125
National Air and Space Museum	4	561	4	1,021	4	2,307
National Museum of American History	12	967	11	958	11	958
National Postal Museum	0	10	0	20	0	20
National Museum of the American Indian	17	1,569	17	1,746	20	5,182
National Portrait Gallery	3	235	3	245	3	250
Smithsonian American Art Museum	12	966	11	927	11	927
International Art Museums						
Arthur M. Sackler Gallery/Freer Gallery of Art	3	328	3	346	3	346
National Museum of African Art	1	137	1	140	1	140
Science Museums and Research Institutes						
National Museum of Natural History	12	1,821	12	1,835	12	1,835
National Zoological Park	3	416	3	500	3	500
Smithsonian Astrophysical Observatory	1	482	1	499	1	499
Smithsonian Center for Materials Research and Education	0	82	0	85	0	85
Smithsonian Environmental Research Center	3	172	3	177	3	177
Smithsonian Tropical Research Institute	4	218	4	218	4	218
TOTAL MUSEUMS AND RESEARCH INSTITUTES	**78**	**8,231**	**76**	**8,991**	**79**	**13,718**
PROGRAM SUPPORT AND OUTREACH						
Outreach						
--Smithsonian Institution Traveling Exhibition Service	1	33	1	35	1	35
--Smithsonian Center for Education and Museum Programs	1	52	1	63	1	63
--Smithsonian Affiliation Program	0	0	1	187	1	187
--Smithsonian Press	1	36	0	0	0	0
Communications						
--VIARC	0	1	0	1	0	1
Institution-wide Programs						
--Information Resources - No Year [1]	0	2,804	9	10,004	5	3,154
Museum Support Center	2	140	2	165	2	165
Smithsonian Institution Archives	1	80	1	85	1	88
TOTAL PROGRAM SUPPORT AND OUTREACH	**8**	**3,148**	**15**	**10,540**	**11**	**3,693**
ADMINISTRATION						
Office of the Comptroller [2]	9	645	9	650	0	0
Office of Information Technology (w/Chief Technology Officer) [1,2]	44	5,494	44	5,374	76	24,270
TOTAL ADMINISTRATION	**53**	**6,139**	**53**	**6,024**	**76**	**24,270**
FACILITIES SERVICES						
Office of Protection Services	3	230	3	237	3	237
Office of Physical Plant						
--Immed. Ofc. of Phy. Plant	7	779	7	799	7	799
--Utilities	0	9,997	0	9,792	0	9,792
TOTAL FACILITIES SERVICES	**10**	**11,006**	**10**	**10,828**	**10**	**10,828**
TOTAL SMITHSONIAN INSTITUTION	**147**	**28,522**	**154**	**36,383**	**176**	**52,509**

[1] FY 2003 Request reflects the transfer of base resources for information technology projects from the IRM pool to the Office of Information Technology.

[2] FY 2003 Request reflects the transfer of base resources for information technology personnel from the Office of the Comptroller to the Office of Information Technology.

REPAIR, RESTORATION AND ALTERATION OF FACILITIES

	SMITHSONIAN	NATIONAL ZOOLOGICAL PARK	TOTAL
FY2001 APPROPRIATION	$ 49,890,000	$ 7,583,000	$ 57,473,000
FY2002 ESTIMATE	$ 57,900,000	$ 10,000,000	$ 67,900,000
FY2003 ESTIMATE	$107,100,000	$22,500,000	$129,600,000

PROGRAM GOALS - The goal of the Repair, Restoration and Alteration (RR&A) program is to ensure that deterioration in Smithsonian facilities is arrested and that necessary repairs and revitalization of the facilities goes forward in a sensible way so that the Institution's exhibition, research, conservation, collections storage, and education programs function efficiently, effectively, and safely within facilities that conform with modern building, life safety, and environmental codes.

STRATEGY FOR ACHIEVING GOALS - Since the Commission on the Future of the Smithsonian Institution made its recommendations in 1995, $260 million in repair and restoration funds has been appropriated for revitalization of facilities. Although the investment was significant and unquestionably needed, it was not sufficient to address the needs of the Institution's nearly eight million square feet of facilities located in six states, the District of Columbia and Panama. Today, the Smithsonian's facilities need even more extensive investment if the Institution is to continue to fulfill its missions as preserver of the nation's cultural heritage and a leader in scientific research. This investment would arrest the decline in facilities performance and backstop necessarily higher costs of ownership from:

- **Block obsolescence.** More than half of the Smithsonian's buildings and systems are between 25 and 40 years old, effectively obsolete, and no longer economically maintained or repaired.

- **Age of buildings.** The buildings range in age from new to over 160 years old, with many subject to the higher costs and constraints associated with historic preservation.

- **High traffic.** The Smithsonian receives over 30 million visits per year.

- **Architectural variety.** Addressing the repairs of these buildings requires expertise in everything from stone masonry to stained glass and from slate roofs to subterranean vaults.

- **Functional diversity.** Virtually every kind of artistic, cultural, and scientific activity conceivable takes place in laboratories, classrooms, galleries, studios, and gathering places.

- **Track record of understated need.** The scope of the revitalization, repair and restoration needs of the Institution have neither been fully quantified nor completely communicated, resulting in an extensive backlog of capital repairs.

- **Inadequate maintenance.** Since the buyouts of 1994 and 1996, the maintenance and facilities areas of the Institution lost 51 staff at a time when systems are increasingly in need for repair.

As the "principal repository of our nation's collective memory and the nation's largest public cultural space,"[1] the Smithsonian must ensure that the country's most valued artifacts are maintained in perpetuity through preservation, research, and educational programs. However, the combined problems listed above and the compelling urgency for a solution result in an enormous problem for the relatively small federal budget of the Smithsonian Institution. Nonetheless, the challenge remains for the Institution "to face the problem and transform the physical environment of the Smithsonian during the coming decade."[2] That duty demands that the Institution define its facility stewardship requirements and secure a means for honoring this commitment to its museums, research units, and the National Zoo.

The professional engineering evaluation, *Smithsonian Institution Museums and Facilities: Critical Assessment and Improvement Objectives,* records for the first time in one account the full breadth of the commitment that must be made to preserve the Smithsonian and position it for the 21st century. It is a compilation of scores of A/E consultant investigations and hundreds of internal condition assessments. The total revitalization requirements of the Institution's physical plant known at this time fall into three major areas:

Revitalization. To address the causes of advanced deterioration and resulting decline in the Institution, and avoid crippling failures in building systems that can result in lost data and damage to collections, the Smithsonian must

---

[1] *E Pluribus Unum: This Divine Paradox,* Report of the Commission on the Future of the Smithsonian Institution, May 1995, p. iv.

[2] Lawrence M. Small, "America's Icons Deserve a Good Home," *The Washington Post,* June 26, 2000, p. A19.

spend more than $1.4 billion by 2010 for restoration, renovation, and modernization, including engineering and construction management costs.

Maintenance. To realize the intended design life and full economic value of our facilities and the above revitalization investment, the Smithsonian must double its day-to-day facility preservation activities to $45 million annually. Concurrently, the method of maintenance will transition to a modern, cost effective program centered on reliability and risk management reinforced through qualitative standards and cost-effective application of technology.

Construction. Fulfilling the Smithsonian's mission will require new facilities off the Mall, mainly to meet collections needs at the Institution's Suitland, MD site.

The RR&A chart that follows summarizes the Institution's current assessment of needs for the highest priority projects for FY 2003 and the five-year period up to FY 2007. The highest priority projects typically include:

- Work needed to correct hazardous conditions that pose a serious threat to public or employee safety or health, or are required to meet mandated life safety or health codes
- Repair or replacement of building shell or utility components or systems experiencing active failures, such as roof or facade leaks, or HVAC or electrical equipment breakdowns, which pose an immediate risk of damage to the collections or major disruption of program activities
- Fire and life safety, accessibility, and security modifications that are required to meet life safety or health codes within an established timeframe
- Repair or replacement of building shell or utility components or systems that are in imminent danger of failure, such as minor roof leaks or electrical equipment that requires more frequent than normal maintenance, or HVAC systems whose components are failing at an increasing rate
- Predicted renewal requirements, based on normal life span and observable condition of building shells and systems

In applying the priorities and scheduling, the staff considers other factors that influence how and when projects might be accomplished, including the potential for disruption of the visiting public and the extent to which work of differing priorities should be undertaken at the same time in a particular building in order to take advantage of better pricing. The availability of space in which to relocate staff and collections that would be at risk while the work is performed also affects the timing of projects.

The project summaries that follow the RR&A chart describe FY 2003 project requests and are organized in two formats. Large projects, those exceeding $1.5 million, are presented in greater detail including narratives on project description, justification, and impact of delay. Smaller projects, in the range of $500,000 to $1.5 million, are presented with a succinct project description only. Projects under $500,000 are consolidated under a Minor Projects heading.

The Smithsonian will use the funds requested in FY 2003 to perform work in the categories that follow. The *Smithsonian Institution Federal Capital Program* spreadsheet in the appendix provides a detailed listing of the program needs for the five-year period ending in FY 2007. The Institution contracts for most RR&A projects unless it is more cost-effective to use existing employees or to hire staff to accomplish the work. The Smithsonian also contracts for certain ongoing maintenance services with funding in the RR&A account. The account also funds expenses required to accomplish the RR&A work, including construction supervision and administration, security requirements, and relocation of staff and collections that might be placed at risk during construction.

Smithsonian Institution
Repair, Restoration and Alteration of Facilities
FY 2003 - FY 2007

CATEGORY TITLE	Prior Funding Received	FY2002 Request	FY2003 Request	FUTURE REQUIREMENTS FY 2004	FY 2005	FY 2006	FY 2007	Outyear Costs
Mejor Renewal Projects								
Patent Office Building	33.6	15.0	45.0	38.0	34.0			
National Museum of Natural History	76.0	12.0	22.0	18.0	18.0	18.0	46.0	85.0
Arts and Industries Building	7.2	6.0	2.0	8.0	40.0	60.0	47.0	
National Zoological Park	8.3	5.0	11.3	12.0	21.3	40.5	39.7	95.0
Smithsonien Castle	1.0					5.0	20.0	55.0
National Air and Space Museum				4.0		41.0		8.5
Renwick Gallery				2.0	20.0			3.0
Museum Support Center					1.0	15.0		4.0
Hirshhorn Museum					1.0	10.0		10.0
Freer Gallery				0.5	3.0			7.0
Quadrangle					4.0		40.0	
Netional Museum of American History	1.4			15.5	18.0			
Silver Hill Facility								21.0
SUBTOTAL	127.5	38.0	80.3	98.0	160.3	189.5	192.7	288.5
Code Compliance and Security								
Fire Oetection and Suppression			1.8	0.1				
Access, Safety and Security		5.6	2.6	7.9	3.5	8.5	2.7	
National Zoological Park, Code Compliance & Security		1.4	2.2	2.0	1.9	3.1	1.8	
SUBTOTAL		7.0	6.6	10.0	5.4	11.6	4.5	ONGOING
Infrastructure Repeirs and Modifications								
General Repairs		7.4	17.2	20.3	21.9	23.7	23.0	
Façade, Roof and Terrace Repairs		1.3	3.2	1.3	1.8	1.4	1.6	
Utility Systems Repair		3.4	4.4	5.1	4.0	6.1	7.0	
R&R Planning, Design and Inspection		2.5	3.8	1.0	5.3	3.7	2.0	
Netional Zoological Park, Code Infrastructure Repairs		3.6	9.0	5.3	5.3	6.5	5.2	
Alterations and Modifications		2.8	3.0	3.0	3.0	3.0	3.0	
SUBTOTAL		21.0	40.6	36.0	41.3	44.4	41.8	ONGOING
Maintenance *		1.9	2.1	36.0	36.0	36.0	36.0	ONGOING
SUMMARY								
SUBTOTAL, Smithsonian		57.9	107.1	151.4	207.9	230.8	228.5	
SUBTOTAL, National Zoological Park		10.0	22.5	21.0	28.5	51.7	46.7	
GRAND TOTAL		67.9	129.6	180.0	243.0	281.5	275.0	ONGOING

* The estimate for this category in FY 2004 includes $21 million currently within the S&E base for facilities maintenance. A final decision on whether to include facility maintenance funds within this account or within the S&E account in future years has not yet been made.

MAJOR RENEWAL

This category provides funds for the cyclical replacement of major building systems and equipment and major renovation projects required for the preservation of the buildings. It primarily addresses the major replacement requirements for HVAC and electrical systems at the older buildings where systems are nearing the end of their service lives.

Facility	Project	Line Request $(000)s	Subtotals $(000)s
Patent Office Building	Restore Building	45,000	45,000
National Museum of Natural History	Restore Halls 8,9,10,11,12	16,000	
National Museum of Natural History	Construct Accessible Mall Entrance	4,000	
National Museum of Natural History	Design Phase IId & IIe HVAC Renewal	2,000	
	Subtotal, National Museum of Natural History		22,000
Arts & Industries Building	Design Major Restoration	2,000	2,000
National Zoological Park	Renovate Deer & Tapir Area	7,000	
National Zoological Park	Design Multiple Building Renovations	4,300	
	Subtotal, National Zoological Park		11,300
TOTAL		**80,300**	**80,300**

PROJECT TITLE: Restore Patent Office Building
INSTALLATION: Patent Office Building
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		45,000
PRIOR YEAR FUNDING:		48,649
Construction	28,943	
Facility Planning and Design	17,177	
Relocation Expenses	2,529	
TOTAL	48,649	

FUTURE YEAR FUNDING
(FY 2004–2005)

Fit out of 1st & 2nd floors	38,000
Fit out of 3rd floor & mezzanine, move back into building	34,000

BUILDING BACKGROUND:
Originally designed to exhibit models of inventions patented in the United States, this stone neoclassical structure is a National Historic Landmark designed by architects Robert Mills and Thomas U. Walter. Begun in 1836 to house the U.S. Patent Office and completed in 1867, the building was converted to museum use in 1964.

Located within this 332,000-square-foot building are the Smithsonian American Art Museum and the National Portrait Gallery. The Smithsonian American Art Museum houses paintings, sculpture, graphic art, photography, and folk art dedicated to the arts and artists of the United States from colonial times to the present. The National Portrait gallery exhibits portraits of major figures in American history and culture. Average annual visitation for both museums is 430,000.

PROJECT JUSTIFICATION:
The building's mechanical and electrical systems are more than 30 years old and break down frequently. The inefficient two-pipe heating, ventilation, and air conditioning system cannot meet the current heating and cooling loads in the building. Air circulation is insufficient, humidity control is limited, and condensation is a major problem. The cooling tower leaks, and the chiller plant contains chlorofluorocarbons (CFCs), which must be phased out to meet environmental laws.

The electrical distribution system is overloaded, inadequate, and unsafe. Clearances around transformers do not meet current code requirements.

Switchgear, panel boards, and distribution networks are deteriorated and obsolete. Replacement parts are no longer available.

Other utility systems that are seriously deteriorated include fire protection, plumbing, steam distribution, and communications systems. Some of the fire alarm system wiring is original to the building and contributes to system malfunctions. The building's elevators break down frequently, thereby reducing public access. The building's façade has been damaged by acid rain and air pollution, the window frames are deteriorated and failing, and several interior surfaces have been severely damaged by leaks and condensation. The building's main entrances and most restrooms are not accessible to persons with disabilities and do not meet current codes and standards. Asbestos, present throughout the building, must be abated before repairs can be accomplished.

PROJECT DESCRIPTION:

Create an accessible main entrance and improve accessibility throughout the building. Replace mechanical and electrical equipment, including boilers, pipes, air handling units, chillers, pumps, electrical transformers and substations, and fire pumps with new energy-efficient equipment. Install a new air distribution and control system, supply and return air grilles, and temperature and humidity controls by zone. Replace the cooling tower and change the location and mounting configuration to eliminate leaks. Repair exterior masonry, replace windows, restore elevators, and improve functionality of the building by widening the door openings in the south, east, and north for improved visitor access and by providing accessible restrooms adjacent to each lobby and in event spaces. Remove or abate hazardous materials such as asbestos and CFCs. Convert administrative space to public space. Relocate some mechanical and electrical equipment to new space beneath the courtyard so that the adjacent space can be used for public programming. Restore interior finishes after installation of new systems and other construction.

The Institution also plans to construct a glass dome over the building's courtyard, install a modern kitchen and restaurant, and add up to two exterior visitor kiosks. This work will occur concurrently, but will be funded from private sources.

In FY 2003, we will complete design and request contractor proposals for base bid for courtyard excavation, basement & 4th floor mechanical equipment, system rough-in of all floors, and elevator installation.

PROGRESS TO DATE:

Facility assessment and planning phases have been completed and the roof and gutters have been replaced. Design for the renewal is 50 percent complete. The gross demolition package in support of the physical plant renewal of the Patent Office Building was awarded for $7.3 million and is approximately 12 percent complete. Bids have been received for the exterior stone and window renovation portion of the project, estimated at approximately $10 million, and an award is expected in that amount by October 1, 2001. Additionally, a contract for the packing, crating, relocation, and storage of SAAM and NPG collections material is expected to be awarded by September 1, 2001, for an estimated $1 million. This work will commence immediately after award.

IMPACT OF DELAY:

The building is closed to the public, including school groups, educators and scholars, for renovation and will remain so until sufficient funding is received to complete the entire renovation. This diminishes access to the museum's collections, reduces the Smithsonian's visibility and consequently its ability to attract donors. Also, the separation of staff from their collections causes inefficiency and inconvenience in collections management and research.

PROJECT TITLE: Restore Halls 8, 9, 10, 11, & 12
INSTALLATION: National Museum of Natural History
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		16,000
Project Element:		
Halls 11 & 12	4,300	
Halls 8, 9, 10	6,000	
Vertical Access	5,700	
TOTAL	16,000	

PRIOR YEAR FUNDING:		74,910
Construction	64,350	
Facility Planning and Design	9,510	
Interim Repair	775	
Move	275	
TOTAL	74,910	

BUILDING BACKGROUND:
Eligible for listing in the National Register of Historic Places, the National Museum of Natural History was designed by Hornblower and Marshall and completed in 1911 in the Beaux-Arts style. Mills, Petticord, and Mills added east and west wings in 1964 for offices, storage, and laboratories. In the 1990s, east and west courtyard complexes were added for public facilities, offices, storage and classrooms. The 1.3 million-square-foot building is one of the leading international centers for research on life sciences, earth and planetary studies, and anthropology, the museum's researchers study natural and cultural diversity by collecting and identifying specimens of nature and cultural artifacts; establishing relationships among them; and explaining the underlying processes that generate, shape, and sustain their diversity. The Hope diamond, dinosaur skeletons, an African bush elephant, and an insect zoo are among the collections. The visitation in FY 2000 was 9.5 million.

PROJECT JUSTIFICATION:
Alcohol collections are housed in large rooms that far exceed the code - prescribed maximum areas and have insufficient fire protection. The eventual construction of a new pod at the Museum Support Center would resolve this issue, but until then, alcohol storage areas in the Natural History Building must be made safe. The windows in the main building are original and have so deteriorated that they leak. They are also covered with several layers of lead-based paint. The roof system above the rotunda and the major halls was installed in 1909. Portions of the main roofing system were repaired in the 1950s. The roof over the original building is now being replaced. The 40-year-old heating, ventilating, and air conditioning system, control system, fire

protection and suppression system, and laboratory exhaust system are all 15 years past their projected normal useful life and break down frequently. The automatic temperature control system is obsolete and does not operate satisfactorily to maintain the stable temperature and humidity necessary for long-term preservation of the collections. Ninety percent of the electrical lighting and power panels in the building are more than 30 years old. The emergency power system is inadequate to operate the more than 30 elevators, 3 fire pumps, and emergency lighting in the building in the event of a major power outage. Communications systems are not adequate to meet current computer requirements. Restrooms for the public, and some for staff, have been modified to make them accessible for persons with disabilities, but some 22 staff restrooms in the building still do not meet ADA requirements. Asbestos has been abated in all major equipment and storage rooms in the attics, but asbestos remains in duct wrap, mastic, pipe insulation and most of the floor tile in the wings. Lead is present in old paint throughout the building, and must be abated or encapsulated as it is exposed. To meet pressing space needs, mezzanines have been added over the years in a haphazard fashion. None of the mezzanines have sufficient fire separation from adjacent spaces, all are inaccessible to the disabled and many are overcrowded to the point of structural stress. The Museum continues to outgrow its quarters, diminishing the space available for public use. When the building opened in 1910, 220,000 square feet of exhibit space was provided. Today, visitation has increased a thousand fold from the earliest days of the Museum yet exhibits currently occupy 25 percent less space. The cramped escalators date from the 1960s, when the visitation was half of what it is now.

PROJECT DESCRIPTION:

Restore and upgrade the windows in the original building. Replace, heating, ventilating, and air conditioning equipment (HVAC), ductwork, lighting, and electrical wiring. Abate and encapsulate asbestos and lead. Upgrade fire protection and detection systems, storm water systems, water distribution, sanitary and power systems. Renovate the mezzanines to meet acceptable fire protection and accessibility standards. Install a complete data communication distribution system. Modify staff restrooms to meet ADA requirements. Update the existing security system. Create an accessible entrance from the Mall. Create a safe storage facility for the variety of hazardous chemicals used in the museum's scientific research departments. Repair and replace deteriorated piping systems in the tunnels beneath the ground floor of the museum, including primary fire protection sprinkler mains, storm and sewage mains, and miscellaneous water and steam piping. Upgrade emergency power systems to bring the building's life safety systems into code compliance.

In FY 2003, the Institution plans to restore halls 8, 9, 10, 11, and 12. This phase will include the complete building system restoration and renewal for approximately 40,000 square feet on the first floor of the main building. The project space will be restored and reverted to gallery space and is coordinated with major exhibit reinstallation planned for these areas. Restoration and renewal will include complete replacement and upgrade of the HVAC system, electrical distribution system, fire protection and detection, plumbing systems, lighting, architectural restoration, and asbestos and lead abatement.

PROGRESS TO DATE:

Construction completed on the NMNH renewal includes the central heating and cooling plant and emergency generator, asbestos abatement in all mechanical spaces and attics, replacement of all windows in the east and west wings, roof replacement for the entire building, HVAC equipment replacement for the wings, and the renovation of three floors in the east wing and a portion of the third floor of the main building.

IMPACT OF DELAY:

Continued degradation of windows, HVAC, power, water, storm, and steam condensate systems, including leaks and loss of service to the facility will occur. Steam condensate and storm lines have backed up, flooded, and damaged equipment in the west court basement. Major valve failure has flooded the chiller plant, shutting it down. Overheating of electrical vaults could cause malfunction and loss of electrical service to the facility. Continued degradation of all building system components and any prolonged loss of cooling, heating, or power would impact the Museum's activities, as well as the condition of the collection housed therein. Excessive heat in one of the exhibit halls has caused a mineral specimen to collapse. Storm water pumps cannot keep up with flooding in the basement in event of a major rain; as a result, staff keeps materials on pallets and off the floor. One hundred spray nozzles in a single cooling tower failed at once, causing humidity to spike throughout the building. This Museum remains one of the Institution's primary accessibility issues. The mezzanines present less than optimal conditions for the safety of staff and collections. The overcrowded escalators present the risk of accidental falls and injury.

PROJECT TITLE: Construct Accessible Mall Entrance
INSTALLATION: National Museum of Natural History
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		4,000
Project Element:		
Demolition and site preparation	75	
Site Improvements	350	
Structures	945	
Elevators, Stairs and Railings	2,550	
Mechanical and Electrical	80	
TOTAL	4,000	

PRIOR YEAR FUNDING:		200
Construction	0	
Facility Planning and Design	200	

PROJECT JUSTIFICATION:
The Museum receives more than 50 percent of its visitors through the Mall entrance. In addition, all of the school and tour buses drop visitors off at this south location. There exists a 13-foot difference from the sidewalk level to the main doors that are accessible only by stairs. For people who are unable to climb these stairs, their only option is a ramp located at the north face of the building, over 300 feet away.

PROJECT DESCRIPTION:
This project is a separately identified phase of work that is included in the Museum of Natural History Major Renewal project previously described. This project involves constructing a means to make the Mall entrance to the National Museum of Natural History accessible to persons with disabilities, while respecting the historic character of this National Landmark building. The project includes the installation of two exterior elevators and exterior stairs that provide access to the extended south portico of the Museum. The portico would be extended and widened to provide entrance through the main doors of the Museum. The project will also include modifications to the doors so that they can be opened manually or automatically.

PROGRESS TO DATE:
This project is under design in the concept development phase. An A/E contract has been awarded for $140,000 in FY 2000. The Smithsonian and the Architect will be presenting the conceptual design to the Commission of Fine Arts and the National Capital Planning Commission in September 2001 for their recommendations and approval.

IMPACT OF DELAY:

The lack of an accessible Mall entrance is one of the Institution's primary accessibility issues. The inaccessibility of the Museum from the Mall is a major complaint of many of the visitors. Some visitors have carried people, chairs, or strollers up the monumental stairs at risk of injury to themselves and others.

PROJECT TITLE: Design Phase IId & IIe HVAC Renewal
INSTALLATION: National Museum of Natural History
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		2,000
Project Element:		
Design for Phase IId	1,000	
Design for Phase IIe	800	
Design for Swing Space	200	
TOTAL	2,000	

PRIOR YEAR FUNDING:		74,910
Construction	64,350	
Facility Planning and Design	9,510	
Interim Repairs	775	
Move	275	
TOTAL	74,910	

PROJECT JUSTIFICATION:
The building's life support systems have deteriorated to the point that they do not operate satisfactorily to maintain the stable environmental conditions necessary for long-term preservation of the collections. These support systems were originally installed in the early 1960s and are at the end of their useful life. In addition the demand for many of the building systems have changed substantially from 1962. These systems must be upgraded to bring them up to acceptable Museum standards of operating efficiency and reliability. Increasing visitation and use of interactive exhibits has put a strain on the existing mechanical and electrical capacities as well. Systems that are in need of upgrade and replacement include the mechanical heating, ventilation, air-conditioning (HVAC) and control systems, electrical power and distribution systems, fire protection and detection systems, and the removal of the remaining asbestos used in insulation and building materials.

PROJECT DESCRIPTION:
This design is part of the ongoing major restoration and renewal of the National Museum of Natural History (NMNH). The phases will include the complete building system restoration and renewal for various areas within the Museum. Phase IId represents the fourth and fifth floors of the west wing and Halls 28, 29, & 30 of the main building. Phase IIe represents the second and third floors of the west wing. Design for accommodating the staff during construction will also be part of this package.

PROGRESS TO DATE:

Construction completed on the NMNH renewal includes the central heating and cooling plant and emergency generator, asbestos abatement in all mechanical spaces and attics, replacement of all windows in the east and west wings, roof replacement for the entire building, HVAC equipment replacement for the wings, and the renovation of three floors in the east wing and a portion of the third floor of the main building.

IMPACT OF DELAY:

Continued degradation of all building system components and any prolonged loss of cooling, heating, or power would impact the Museum's activities, as well as the condition of the collections housed therein.

PROJECT NAME: Design AIB Major Restoration
INSTALLATION: Arts and Industries Building
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		2,000
Project Element:		
Complete A/E Construction Documents	2,000	
PRIOR YEAR FUNDING		7,200
A/E Programming and Concepts	3,600	
A/E Design Development	3,600	
TOTAL	7,200	
FY 2002		6,000
A/E Construction Documents (Phase1)	6,000	
FUTURE YEAR FUNDING (FY 2004 - 07)		155,000
Restoration and Construction	109,000	
Contingency 15%	16,000	
Construction Supervision and Administration. 6.5% of $125,000	8,000	
Building Systems Commissioning	1,000	
Construction Phase A/E Services. 2.5% of $125,000	3,000	
Design, Alterations, Moves, and Rent (Phase 2)	8,000	
Rent (Phase 2)	6,000	
Systems Furniture	4,000	
TOTAL	155,000	

BUILDING BACKGROUND:

A National Historic Landmark, this 1881 polychrome masonry structure was designed by German-American architects Adolph Cluss and Paul Schulze with General Montgomery Meigs as a consultant. Built to house the U.S. National Museum, including objects given to the Smithsonian after the 1876 Centennial Exposition, the 185,000-square-foot building presently houses temporary exhibition space, public facilities, administrative offices, and the Discovery Theater. Smithsonian Archives, including the papers of the first Secretary, Joseph Henry, and the central Office of Information Technology are among the largest tenants of the building. About 430 Smithsonian staff occupy the building. Average annual visitation is about 900,000.

PROJECT JUSTIFICATION:

Mechanical, electrical, and other utility systems are more than 30 years old, and breakdowns occur with increasing frequency. One of the cooling towers is out of service, and one of the chillers serving the building and the Smithsonian Castle is reaching the point where it can no longer be repaired. Maintenance is difficult and expensive on the entire system, controls are manual, and the humidification system is virtually inoperable. The chiller plant contains CFCs and is not compliant with environmental laws. The main steam station leaks steam into the air continuously. Pressurized steam pipes, chilled water pipes, and electrical conduits are located in utility trenches under the first floor. Because these trenches contain asbestos and are filled with abandoned pipes and conduits, maintenance and repair are difficult. The building's two elevators are frequently out of service for repairs. Many spaces are not accessible to persons with disabilities. The sewer occasionally backs up into the basement. The older portion of the roof is badly deteriorated. Air and moisture infiltration at the seams and flashing causes leaks and flaking paint and plaster to fall on the exhibits and archival records. The fire alarm system is antiquated and has no additional capacity or flexibility for future changes. Asbestos has been found on pipe elbows and insulation, floor tile and mastic, duct insulation mastic, and fire doors. The building has some lead-based paint. The stone floors in the halls are heavily deteriorated.

PROJECT DESCRIPTION:

Replace plumbing, fire detection and suppression, security, vertical transportation, and communication systems; modify environmental control systems to protect collections and the building's fabric. Modify and upgrade elevators and improve access to persons with disabilities. Replace sections of the roof and repair the façade to prevent further leaks, replace insulation to stabilize the interior temperature and humidity, and restore the interior to reflect its original architecture. Remove asbestos, CFCs, and lead paint. Install a new energy-efficient heating, ventilating, and air conditioning system to control and monitor environmental conditions to meet climate-control requirements of the collections, reduce maintenance costs, and meet contemporary codes and ventilation standards. Relocate air handling and other HVAC equipment to underground mechanical room to improve efficiency and free space for public use and provide a food service facility. Replace obsolete and malfunctioning electrical panel boards, switchgear, and distribution systems with a system that meets current codes and program requirements. Install connector to Quadrangle building to allow the loading dock in that building to serve the Arts and Industries Building also. Provide temporary swing space for office occupants and permanent replacement space for those functions lost to the expansion of exhibition space. In

FY 2003, the design and construction documents for the major renewal will be completed.

PROGRESS TO DATE:
The $3.6 million Phase 1 pre-design contract with the Architect-Engineer, which included the field survey and documentation, programmatic analysis, concepts and schematics, is complete. An additional $3.6 million for Phase 2 was obligated in FY 2001 for design development documents. This phase is underway and will be completed in late FY 2001.

IMPACT OF DELAY:
Breakdowns of most building systems occur with increasing frequency. Replacement parts are hard to find or no longer available. Maintenance is becoming increasingly difficult and expensive. Many spaces are not accessible to persons with disabilities. Roof leakage will further damage the roof and the building components. Flaking paint will fall on occupants or exhibits at an increased rate. There is a potential environmental risk of contamination from asbestos and lead paint. Numerous spaces remain very warm in the summer and too cold in the winter. Parts of the building not served by fire detection and suppression systems are at risk of loss from fire. The risk of shutdown of all or part of the entire building continues to exist from mechanical failure, which would cause major disruption, especially to central service organizations such as the Office of Protection Services and the Office of Information Technology.

Continued delay, especially of roof and mechanical systems replacement, poses risks to both the central computer system for the entire Smithsonian and the irreplaceable records of the Smithsonian Archives. Peeling paint is unsightly and falls from the roof in public exhibition areas, requiring temporary canopies to catch it.

PROJECT TITLE: Renovate Deer & Tapir Area
INSTALLATION: National Zoological Park – Rock Creek
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 7,000

Project Element:	
Construction	7,000

PARK BACKGROUND:
The National Zoological Park in Washington DC, a National Historic District, was designed in the 1890s by the firm of renowned landscape architect Frederick Law Olmsted and architect William Ralph Emerson. The Byzantine-style Reptile House and Renaissance-style Elephant House exemplify the tradition of architect-designed buildings at the Zoo. Visitors to the Zoo in Washington can find over 4,000 animals of nearly 480 species on exhibit in naturalistic settings. The Zoo's purpose is to promote the conservation of life on earth through inspiration, recreation, informal and formal education, research, and animal health programs that use its unique collection of living animals and plants. Giant pandas, tigers, rhinos, elephants, Amazonia tropical rain forest, the Reptile Discovery Center, the invertebrate exhibit, and wetlands exhibit are among its collections. The visitation in FY 2000 was 2.4 million.

PROJECT JUSTIFICATION:
Twenty-three major buildings at the Zoo, totaling over 600,000 square feet and located on 167 acres, vary in condition from new to recently renovated to poor. There are structural failures at the Australia Building, Bear exhibit, and Holt House. Concrete exhibit rock is deteriorating in the Seal/Sea Lion, Beaver Valley and Bear exhibits with structural cracks throughout much of the concrete rock. One large rock failure at the sea lion pool occurred in 1999 and was repaired, and two others occurred and were repaired in 2001 at the Mexican Wolf and Beaver exhibits. Roofing and waterproofing problems exist at the Australia, Bear, Bird, Elephant, Small Mammal, Reptile, and Lion-Tiger houses, as well as Mane Restaurant, several small barns, and support structures. Other roofs and terraces will need replacement soon. Heating and cooling systems at the Australia, Bear, Bird, Elephant, and Reptile houses, Mane Restaurant, and the Police Station buildings are in poor condition. The three large central boilers in the main plant at the Zoo were replaced in 1995. Insufficient quantities of outside combustion air are supplied to the boilers, reducing their efficiency. Areas with asbestos and lead paint have been identified, and hazardous materials are being abated or removed on a gradual basis. Although a central fire alarm system has been recently installed, existing smoke detection and fire alarm systems in many buildings need to be extended and improved to meet current codes and

provide better coverage. The underground electric distribution system serving approximately half of the Zoo's buildings needs to be replaced because of ground faults and poor condition of cables. There have been four significant power outages in the past five years due to transformer failures, with several outages putting animals, staff, and the public at risk of animal escapes. The Zoo's water service dates back to the 1890s. Water quantity to the facilities is insufficient, as demonstrated when elephant house pools are being filled and toilets cannot be flushed at valley trail restrooms. Because the District of Columbia switched from chlorine to chloramine water treatment, new water treatment systems and additional filtration were installed in critical areas. Additional treatment systems are being installed in the seal, sea lion, beaver, and otter pools, and the hippo pools require daily chemical treatment to eliminate the hazard of chloramines in the water. Due to these water system problems and obsolete water treatment equipment, seals and sea lions have developed eye and skin problems that can only be solved by changing to salt water systems. Portions of the Zoo's sanitary and storm drainage systems date to the original site development in the 1890s and have been subsequently extended and modified. Failures in these systems are currently causing soil erosion at three locations. The security systems are outdated and inadequate. Many buildings and outside areas do not meet ADA accessibility requirements.

PROJECT DESCRIPTION:

The full scope of the facilities renewal at the Zoo involves upgrading underground utility systems throughout the Zoo, including:

- New 12-inch main water line to increase capacity and to allow fire sprinklers to be installed in all buildings
- Upgrade electrical distribution system and replace old transformers
- Improve sanitary and storm water piping to repair failures and reduce erosion of the site
- Upgrade fiber-optic telecommunications distribution systems to eliminate overhead wiring and increase capacity for multiple systems applications (telephone, video, security, fire alarm, etc)

The renewal also includes installing chloramine water treatment systems in remaining areas and replacing seal/sea lion fresh water systems with new salt water systems to improve animal health; renovating Deer and Tapir area to relocate Sloth Bears so existing Bear Exhibit can be renovated; renovating the Mane Building, Elephant House, Small Mammals, Property Yard, Valley Keeper, Reptile Building, and Seal and Sea Lion exhibits; maintaining and repairing building roofs, waterproofing, walls, exhibits, air conditioning, electric, lighting, safety, and security systems; improving fire alarm and smoke detection systems; extending and enhancing fire protection in all buildings to meet code requirements; upgrading existing security systems in

all facilities; modifying buildings and exhibits to improve site and exhibit access.

In FY 2003, the Institution will begin construction to renovate the existing Deer and Tapir area. This project renovates the utility and service infrastructure for the Deer and Tapir Area, consisting of 6.25 acres of failing animal exhibits and paths. Renovation work includes replacement of severely inadequate site utilities with new water service to permit installation of fire suppression systems, new high-voltage electric service to increase capacity and replace existing single phase service, improved sewer and storm water management, new gas service, new security systems, new perimeter fence and railing, and new fiber-optic and telecommunications backbone. Work includes installation of a new service road away from public paths, and installation of new public walkways that meet ADA guidelines. Existing holding buildings will be replaced with new structures to meet current USDA and AZA animal containment regulations. Holding buildings are designed for energy efficiency and incorporate environmentally sustainable design and construction practices. Fire suppression systems will be installed to reduce fire hazards to the animal collection.

PROGRESS TO DATE:
The A/E concepts and schematic design for the Deer and Tapir area will be completed October 2001.

IMPACT OF DELAY:
The Australia building will be uninhabitable and must be closed or replaced within three years. A portion of the Upper Bear Line animal holding area has been closed due to structural failure. Six buildings (Bear, Elephant, Reptile, Small Mammal, Bird, Education/Administration) have leaking or seriously deteriorated roofing systems and are overdue for roof replacement. These same buildings are in need of significant HVAC and electrical system improvements to correct existing deficiencies, meet fire and life safety codes, and accommodate improved animal care requirements, including addition of supplemental heating and/or cooling, increased computer and equipment power loads, animal exhibit/habitat repairs, and increased or changed lighting needs. All water treatment systems for animal life support in the Zoo must be improved and expanded. Seals and sea lions need to be transitioned from fresh water to a salt water system to prevent further eye and skin disease. Extensive areas of failing concrete rockwork throughout the Zoo need to be repaired or replaced to maintain secure enclosures, meet animal health needs, and prevent injury from falling concrete. Fire alarm and suppression systems and smoke detection systems need to be extended so that all areas are properly covered and in compliance with current codes. Without repairs, continued degradation of these buildings will occur and

deficiencies will remain, including structural and cosmetic deterioration, roof and wall tank leaks, piping leaks and breaks, unscheduled power, water and HVAC outages, and telecommunications service interruptions, causing an increased likelihood that the buildings will need to be closed, animal areas condemned, and animals relocated off site on an emergency basis. If facilities continue to deteriorate, pools will continue to leak, powered doors will continue to fail, electric hot-wires will fail, heating and cooling systems will fail, placing the general public, staff, and collections at risk. Without adequate containment and security, the potential for escape of dangerous animals will increase as facilities age.

PROJECT TITLE: Design Multiple Building Renovations
INSTALLATION: National Zoological Park – Rock Creek
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 4,300

Project Element:	
Design	4,300

PRIOR YEARS FUNDING (FY 2002): 500

PROJECT JUSTIFICATION:
The Elephant House was built in 1934 and is in serious disrepair. The Small Mammal house is at the end of its useful life. Fire alarm, smoke detection, and fire suppression systems are significantly deficient and have limited coverage. The HVAC and electrical systems are critically inadequate and do not conform to currently accepted codes and practices for management of these animals and for public health. Air quality problems are a health concern for staff due to inadequate fresh-air supply. Asbestos insulation must be removed from the facility. The roof and skylights leak and are beyond cost-effective repair. Hydraulic doors are failing and being repaired on a weekly basis, increasing the hazard of managing animals. On several recent occasions, maintenance staff have been called in after hours and on weekends to repair elephant and rhino doors so that animals could be permitted to enter or exit the building for critical management. The hot water system is inadequate and failing. Staff office and support space is in a deteriorated and unusable condition. A chloramine removal water treatment system is needed for hippos. Exterior yards are inadequate in size for the elephants. Improvements must be made to waste handling and control of animal waste in runoff from yards to comply with most current EPA guidelines. Additional shade structures are needed in all yards. Walkway and railing improvements are required for ADA compliance.

PROJECT DESCRIPTION:
This project will initiate A/E design for several areas of the Major Renewal project for the National Zoological Park, which is described in more detail in the previous project description. In FY 2003, design will begin for Giraffe Relocation, renovation of the Elephant House, Small Mammal House, Seal/Sea Lion and Lower Bear Area. These areas include approximately eight acres of animal exhibit yards. The project includes schematic design and cost estimating for complete renovation of the existing buildings and a new elephant holding facility that will also provide swing space for temporary relocation of animals during building renovations. Building renovations will include structural repairs, roof and skylight replacement, HVAC, power

distribution, lighting, fiber optic backbone, hydraulic doors, people doors, and windows. Fire suppression, smoke detection, and fire alarm systems will be installed or upgraded to reduce fire hazards to the animal collection. In addition, building modifications will be made to improve safety for animal management staff and to provide interior pools and necessary water treatment for improved animal welfare. Site renovations will include upgrade of all underground utilities and services, including: steam, high-voltage electric service, water, sewer, storm drainage, storm water management, telephone, security, fiber-optic, roads, paths, accessibility improvements, and animal containment and animal management improvements. The exterior animal yards will be improved to allow for safe and modern animal management activities, including improved containment, visitor railings and paths. The project will be designed for energy efficiency and incorporate environmentally sustainable design and construction practices. Work includes installation of new manure collection area to meet EPA regulations, and installation of new public walkways that meet ADA guidelines. Adjacent vacant animal yards will be incorporated so that under-utilized areas are fully renovated.

PROGRESS TO DATE:
This A/E design effort will begin in FY 2002.

IMPACT OF DELAY:
The facilities are rapidly approaching failure and it may be necessary to close them unexpectedly. If work is delayed, critical animal and public health concerns could arise from HVAC systems, animal waste management and controls. Electrical power and hydraulic door failures will create unsafe conditions for staff, animals, and the public. Animals, staff and the public will remain at risk due to lack of adequate fire and life safety systems. These conditions could result in closure of the facilities and the need to relocate animals—some of them very large and difficult to move—on an emergency basis.

CODE COMPLIANCE AND SECURITY

The Smithsonian plans to spend $6.6 million in FY 2003 on code compliance projects. Listed below are the major projects in this category.

- **Fire Detection and Suppression Projects.** Provide fire protection and safety measures meeting today's standards with state-of-the-art technology. These projects typically include installation of detection systems such as smoke alarms, suppression systems such as sprinklers, and architectural modifications to create fire zones by installing walls and doors with rated fire resistance.

- **Access, Safety and Security Projects.** Provide better access to facilities for persons with disabilities, improve environmental conditions for the health and safety of visitors and staff, and correct facility conditions that threaten the security of the National Collections

- **Minor Projects.** Minor projects in these same categories are generally under $500,000 each and are distributed throughout Smithsonian facilities.

Facility	Major Projects	$(000)s
Multiple Locations	Provide Guard Services, All Locations	600
National Zoological Park, Front Royal	Install/Improve Fire Protection Systems	500
Quadrangle	Upgrade Fire Protection System	1,500
Silver Hill Facility	Abate Asbestos in Buildings 15, 16, & 18	500
	Minor Projects	
Multiple Locations	Implement Miscellaneous projects under $500,000	3,500
TOTAL		**6,600**

PROJECT TITLE: Provide Guard Services, All Locations
INSTALLATION: All Facilities
LOCATION: SI-Wide

FY 2003 COST ESTIMATE (Thousands of Dollars): 600

PRIOR YEAR FUNDING:

FY 2001	400
FY 2002	500

PROJECT DESCRIPTION:
Smithsonian security forces are assigned to maintain security at Smithsonian facilities whenever contractor staff are on site to perform work on repair, renovation, or alteration projects. The cost of guard services in this request is required for a variety of small RR&A projects at multiple Smithsonian locations. It does not represent the total cost of security services for RR&A because for the larger, discrete projects, such as the major renovations at POB and NMNH, security services are charged directly to that discrete project.

PROJECT TITLE: Install/Improve Fire Protection Systems
INSTALLATION: National Zoological Park – Front Royal
LOCATION: Front Royal, VA

FY 2003 COST ESTIMATE (Thousands of Dollars): 500

PRIOR YEAR FUNDING: 0

PROJECT DESCRIPTION:
The project is for design of a central fire alarm system to improve notification and response in the event of a fire or smoke alarm. There is currently no central notification for these systems, and many barns housing endangered or threatened animals are in remote locations. A central system using wireless technology will be designed and installation of the main reporting station will be accomplished with these funds.

PROJECT TITLE: Upgrade Fire Protection System
INSTALLATION: Quadrangle
LOCATION: Washington, DC

FY 2003 COST ESTIMATE (Thousands of Dollars):	1,500
PRIOR YEAR FUNDING:	225
Construction	0
Facility Planning and Design	225

PROJECT DESCRIPTION:
This project involves renovation and upgrade of the major fire protection systems for the Smithsonian Quadrangle including the Arthur M. Sackler Gallery, The National Museum of African Art (NMAfA), and The S. Dillon Ripley Center. Additional audio and visual devices will be added to fully comply with ADA criteria plus creation of areas for rescue assistance at the lower level. Manual pull stations will be adjusted to the proper ADA height criteria. This project also includes fire protection for all elevator rooms and shafts in order to comply with federal safety codes. It will install sprinkler and /or gaseous fire suppression protection in Sackler and NMAfA refrigerated collection rooms. Upgrades to fire protection for the main computer room are also included. The project will add fire protection to the elevator shafts and pits and upgrade the recall system. The elevator cabs will be upgraded to full ADA compliance.

PROJECT JUSTIFICATION:
This project is to correct fire safety deficiencies identified in the building Management Evaluation and Technical Review (METR) report, as well as the Quadrangle Fire Protection Master Plan.

IMPACT OF DELAY:
A delay in correcting these deficiencies will continue to jeopardize the safety of visitors and staff.

PROJECT TITLE: Abate Asbestos in Bldgs. 15, 16 and 18, Phase I of III
INSTALLATION: Garber Building, Silver Hill Facility
LOCATION: Suitland, MD

FY 2003 COST ESTIMATE (Thousands of Dollars): 500

PROJECT DESCRIPTION:
Buildings 15, 16 and 18 have insulating materials containing asbestos fibers. The fibers have been contained by a plastic covering that has been in place beyond it useful life. Failures have been noted and some repairs have been attempted. Abatement is the preferred long-term, cost-effective solution. Except for a portion of Building 16, all the collections are free of building asbestos. To delay abatement puts the collections at risk of becoming contaminated; that would result in much higher cleaning costs and risk damage to the collections when they are being cleaned. Each of the three buildings will be a different phase of this project. Design documents for each will be similar.

INFRASTRUCTURE REPAIR

General Repairs. Provides resources for minor, unscheduled, but essential repairs that the Institution cannot anticipate specifically or that do not fit into any one discrete category.

Façade, Roof, and Terrace Repairs. Provides exterior repair and maintenance to building envelopes to prevent major structural and interior damage and deterioration due to age, water intrusion, and weathering.

Utility System Repairs. Maintains, repairs, and upgrades the heating, ventilating, and air conditioning (HVAC) systems and plumbing, electrical, and communications systems. Ensures reliable and energy-efficient operation of utility systems through ongoing renovation, repairs, and replacement of deteriorated equipment.

R&R Planning, Design and Inspection. Supports projects to identify and analyze long-range repair and restoration needs and to design future-year projects in advance of funding requests.

Alterations and Modifications. Provides for smaller, program-oriented construction projects with estimated construction costs of less than $1 million.

Facility	Major Projects	$(000)s
Cooper-Hewitt Museum	Repair Fox House Exterior	2,000
Hirshhorn Museum	Improve Interior Lighting	1,000
Multiple Locations	Minor General Repair, including craft services	5,170
Multiple Locations	Emergency and General Repair	5,000
Multiple Locations	Personnel, Reprographics and Library	960
Multiple Locations	Replace Exterior Signage	750
Multiple Locations	Miscellaneous Utility Repair	520
American History Museum	Repair Mechanical & Electrical Systems	2,000
National Zoological Park	Renovate Upper Bear Habitat	1,500
National Zoological Park	Update Zoo Master Plan, Rock Creek	1,000
National Zoological Park	Waterproof Lion/Tiger Moat & Planter	900
National Zoological Park	Repair/Improve HVAC Systems, Rock Creek	760
National Zoological Park	Repair Roads and Bridges Throughout Site	700
National Zoological Park	Misc. General Repair & Painting	500
Astrophysical Observatory	Repair/Improve Whipple Road	500
Environmental Research Ctr.	Install Utility Connection to Research Center	550
Silver Hill Facility	Repair Building 10 Roof	500

PROJECT TITLE: Repair Fox House Exterior
INSTALLATION: Cooper-Hewitt, National Design Museum
LOCATION: New York City, NY

FY 2003 COST ESTIMATE (Thousands of Dollars):		2,000
Project Element:		
Masonry Stabilization	1,500	
Historic Window Replacement	500	

PRIOR YEAR FUNDING: 0

PROJECT DESCRIPTION:
This project is the continuation of the capital rehabilitation project of the Cooper-Hewitt, National Design Museum. This phase will complete the conservation, stabilization and rehabilitation of the exterior envelope of the Fox House, the eastern-most townhouse in the group of buildings constituting the National Design Museum located along Museum Mile in New York City. This structure functions as the primary curatorial storage facility of the museum and houses approximately 90,000 objects in just over 7,000 square feet. The rehabilitation of the facades of this structure was not included in the Museum's general renovation project, which was completed in 1997. Rehabilitation will include masonry stabilization and rehabilitation and the replication and replacement of deteriorating historic wood windows.

PROJECT JUSTIFICATION:
The building envelope is compromised and showing clear signs of degradation. Open mortar joints and deteriorated stonework allow moisture to penetrate to newly finished curatorial and office space within the structure.

IMPACT OF DELAY:
Continued degradation of the exterior envelope will compromise and impact the museum activities as well as the condition of the collection housed within the structure.

PROJECT TITLE: Improve Interior Lighting
INSTALLATION: Hirshhorn Museum and Sculpture Garden
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 1,000

PROJECT DESCRIPTION: This project is an ongoing project begun in FY 1999. It involves upgrading and replacing the exhibit lighting in the Hirshhorn Museum and Sculpture Garden. The FY 1999 project upgraded and replaced the lighting in the second and third floor exhibit galleries. The FY 2003 project is to complete this work to upgrade and replace the lighting in the ambulatory exhibit spaces, as well as in the stage and booth areas in the auditorium.

PROJECT TITLE: Minor General Repair, including Craft Services
INSTALLATION: All Facilities
LOCATION: SI-Wide

FY 2003 COST ESTIMATE (Thousands of Dollars): 5,170

PRIOR YEAR FUNDING:

FY 2001	1,500
FY 2002	2,375

PROJECT DESCRIPTION:
This request is to provide minor general repair, including craft services throughout the Institution. Projects at this level generally fall below $50,000 and include such things as replacing broken or failing pipes, painting, repairing damaged floors, patching walls, etc. Work in this category may be performed either by outside contractors or by Smithsonian staff.

PROJECT TITLE: Emergency and General Repair
INSTALLATION: All Facilities
LOCATION: SI-Wide

FY 2003 COST ESTIMATE (Thousands of Dollars):	5,000

PRIOR YEAR FUNDING:

FY 2001	2,000
FY 2002	4.355

PROJECT DESCRIPTION:
This request is to provide emergency repair and general repair throughout the Institution. Projects at this level generally fall between $50,000 and $200,000 and include unanticipated and emergency repair needs.

PROJECT TITLE: Personnel, Reprographics and Library
INSTALLATION: All Facilities
LOCATION: SI-Wide

FY 2003 COST ESTIMATE (Thousands of Dollars):	960

PRIOR YEAR FUNDING:

FY 2001	600
FY 2002	860

PROJECT DESCRIPTION:
This request includes staff costs for term and temporary design management, construction management and contract management staff, reprographic services required by the RR&A program, as well as professional publications and memberships that directly support the RR&A program.

PROJECT TITLE: Replace Exterior Signage
INSTALLATION: Multiple Buildings
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 750

PROJECT DESCRIPTION: This project will replace existing outdated and inconsistent signage at Smithsonian buildings on the Mall. The goal is to provide consistent signage that is universally accessible and easily identifiable for the millions of people that visit our museums each year. New signs are planned at NMAH, NMNH and NASM during FY 2003.

PROJECT TITLE: Miscellaneous Utility Repair
INSTALLATION: All Facilities
LOCATION: SI-Wide

FY 2003 COST ESTIMATE (Thousands of Dollars): 520

PRIOR YEAR FUNDING:

FY 2001	800
FY 2002	500

PROJECT DESCRIPTION:
This request supports utility repair throughout the Institution. Examples of work performed include repair and/or replacement of chillers, boilers, and lighting systems, and HVAC repair. Work may be performed by outside contractors or by Smithsonian staff.

PROJECT TITLE: Repair Mechanical & Electrical Systems
INSTALLATION: National Museum of American History
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		2,000
Project Elements:		
Repair Basement Steam Condensate Lines	1,000	
Repair Condensate Lines to Convectors and Heating Units	400	
Repair Steam Pressure Reducing Valve Stations	300	
Air Condition High Voltage Vaults	300	
PRIOR YEAR FUNDING:		250
Construction	0	
Conceptual Planning	42	
Design (2001)	208	

PROJECT JUSTIFICATION:
Basement steam condensate return is in poor to fair condition. Active leaks have plagued basement storage collection areas that the steam returns run through. Steam condensate returns include high-pressure, medium-pressure, low-pressure returns and vacuum return and vacuum-pumped return. Steam condensate return piping from the convectors in the stairs, as well as fin tube radiation in the Railroad Hall, Agricultural Hall and Taylor Gallery are in poor condition. The East Wing and West Wing pressure reducing valve stations are in fair to poor condition with many valves in both stations leaking substantially. The PRV station in the central plumbing mechanical room Is also in fair to poor condition. Electrical equipment in the five vaults is in danger of overheating and malfunctioning in the summer if active cooling is not provided.

PROJECT DESCRIPTION:
During previous renovations, some of the steam system serving the basement was converted to a hot water heating system; however, a large portion of the original steam system remains. This project replaces all the original steam condensate lines downstream from equipment traps. Steam condensate risers extending up to the fourth floor and those serving convectors and heating units will also be replaced. Because existing risers are located in hard-to-reach spaces, routing for new risers must be found in lieu of replacing existing risers. Additionally, three steam-pressure-reducing stations in the basement will be replaced. Replacement of condensate lines will be phased and performed in the summer.

Four electrical vaults in the basement and another on the fourth floor are currently cooled by outside air. During the summer months, the temperature in these vaults rises and causes overheating of the electrical equipment. This project adds supplemental air handling equipment with chilled water coils. The new cooling equipment will take over the current heating and ventilating system when the vault temperatures rise to unacceptable levels.

IMPACT OF DELAY:

Continued degradation of steam condensate lines, including leaks and loss of service to the facility, will occur. Overheating of electrical vaults could cause malfunction and loss of electrical service to the facility.

PROJECT TITLE: Renovate Upper Bear Habitat
INSTALLATION: National Zoological Park – Rock Creek
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):		1,500
Project Element:		
Construction	1,500	

PRIOR YEAR FUNDING: 500

PROJECT JUSTIFICATION:
Portions of the Upper Bear Habitat were built in the 1902-1910 period, with the most recent renovation in 1978. The existing roof and wall structures have deteriorated to the point that portions of the holding areas have been closed and cannot be used, and portions of masonry walls have been temporarily reinforced for safety of staff working in the area. Floor slabs have cracked, allowing storm water to undermine the slab structures. This project is critical to provide safe and adequate holding for the animals housed at the Zoo.

PROJECT DESCRIPTION:
This project repairs the existing bear habitat so that it can remain the home of Kiska, the Alaskan Brown Bear, for the remainder of her life, and support existing bear management and care. Renovations include structural repairs and modifications to floor slabs, dens, and artificial rock to ensure safe containment, door replacement, pool modifications and repairs, improved fence and railings, and correction of utilities for proper drainage and erosion prevention.

IMPACT OF DELAY:
Delay of this project will cause the Upper Bear area to continue to deteriorate and will pose a significant safety risk to the animal keeper staff and animals in the exhibit. The structure needs to be repaired for continued use. Delay will increase risk of structural failure and animal escape, will increase unplanned disruptions, and prevent safety improvements and optimum use of the facility.

PROJECT TITLE: Update Zoo Master Plan, Rock Creek
INSTALLATION: National Zoological Park
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 1,000

PROJECT DESCRIPTION:
The current master plan for the National Zoo at Rock Creek is dated 1986, and it was an update of a plan prepared more than 10 years earlier. The needs, focus, mission, and vision of the Zoo have significantly changed since those plans were prepared. A fresh review of the facility is needed to address the changes in philosophy and vision. The new master plan will lay out an integrated approach to current renovation and improvement plans, improvements to visitor amenities, and planned infrastructure improvements.

PROJECT TITLE: Waterproof Lion/Tiger Moat & Planter
INSTALLATION: National Zoological Park
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 900

PROJECT DESCRIPTION:
The existing moats and planters leak and are in need of waterproofing replacement. A phased project will be developed to address one third of the building each year for three years. Moats will be emptied, repaired, and re-waterproofed. Planters will be emptied, surfaces cleaned and repaired, re-waterproofed, and replanted. If this work is not begun when requested, the leaks will continue and will cause additional damage to the building, requiring more extensive and costly work.

PROJECT TITLE: Repair/Improve HVAC Systems at Rock Creek
INSTALLATION: National Zoological Park
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 760

PROJECT DESCRIPTION
This project supports maintenance and repair of approximately 80 percent of the HVAC operating equipment at the Zoo's Rock Creek and Front Royal sites. Each year, planned improvements and unplanned equipment replacement must be performed with these funds. If this work is not funded,

there will be significant animal health, staff health, and public health problems due to equipment failures and lack of repair.

PROJECT TITLE: Repair Roads and Bridges Throughout Site
INSTALLATION: National Zoological Park
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 700

PROJECT DESCRIPTION
Repairs are needed to the three bridges at the Zoo that cross Rock Creek. Lead paint must be removed from the Harvard Street Bridge, rust stains removed, and railings repaired and repainted. In addition, the paving is in need of replacement. The two stone bridges over Rock Creek are in need of repair and re-pointing. If this work is not performed, the bridges will continue to deteriorate and lead paint will flake, creating a hazard to the public entering the Zoo at that location.

PROJECT TITLE: Miscellaneous General Repairs and Painting
INSTALLATION: National Zoological Park
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars): 500

PROJECT DESCRIPTION:
Each year, planned minor repairs, unplanned failures, and animal management issues arise requiring immediate action and available funds. Work such as replacing damaged railings, painting excessive rust or flaking animal enclosures, building a stall for a critical animal care operation, covering emergency equipment failures, and making improvements for animal enrichment is performed with these funds. If this work is not funded, equipment failures could result in unplanned closures of buildings or the entire facility.

PROJECT TITLE: Repair/Improve Whipple Observatory Roads
INSTALLATION: Smithsonian Astrophysical Observatory (SAO)
LOCATION: Tucson, AZ

FY 2003 COST ESTIMATE (Thousands of Dollars): 500

PROJECT DESCRIPTION:
The Smithsonian maintains a 20 km single-lane road from the Fred L. Whipple Observatory base facility to the summit of Mt. Hopkins. Portions of the road are paved, while other sections have a gravel surface. Ongoing maintenance includes repairing guardrails; hauling, placing; and grading road-topping material lost due to erosion; sealing the existing paving; and repaving. Improvements include installing additional guardrails, straightening curves to improve site distance, and extending paving. A detailed design for road improvements is underway. If this project is not approved, the roadway safety conditions will quickly deteriorate, putting SAO staff and visiting astronomers at great risk.

PROJECT TITLE: Install Utility Connection to Experimental Research Center
INSTALLATION: Smithsonian Environmental Research Center
LOCATION: Edgewater, MD

FY 2003 COST ESTIMATE (Thousands of Dollars): 550

PROJECT DESCRIPTION:
Smithsonian Environmental Research Center's (SERC) environmental center facilities are separated from the main research core facilities. There is no direct data cable, communications cable, or conduit connection between these major research centers. This project will install a multiple-conduit duct bank between the research sites to provide backbone communications and data link connection. If this connection is not installed, SERC will continue to operate with inadequate communications and data connections between the major research centers. The inefficiencies of this outdated system will continue to hinder SERC's ability to operate its basic research and educational programs.

PROJECT TITLE: Repair Building 10 Roof
INSTALLATION: Garber Building, Silver Hill Facility
LOCATION: Suitland, MD

FY 2003 COST ESTIMATE (Thousands of Dollars): 500

PROJECT DESCRIPTION:
Building 10 is a pre-engineered steel building that was constructed in the mid-1950s. The roof valleys, downspouts, flashings and shed roof have deteriorated to the point that water is leaking into the building and leaching asbestos into the building, as well as causing damage to the collections being restored in the space below. This project will repair the immediate leaks until the current building operations can be moved to Dulles or operations temporarily reduced to permit total asbestos abatement and roof replacement. Current operations cannot be relocated because restoration projects underway are on a schedule related to the opening date of the Udvar-Hazy facility at Dulles.

MAINTENANCE

The Smithsonian will convert to Reliability Centered Maintenance (RCM). RCM is a maintenance philosophy that incorporates the most logical and cost-effective mix of predictive, proactive, preventive, and breakdown (reactive) maintenance. The mix is a function of the degree of required reliability, or conversely the impact of failure, of systems and structure components supporting organization activities and objectives. Overall, development of RCM and its measured application of the underlying four maintenance processes, deployed in parallel with a modern computerized maintenance management system, results in attainment of the full expected life of equipment and infrastructure, lower life cycle maintenance costs, and greatest reliability of equipment.

RCM entails risk-based plant management, with precision condition monitoring, using advanced technologies, so that the Institution spends its maintenance resources more wisely. As much as half of the $1.9 million for preventive maintenance funds in the FY 2002 RR&A budget will be used to develop an implementation strategy to expand the use of modern maintenance analyses, equipment, training, and practices and to begin implementation. Based on the experience of other agencies, such as NASA and the National Security Agency, implementing RCM at the Smithsonian will probably cost about $3-4 million over a two-to-three year period. This investment will be recovered in about three years from the benefits of more effective and efficient maintenance activities and avoiding emergency repair costs, and will contribute to the base of resources to support new and newly renovated facilities.

A portion of the $2.1 million requested in FY 2003 will be used to fund up to 37 FTEs for maintenance as outlined in the Institution's FY 2002 request.

Facility	Projects	$(000)s
Multiple Locations	Conversion to Reliability Centered Maintenance Process	2,100

CONSTRUCTION

	SMITHSONIAN	NATIONAL ZOOLOGICAL PARK	TOTAL
FY2001 APPROPRIATION	$ 4,490,000	$ 4,989,000	$ 9,479,000
FY2002 ESTIMATE	$30,000,000	0	$30,000,000
FY2003 ESTIMATE	$26,500,000	0	$26,500,000

The Smithsonian's mission to increase and diffuse knowledge cannot be accomplished without new construction. The creation of the National Air and Space Museum's new Steven F. Udvar-Hazy Center at Dulles Airport and the National Museum of the American Indian on the Mall testify to the vigorous spirit of public outreach that will bring more visitors in touch with their national collections. Furthermore, advances in science demand new locations for research, sites for astrophysical observations, and plant expansion to sustain increasingly complex research requirements.

Smithsonian Astrophysical Observatory	VERITAS Facility	$ 4,500,000
National Museum of the American Indian	Mall Museum	20,000,000
National Museum of the Natural History	Museum Support Center, Pod Five Design	2,000,000
Total		$26,500,000

Smithsonian Institution

Long Range Construction Program
FY 2003 - FY 2007

ESTIMATED COSTS		PRIOR FUNDING Federal	OUTSIDE FUNDING Non-Fed	FY 2003 REQUEST Federal	FUTURE REQUIREMENTS FY 2004	FY 2005	FY 2006	FY 2007	OutyearCosts
Smithsonian Astrophysical Observatory VERITAS									
Plan/Design:	0.5								
Construction:	4.0			4.5					
Equipment:									
	4.5			4.5					
National Museum of the American Indian Mall Museum									
Plan/Design:	23.3	23.3							
Construction:	176.0	89.0	76.0	20.0					
Equipment:									
	199.3	112.3	76.0	20.0					
National Museum of Natural History Museum Support Center, Pod 5									
Plan/Design:	2.0			2.0					
Construction:	21.3				21.0	0.3			
Equipment:	5.0				2.5	2.5			
	28.3			2.0	23.5	2.8			

Additional important requirements for the outyears have been identified and are awaiting internal review and approval. These outyear projects have not been included in these estimates.

Smithsonian Institution

Long Range Construction Program
FY 2003 - FY 2007

ESTIMATED COSTS		PRIOR FUNDING	OUTSIDE FUNDING	FY 2003 REQUEST	FUTURE REQUIREMENTS				
		Federal	Non-Fed	Federal	FY 2004	FY 2005	FY 2006	FY 2007	OutyearCosts
Smithsonian Astrophysical Observatory VERITAS									
Plan/Design:	0.5								
Construction:	4.0			4.5					
Equipment:									
	4.5			4.5					
National Museum of the American Indian Mall Museum									
Plan/Design:	23.3	23.3							
Construction:	176.0	80.0	76.0	20.0					
Equipment:									
	199.3	103.3	76.0	20.0					
National Museum of Natural History Museum Support Center, Pod 5									
Plan/Design:	2.0			2.0					
Construction:	21.3				21.0	0.3			
Equipment:	5.0				2.5	2.5			
	28.3			2.0	23.5	2.8			

Additional important requirements for the outyears have been identified and are awaiting internal review and approval. These outyear projects have not been included in these estimates.

Errata, 11.15.01

PROJECT TITLE: Construct VERITAS Facility
INSTALLATION: Smithsonian Astrophysical Observatory (SAO)
LOCATION: Amado, AZ

FY 2003 COST ESTIMATE (Thousands of Dollars):

For design development, construction documents and construction at the site	4,500

FUTURE YEAR FUNDING 0

PROJECT JUSTIFICATION:

SAO astronomers have been pioneers in ground-based gamma ray observation technology. Discoveries made at the SAO F.L. Whipple Observatory in Arizona form the basis for the development of the Very Energetic Radiation Imaging Telescope Array System (VERITAS). Funding support for the telescope array is provided by a consortium including SAO, the U.S. Department of Energy, the National Science Foundation, and seven other research institutions in the U.S. and abroad. Funding requested in this construction budget will develop the facility infrastructure necessary to support and operate the telescope array. Construction must start in FY 2003 in order to meet the time schedules developed by the VERITAS project team.

PROJECT DESCRIPTION:

VERITAS is a proposed major ground-based observatory to be built at the Smithsonian's Whipple Observatory in southern Arizona. VERITAS will consist of an array of seven 10-meter-diameter imaging telescopes that will pinpoint and study extraterrestrial sources of gamma rays with unprecedented accuracy. SAO will share the instrument development project costs with the U.S. Department of Energy, the National Science Foundation, and funding agencies from abroad. A total of ten institutions, eight U.S. and two from abroad, are involved in this project. The preferred location is near the SAO Base Camp at the approach to Mt. Hopkins in Arizona on land managed by the National Forest Service. The Smithsonian requests construction funds to develop the site infrastructure elements, including roads, utilities, communication lines, foundations, alignment structures, instrument buildings, and support and control buildings.

IMPACT OF DELAY:

The Department of Energy, National Science Foundation, and other partners have extensively reviewed the project and are making significant contributions in support of SAO efforts. These agencies will also support the operations and maintenance of the VERITAS telescope array. If funds are not provided for the facility development, the telescope array cannot be installed, valuable ground based gamma ray research will be stalled, the funds already

invested by other federal and private agencies will be in jeopardy, and the research community will lose one of the highest-priority projects of the first decade of the new millennium.

PROJECT TITLE: Construct Mall Museum
INSTALLATION: National Museum of the American Indian (NMAI)
LOCATION: Washington DC

FY 2003 COST ESTIMATE (Thousands of Dollars):

Option C (completion of interiors)		20,000
PRIOR YEAR FUNDING (Federal):		103,300
Project Element:		
Construction	80,000	
Planning & Design (including construction management and contingency)	23,300	
PRIOR YEAR FUNDING (Trust):		47,700
Trust Funds	47,700	

PROJECT JUSTIFICATION:

This project was established by legislation and through FY 2001, received $73.3 million in federal funding, which represents 2/3 of the original $110 million budget. In accordance with the legislation, the Smithsonian raised $36.7 million to fulfill its 1/3 share. Project cost increases led the Institution to request additional federal funding of $30 million in FY 2002 and $20 million in FY 2003, while it continues to raise trust funds to cover the revised project cost of $199.3 million. An additional $20 million in trust funds is also projected to cover opening costs, bringing the project budget to $219.3 million. The construction of the foundation and superstructure began with a Notice-to-Proceed on June 30, 2001, and construction is ongoing. Building and completing this museum is essential to honoring the commitments made to U.S. taxpayers, private donors, and the Native American community.

PROJECT DESCRIPTION:

The National Museum of the American Indian Mall Museum is the third and final facility established by Public Law 101-185 (1989) for the NMAI within the Smithsonian Institution. The building consists of five stories above grade, with two mechanical mezzanine levels, and a basement. It houses a five-story, domed atrium, several large exhibit galleries, a 300-seat theater, a native-foods café, museum shops, and office and support areas. The site contains several outdoor gathering and performance areas, water features, and a native habitat landscape.

Excavation, sheeting, shoring, and dewatering were completed under the Site Preparation Contract in January 2001. The building package was divided

into a base bid with several options, devised to follow a critical path construction schedule and anticipated funding stream. The base bid is a foundations and structure package; Option A is the core and shell; Options B and Option C comprise the interior fit-out, furnishings and equipment, and the completion of the landscaping and site work. A construction contract was awarded to Clark/TMR, A Joint Venture, on June 20, 2001. The base bid and the stone portions of Options A & B were exercised in the initial contract phase. The $30 million FY 2002 appropriation will be supplemented with trust funds in hand in order to award as much of the balance of Options A and B as possible before prices for these options expire on February 1, 2002. The $20 million requested in FY 2003, supplemented with trust funds, will be awarded in the fall of 2002 to cover Option C and complete the build-out of the interiors. The National Museum of the American Indian will open in the summer of 2004.

IMPACT OF DELAY:

Delay in awarding the balance of the construction contract options will push the museum opening date beyond the summer of 2004. Contract Option C, which completes the balance of the interiors, will expire on November 1, 2002. Therefore, the Institution wishes to award this Option with FY 2003 funding and supplemental trust funds in the fall of 2002. Delay in the funding stream will delay the critical path progress and increase project construction costs, construction management costs, and the contingency reserve.

PROJECT TITLE: Design Pod 5
INSTALLATION: Museum Support Center
LOCATION: Suitland, MD

FY 2003 COST ESTIMATE (Thousands of Dollars):

Design development and construction documents	2,000

FUTURE YEAR FUNDING
(FY 2004 - 05)

Site work and construction of code-compliant storage building for alcohol collections	21,300
Fit out storage equipment	5,000

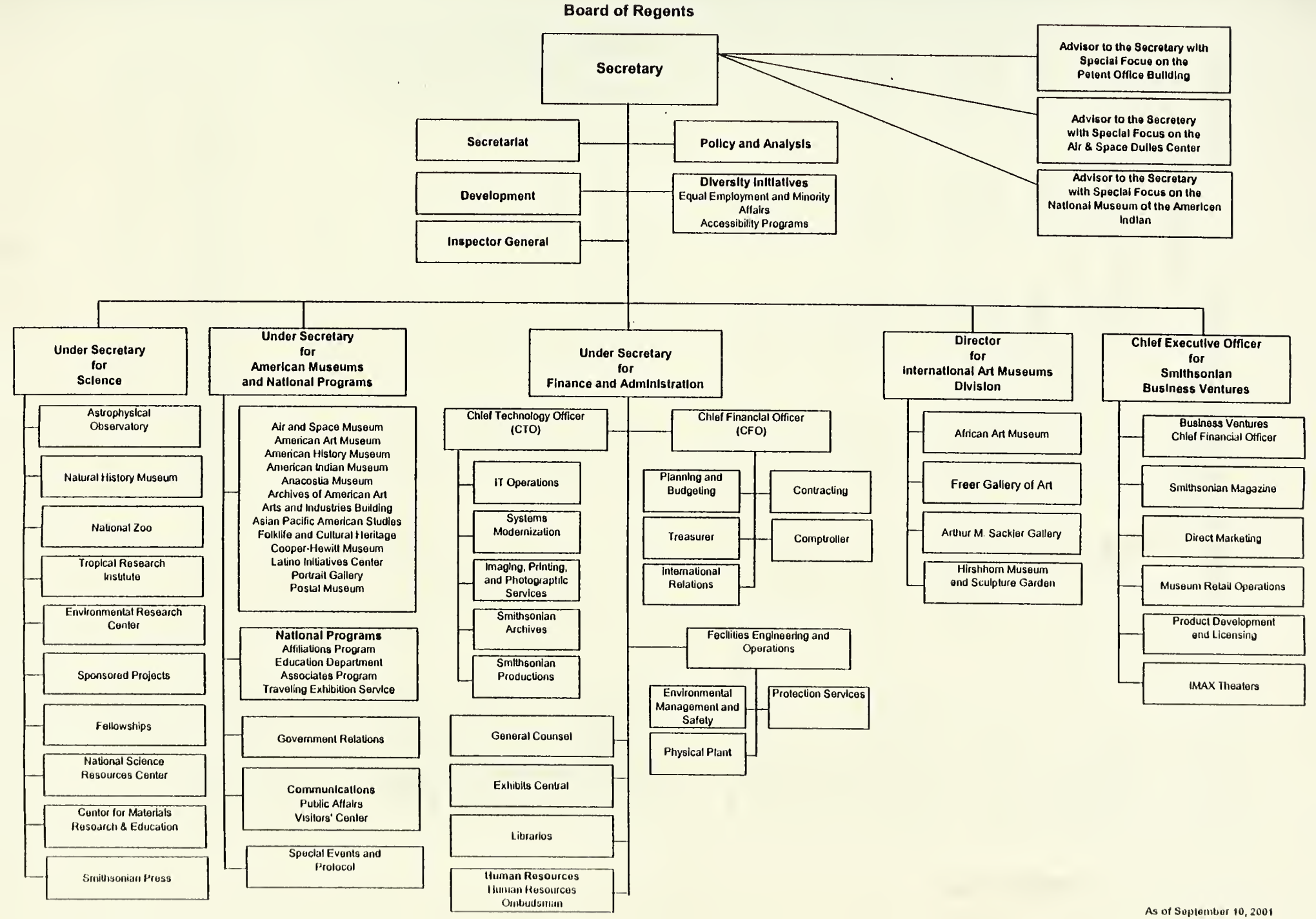
PROJECT JUSTIFICATION: The National Museum of Natural History, located on the National Mall, currently houses approximately 50,000 square feet of Systematic Biology collections preserved in alcohol. Existing conditions violate many modern codes and standards. In most cases, these violations pose serious hazards to the building occupants and the collections. An ongoing Space Programming Plan demonstrates the need for action in response to the challenges facing the use of this facility over the next 25 years. Space on the Mall is at a premium, and collections storage and research occupy almost 50 percent of the available space in the Natural History Building with no space for growth and expansion. Current designs for the Museum include additional sprinklers, containment, and sub-cooling the existing collection rooms in an attempt to make the alcohol rooms safer.

PROJECT DESCRIPTION: The Smithsonian Institution's Museum Support Center is a state-of-the-art research, conservation, and collections storage facility. The facility houses no public exhibits and dedicates its space to providing optimum environments for the preservation and study of Smithsonian collections. Four large storage bays and an office/laboratory complex make up the Museum Support Center. The third bay, or pod, was intended for use as alcohol collections storage. The Natural History Museum engaged in a lengthy design process to complete the installation of a steel collections storage structure in Pod 3. Due to current code requirements and collection needs, it became impractical to upgrade Pod 3 to meet these standards. The design estimated that it would cost over $13 million to upgrade Pod 3, and it still would not satisfy all the collection needs. The current plan is to provide Pod 3 to the Smithsonian American Art Museum and National Portrait Gallery for storage of their collections while the Patent Office Building is under renovation. While a portion of the alcohol collections will temporarily remain in Pod 3, the need remains for a code-compliant alcohol collections storage facility off the National Mall that will permanently

house all of the alcohol collections including those still in the NMNH building on the Mall.

IMPACT OF DELAY: The building and its staff, visiting public, and collections remain at risk with the alcohol collections inadequately protected within the Museum. Plans for renovating the Museum presently include extraordinary approaches if it is necessary to keep the alcohol collections on the Mall. These plans would include increasing water service to the building, increasing fire pump capacity and emergency power requirements, installing equipment to provide cold storage environment, and increasing drainage system capacity, at an increased cost for construction and an estimated 10 percent increase in yearly utility costs.

SMITHSONIAN I ITUTION



As of September 10, 2001

VISITS TO THE SMITHSONIAN
FY 1996–FY 2000

MUSEUM	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
MALL					
SI Castle	1,722,551	1,812,172	1,890,838	1,854,903	1,836,963
A&I Building	725,620	986,348	875,853	742,415	868,171
Natural History	5,171,318	5,859,717	6,476,700	7,076,380	9,489,272
Air and Space/Silver Hill	6,935,989	8,348,096	10,238,890	9,410,872	9,008,608
Freer Gallery	321,005	290,939	330,104	364,305	347,607
Sackler Gallery	164,395	176,627	207,653	213,276	224,151
African Art	232,352	227,703	232,939	245,786	234,295
Ripley Center	141,548	134,579	300,147	333,537	502,334
American History	4,578,490	5,106,387	5,579,039	5,680,001	6,261,715
Hirshhorn	742,139	767,229	829,782	795,646	951,570
OFF MALL					
American Art/ Portrait Gallery[1]	298,150	374,494	550,087	362,854	176,881
Renwick	98,832	132,481	130,700	125,910	146,071
Anacostia[2]	39,900	7,206	26,100	25,794	3,302
Cooper-Hewitt[3]	25,246	100,804	131,949	108,579	150,786
American Indian[4]	318,891	577,962	615,697	587,546	498,316
National Zoo	2,700,000	2,634,000	2,800,000	2,682,283	2,360,876
Postal	341,210	450,288	423,760	461,743	450,483
TOTAL	**24,557,636**	**27,987,032**	**31,640,238**	**31,071,830**	**33,511,401**

[1]Closed to the public January 2000.

[2]Closed to the public December 1996 through January 1998; September 1998; and December 1999 through present.

[3]Galleries closed to the public August 1995 through September 1996; the Garden remained open.

[4]Includes the George Gustave Heye Center, which opened in 1994, and the Cultural Resources Center, which opened in April 2000.

Agency: Smithsonian Institution
Bureau: (OIA)
Account Title: Salaries and Expenses
Account Identification Code: 33-0100-0

Name of project: **Enterprise Resource Planning System**

Check one: New project ____ Ongoing project __X__

Was the project approved by an Executive Review Committee? Yes _X_ No ___

Is this project information technology (see Section 300.4(e) for a definition)?
Yes _X_ No ___

For information technology projects only:
Is this project a financial management system (see section 42.2 for a definition)? Yes X No __

If so, what percentage of the system is financial? **80%**

Was this project approved by an agency Investment Review Board? Yes _X_ No ___

PART I: SUMMARY OF SPENDING FOR PROJECT STAGES
(In Thousands)

Project Costs	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Total
Analysis Phase	1,400	0	0	0	0	0	0	1,400
Financials Phase 1[1]	494	3,300	0	0	0	0	0	3,794
Financials Phase 2[2]	0	1,449	8,544	1,683	0	0	0	11,642
HR Phase 1[3]	0	0	1,280	4,000	0	0	0	5,280
Trav Mgr Interface[4]	0	0	0	257	0	0	0	257
HR Phase 2[5]	0	0	0	480	2,744	0	0	3,224
Develop. Platform	475	0	0	0	0	0	0	475
ERP Software	1,511	0	320	0	0	0	0	1,831
Development Sub-total	**3,880**	**4,749**	**10,154**	**6,420**	**2,744**	**0**	**0**	**27,903**
Appl. Maint. & Ops	0	630	1,044	2,775	5,678	5,427	6,195	21,749
IT Operations	0	821	812	739	739	739	739	4,589
Steady State Sub-total	**0**	**1,451**	**1,856**	**3,514**	**6,417**	**6,166**	**6,934**	**26,338**
Total	**3,880[6]**	**6,200**	**12,000**	**9,934**	**9,161**	**6,166**	**6,166**	**54,241**

[1] General Ledger, Accounts Payable, and Purchasing
[2] Procurement, Budgets, Projects, Grants, Assets, and Accounts Receivable
[3] Human Resources, Time and Labor, Payroll Interface
[4] Integration of existing Travel Manager system with the ERP
[5] Benefits Administration
[6] Includes prior year IRM Pool funds. In addition, trust funds amounting to $1,051,000 have been used to support this project in FY 2001.

PART II: JUSTIFICATION AND OTHER INFORMATION

A. Justification

The Institution's financial systems are in a fragile state. The primary financial system, Smithsonian Financial System (SFS), is based on a technologically obsolete, commercial financial management software product that has not been supported by its software vendor since 1997. Each Smithsonian unit has had to develop its own system to manage financial activities. Some are based on simple spreadsheets or desktop computer data base management software, while others are based on commercial software packages that operate on desktop computers.

Since these tools and systems operate essentially in a stand-alone fashion with limited automated security safeguards, the integrity of the data is questionable. Data is manually key-entered by the units in their local systems and then again in SFS. The Institution has no way to capture data at the source and re-use it for multiple purposes, which leads to errors, inconsistent information, extra work, and re-work. Reconciliation of records is a difficult, labor-intensive task, and the absence of real-time information about financial activities limits our ability to develop a complete picture to support sound business decisions. The Smithsonian cannot continue to sustain its mission without having a modern resource management system. In the absence of implementing new financial systems, automated internal controls will continue to erode, Smithsonian assets will be at high risk, and the likelihood of maintaining our clean audit record becomes problematic. The Institution is concerned that SFS could fail at any time. SFS supports only the functions of general ledger, accounts payable, and purchasing, and cannot be adapted to serve the financial management needs of the Institution.

Sound planning and effective use of the Smithsonian Institution's resources and achievement of strategic goals are dependent on the availability of accurate financial and human resources data. For the Smithsonian to successfully manage its financial and human resources information and support both its ongoing and new activities, the Institution must adopt a cohesive approach to manage these resources in order to provide accurate and current information on the functions supported, as well as historical snapshots in time that may be analyzed to discover trends. This information can be used by the Chief Financial Officer and Smithsonian management at all levels for proactive decision making to support investment decisions as well as management of the core financial activities of budget formulation, justification, and execution; financial accounting (standard general ledger, subsidiary ledgers, transaction registers – grants and contracts, revenues, and fund-raising pledges and payments); preparation of financial statements and reports, audit and certification of payment vouchers; payroll; and purchasing. The Smithsonian must also improve the management of the core human resource management activities of personnel action processing, time and attendance, recruiting, training, and benefits administration.

The Institution also relies on SFS to support procurement. Major Smithsonian units have augmented SFS with stand-alone systems. SFS accommodates invoice processing, but does not accommodate other functional requirements such as clauses and justifications. Purchasing agents must mesh SFS data with e-mail, facsimile, and word processing documents to complete a procurement transaction. Since SFS is not accessible to all Smithsonian units for procurement, there is no comprehensive database of critical management information that might allow discounts for bulk purchases to be negotiated.

Some human resource data is available electronically; however, the processes are not automated. The distribution of human resources and payroll data to unit managers requires 13 separate manual updates each pay period. More than 12,000 personnel actions start in a typewriter and work their way from desk to desk, building to building over weeks until they are completed. As with the financial management systems, there is no way to capture the data at the source and re-use it for multiple purposes; this leads to errors, extra work, and re-work. In addition, Smithsonian units have developed their own "cuff" systems to help maintain personnel information. These information systems, or the lack thereof, fail to provide the Institution's Office of Human Resources and Smithsonian units with the information necessary to serve Smithsonian managers and employees. Many human resource specialists have become entrenched in

the administrative processes that inhibit their ability to provide necessary advisory and consulting services. Current human resource processes are labor-intensive and paper-bound.

B. Program management

1. **Is there a program manager and contracting officer devoted to the project**? Yes. Deron Burba has been assigned as the Enterprise Resource Planning (ERP) System project manager. Lynn Spurgeon has been assigned as the contracting officer.

2. **Will an Integrated Project Team be established to assist with the management of the project**? Yes. The project team will follow a disciplined system development life cycle process tailored for implementing a commercial software product. In order to deploy the ERP system effectively, the Smithsonian plans to establish an Integrated Product Team that recognizes the complementary roles of functional users, system developers, and other supporting organizations. Work Groups will be established for each ERP module as part of the Integrated Product Team. Work Groups will include functional experts from central staff (*e.g.*, Comptroller) and representatives of units (*e.g.*, National Museum of Natural History). The Work Groups also will include subject matter experts who will focus on a specific ERP module. End-user participation and involvement is crucial to the success of the ERP project. End users must participate early in the ERP project through the Work Groups in order to obtain clear, validated functional requirements. The project manager, under the direction of the Chief Technology Officer, will lead the Integrated Product Team in developing and implementing the ERP system. The Smithsonian plans to establish a core technical team augmented by functional work groups for each ERP software module. The work groups will include representation from throughout the Smithsonian and will:

- Define and refine functional processes and data requirements for each ERP module;
- Define ERP module workflow roles, route, and rules;
- Analyze business process fit with the ERP software package and identify implementation options;
- Participate in acceptance testing;
- Develop and deliver end-user training for each ERP module, ensuring that
  - End users have initial training to support a newly installed ERP module,
  - End users are adequately trained before the ERP module is fully deployed;
- Participate in ERP module implementation in each Smithsonian unit; and
- Serve as change agents, coordinating changes to the work environment brought on by implementation of new business processes.

C. Acquisition strategy

The Smithsonian Institution plans to implement a commercial Enterprise Resource Planning software package to meet the Smithsonian's financial management and human resource management needs. The ERP will be implemented incrementally through FY 2005. Initial modules include general ledger, accounts payable, and purchasing. The intent is to adapt Smithsonian processes to the selected ERP software product in order to streamline business processes and assure a cost-effective and speedy implementation.

The Smithsonian plans to take full advantage of streamlining allowed by law and regulations for acquiring and administering Federal contracts, notably the Federal Acquisition Streamlining Act (FASA) and the Clinger-Cohen Act and the resulting revisions to the Federal Acquisition Regulations. The Smithsonian plans to rely on existing federal contracts to acquire commercial software and system integration and independent verification and validation services. For hardware acquisition, the Smithsonian plans to use mechanisms such as General Services Administration (GSA) schedules, interagency agreements, and competitive procurements. For software seat/site license agreements, the Smithsonian plans to use full and open competition and acquisition through interagency agreements, small businesses, GSA schedules, and other sources.

The Smithsonian completed a market survey of commercial financial and human resource management software products in January 2001. Initial efforts were directed at narrowing the field of potential software products to those products that met Federal financial management and human resource management functional requirements. Although there are many companies that offer software products and services that support financial management or human resource management functions, there are a limited few that comply with Federal financial management and/or human resource management functional requirements. Based on the market survey, the Smithsonian purchased the commercial ERP software through the GSA schedule. The selected commercial software product serves the business, academic, and federal market. It is the only software company that advertises its higher education package. This is an important consideration as the Smithsonian environment is closer to a university model than to a manufacturing model for its operating accounts. The selected package was also the first to penetrate the federal human resource management system market and is the dominant commercial human resources management software product in use by Federal agencies.

In addition to the commercial software product, the following sources will be used to support the ERP project:

System Integration: The Smithsonian plans to acquire system integration services through the Department of Commerce's *Commerce IT Solutions* government-wide contract. This is a competition among 41 pre-qualified companies. Past performance was a key evaluation factor in selecting *Commerce IT Solutions* vendors. The Smithsonian plans to use a firm- fixed price contract for the analysis phase and cost-plus-award fee for the implementation of the software modules.

System Product Assurance: The Smithsonian plans to acquire independent verification and validation services in FY 2002 through a competitive bid process or through a limited competition from an existing Government-wide contract such as the Department of Transportation's *Value Added Niche Information Technology Services (VANITS)* contract. The Smithsonian plans to use a cost-plus-fixed-fee contract for product assurance work.

IT Infrastructure: The Smithsonian plans to acquire hardware and software to support development and implementation through the National Aeronautics and Space Administration's *Scientific and Engineering Workstation II (SEWP II)* government-wide contract. The Smithsonian has not finalized plans for hosting the production system and is considering outsourcing with a commercial Application Service Provider or entering into a cross-servicing agreement with another Federal agency. The Smithsonian has had preliminary discussions with two Application Service Providers and one Federal agency for hosting the financial and human resource management system. The Smithsonian will select the most cost-effective solution for hosting the production system.

D. Alternatives Analysis and Risk Management

The Smithsonian has determined that implementing a commercial ERP software product is preferable to developing a new system or upgrading SFS, which is based on a financial management software product used primarily by manufacturers. The SFS software, which has not been supported by the vendor since 1997, has been extensively patched, modified, and customized by the Smithsonian without sufficient documentation. In 1999, the Comptroller assessed the Institution's functional accounting architecture and concluded that it most closely resembled that of institutions of higher education. This, coupled with the decision by the SFS vendor not to comply with JFMIP standards, precludes any further consideration of SFS as a valid solution for our core financial system needs.

The Smithsonian has prepared an economic analysis that compares upgrading the current systems with replacing them with the ERP system over a 10-year system life. The ERP system will be incrementally implemented over a 4-year period. The initial focus will be on replacing SFS by October 1, 2002. This includes the general ledger, accounts payable, and purchasing software modules. The last software

module to be implemented in FY 2005 is benefits administration. For purposes of the economic analysis, the new ERP system will operate through FY 2010 with only periodic version updating, additional interfaces, and maintenance.

The following alternatives were considered in this analysis:

- *Implement a commercial financial and human resource management software product.* This is the preferred alternative and includes purchasing a commercial software product, obtaining contractual services to help tailor the commercial software product to reflect the Smithsonian's re-engineered business processes, to perform quality assurance and independent testing, and to provide training. By implementing a commercial software product, the Smithsonian will minimize risk by acquiring a fully developed and functional system and will comply with federal IT management guidance that encourages the acquisition of commercial software products over developing application software. The cost to implement and operate the ERP system and to operate existing systems during the phase-in period of the 10-year system life is $87.2 million. During the 10-year systems life, the Smithsonian expects to realize $108.8 million in undiscounted benefits including cost avoidance amounting to $13.5 million associated with operating and maintaining the current systems.

- *Maintain current systems*: The Institution currently has 27 systems in operation across all units that support financial management and 20 desktop database systems within the Office of Human Resources that support human resource management. For the purposes of this economic analysis, the cost to operate and maintain these systems and upgrade SFS, payroll interface, and various versions of unit cuff financial systems are projected through FY 2010. The current systems cannot support re-engineered business processes and the increased demand for services and the SFS cannot meet JFMIP requirements. The cost to operate existing systems during the 10-year system life is $90 million, about $2.8 million more than the cost to implement and operate the ERP system and to operate existing systems during the phase-in period of the 10-year system life. Furthermore, no benefits will accrue from this alternative.

Cross-servicing or outsourcing the entire financial management and human resource management functions are not considered viable options. However, the Smithsonian is considering cross-servicing and/or outsourcing the production processing of the ERP system. The ERP project life cycle cost estimate is based on the Smithsonian hosting the ERP system production processing. This economic analysis will be updated to reflect an option to obtain cross-servicing or outsourcing support for ERP production processing once cost estimates for outsourcing and cross-servicing support are available.

- *Cross-servicing*: The Smithsonian currently has a cross-servicing arrangement with USDA's National Finance Center for payroll services and expects to continue this arrangement for the foreseeable future. The Smithsonian has held preliminary discussions with one federal agency and plans to consider cross-servicing the production processing of the ERP system. Factors that will be considered are the cross-servicing agency's methods for prioritizing service and ability to keep current with information technology industry best practices, service level agreement, security, and cost.

- *Outsourcing*: The Smithsonian does not consider outsourcing the entire financial and human resources management functions as appropriate because both are integral to the operations of the Institution in meeting its mission. The Smithsonian plans to contract for accounts payable services in FY 2002. The service provider will use the SFS initially and the replacement ERP system in the future. The Smithsonian has held preliminary discussions with two Application Service Providers (ASPs) and will consider outsourcing ERP production processing through an ASP. Factors that will be considered are the financial stability of the ASP, service level agreement, security, and cost.

The Smithsonian performed a sensitivity analysis that considered several scenarios that included cost overruns of 10 percent and 20 percent and reductions of productivity savings from 25 percent to 10 percent in Smithsonian units. The "best case" scenario projects workforce productivity increases of 25 percent in the Office of Human Resources, the Comptroller's Office and administrative staff in Smithsonian Institution units. This is based on predicted workload growth and the existing number of staff. The analysis also takes into account the present operating costs of the systems being replaced during the implementation period.

Under the "best case" or "expected outcome" scenario, the economic benefits generated by the ERP system during the 10-year system life outweigh the investment costs. The following chart depicts the "best case" scenario.

Cost and Benefits Under "Best Case" Scenario for the ERP System

Fiscal Year	Expected Yearly Cost (incl. Development & Ongoing Costs)	Expected Yearly Benefit			Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
		Productivity Increase	Cost Avoid. for Repl. Sys.	Total Yearly Benefit			
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2001	$10,303	0		$0	0.9667	$9,960	$0
FY2002	$11,656	0		$0	0.9035	$10,531	$0
FY2003	$13,306	$10,449		$10,449	0.8444	$11,236	$8,823
FY2004	$10,178	$12,130		$12,130	0.7891	$8,031	$9,571
FY2005	$9,333	$12,131		$12,131	0.7375	$6,883	$8,946
FY2006	$6,166	$12,130	$2,816	$14,946	0.6893	$4,250	$10,302
FY2007	$6,696	$12,130	$2,423	$14,553	0.6442	$4,314	$9,375
FY2008	$6,830	$12,130	$2,312	$14,442	0.6020	$4,112	$8,693
FY2009	$6,471	$12,130	$2,712	$14,842	0.5626	$3,641	$8,350
FY2010	$6,231	$12,130	$3,213	$15,343	0.5258	$3,276	$8,067
Total	**$87,170**	**$95,357**	**$13,476**	**$108,833**		**$66,234**	**$72,129**

The "worst case" scenario projects workforce productivity increases of 25 percent in the Office of Human Resources and the Comptroller's Office and 10 percent productivity increases for the administrative staff in Smithsonian Institution units. This is based on predicted workload growth and the existing number of staff. The analysis also takes into account the present operating costs of the systems being replaced during the implementation period and assumes a 20 percent cost overrun. Under the "worst case" scenario, the Smithsonian will realize $54.4 million through productivity gains and save an additional $11.9 million through cost avoidance. The following chart depicts the "worst case" scenario.

Cost and Benefits Under "Worst Case" Scenario for the ERP System

Fiscal Year	Expected Yearly Cost (Incl. Development & Ongoing Costs)	Expected Yearly Benefit			Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
		Productivity Increase	Cost Avoid. for Repl. Systems	Total Yearly Benefit			
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2001	$10,303	0		$0	0.9667	$9,960	$0
FY2002	$11,656	0		$0	0.9035	$10,531	$0
FY2003	$14,787	$5,311		$5,311	0.8444	$12,486	$4,484
FY2004	$11,411	$7,011		$7,011	0.7891	$9,004	$5,533
FY2005	$10,253	$7,012		$7,012	0.7375	$7,562	$5,172
FY2006	$6,486	$7,011	$2,496	$9,507	0.6893	$4,471	$6,553
FY2007	$7,016	$7,011	$2,103	$9,114	0.6442	$4,520	$5,871
FY2008	$7,150	$7,011	$1,992	$9,003	0.6020	$4,304	$5,420
FY2009	$6,791	$7,011	$2,392	$9,403	0.5626	$3,821	$5,290
FY2010	$6,551	$7,011	$2,893	$9,904	0.5258	$3,445	$5,208
Total	**$92,404**	**$54,391**	**$11,876**	**$66,267**		**$70,103**	**$43,531**

The following chart presents the costs of operating and maintaining the existing financial and human resources systems over a 10-year period. In this scenario, there are no expected productivity gains or cost avoidance for systems being replaced.

Cost and Benefits for Operating and Maintaining the Existing Systems

Fiscal Year	Expected Yearly Cost (Incl. Development & Ongoing Costs)	Expected Yearly Benefit			Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
		Productivity Increase	Cost Avoid. for Repl. Sys.	Total Yearly Benefit			
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2001	$8,035	$0	0	$0	0.9667	$7,767	$0
FY2002	$10,491	$0	0	$0	0.9035	$9,479	$0
FY2003	$8,638	$0	0	$0	0.8444	$7,294	$0
FY2004	$8,379	$0	0	$0	0.7891	$6,612	$0
FY2005	$8,594	$0	0	$0	0.7375	$6,338	$0
FY2006	$8,982	$0	0	$0	0.6893	$6,191	$0
FY2007	$9,119	$0	0	$0	0.6442	$5,874	$0
FY2008	$9,142	$0	0	$0	0.6020	$5,503	$0
FY2009	$9,183	$0	0	$0	0.5626	$5,166	$0
FY2010	$9,444	$0	0	$0	0.5258	$4,966	$0
Total	**$90,007**	**$0**	**$0**	**$0**		**$65,191**	**$0**

The decision to implement the ERP system is cost effective for the Smithsonian whether you use the expected outcome or more conservative "worst case" scenario. Cost aside, a single, integrated ERP system eliminates redundancy of effort and of data and will greatly reduce the opportunity for error. The ERP system will reduce the substantial amount of time and frustration that are currently devoted each month to reconciling data between central and individual organization records. It will automate thousands

of routine and repetitive transactions that are now performed manually and provide more opportunity to perform value-added work. Finally, it will create critical linkages that provide for better management of the Institution's financial and human resources.

There are project-related risks that must be managed before they become problems. Because the commercial software that will drive the ERP system has been successfully implemented in 280 higher education and government organizations and in 5000 organizations around the world, the risks associated with new system development - excessive time delays and cost overruns – are minimized. The following major project-related risks can adversely affect project cost and schedule:

Risk 1: *The Smithsonian cannot adapt its business processes to the selected ERP system software product.* The Institution must streamline its business processes in order to modernize its management systems and to bring them to a level of quality and sophistication appropriate to the size and complexity of the Smithsonian Institution and to help assure a cost-effective and speedy implementation. If the Smithsonian cannot adapt its business processes, then the commercial ERP software product would have to be customized. Customizing a commercial product will add costs and lead to schedule delays in implementing the ERP system and in deploying future upgrades to the commercial product. The Finance & Administration Management Committee serves as a steering committee for the Smithsonian ERP project. Its role and membership are described in Part IIIA of this exhibit. The Committee will help assure that all Smithsonian units adapt their business processes to the selected ERP system and that the Smithsonian does not customize the commercial software product.

Risk 2: *The Smithsonian will not have a robust IT infrastructure in place.* A robust IT infrastructure – servers, network, modern desktop workstations, facility, and IT staff - must be in place in order for the ERP to operate. The Smithsonian has initiated a complementary project to modernize its IT infrastructure and plans to migrate its current IT infrastructure incrementally through FY 2005. The four-year migration period will minimize risk of disruption. Initially, the Institution will focus on replacing email systems, co-locating and consolidating LAN servers, and centralizing LAN management. These actions will help assure that all Smithsonian units can access the ERP system. The Smithsonian also plans to consider outsourcing and cross-servicing to host production processing of the ERP system.

Risk 3: *The Smithsonian will not be able to adequately train Institution staff administering and using the ERP system.* End-user and administrator training is essential in order for the ERP system to be effectively used. End-users must be provided with initial training to support the installation of the ERP system, and must receive all additional training necessary to effectively use ERP system modifications and enhancements. Without proper training, the Institution will not realize the benefits associated with a modern ERP system. The Smithsonian has planned for training initial work groups and system administrators, and plans to acquire the ERP software "train the trainer" package. One of the critical functions of each work group is to develop and deliver end-user training for each ERP module, ensuring that

- end users have initial training to support a newly installed ERP module, and
- end users are adequately trained before the ERP module is fully deployed.

Risk 4: *The ERP system project will not be adequately funded.* Without adequate funds to implement the ERP system, the Institution will be at a higher risk of failure of its core financial system, and its human resource management resource processes will continue to be labor-intensive and paper-bound. A reduction in funds will adversely affect the deployment schedule and defer realization of the benefits of a modern ERP system. Without adequate funds to operate and maintain the ERP system, the Institution will find itself in the same position it is in today – being supported by software that is no longer supported by the software vendor. Modernizing the Institution's financial and human resource management systems is

one of the Smithsonian's top priorities. The Smithsonian plans to redirect funds from other activities to ensure that this project is adequately funded.

E. IT Modernization and Architecture (IT projects only)

The Smithsonian Institution completed a baseline inventory of automated information systems and IT products in March 2001 as part of a companion IT project to establish an enterprise IT architecture and deploy a managed IT infrastructure. The current IT infrastructure is a heterogeneous collection of incompatible hardware and software systems with incompatible commercial software products operated by the Office of Information Technology and each Smithsonian unit. Based on an analysis of the IT baseline, the Smithsonian defined a conceptual target IT architecture in July 2001 and plans to publish a Technical Reference Model in December 2001. The purpose of the model is to identify a comprehensive set of information technology standards, services, protocols, and products that define the target technical environment for the acquisition, development, and support of Smithsonian automated information systems. The Technical Reference Model will be based on the most recent version of the National Institute of Standards and Technology's Application Portability Profile. The Institution will select information technology components that best support an open system environment for operating the Smithsonian ERP system. The ERP project will support an iterative IT architecture planning process and will help the Smithsonian modernize its IT infrastructure and establish an enterprise IT architecture.

F. IT Security (IT projects only)

The ERP system will maintain critical financial, procurement, budget, and personnel information. Its nature requires a high degree of data integrity. The Smithsonian will protect sensitive financial, contract, and personnel data from unauthorized access and/or disclosure. This data, which is considered confidential, also requires assurance of its integrity when stored in electronic form, as well as security from unauthorized alteration or modification. The Smithsonian will explicitly consider security of all sensitive information throughout the ERP project system life cycle and will document security requirements in a *Security Plan*. The plan will capture the structured process of planning and implementing adequate, cost-effective security protection for the ERP system. The Under Secretary for Finance and Administration, with the guidance and assistance of the Chief Technology Officer (CTO), will ensure that adequate general controls are in place and that the ERP system and business procedures will process and handle sensitive information and deliver critical services in a manner compliant with all applicable laws and regulations.

Smithsonian staff will access the ERP system through desktop workstations. The ERP system will be controlled with respect to access, authority to modify, and ability to operate it. The ERP system will require users to authenticate their identity through the entry of a user ID and password. The system will allow access only to authorized users based on user profiles. Electronic documents will be authenticated through electronic signatures. For audit purposes, a record of any changes to the original data will create a history record that includes the date of change and the user ID of the person making the change.

G. Government Paperwork Elimination Act (IT projects only)

The ERP system supports the electronic government goals of the Government Paperwork Reduction Act (GPEA). The Smithsonian plans to replace cumbersome manual paper processes with re-engineered electronic processes. The Smithsonian currently uses electronic signatures to authenticate travel-related transactions within the *Travel Manager* system and plans to use electronic signatures to authenticate financial and human resource transactions. *Travel Manager* will interface with the ERP system. Since the ERP system supports financial and human resource management internal transactions and will not place a paperwork burden on the public, the GPEA provisions are not applicable.

PART III: COST, SCHEDULE, AND PERFORMANCE GOALS

A. Description of performance-based system:

The Smithsonian is applying a four stage iterative approach to planning, budgeting, and performance management for the ERP System project:

Plan. The Smithsonian has conducted several studies of its administrative systems during the past five years. In April 1998, the Smithsonian established the Automated Resource Management Committee to gather ideas for the next generation of administrative systems. The Committee consisted of thirty Smithsonian staff representing a broad spectrum of organizations and administrative functions. In July 1999, the Committee recommended that the Smithsonian implement a commercially available Enterprise Resource Planning (ERP) system to support its administrative processes.

Select. The Capital Planning Board serves as the primary vehicle for approval of the Smithsonian's capital asset program. The Board is composed of the Under Secretaries, the Director of International Art Museums, the General Counsel, the Chief Executive Officer of Business Ventures, the Chief Financial Officer (CFO), the Director of Policy and Analysis, the Director of Facilities Engineering and Operations, and the CTO and is chaired by the Under Secretary for Finance & Administration. The Board provides advice, counsel, and recommendations for consideration by the Secretary related to planning and implementation of the Institution's major capital projects and related infrastructure. The Board provides strategic direction and sets priorities for all capital projects, including major information technology projects. The Capital Planning Board approved the ERP System project on November 28, 2000.

Control. The Smithsonian will monitor interim results of the ERP project and take action when needed to ensure that the project stays on track. The Smithsonian will monitor the achievement of or deviation from goals by performing functional and technical reviews to ensure that the project is progressing on schedule and within budget and is satisfying program requirements.

To help assure that business requirements are being met, the Finance & Administration Management Committee serves as a steering committee for the Smithsonian ERP project. The Committee is composed of senior administrative officers from the major museums, representatives of the Under Secretaries and the Director of International Art Museums, the General Counsel, the CFO, Director of Facilities Engineering and Operations, and the CTO and is chaired by the Under Secretary for Finance & Administration. The Committee is responsible for defining and validating functional requirements, for making resources available to support the ERP project, and for reviewing the progress of the ERP project to ensure that functional requirements are being satisfied in a timely and cost-effective manner.

To help assure that quality of the technical work products is acceptable, the Smithsonian has established the System Architecture and Product Assurance office to administer programs for system architecture, quality assurance, and independent testing of application software and information technology infrastructure. The primary purposes of the technical reviews conducted by the Product Assurance office are to improve the quality of intermediate work products, correct defects as early in the life cycle as possible, and prevent problems over the long run. To assist the Product Assurance office, the Smithsonian plans to acquire an independent verification and validation services contractor to evaluate progress of the ERP project, assess the quality of work products, and conduct independent acceptance testing. These mechanisms provide visibility into the information technology project's business and technical characteristics, as well as establish management control points for assessing project cost, schedule and quality.

To help manage and control the project, the ERP project manager will prepare a detailed project plan that contains specifics on such tasks as data migration, fit-gap analysis, concept of operations, detailed design, integration, training, testing, implementation and other related activities, which serve the transition of the ERP project from initiation activities through to production system operation. The project

management control system will provide for tracking schedule performance against project plan milestones. This visibility will help both business and technical managers identify problem areas and take corrective actions when actual results deviate significantly from plans. The ERP Project Manager will ensure that the necessary information is provided in a timely manner and entered into the project management control system.

Evaluate. The Smithsonian will assess the results of the ERP project by conducting a post-implementation review to determine if the system delivered what was expected. The performance measures agreed to in the System Boundary Document will be the basis for the evaluation. Key performance measures include:

- Unqualified Audit Opinion: The Smithsonian Institution receives an unqualified audit opinion from external auditors with no outstanding recommendations regarding financial systems in the Management Letter to the Board of Regents in FY 2005.

- Increased Productivity: Workforce productivity in the offices of Human Resources and the Comptroller, and among administrative staff in Smithsonian units will increase by 25 percent based on predicted workload growth and the existing number of staff. Passing paper documents through several hands and duplicating data entry will be virtually eliminated. Reconciliation of local records with records maintained in central systems will allow staff to perform value-added work instead of duplicative activities.

- Reduction of Payroll Errors: Payroll errors associated with arithmetical computations of Thrift Savings Plan and payroll functions will be reduced from 5 percent to 4 percent.

- Reduced Staffing: Staff currently performing payroll data entry in the Comptroller's Office will not be needed once data can be captured at the source. This will reduce annual operating costs by about $200,000.

B. Original baseline:

Key business milestones

Tasks/Products	Completion Dates	
	Initial Projection	Current Projection
Established Automated Resource Management Committee to analyze administrative systems	04/1998	04/1998
Complete analysis of administrative systems	07/1999	07/1999
Capital Planning Board Approval	11/2000	11/2000
Acquire ERP Product	03/2001	03/2001
Establish IT Development Lab	04/2001	06/2001
Acquire ERP Integration Services	04/2001	06/2001
Establish Integrated Product Team	07/2001	09/2001
Deploy General Ledger, Accounts Payable, and Purchasing Modules	10/2002	10/2002
Deploy Procurement, Projects, Budgets, Grants, Assets, and Accounts Receivable Modules	10/2003	10/2003
Deploy Human Resources, Time & Labor, and Payroll Interface Modules	04/2004	04/2004
Deploy Travel Manager Interface	08/2004	08/2004
Deploy Benefits Administration Module	04/2005	04/2005

C. Current baseline:

The current baseline is shown in the chart above.

D. Variance from current baseline:

The Smithsonian did not receive Congressional approval until June 28, 2001. This delayed award of the system integration contract and the beginning of the ERP project.

E. Latest revised estimate:

There has been no change in the cost or schedule estimate.

F. Corrective actions:

While the Smithsonian still plans to deploy the General Ledger, Accounts Payable and the Purchasing modules on October 1, 2002, the period of parallel operations with the current Smithsonian Finance System is now planned for the first quarter of fiscal year 2003 instead of the last quarter of FY 2002.

Agency: Smithsonian Institution
Bureau: (OIA)
Account Title: Salaries and Expenses
Account Identification Code: 33-0100-0

Name of project: **Managed Information Technology Infrastructure**

Check one: New project _____ Ongoing project __X__

Was the project approved by an Executive Review Committee? Yes _X_ No ___

Is this project information technology (see Section 300.4(e) for a definition)?
Yes _X_ No ___

For information technology projects only:
Is this project a financial management system (see section 42.2 for a definition)? Yes ___ No _X_

If so, what percentage of the system is financial? _0%_

Was this project approved by an agency Investment Review Board? Yes _X_No ___

PART I: SUMMARY OF SPENDING FOR PROJECT STAGES
(In Thousands)

Project Costs	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Total
Analysis Phase	373	0	0	0	0	0	0	373
NOC and Help Desk [1]	146	1,164	1,612	0	150	0	0	3,072
Network Services[2]	302	536	1,368	34	356	0	0	2,582
Application Server Consolidation [3]	106	0	2,055	1,680	1,720	0	0	5,561
Desktop[4]	0	1,146	0	0	0	0	0	1,146
Development Sub-total	**927**	**2,846**	**5,035**	**1,714**	**2,226**	**0**	**0**	**12,734**
NOC and Help Desk	0	0	1,155	2,101	2,116	2,146	2,146	9,664
Network Services	0	0	56	0	314	512	512	1,394
Application Server Consolidation	0	0		436	472	2,160	2,160	5,228
Desktop	0	0	0	4,065	5,205	4,065	4,065	17,400
Steady State Sub-total	**0**	**0**	**1,211**	**6,602**	**8,107**	**8,883**	**8,883**	**33,686**
Total	**927**	**2,846**	**6,246**	**8,316**	**10,333**	**8,883**	**8,883**	**46,420**

[1] Implementation of a network operations center and a consolidated Help Desk
[2] Upgrade of directory, e-mail, and network operating systems and consolidation and periodic replacement of network, directory, and e-mail servers.
[3] Consolidation and periodic replacement of application servers.
[4] Institution-wide license for office automation software and periodic replacement (3-year life cycle) of desktop workstations beginning in FY 2004.

PART II: JUSTIFICATION AND OTHER INFORMATION

A. Justification

As the Smithsonian builds its framework for the 21st century, it must apply an enterprise approach to managing the Information Technology (IT) infrastructure consistent with the provisions of the Clinger-Cohen Act. The Smithsonian has long been served by an IT infrastructure composed of incompatible commercial hardware and software systems operated by the central information technology services organization and each Smithsonian unit. The Smithsonian's IT infrastructure includes 80 commercial and 73 custom developed application systems operating on a variety of hardware and software environments from desktop workstations to mainframe computer systems. There are nearly 80 loosely-coupled local area networks, 149 servers running multiple versions of Novell Netware, 82 servers running multiple versions of Windows, and 20 servers executing miscellaneous operating systems. The e-mail system is primarily Novell GroupWise, but three other e-mail systems exist to serve 6000 end-users. There are 462 unique commercial software infrastructure products in use; 20 are different database management system products and 47 are different software engineering tools in use. This IT infrastructure is costly to operate, hard to manage and maintain, difficult to infuse with new technology, and has parts that are becoming technologically obsolete.

This situation has occurred, in large part, because supporting IT technology infrastructure components have been acquired by each operating unit and managed on a piecemeal basis as a set of distinct application systems, each with its own dedicated operations and IT support organizations throughout the Smithsonian. The current IT infrastructure limits flexibility, adds cost, and complicates efforts to provide quality IT services, backup and recovery, and adequate security. To address these expanding needs as well as future public access requirements, the current IT infrastructure must be more robust, reliable, and secure.

The Smithsonian must invest now to modernize its IT infrastructure incrementally through FY 2005. This 4-year migration period will minimize the risk of disruption to the Smithsonian end-user. Further delay in modernizing the IT infrastructure will only exacerbate an already serious problem as the Smithsonian is becoming increasingly dependent on information technology to perform its day-to-day operations. Initially, the Institution will focus on upgrading the network backbone, directory service, and e-mail, implementing a network operations center and a consolidated Help Desk, co-locating and consolidating network and application servers, and centralizing network management. The Smithsonian plans to replace desktop workstations, network and application servers and other IT infrastructure components on an industry standard periodic replacement cycle.

As the Smithsonian migrates to a managed information technology infrastructure, it will be better positioned to add new products or infrastructure components, to replace existing ones as new technologies emerge, and to leverage the IT infrastructure to better serve all Smithsonian units. A defined information technology architecture supported by a managed information technology infrastructure will allow the Smithsonian to:

- Improve customer service through product standardization. By standardizing LAN and desktop workstation operating systems and implementing a software distribution system, a centralized Help Desk will be better able to resolve problems. This greatly reduces user downtime, as well as the cost of on-site visits to fix software problems.

- Improve management of the Smithsonian's distributed computing environment by facilitating help desk management, problem management, and system and network management.

- Reduce life cycle hardware and software maintenance costs through better management of the life cycle of hardware and software, which will:

  - Ensure competitive pricing and longer/more comprehensive warranties by leveraging bulk purchasing of assets, warranties, licensing fees, technical training, and maintenance;
  - Increase functionality through consolidation, thus reducing the number of items that require maintenance; and
  - By standardizing IT components, allow the Smithsonian to pursue competitive maintenance agreements.

- Achieve economies through site software licenses and consolidated hardware procurements. The bundling of commercial software requirements across the Institution will provide the leverage to negotiate more favorable licensing terms, providing both reduced costs and increased flexibility. Consolidating hardware requirements and conducting competition for bulk purchases of IT infrastructure components, especially among resellers who apply discounts to consolidated orders, can significantly reduce costs.

- Improve security of the IT infrastructure and automated systems. The Smithsonian is becoming increasingly dependent on information technology to perform day-to-day operations and is relying on the Internet to help disseminate information and conduct limited electronic commerce. Increasing dependence on information technology coupled with increasing reliance on the Internet makes it imperative that the Smithsonian adequately safeguard its automated information systems and the supporting IT infrastructure, provide online backup and recovery and create a trusted environment in which to conduct electronic commerce.

- Reduce information technology personnel training costs by centrally managing and standardizing IT software products. There will be fewer unique products, thus reducing training required for Smithsonian IT staff and support contractors. Training costs include tuition, employee salary while attending training, and lost productivity associated with the time to gain proficiency on a specific IT product.

In addition, this approach provides the technical benefits of improved software and hardware integration and interoperability, which are critical to achieving overall system reliability as computer technology becomes more complex to manage.

B. Program management

1. **Is there a program manager and contracting officer devoted to the project?** Yes. Michael Press has been assigned as the project manager. Lynn Spurgeon has been assigned as the contracting officer.

2. **Will an Integrated Project Team be established to assist with the management of the project?** Yes. The Institution has established a project team that includes representatives from major Smithsonian units (*e.g.*, National Museum of Natural History) and is led by a project manager from the Office of the Chief Technology Officer. The project team will follow a disciplined life cycle management process tailored for IT infrastructure components. Work groups will also be established for individual project stages (e.g. upgrade of network operating system). The work groups will include representatives of Smithsonian units.

C. Acquisition strategy

The Smithsonian plans to acquire and implement commercially available hardware and software products to modernize and help manage the IT infrastructure. The Institution plans to take full advantage of streamlining allowed by law and regulations for acquiring and administering Federal contracts, notably the Federal Acquisition Streamlining Act (FASA) and the Clinger-Cohen Act and the resulting revisions to the Federal Acquisition Regulations. The Smithsonian plans to rely on existing federal contracts to

acquire commercial software and system integration and independent verification and validation services. For hardware acquisition, the Smithsonian plans to use mechanisms such as General Services Administration (GSA) schedules, interagency agreements, and competitive procurements. For software seat/site license agreements, the Smithsonian plans to use full and open competition and acquisition through interagency agreements, small businesses, GSA schedules, and other sources.

The Smithsonian plans to rely on existing Federal contracts to acquire commercial software and IT services. For hardware acquisition, the Smithsonian plans to use mechanisms such as General Services Administration schedules, interagency agreements, and competitive procurements. For software seat/site license agreements, the Smithsonian plans to use full and open competition and acquisition through interagency agreements, small businesses, GSA schedules, and other sources. The Smithsonian has relied on *Gartner Group* and *Ciber* to complete the analysis phase and plans to use the Department of Transportation's *Information Technology Omnibus Procurement (ITOP)* government-wide contract to acquire support services. The Institution also has contracts in place for desktop workstations and Intel-based network and application servers.

D. Alternatives Analysis and Risk Management

The Smithsonian has prepared an economic analysis that compares maintaining the current IT infrastructure as it is done today with three alternatives. The managed IT infrastructure will be incrementally implemented over a 4-year period through FY 2005. The following alternatives were considered in this analysis:

- Preferred Alternative: This alternative standardizes the Smithsonian IT infrastructure on the latest versions of the most widely used technology platforms at the Smithsonian today (*Novell NOS*, *NDS*, and *GroupWise*). It provides network support for both *Windows*- and *Macintosh*-based desktop platforms. It allows for the heterogeneous email/calendaring platforms to remain integrated as they are today; however, it targets selected "non-standard" platforms for pilot programs in FY 2004. This approach minimizes the cost outlay and maximizes the returned value to the Smithsonian by taking advantage of the installed technology base and existing maintenance contracts. This alternative standardizes the IT infrastructure platforms to the greatest extent practical on the latest Novell products, but allows the Smithsonian to keep its heterogeneous environment intact and integrated into the shared infrastructure. This alternative includes investing in key support components (e.g., a centralized help desk, network operations center, desktop office automation software, and technology refreshment for hardware/software) that are required to manage the IT infrastructure in an industry best practice fashion. Additionally, this plan works to reduce and co-locate the network and application servers as the managed IT infrastructure is established and begins the periodic replacement of desktop workstations in FY 2004 based on an industry-standard 3-year life cycle. This alternative establishes quality and performance metrics for the IT infrastructure environment. Lastly, this alternative provides for the evaluation of new technologies in 2004 with implementation within the strategic timeframe (starting in 2005) of this plan. The cost to implement the managed IT infrastructure through FY 2005 is $27.7 million. During the 4-year economic life, the Smithsonian expects to realize $31.7 million in undiscounted benefits including cost avoidance amounting to $14.2 million associated with consolidation of network and application servers.

- Maintain the Status Quo: This alternative continues the support of the existing IT infrastructure as it is done today. This means that the variety of network servers, operating systems and infrastructure platforms would remain in place unchanged. IT infrastructure support will be performed throughout the Smithsonian in a varied fashion (based on each individual business unit's ability to staff and maintain these services). It does not provide for necessary shared infrastructure investments (e.g., help desk, network operations center, and technology refreshment), nor does it standardize the technical platforms in the environment through any conscience effort. The cost to maintain the status

quo over the 4-year economic life is $60.7 million. Furthermore, no benefits will accrue from this alternative.

- Migrate to *Microsoft Windows 2000* platform (exclusively): Industry research indicates that this path is best suited for enterprises that have been using *Microsoft Exchange* (pre-*Windows 2000* versions) for messaging and *Microsoft SMS* for desktop management as the predominant platforms in their environment. Since the Smithsonian only has a 0.3% installed base in *Exchange*, this is not a practical alternative at this time. According to *Gartner Group*, it is as much as twice as expensive to convert a *Novell* 4.x network environment to *Windows 2000,* as it is to upgrade that same environment to *Novell* 5. Additionally, an exclusive *Microsoft* environment will disenfranchise the 6% installed *Macintosh* base that has a critical business function within the Smithsonian.

- Maintain the *Novell* network and migrate to *Microsoft* messaging products: This "blended approach" would use *Novell* for the network services and *Microsoft* for electronic messaging services. This alternative will incur unnecessary costs to license *Microsoft Outlook* and *Exchange* and to convert data (i.e., emails/schedules) from the existing Novell messaging users (90% of the total user population). More importantly, this alternative will not gain any tangible business value (e.g., new features that are missing in *Novell* that are critical to the Smithsonian) for the end-users.

Cross-servicing or outsourcing the entire IT infrastructure management is not considered a viable option at this time. However, the Smithsonian is considering cross-servicing and/or outsourcing the production processing of the data center to coincide with the renovation of the Arts and Industries Building now scheduled for FY 2004. The Smithsonian has held preliminary discussions with two federal agencies and two application service providers (ASPs) to consider cross servicing or outsourcing the production processing of the ERP system and ultimately the entire data center. Factors that will be considered are the cross-servicing agency's methods for prioritizing service and ability to keep current with information technology industry best practices, service level agreement, security, and cost. Factors that will be considered for outsourcing data center operations are the financial stability of the ASP, service level agreement, security, and cost.

The Smithsonian performed a sensitivity analysis that considered several scenarios that included cost overruns of 10 percent and 20 percent and reductions of productivity savings from 60 percent to 30 percent in Smithsonian units. The "best case" scenario projects IT workforce productivity increases of 60 percent in the in Smithsonian Institution units. Smithsonian unit IT staff would be redirected to focus on core unit business and not IT infrastructure. This is based on the existing number of IT staff and support contractors in Smithsonian units.

Under the "best case" or "expected outcome" scenario, the economic benefits generated by the managed IT infrastructure project during the 4-year economic life outweigh the investment costs. The following chart depicts the "best case" scenario. (Figures are presented in $000's)

Costs and Expected Benefits Under "Best Case" Scenario for Managed IT Infrastructure

		Expected Yearly Benefit					
Fiscal Year	Expected Yearly Cost Increase (incl. Implementation & Ongoing Costs)	Productivity Increase	Cost Avoid. for Replacing HW/SW.	Total Yearly Benefit	Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2002	$2,846	$0	$7,085	$7,085	0.9667	$2,751	$6,849
FY2003	$6,232	$3,510	$4,880	$8,391	0.9035	$5,631	$7,581
FY2004	$8,316	$7,021	$1,465	$8,486	0.8444	$7,022	$7,166
FY2005	$10,333	$7,021	$775	$7,796	0.7891	$8,154	$6,152
Total	**$27,727**	**$17,551**	**$14,206**	**$31,758**		**$23,557**	**$27,748**

The "worst case" scenario projects IT workforce productivity increases of 30 percent in the Smithsonian units and assumes a 20 percent cost overrun. Under the "worst case" scenario, the Smithsonian will realize $8.7 million through productivity gains and save an additional $14.2 million through consolidation of network and application servers. The following chart depicts the "worst case" scenario.

Costs and Expected Benefits Under "Worst Case" Scenario for Managed IT Infrastructure

Cost and Benefits with a 30% Benefit and 20% Cost Overrun

		Expected Yearly Benefit					
Fiscal Year	Expected Yearly Cost Increase (incl. Implementation & Ongoing Costs)	Productivity Increase	Cost Avoid. for Replacing HW/SW.	Total Yearly Benefit	Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2002	$2,846	$0	$7,085	$7,085	0.9667	$2,751	$6,849
FY2003	$6,232	$1,755	$4,880	$6,636	0.9035	$5,631	$5,995
FY2004	$8,736	$3,510	$1,465	$4,976	0.8444	$7,376	$4,201
FY2005	$10,693	$3,510	$775	$4,285	0.7891	$8,438	$3,382
Total	**$28,507**	**$8,776**	**$14,206**	**$22,982**		**$24,196**	**$20,428**

The following chart presents the costs for the *Maintaining the Status Quo* alternative in current and discounted dollars. The costs presented below include the cost to operate and maintain the infrastructure as it is done today. With this option there is no expected IT workforce productivity increase or cost avoidance from consolidating the network and infrastructure management.

Costs and Expected Benefits for Maintaining the Status Quo

		Expected Yearly Benefit					
Fiscal Year	Expected Yearly Cost Increase (incl. Implementation & Ongoing Costs)	Productivity Increase	Cost Avoid. for Replacing HW/SW.	Total Yearly Benefit	Disc. Factors for 7%	PV of Costs (Col 2 x Col 4)	PV of Benefits (Col 3c x Col 4)
(1)	(2)	(3a)	(3b)	(3c)	(4)	(5)	(6)
FY2002	$8,439	$0	$0	$0	0.9667	$8,158	$0
FY2003	$13,150	$0	$0	$0	0.9035	$11,881	$0
FY2004	$19,000	$0	$0	$0	0.8444	$16,044	$0
FY2005	$20,140	$0	$0	$0	0.7891	$15,893	$0
Total	**$60,730**	**$0**	**$0**	**$0**		**$51,976**	**$0**

The economic benefits generated by a managed IT infrastructure over the period FY 2002–FY 2005 outweigh its investment costs. The decision to implement a more robust and stable computing infrastructure is cost effective when compared to the alternative of maintaining the current infrastructure in a decentralized approach. As evidenced by this economic analysis, the managed IT infrastructure project is cost justified over the 4-year time horizon. The personnel and productivity savings generated by the managed IT infrastructure provide an expected net present value of $4,190,000 when discounted at 7% (OMB Circular A-94 discount rate) in an analysis projected over the period FY 2002–FY 2005. Cost aside, a more consistent, reliable and stable infrastructure eliminates redundancy of effort within the Smithsonian units and provides a support model for managing the IT infrastructure that is in line with industry best practices. A properly managed IT infrastructure provides the technology foundation that is necessary to modernize the Smithsonian's computing infrastructure and enable the strategic vision of the enterprise.

There are project-related risks that must be managed before they become problems. Because the managed IT infrastructure project will rely on proven commercial hardware and software products, excessive time delays and cost overruns are minimized. The following major project-related risks can adversely affect project cost and schedule:

Risk 1: *The managed IT infrastructure project will not be adequately funded.* Over the last several years, the Smithsonian has been reducing its investment in the central IT infrastructure while increasing its reliance and demand for IT services. Without adequate funds to implement the managed IT infrastructure project, the Institution will incur serious risk to the stability and reliability of the computing infrastructure. In addition, the Smithsonian has initiated a complementary project to modernize the Institution's financial and human resource management systems. A robust IT infrastructure – servers, network, modern desktop workstations, facility, and IT staff - must be in place in order for the Enterprise Resource Planning (ERP) system to operate effectively. The managed IT infrastructure and ERP projects are two of the Smithsonian's top priorities. The Smithsonian plans to redirect funds from other activities to ensure that this project is adequately funded.

Risk 2: *Smithsonian units will not buy-in to centralized network management and server consolidation.* Because the Smithsonian has been under investing in its enterprise-wide IT infrastructure and support services for years, the need for networked based IT solutions arose in individual museums, business

units and research centers. Smithsonian units invested in "point solutions" that met specific unit needs and were often independent of the Smithsonian as a whole. Additionally, lacking a strong central network support structure, each business unit took on the burden of providing their own individual network support. As a result, the Smithsonian has an IT infrastructure composed of incompatible hardware and software systems with incompatible commercial software products operated by both the central IT services organization and each Smithsonian unit. There is a perceived lack of trust on the part of Smithsonian units in the ability of central IT services to deliver quality services. This lack of trust could hamper successful implementation. To mitigate the risk of not having Smithsonian unit buy-in, the project team and associated work groups will include representatives of Smithsonian units and the Information Technology Management Committee which includes senior IT managers from throughout the Institution will participate in detailed planning and will monitor the project's progress.

E. IT Modernization and Architecture (IT projects only)

Work conducted through this project will help establish an IT architecture and managed IT infrastructure. The Smithsonian Institution completed a baseline inventory of automated information systems and IT products in March 2001 to establish an enterprise IT architecture and deploy a managed IT infrastructure. Based on an analysis of the IT baseline, the Smithsonian defined a conceptual target IT architecture in July 2001 and plans to publish a Technical Reference Model in December 2001. The purpose of the model is to identify a comprehensive set of information technology standards, services, protocols, and products that define the target technical environment for the acquisition, development, and support of Smithsonian automated information systems. The Technical Reference Model will be based on the most recent version of the National Institute of Standards and Technology's Application Portability Profile. The Institution will select information technology components that best support an open system environment. The Smithsonian has instituted an iterative IT architecture planning process that will help the Smithsonian modernize its IT infrastructure and establish an enterprise IT architecture.

F. IT Security (IT projects only)

Sensitive financial, procurement, budget, and personnel information will be transmitted over the network. This data is considered confidential. A major benefit of the Managed IT Infrastructure project is to improve security as security measures can be applied and managed from an enterprise perspective. The Smithsonian is becoming increasingly dependent on information technology to perform day-to-day operations and is relying on the Internet to help disseminate information and conduct limited electronic commerce. Increasing dependence on information technology coupled with increasing reliance on the Internet makes it imperative that the Smithsonian adequately safeguard its automated information systems and the supporting IT infrastructure, provide online backup and recovery and create a trusted environment in which to conduct electronic commerce. The Smithsonian will explicitly consider security throughout the Managed IT Infrastructure project life cycle and will document security requirements in a *Security Plan*. The plan will capture the structured process of planning and implementing adequate, cost-effective security protection for the IT infrastructure.

G. Government Paperwork Elimination Act (IT projects only)

The Managed IT Infrastructure project supports the electronic government goals of the Government Paperwork Reduction Act (GPEA) by putting in place a robust IT infrastructure that will enable the Institution to more effectively serve the public electronically. Since the Managed IT Infrastructure project primarily supports internal operations and will not place a paperwork burden on the public, the GPEA provisions are not applicable.

PART III: COST, SCHEDULE, AND PERFORMANCE GOALS

A. Description of performance-based system:

The Smithsonian is applying a four stage iterative approach to planning, budgeting, and performance management for the Managed IT Infrastructure project:

Plan. The Chief Technology Officer conducted an IT planning baseline survey in November 2000 to obtain information about the current IT environment and completed a baseline of existing IT standards and products in use across the Institution in March 2001. The baseline survey results underscored the need to improve overall IT capital planning and operational processes. The Smithsonian contracted with *Gartner Group* to help analyze the baseline data, analyze alternatives, and propose a migration path to a managed IT infrastructure based on industry best practices. The Gartner Group completed its analysis in August 2001.

Select. The Capital Planning Board serves as the primary vehicle for approval of the Smithsonian's capital asset program. The Board is composed of the Under Secretaries, the Director of International Art Museums, the General Counsel, the Chief Executive Officer of Business Ventures, the Chief Financial Officer (CFO), the Director of Policy and Analysis, the Director of Facilities Engineering and Operations, and the CTO and is chaired by the Under Secretary for Finance & Administration. The Board provides advice, counsel, and recommendations for consideration by the Secretary related to planning and implementation of the Institution's major capital projects and related infrastructure. The Board provides strategic direction and sets priorities for all capital projects, including major information technology projects. The Capital Planning Board approved the Managed IT Infrastructure project on June 21, 2001.

Control. The Smithsonian will monitor interim results of the Managed IT Infrastructure project and take action when needed to ensure that the project stays on track. The Smithsonian will monitor the achievement of or deviation from goals by performing technical reviews to ensure that the project is progressing on schedule and within budget and is satisfying program needs.

To help assure that requirements are being met, the Information Technology Management Committee (ITMC) serves as a steering committee for the Managed IT Infrastructure project. The Committee is composed of senior IT managers from the major units from throughout the Institution and provides advice and assistance to the Chief Technology Officer in establishing and implementing IT management policies, procedures, and practices and on standards governing the acquisition, development, maintenance, and operation of the Institution's automated information systems and supporting information technology infrastructure. The ITMC is responsible for making resources available to support the Managed IT Infrastructure project, and for reviewing the project's progress.

To help assure that quality of the technical work products is acceptable, the Smithsonian has established the System Architecture and Product Assurance office to administer programs for system architecture, quality assurance, and independent testing of application software and information technology infrastructure. The primary purposes of the technical reviews conducted by the Product Assurance office are to improve the quality of intermediate work products, correct defects as early in the life cycle as possible, and prevent problems over the long run.

To help manage and control the project, the Managed IT Infrastructure project manager will prepare a detailed project plan. The project management control system will provide for tracking schedule performance against project plan milestones. This visibility will help both technical managers identify problem areas and take corrective actions when actual results deviate significantly from plans. The project manager will ensure that the necessary information is provided in a timely manner and entered into the project management control system. These mechanisms provide visibility into the project's progress, as well as establish management control points for assessing project cost, schedule, and quality.

Evaluate. The Smithsonian will assess the results of the Managed IT Infrastructure project through establishing a service commitment statement, service level agreements and customer satisfaction surveys. Key performance measures include:

- Workforce productivity within the Smithsonian unit IT staff will increase by 60 percent based on the implementation of a managed IT infrastructure over the four year planning horizon. This productivity will result from redirecting 60% of the IT infrastructure workload from existing business unit IT staff to the central IT infrastructure organization. The unit IT staff will be better able to focus on core program functions such as collections information systems.

- Through the implementation of much needed infrastructure support processes and resources such as the centralized help desk and network operations center, the Smithsonian will achieve a more robust and reliable infrastructure. The benefit of a more reliable infrastructure is a greater percentage of "up time" for the network and shared service components, which results in greater productivity for all Smithsonian end-users.

- A more reliable IT infrastructure will provide for a higher quality of service to the Smithsonian end-user. This will result in more industry standard "service level agreements" for IT infrastructure monitoring, performance and reporting.

- Through the appropriate investment in network servers, application servers, desktop workstations and infrastructure components, the Smithsonian will achieve a more standardized and therefore, a more easily supported IT environment.

- There are significant hardware and software savings through the consolidation, co-location and central management of the IT infrastructure. These savings are found in: desktop purchase and maintenance, network server purchase and maintenance, and application server purchase and maintenance. The savings from these three categories over the course of the four-year plan are $14.2 million.

B. Original baseline:

Key business milestones

Tasks/Products	Completion Dates	
	Initial Projection	Current Projection
Complete high-level analysis of LAN and office automation server environment	12/2000	12/2000
Establish IT Product Baseline	03/2001	03/2001
Establish Project Team	06/2001	06/2001
Establish IT Lab	09/2001	09/2001
Acquire Migration Services	09/2001	09/2001
Develop Migration Plan	09/2001	09/2001
Publish Technical Reference Model Version 1.0	12/2001	12/2001
Replace Application Servers Phase 1	06/2002	06/2002
Replace Email Systems	09/2002	09/2002
Publish Technical Reference Model Version 2.0	12/2002	12/2002
Centralize LAN Management	12/2003	12/2003
Publish Technical Reference Model Version 3.0	12/2003	12/2003
Replace Application Servers Phase 2	06/2004	06/2004

Tasks/Products	Completion Dates Initial Projection	Current Projection
Publish Technical Reference Model Version 4.0	12/2004	12/2004
Replace Application Servers Phase 3	09/2005	09/2005

C. Current baseline:

Tasks/Products	Completion Dates Initial Projection	Current Projection
Complete high-level analysis of local area network and office automation server environment	12/2000	12/2000
Establish IT Product Baseline	03/2001	03/2001
Begin consolidation of network servers	03/2001	03/2001
Capital Planning Board Approval	06/2001	06/2001
Establish Project Team	06/2001	07/2001
Draft Technical Reference Model	06/2001	07/2001
Acquire network management tool	07/2001	07/2001
Complete conceptual analysis	08/2001	08/2001
Complete Business Case	08/2001	08/2001
Acquire Support Services	09/2001	09/2001
Provide Institution-wide desktop office automation software	10/2001	10/2001
Publish Technical Reference Model Version 1.0	12/2001	12/2001
Upgrade network operating system to current version	12/2001	12/2001
Establish policies and procedures for customer notification, problem escalation, and root cause analysis reporting	02/2002	02/2002
Publish Customer Service Handbook	02/2002	02/2002
Implement Automated Help Desk tools	03/2002	03/2002
Upgrade directory service to current version	03/2002	03/2002
Replace and Consolidate Application Servers Phase 1	03/2002	03/2002
Build-out NOC facility	03/2002	03/2002
Consolidate e-mail servers	03/2002	03/2002
Upgrade e-mail system to current version	04/2002	04/2002
Consolidate central Help Desk services	05/2002	05/2002
Complete consolidation of network operations system servers	09/2002	09/2002
Acquire additional network and system management tools	10/2002	10/2002
Implement network operations center	10/2002	10/2002
Install directory service audit software	12/2002	12/2002
Publish Technical Reference Model Version 2.0	12/2002	12/2002
Begin periodic replacement of desktop workstations (3-year replacement cycle)	10/2003	10/2003
Publish Technical Reference Model Version 3.0	12/2003	12/2003
Replace and Consolidate Application Servers Phase 2	06/2004	06/2004
Build-out alternate NOC facility	07/2004	07/2004
Implement alternate NOC	10/2004	10/2004
Begin periodic replacement of network, directory, and e-mail servers (3-year cycle)	10/2004	10/2004
Continue periodic replacement of desktop workstations (3-year replacement cycle)	10/2004	10/2004
Pilot replacement directory service and e-mail system	12/2004	12/2004

Tasks/Products	Completion Dates	
	Initial Projection	Current Projection
Publish Technical Reference Model Version 4.0	12/2004	12/2004
Replace or upgrade directory, file and print, and e-mail services	09/2005	09/2005
Replace and Consolidate Application Servers Phase 3	09/2005	09/2005

D. Variance from current baseline:

There has been a one-month slippage associated with completing the draft Technical Reference Model. The Smithsonian stills plans to publish the final version in December 2001. The current baseline contains more tasks that reflect the results of the analyses performed since the last submission.

E. Latest revised estimate:

There has been no change in the project schedule estimate. However, periodic replacement of desktop workstations based on an industry best practice of 3 years has been included beginning in FY 2004. This adds about $4 million per year to the Managed IT Infrastructure project.

F. Corrective actions:

No corrective actions are needed at this time.

SMITHSONIAN INSTITUTION

Repair, Restoration and Alteration of Facilities

Detail of
FY 2002 - FY 2007 Five-Year Program

OMB Submission

Prepared by the
Project Management Division
Office Of Physical Plant

September 10, 2001

Definitions

Repair, Restoration and Alteration of Facilities Program

Major Renewal

Provides funds for the cyclical replacement of major building systems and equipment and major renovation projects required for the preservation of the buildings. Primarily addresses the major replacement requirements for HVAC and electrical systems at the older buildings where systems are nearing the end of their service lives.

Code Compliance and Security

Fire Detection and Suppression Projects

Provides fire protection and safety measures meeting today's standards with state-of-the-art technology. Typically includes installation of detection systems such as smoke alarms, suppression systems such as sprinklers, and architectural modifications to create fire zones by installing fire walls and doors

Access, Safety, and Security Projects

Provides better access to facilities for persons with disabilities, improves environmental conditions for the health and safety of visitors and staff, and corrects facility conditions that threaten the security of the National Collections.

Infrastructure Repair

General Repairs

Provides resources for minor, unscheduled, but essential repairs that the Institution cannot anticipate specially or that do not fit into any one discrete category.

Facade, Roof, and Terrace Repairs

Provides exterior repair and maintenance to building envelopes to prevent major structural and interior damage and deterioration due to age, water intrusion, and weathering.

Utility System Repairs

Maintains, repairs, and upgrades the heating, ventilating, and air conditioning (HVAC) systems and plumbing, electrical, and communications systems. Ensures reliable and energy-efficient operation of utility systems through ongoing renovation, repairs, and replacement of deteriorated equipment.

R&R Planning, Design and Inspection

Supports projects to identify and analyze long-range repair and restoration needs and to design future-year projects in advance of funding requests.

Alterations and Modifications

Provides for smaller, program-oriented construction projects with estimated construction cost less than $1 million.

Maintenance

Provides funds for planned preventive maintenance of building systems and components to avoid future buildup of the backlog of repair work.

Explanation of Ranking Codes

R&R Ranking Code System

A Must not defer:

- **A1** Building Shell Failure, Includes
  - Active roof leak
  - Active wall leak
- **A2** HVAC, Electrical, Security System Failure, includes
  - Active piping leak
  - Active or frequent system/equipment failures
- **A3** Mandated/Unexpected Compliance

B Should not defer (High Priority):

- **B1** Building Shell Maintenance, includes
  - Imminent failure of exterior shell
  - Imminent failure of exterior HVAC, electrical, security equipment
  - On-going site utility maintenance problem
- **B2** Building System Maintenance, includes
  - Imminent failure of building systems
- **B3** High priority code improvements includes
  - fire and life safety, accessibility, HVAC, electrical, security equipment

C Should not defer (Medium Priority):

- **C1** Predicted, required repair or maintenance
- **C2** On-going or phased construction efforts, includes
  - Separate but part of on-going construction
  - Needed for start of higher priority project
  - Needed to properly complete high priority project
- **C3** Cost-effective payback period, includes
  - Energy or maintenance savings payback within 7 years

D Can defer one year or logically phase

E Can defer more than one year

F Should reconsider

A&M Ranking Code System

A Cannot defer:
Critical to success of high priority Institutional program initiative; program cannot be implemented without this project.

B Should not defer:

- **B1** Part of backlog of A&M requirements to improve operating efficiency.
- **B2** Part of an ongoing or phased effort, coordinated with other projects, or with significant program considerations.

C Could defer:
Defer construction, design funding should remain in projected year, or construction could be logically phased (suggest minimum funding increment).

D Can defer comfortably for one year

E Can defer more than one year

F Should reconsider

SMITHSONIAN INSTITUTION

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

$(000)s

	FY02	FY03	FY04	FY05	FY06	FY07
MAJOR RENEWAL	37,500	80,300	98,000	160,300	189,500	192,700
CODE COMPLIANACE AND SECURITY						
Fire Detection and Suppression	10	1,760	85	10	10	10
Access, Safety and Security	4,620	2,595	7,860	3,520	8,465	2,650
National Zoological Park Code Compliance and Security	1,450	2,215	2,055	1,855	3,110	1,860
SUBTOTAL	6,080	6,570	10,000	5,385	11,585	4,520
INFRASTRUCTURE REPAIR						
General Repair	9,580	17,230	20,275	21,920	23,750	23,025
Facade, Roof and Terrace Repair	870	3,205	1,290	1,840	1,400	1,600
Utility System Repair	3,050	4,370	5,085	3,950	6,050	7,000
Advance Planning and Design	2,500	3,840	1,000	5,250	3,700	2,000
National Zoological Park Infrastructure Repair	3,610	8,985	5,350	5,355	6,515	5,155
Alterations and Modifications	2,810	3,000	3,000	3,000	3,000	3,000
SUBTOTAL	22,420	40,630	36,000	41,315	44,415	41,780
MAINTENANCE	1,900	2,100	36,000	36,000	36,000	36,000
GRAND TOTAL	**67,900**	**129,600**	**180,000**	**243,000**	**281,500**	**275,000**

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	Location	Priority	Project	FY02	FY03	FY04	FY05	FY06	FY07
MAJOR RENEWAL									
DC - Mall	AIB	B2	Design Major Restoration	6,000	2,000	0	0	0	0
DC - Mall	AIB	B2	Restore Arts & Industries Building	0	0	8,000	40,000	60,000	47,000
DC - Mall	FGA	B1	Replace/Restore Roof Exterior	0	0	0	3,000	0	0
DC - Mall	FGA	B1	Replace/Restore Roof Exterior	0	0	500	0	0	0
DC - Mall	HMSG	A2	Restore & Weterproof Plaze & Foundation Walls	0	0	0	0	10,000	0
DC - Mall	HMSG	A2	Restore & Waterproof Plaze & Foundation Walls	0	0	0	1,000	0	0
Suitland, MD	MSC	B2	Upgrade Machanicel & Electrical Systems	0	0	0	1,000	15,000	0
DC - Mall	NASM	B2	Replace Machanical System, Besamant & 3rd Floor	0	0	4,000	0	41,000	0
DC - Mall	NMAH	B3	Renew Public Space	0	0	12,000	18,000	0	0
DC - Mall	NMAH	A2	Replace Chillers	0	0	3,500	0	0	0
DC - Mall	NMNH	A2	Major Restoration: FY03 Restore Halls 8 through 12	10,000	16,000	16,000	15,000	15,000	18,000
DC - Mall	NMNH	B3	Construct Mell Accessible Entrance	0	4,000	0	0	0	0
DC - Mall	NMNH	A2	Design Major Restoration: FY03 HVAC Phasas IId & IIa	2,000	2,000	2,000	3,000	3,000	3,000
DC - Mall	NMNH	A2	Renovate Mezzanines	0	0	0	0	0	25,000
DC - Gallary Place	POB	A1	Renovate Petent Office Building	15,000	45,000	38,000	34,000	0	0
DC - Mall	QUAD	B2	Replece Machanicel System & Roof	0	0	0	0	0	40,000
DC - Mall	QUAD	B2	Replece Mechanicel System & Roof	0	0	0	4,000	0	0
DC - Lafeyette Park	RG	B2	Restore Renwick Gallery	0	0	0	20,000	0	0
DC - Lafayette Park	RG	B2	Design Major Restoration	0	0	2,000	0	0	0
DC - Mall	SIB	B2	Renovate Smithsonian Castle	0	0	0	0	0	20,000
DC - Mall	SIB	B2	Design Restoration Project	0	0	0	0	5,000	0
DC - Rock Creak	NZP	A1	Renovate Deer & Tepir Area	0	7,000	0	0	0	0
DC - Rock Creek	NZP	B1	Design Elaphant House Renovation	500	1,500	2,000	0	0	0
DC - Rock Creak	NZP	A2	Design Renovetion of Small Mammal Facility	200	1,000	0	0	0	0
DC - Rock Creak	NZP	B1	Design Giraffe Relocetion Area	0	1,000	0	0	0	0
DC - Rock Creak	NZP	B1	Design Seal/Sea Lion & Lowar Baar Areas	0	800	1,000	0	0	0
DC - Rock Creak	NZP	B1	Complete Mane Building Renovation	200	0	0	0	0	0
DC - Rock Creak	NZP	B1	Improve Utility Infrastructura	1,000	0	2,000	1,000	2,000	2,000
DC - Rock Creak	NZP	B1	Construct Giraffe Relocation Arae	0	0	5,000	0	0	0
DC - Rock Creak	NZP	A1	Replace Raptila & Small Mammal Roofs	0	0	2,000	0	0	0
DC - Rock Creek	NZP	B1	Renovate Elephant Housa	0	0	0	20,000	38,500	0
DC - Rock Creak	NZP	B1	Renovate Seal/Sea Lion & Lowar Baar Areas	0	0	0	0	0	30,000
DC - Rock Creek	NZP	A1	Restore Holt Housa	0	0	0	0	0	3,000
DC - Rock Creek	NZP	A1	Design Daar & Tapir Araa	1,400	0	0	0	0	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
DC - Rock Craak	NZP	A1	Design Raptile & Small Mammal Roofs	1,200	0	0	0	0	0
DC - Rock Craak	NZP	A1	Design Holt Housa Rastoretion	0	0	0	300	0	0
Front Royal, VA	NZPFR	A1	Construct Consolidatad Maintenanca Facility	0	0	0	0	0	4,700
	SUBTOTAL MAJOR CAPITAL RENEWAL			**37,500**	**80,300**	**98,000**	**160,300**	**189,500**	**192,700**
CODE COMPLIANCE AND SECURITY									
DC - Mall	NASM	B2	Upgrade Restaurant Alarms/Rapair Fira Alarm	0	250	0	0	0	0
DC - Mall	NMAH	B2	Rapalr Sprinklar Haads	10	10	10	10	10	10
DC - Mall	QUAD	A2	Raplace Fira Protection Systam	0	1,500	0	0	0	0
Paname	STRI	B2	Raplace BCI Fire Alarm System	0	0	75	0	0	0
	SUBTOTAL: FIRE DETECTION AND SUPPRESSION			**10**	**1,760**	**85**	**10**	**10**	**10**
DC - Mall	FGA	B3	Install Courtyard Lift	0	0	0	0	70	0
DC - Mall	HMSG	B3	Renovate Front Entrance	0	0	0	850	0	0
Suitland, MD	MSC	B2	Install Automatic Restroom Door Opaners	0	0	50	0	0	0
DC - Mall	NMNH	B3	Install Naw Interior Handrails	0	0	600	0	0	0
DC - Mall	NMNH	B2	Raplace West Loading Dock Lift	0	0	200	0	0	0
All Facilities	MULTI	B2	Abata Lead, all locations	300	300	300	300	400	500
All Facilitias	MULTI	B2	Abate Asbastos, all locetions	300	300	250	250	300	300
All Facilitias	MULTI	B2	Monitor Asbastos, all locations	300	300	250	250	300	300
All Facilitias	MULTI	B3	Improve Escalator/Elavetor Safety	650	0	500	0	345	500
DC - Mall	NASM	B3	Upgrade Accessibla Egress	0	0	0	0	0	250
DC - Mall	NMAH	A1	Rapair Egrass Deficlancles	0	425	0	0	0	0
DC - Mall	NMAH	B3	Rapair Restrooms and Improve Restroom Accass	0	0	3,000	0	0	0
DC - Mall	NMAH	D	Rastore Fountain & Paving	0	0	0	0	3,000	0
DC - Mall	NMAH	A1	Exterior Doors & Handrails	1,000	0	0	0	0	0
DC - Mall	NMNH	B3	Upgrade Exhibit Shop Exhaust Systems	500	0	0	0	0	0
DC - Mall	NMNH	A3	Install Chemical Control Fecility	0	0	0	0	1,000	0
Hawaii	SAO	B1	Oxygan Enrichmant, Summit Facility	50	0	0	100	0	0
Tuscon, AZ	SAO	B1	Abate Asbastos Throughout Site	0	0	0	100	0	0
Edgawater, MD	SERC	B3	Improve Entrance Road	100	0	350	0	500	0
Edgewater, MD	SERC	B2	Construct Chamical Storaga Building Addition	0	0	0	150	0	0
Suitland, MD	SHF	B3	Abata Asbestos Bldgs. in 15, 16, &18	0	500	500	500	0	0
Suitland, MD	SHF	B3	Monitor Asbestos Condition Throughout Sita	0	150	150	150	0	0
Suitland, MD	SHF	B3	Abate Asbastos in Building 16 Collaction	0	0	750	0	0	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
Suitland, MD	SHF	C1	Install Emergency Intercom	0	0	0	120	0	0
Suitland, MD	MSC	B2	install Pod Doors end Hardware	0	0	0	50	0	0
All Facilitias	MULTI	A	Provide Guerd Services, All Locetions	500	600	600	700	700	700
DC - Mall	NASM	C2	Modernize Security System	900	0	0	0	0	0
New York, NY	NMAI	B3	Modify Geilery Lighting	20	20	60	0	0	0
DC - Mall	QUAD	D	improve NMAA Courtyerd Access	0	0	0	0	100	0
Edgawatar, MD	SERC	B3	Install Perimeter Fire Lane	0	0	0	0	1,750	0
Edgewetar, MD	SERC	B2	Upgrede Security & Telecommunicetions Systams	0	0	300	0	0	0
Edgeweter, MD	SERC	B3	Improve Sacurity Lighting	0	0	0	0	0	100
	SUBTOTAL: ACCESS, SAFETY & SECURITY			**4,620**	**2,595**	**7,860**	**3,520**	**8,465**	**2,650**
DC - Rock Craak	NZP	A3	Improve Fire Protection Systems	350	350	350	350	350	350
DC - Rock Creak	NZP	A3	Instell Fire Alarms & Sprinklars	100	100	90	90	90	90
Front Royal, VA	NZPFR	B3	Instali/Improve Fire Protection Systems	250	500	500	500	500	500
Front Royal, VA	NZPFR	A3	install Fire Alarms & Sprinklers	100	100	100	100	100	100
DC - Rock Creak	NZP	A3	improve Accessibility	100	100	100	100	100	100
DC - Rock Creak	NZP	A3	Renovate Auditorium & Seeting for ADA	0	0	0	0	1,250	0
Front Royal, VA	NZPFR	A3	Accessibility/Dorm & Conference Ctr. Sprinklars	10	300	150	150	150	150
DC - Rock Craak	NZP	A2	Improve Animal Containmant Throughout Site	340	340	340	340	340	340
DC - Rock Creek	NZP	B2	Amazonia: Raplece Railings	0	200	200	0	0	0
DC - Rock Creak	NZP	B3	Abate Asbastos	50	50	50	50	50	50
Front Royal, VA	NZPFR	B3	Abate Asbestos & Lead	25	50	50	50	50	50
Front Royal, VA	NZPFR	A2	Conteinment Rapair & Improvements	20	20	20	20	25	25
DC - Rock Craak	NZP	B3	improve Safety & Sacurity Systam	105	105	105	105	105	105
	SUBTOTAL: NZP CODE COMPLIANCE & SECURITY			**1,450**	**2,215**	**2,055**	**1,855**	**3,110**	**1,860**
SUBTOTAL: CODE COMPLIANCE & SECURITY				**6,080**	**6,570**	**10,000**	**5,385**	**11,585**	**4,520**

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

INFRASTRUCTURE REPAIR AND MODIFICATION

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
DC - Anacostia	AM	C1	Rapair Peving & Sidawalk	0	160	0	0	0	0
Naw York, NY	CHM	B3	Rastore Mansion Intarior,Basamant/Auditorium Accass	375	325	350	325	0	0
Naw York, NY	CHM	B	Ganaral Repairs	60	60	60	60	60	60
Suitland, MD	MSC	C2	Rapair & Stripe Service Road	0	0	0	0	510	0
Suitland, MD	MSC	C2	Paint Buildings Throughout Sita	0	0	175	0	0	0
All Fecilitias	MULTI	B	Craft Sarvicas and Minor Ganaral Rapair	2,375	5,100	4,180	5,030	4,B50	5,355
All Facilitias	MULTI	B	Emargancy and Ganaral Rapair	4,0B5	5,230	5,740	5,350	6,390	5,B70
All Facilitias	MULTI	A	Parsonnal, Raprographics and Librery	860	3,460	5,500	B,000	B,000	B,000
All Facilitias	MULTI	C	Exterior Signaga	0	750	600	1,000	1,000	1,000
DC - Mall	NASM	A1	Rapair Dalta Solar Raflactlon Pool	0	0	0	0	0	200
DC - Mall	NMAH	C1	Raplace Trash Compactor & Rapair Dock Paving	0	0	800	0	0	0
Naw York, NY	NMAI	B	Rasearch Branch Ganaral Rapairs	60	60	60	60	60	60
Naw York, NY	NMAI	B	GGHC Gan. Rapair	40	50	50	60	B0	100
Suitland, MD	NMAI	C1	Control Erosion at CRC	150	0	0	0	0	0
Suitland, MD	NMAI	B	CRC Ganaral Repairs	150	0	0	0	0	0
DC - Mall	QUAD	C1	Rapair Intarior Stone	0	0	0	0	0	250
Tuscon, AZ	SAO	B1	Rapair/Improve Whipple Road	0	500	1,000	0	0	0
Tuscon, AZ	SAO	B	Ganaral Repairs, All Locations	150	200	200	250	250	250
Edgawatar, MD	SERC	B3	Improve Signaga, Security and Accassibility	0	275	125	200	830	0
Edgawatar, MD	SERC	B2	Rapair Corn Island Barn	200	200	0	500	0	0
Edgawatar, MD	SERC	C2	Install Muddy Creek Bridge	0	0	0	0	1,000	0
Edgawater, MD	SERC	B1	Rapair & Peve Roads Throughout Site	125	0	0	500	0	0
Edgawatar, MD	SERC	C1	Paint & Rapair Water Towar	0	0	0	80	0	0
Suitland, MD	SHF	B3	Rapair Road Betwaan Bldgs. 3 & 6	100	300	700	0	0	0
Panama	STRI	B1	Rapair Gigante/Tivoli/Tuppar/Naos & Gamboe/BCI/Boat Acces	50	330	275	0	100	100
Panama	STRI	B	General Rapairs/Painting of Structures/Dock Rapair	225	230	255	255	280	280
Panama	STRI	B2	Rapair Tivoli Intarior/Extarior	0	0	0	0	0	1,500
Panama	STRI	A1	Rapair Tivoli Structure	280	0	0	0	0	0
Panama	STRI	B	Install Shaat Piling at BCI	170	0	0	0	0	0
Panama	STRI	B	Procuremant Storage Space	40	0	0	0	0	0
Panama	STRI	B2	Dasign Tivoli Intarior/Extarior	0	0	0	0	300	0
Panama	STRI	C2	Ranovata Haskins Bldg. at BCI	0	0	125	0	0	0
Panama	STRI	A2	Improva BCI Facility	0	0	0	150	0	0
Panama	STRI	B2	Rapair Library Intarior/Extarior	0	0	0	100	0	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
Panama	STRI	B3	Naos Fecilitias Rapairs/Naos Dock	85	0	80	0	40	0
	SUBTOTAL: GENERAL REPAIR			**9,580**	**17,230**	**20,275**	**21,920**	**23,750**	**23,025**
Naw York, NY	CHM	A1	Rapair Fox House Exterior	0	2,000	0	0	0	0
New York, NY	CHM	B3	Repair Mansion Fecade & Fance	0	0	0	1,300	0	0
Naw York, NY	CHM	B1	Rastore Mansion Tarrece	0	0	225	0	0	0
DC - Mall	FGA	C1	Repair Entry Sidewalk	0	0	0	0	500	0
DC - Mall	FGA	C1	Repair Courtyard Stone	0	0	0	0	250	0
DC - Mall	FGA	C3	Correct Courtyard Window & Door Condensation	0	0	0	0	150	0
Suitlend, MD	MSC	A1	Claan & Receulk Fecade	0	0	400	0	0	0
DC - Mall	NASM	A1	Waterproof Terrace	0	0	0	0	0	1,500
DC - Mall	QUAD	B3	Modify Loading Dock	350	0	0	0	0	0
DC - Mall	QUAD	C1	Repsir Haupt/Sackler Fountain	0	0	0	0	300	0
Tuscon, AZ	SAO	B1	Paint FLWO Bsse Camp Warehouse/Sacurity Improvamants	0	100	0	0	0	100
Tuscon, AZ	SAO	B1	Rapair Roof	0	0	0	0	200	0
Tuscon, AZ	SAO	B1	Raplace Commons Building Deck	60	0	0	0	0	0
Tuscon, AZ	SAO	B1	Repair Building Extarlors	0	0	170	0	0	0
Edgawetar, MD	SERC	C1	Small Bldg. Roof Repairs	0	0	50	0	0	0
Suitlsnd, MD	SHF	B1	Rapsir Building 10 Roof	0	500	0	0	0	0
Psneme	STRI	B3	Rapsir Tuppar Faceda & Roof	0	275	0	540	0	0
Panema	STRI	B3	Rapair Naos Facada & Roof	60	180	0	0	0	0
Penama	STRI	B2	Tivoli Animal Ceges Roof & BCI Roof	0	150	0	0	0	0
Psnama	STRI	A1	Rapair Bocas Roof and Structure	400	0	0	0	0	0
Penama	STRI	B2	Repair Exterlors at BCI	0	0	445	0	0	0
Psnema	STRI	B3	Ancon/Culabra Exterior Repair	0	0	0	0	0	0
	SUBTOTAL: FAÇADE, ROOF AND TERRACE			**870**	**3,205**	**1,290**	**1,840**	**1,400**	**1,600**
DC - Mall	FGA	B2	Repair Utility Systam	0	0	0	0	500	0
DC - Mall	FGA	C1	Raplace Gallary Lighting Systams	0	0	0	0	0	350
DC - Mall	HMSG	B	Improve Intarior Lighting	0	1,000	0	0	0	0
DC - Mall	HMSG	A2	Repair HVAC Systam	1,250	0	0	0	0	0
Suitland, MD	MSC	C1	Install Emargancy Ganerator	0	0	0	0	0	250
Suitland, MD	MSC	B2	Raplace Isoletion Velves /Humidifiar	0	0	0	100	0	0
All Facilities	MULTI	B3	Misc. Utility Repair	500	520	500	500	500	500
DC - Mall	NASM	C1	Raplsca Dimmars/Cailing In Thaater	0	0	0	0	200	0
DC - Mall	NMAH	B2	Rapair Machenicel & Electricel Systems	0	2,000	0	0	0	0
DC - Mall	NMAH	B3	Upgrade Fire Protection	0	0	2,500	0	0	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
DC - Mall	NMAH	C3	Convert Hot Weter Re-Heet System	0	0	0	0	0	5,000
DC - Mall	NMAH	C1	Replece Cooling Tower	0	0	0	0	2,000	0
DC - Mall	NMAH	C1	Replece Emergency Generetor	0	0	0	0	1,000	0
Suitland, MD	NMAI	B2	Install Beckup Electric Service at CRC	80	0	400	0	0	0
DC - Mell	QUAD	A2	Replece Steam Humidification System	0	0	0	0	1,750	0
DC - Mall	QUAD	C2	Replece Ripley Kiosk Elevator	0	0	0	0	0	300
DC - Mall	QUAD	A2	Replece Steem Humidificetion System	0	0	0	950	0	0
DC - Lafeyette Park	RG	A2	Emergency Circuit Repeir	250	0	0	0	0	0
Tuscon, AZ	SAO	C2	Replace HVAC	0	200	0	0	0	300
Hewaii	SAO	B2	Instell SMA Emergency Generetor	0	0	200	0	0	0
Tuscon, AZ	SAO	B2	Improve Weter System	350	0	0	375	0	0
Tuscon, AZ	SAO	B2	Instell Base Camp Microwave Link	0	0	150	0	0	0
Tuscon, AZ	SAO	B2	Instell MMT Rotary Uninterruptible Power	0	0	150	0	0	0
Tuscon, AZ	SAO	B2	Replece FM Repeeter	0	0	60	0	0	0
Edgewater, MD	SERC	B3	Install Utility Connection to Weterfront	0	550	0	0	0	0
Edgewater, MD	SERC	B2	Repeir Senitery Sewer	500	0	0	500	0	0
Edgeweter, MD	SERC	B2	Replece Fens & Plumbing, Building 100	0	0	150	0	0	0
Edgewater, MD	SERC	C2	Upgrede HVAC System	0	0	0	100	0	100
Suitland, MD	SHF	B2	Improve Environmentel Conditions, Bldgs... 15/16	0	0	300	0	0	0
Suitland, MD	SHF	B2	Repair HVAC, Buildings 22 & 23	0	0	0	600	0	0
Penema	STRI	B	Elevetor/HVAC/Fire Sprinkler Maintenence	20	100	100	100	100	100
Penama	STRI	B3	Repeir HVAC & Electricel Systems at Headquarters	100	0	0	375	0	0
Panama	STRI	B1	Repeir HVAC & Plumbing et Naos/BCI	0	0	250	0	0	0
Paname	STRI	B2	Improve Communicetions/OIT Systems	0	0	225	0	0	0
Peneme	STRI	B3	Automete Lighting System/ Instell Surge Protection	0	0	0	350	0	0
Pename	STRI	B2	Replece/Relocete Tupper Cooling Towers	0	0	100	0	0	100
	SUBTOTAL: UTILITY SYSTEM REPAIR			3,050	4,370	5,085	3,950	6,050	7,000

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
All Facilities	MULTI	B	Facility Planning & Design	1,800	1,840	1,000	5,250	3,700	2,000
DC - Mall	NMAH	B3	Design Public Space Renewal	0	2,000	0	0	0	0
DC - Mall	NMNH	A3	Design Chemical Control Facility	200	0	0	0	0	0
DC - Lafayette Park	RG	B2	Building Assessment	500	0	0	0	0	0
	SUBTOTAL: ADVANCE PLANNING and DESIGN			**2,500**	**3,840**	**1,000**	**5,250**	**3,700**	**2,000**
All Facilities	**MULTI**	**B**	**Program Oriented Alterations & Modifications**	**2,810**	**3,000**	**3,000**	**3,000**	**3,000**	**3,000**
DC - Rock Creek	NZP	A2	Repair/Improve HVAC Systems at Rock Creek	235	760	760	760	760	760
DC - Rock Creek	NZP	B1	Repair Roads and Bridges Throughout Site	0	700	0	500	600	700
DC - Rock Creek	NZP	B1	Misc. General Repair & Painting	235	500	500	500	500	500
DC - Rock Creek	NZP	B1	Repair Graphics, Exhibits & Glass Throughout Site	310	310	310	310	310	310
DC - Rock Creek	NZP	B1	Tree, Turf & Soil Improvements	200	200	200	200	200	200
DC - Rock Creek	NZP	A3	Improve Animal Exhibits	100	100	100	100	100	100
DC - Rock Creek	NZP	B1	Road Repairs & Erosion Control	60	60	60	60	60	60
Front Royal, VA	NZPFR	A1	Renovate Buildings and Barns	0	400	400	400	450	500
Front Royal, VA	NZPFR	A2	General Repair and Painting	310	350	350	350	350	350
Front Royal, VA	NZPFR	A2	Repair/Improve HVAC Systems at Front Royal	235	150	150	150	150	150
Front Royal, VA	NZPFR	A2	Minor Maintenance Throughout Site	125	125	125	125	125	125
Front Royal, VA	NZPFR	B1	Improve Roads and Site	110	110	110	110	110	110
DC - Rock Creek	NZP	B1	Renovate Upper Bear Habitat	0	1,500	0	0	0	0
DC - Rock Creek	NZP	A1	Waterproof Lion/Tiger Moat & Planter	0	900	0	0	0	0
DC - Rock Creek	NZP	A1	Design Reptile House Roof & Skylight Replacement	0	400	0	0	0	0
DC - Rock Creek	NZP	A1	Roof Repair	50	50	50	50	50	50
DC - Rock Creek	NZP	B1	Waterproof Monkey Island	0	0	0	0	1,500	0
DC - Rock Creek	NZP	B1	Design Road & Bridge Repair	500	0	0	0	0	0
DC - Rock Creek	NZP	B1	Design Upper Bear Habitat Renovation	500	0	0	0	0	0
DC - Rock Creek	NZP	B1	Design Monkey Island Waterproofing	0	0	0	500	0	0
Front Royal, VA	NZPFR	A1	Replace/Repair Roofs, Windows, & Doors	300	435	435	450	450	450
DC - Rock Creek	NZP	B1	Repair Pools Zoo Wide	100	100	100	100	100	100
DC - Rock Creek	NZP	B1	Irrigation & Sewer System Maintenance	50	55	55	55	55	55
DC - Rock Creek	NZP	B1	Telecom. & Electrical Repair & Improvements	45	45	45	45	45	45
DC - Rock Creek	NZP	A2	Amazonia Filter Maintenance	10	10	15	15	15	15
DC - Rock Creek	NZP	B1	Relamping	10	10	10	10	10	10
Front Royal, VA	NZPFR	B3	Improve Site Utilities	0	400	500	500	500	500
Front Royal, VA	NZPFR	B2	Construct Main Water Reservoir	0	250	0	0	0	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Category

$(000)s

Campus	*Location*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
Front Royal, VA	NZPFR	B2	Electrical Improvements & Testing	40	30	40	30	40	30
Front Royal, VA	NZPFR	B2	Communications	15	15	15	15	15	15
Front Royal, VA	NZPFR	A2	Boilers - Annual Replacement	10	10	10	10	10	10
Front Royal, VA	NZPFR	B2	Sewer/Storm Drain Repair	10	10	10	10	10	10
Front Royal, VA	NZPFR	B2	Main Water Reservoir	50	0	0	0	0	0
DC - Rock Creek	NZP	B3	Update Zoo Master Plan, Rock Creek	0	1,000	0	0	0	0
Front Royal, VA	NZPFR	B3	Update Master Plan, Front Royal	0	0	1,000	0	0	0
	SUBTOTAL: NZP INFRASTRUCTURE REPAIR			**3,610**	**8,985**	**5,350**	**5,355**	**6,515**	**5,155**
SUBTOTAL: INFRASTRUCTURE REPAIR AND MODIFICATION				**22,420**	**40,630**	**36,000**	**41,315**	**44,415**	**41,780**
MAINTENANCE									
All Facilities	MULTI	C	Conversion to Reliability Centered Maintenance Process	1,900	2,100	0	0	0	0
All Facilities	MULTI		Move from S&E: Maintenance Labor, Supplies, Materials	0	0	21,000	21,000	21,000	21,000
All Facilities	MULTI		Additional Maintenance Staff and Contracts	0	0	15,000	15,000	15,000	15,000
SUBTOTAL: MAINTENANCE				**1,900**	**2,100**	**36,000**	**36,000**	**36,000**	**36,000**
TOTAL: REPAIR, RESTORATION AND ALTERATION PROGRAM				**67,900**	**129,600**	**180,000**	**243,000**	**281,500**	**275,000**

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	*Category*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
			ARTS AND INDUSTRIES BUILDING						
DC - Mall	Major Renewal	B2	Design Mejor Reatoretion	6,000	2,000	0	0	0	0
DC - Mall	Mejor Renewal	B2	Restore Arts & Industries Building	0	0	8,000	40,000	60,000	47,000
			AIB SUBTOTAL	6,000	2,000	8,000	40,000	60,000	47,000
			ANACOSTIA MUSEUM						
DC - Anacostia	Generel Repair	C1	Repair Paving & Sidewalk	0	160	0	0	0	0
			AM SUBTOTAL	0	160	0	0	0	0
			COOPER HEWITT MUSEUM						
New York, NY	General Repair	B	General Repairs	60	60	60	60	60	60
New York, NY	General Repair	B3	Reatore Mension Interior, Beaement/Auditorium Accesa	375	325	350	325	0	0
New York, NY	Facade, Roof end Terrace	A1	Repair Fox House Exterior	0	2,000	0	0	0	0
New York, NY	Fecade, Roof end Terrece	B3	Repair Mansion Fecade & Fence	0	0	0	1,300	0	0
New York, NY	Facede, Roof end Terrace	B1	Restore Mansion Terrace	0	0	225	0	0	0
			CHM SUBTOTAL	435	2,385	635	1,685	60	60
			FREER GALLERY OF ART						
DC - Mall	Access	B3	Instell Courtyerd Lift	0	0	0	0	70	0
DC - Mall	Facade, Roof and Terrece	C1	Repair Entry Sidewelk	0	0	0	0	500	0
DC - Mell	Facade, Roof and Terrece	C1	Repair Courtyerd Stone	0	0	0	0	250	0
DC - Mall	Fecade, Roof and Terrace	C3	Correct Courtyard Window & Door Condensation	0	0	0	0	150	0
DC - Mall	Major Renewel	B1	Replace/Reatore Roof Exterior	0	0	500	0	0	0
DC - Mell	Major Renewel	B1	Replece/Reatore Roof Exterior	0	0	0	3,000	0	0
DC - Mall	Utility Repelr	B2	Repeir Utility System	0	0	0	0	500	0
DC - Mall	Utility Repeir	C1	Replace Gallery Lighting Systems	0	0	0	0	0	350
			FGA SUBTOTAL	0	0	500	3,000	1,470	350
			HIRSHHORN MUSEUM AND SCULPTURE GARDEN						
DC - Mall	Access	B3	Renovete Front Entrence	0	0	0	850	0	0
DC - Mall	Fecade, Roof and Terrece	D	Replace Windowa	0	0	0	0	0	0
DC - Mall	Major Renewal	A2	Restore & Weterproof Pleza & Foundation Wells	0	0	0	1,000	0	0
DC - Mall	Major Ranewel	A2	Restore & Waterproof Plaza & Foundation Wells	0	0	0	0	10,000	0
DC - Mall	Utility Repair	B	Improve Interior Lighting	0	1,000	0	0	0	0
DC - Mall	Utility Rapair	A2	Repair HVAC System	1,250	0	0	0	0	0
DC - Mall	Utility Repair	D	Improve Mall Master Raceway	0	0	0	0	0	0
			HMSG SUBTOTAL	1,250	1,000	0	1,850	10,000	0

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	Category	Priority	Project	FY02	FY03	FY04	FY05	FY06	FY07
			MUSEUM SUPPORT CENTER						
Suitland, MD	Access	B2	Install Automatic Restroom Door Openers	0	0	50	0	0	0
Suitland, MD	Facade, Roof and Terrace	A1	Clean & Recaulk Facade	0	0	400	0	0	0
Suitland, MD	General Repair	C2	Paint Buildings Throughout Site	0	0	175	0	0	0
Suitland, MD	General Repair	C2	Repair & Stripe Service Road	0	0	0	0	510	0
Suitland, MD	Major Renewal	B2	Upgrade Mechanical & Electrical Systems	0	0	0	1,000	15,000	0
Suitland, MD	Security Repair and Improvem	B2	Install Pod Doors and Hardware	0	0	0	50	0	0
Suitland, MD	Utility Repair	C1	Install Emergency Generator	0	0	0	0	0	250
Suitland, MD	Utility Repair	B2	Replace Isolation Valves /Humidifier	0	0	0	100	0	0
			MSC SUBTOTAL	0	0	625	1,150	15,510	250
			MULTIPLE SITE PROJECTS						
All Facilities	Advance Planning and Design	B	Facility Planning & Design	1,800	1,840	1,000	5,250	3,700	2,000
All Facilities	General Repair	B	Craft Services and Minor General Repair	2,375	5,100	4,180	5,030	4,850	5,365
All Facilities	General Repair	C	Exterior Signage	0	750	600	1,000	1,000	1,000
All Facilities	General Repair	B	Emergency and General Repair	4,085	5,230	5,740	5,350	6,390	5,870
All Facilities	General Repair	A	Personnel, Reprographics and Library	850	3,460	5,500	8,000	8,000	8,000
All Facilities	Safety	B3	Improve Escalator/Elevator Safety	650	0	500	0	345	500
All Facilities	Safety	B2	Abate Lead, all locations	300	300	300	300	400	500
All Facilities	Safety	B2	Abate Asbestos, all locations	300	300	250	250	300	300
All Facilities	Safety	B2	Monitor Asbestos, all locations	300	300	250	250	300	300
All Facilities	Security Repair and Improvem	A	Provide Guard Services, All Locations	500	600	600	700	700	700
All Facilities	Utility Repair	B3	Misc. Utility Repair	500	520	500	500	500	500
All Facilities	Alteration and Modification	B	Program Oriented Alterations & Modifications	2,810	3,000	3,000	3,000	3,000	3,000
All Facilities	Maintenance	C1	Conversion to Reliability Centered Maintenance Process	1,900	2,100	0	0	0	0
All Facilities	Maintenance	C1	Move from S&E: Maintenance Labor, Supplies, Materials	0	0	21,000	21,000	21,000	21,000
All Facilities	Maintenance	C1	Additional Maintenance Staff and Contracts	0	0	15,000	15,000	15,000	15,000
			MSP SUBTOTAL	16,380	23,500	58,420	65,630	65,485	64,025
			NATIONAL AIR AND SPACE MUSEUM						
DC - Mall	Facade, Roof and Terrace	A1	Waterproof Terrace	0	0	0	0	0	1,500
DC - Mall	FIR	B2	Upgrade Restaurant Alarms/Repair Fire Alarm	0	250	0	0	0	0
DC - Mall	General Repair	A1	Repair Delta Solar Reflection Pool	0	0	0	0	0	200
DC - Mall	Major Renewal	B2	Replace Mechanical System, Basement & 3rd Floor	0	0	4,000	0	41,000	0
DC - Mall	Safety	B3	Upgrade Accessible Egress	0	0	0	0	0	250
DC - Mall	Security Repair and Improvem	C2	Modernize Security System	900	0	0	0	0	0
DC - Mall	Utility Repair	C1	Replace Dimmers/Ceiling in Theater	0	0	0	0	200	0
			NASM SUBTOTAL	900	250	4,000	0	41,200	1,950

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	Category	Priority	Project	FY02	FY03	FY04	FY05	FY06	FY07
			NATIONAL MUSEUM OF AMERICAN HISTORY						
DC - Mall	Advance Planning and Design	B3	Design Public Space Renewal	0	2,000	0	0	0	0
DC - Mall	FIR	B2	Repair Sprinkler Heads	10	10	10	10	10	10
DC - Mall	General Repair	C1	Replace Trash Compactor & Repair Dock Paving	0	0	800	0	0	0
DC - Mall	Major Renewal	B3	Renew Public Space	0	0	12,000	18,000	0	0
DC - Mall	Major Renewal	A2	Replace Chillers	0	0	3,500	0	0	0
DC - Mall	Safety	A1	Repair Egress Deficiencies	0	425	0	0	0	0
DC - Mall	Safety	B3	Repair Restrooms & Improve Restroom Access	0	0	3,000	0	0	0
DC - Mall	Safety	D	Restore Fountain & Paving	0	0	0	0	3,000	0
DC - Mall	Safety	A1	Install Exterior Doors & Handrails	1,000	0	0	0	0	0
DC - Mall	Utility Repair	B2	Repair Mechanical & Electrical Systems	0	2,000	0	0	0	0
DC - Mall	Utility Repair	B3	Upgrade Fire Protection	0	0	2,500	0	0	0
DC - Mall	Utility Repair	C3	Convert Hot Water Re-Heat System	0	0	0	0	0	5,000
DC - Mall	Utility Repair	C1	Replace Cooling Tower	0	0	0	0	2,000	0
DC - Mall	Utility Repair	C1	Replace Emergency Generator	0	0	0	0	1,000	0
			NMAH SUBTOTAL	1,010	4,435	21,810	18,010	6,010	5,010
			NATIONAL MUSEUMOF THE AMERICAN INDIAN						
New York, NY	General Repair	B	Research Branch General Repairs	60	60	60	60	60	60
New York, NY	General Repair	B	GGHC Gen. Repair	40	50	50	60	80	100
New York, NY	Security Repair and Improvem	B3	Modify Gallery Lighting	20	20	60	0	0	0
Suitland, MD	General Repair	C1	Control Erosion at CRC	150	0	0	0	0	0
Suitland, MD	General Repair	B	CRC General Repairs	150	0	0	0	0	0
Suitland, MD	Utility Repair	B2	Install backup Electric Service	80	0	400	0	0	0
			NMAI SUBTOTAL	500	130	570	120	140	160
			NATIONAL MUSEUM OF NATURAL HISTORY						
DC - Mall	Major Renewal	A2	Design Major Restoration: FY03 HVAC Phases IId & IIe	2,000	2,000	2,000	3,000	3,000	3,000
DC - Mall	Advance Planning and Design	A3	Design Chemical Control Facility	200	0	0	0	0	0
DC - Mall	Major Renewal	A2	Major Restoration: FY03 Restore Halls B thru 12	10,000	16,000	16,000	15,000	15,000	18,000
DC - Mall	Major Renewal	B3	Construct Mall Accessible Entrance	0	4,000	0	0	0	0
DC - Mall	Major Renewal	A2	Renovate Mezzeninas	0	0	0	0	0	25,000
DC - Mall	Access	B3	Install New Interior Handrails	0	0	600	0	0	0
DC - Mall	Access	B2	Replace Wast Loading Dock Lift	0	0	200	0	0	0
DC - Mall	Safety	B3	Upgrade Exhibit Shop Exhaust Systems	500	0	0	0	0	0
DC - Mall	Safety	A3	Install Chemical Control Facility	0	0	0	0	1,000	0
			NMNH SUBTOTAL	12,700	22,000	18,800	18,000	19,000	46,000

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	Category	Priority	Project	FY02	FY03	FY04	FY05	FY06	FY07
			NATIONAL ZOOLOGICAL PARK						
DC - Rock Creek	Access	A3	Renovate Auditorium & Seating for ADA	0	0	0	0	1,250	0
DC - Rock Creek	Access	A3	Improve Accessibility	100	100	100	100	100	100
DC - Rock Creek	Advance Planning and Design	B3	Update Zoo Master Plan, Rock Creek	0	1,000	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	A1	Design Reptile House Roof & Skylight Replacement	0	400	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	B1	Design Road & Bridge Repair	500	0	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	B1	Design Upper Baer Habitat Renovetion	500	0	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	B1	Design Monkey Island Weterproofing	0	0	0	500	0	0
DC - Rock Creek	Facade, Roof and Terrace	A1	Repair Roofs	50	50	50	50	50	50
DC - Rock Creek	Facade, Roof and Terrace	B1	Renovate Upper Baar Habitet	0	1,500	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	A1	Waterproof Lion/Tigar Moet & Planter	0	900	0	0	0	0
DC - Rock Creek	Facade, Roof and Terrace	B1	Waterproof Monkey Island	0	0	0	0	1,500	0
DC - Rock Creek	Fire	A3	Instell Fire Alarms & Sprinklers	100	100	90	90	90	90
DC - Rock Creek	Fire	A3	Improve Fire Protection Systems	350	350	350	350	350	350
DC - Rock Creek	General Repair	A2	Repair/Improve HVAC Systems at Rock Creek	235	760	760	760	760	760
DC - Rock Creek	General Repair	B1	Misc. General Repair & Painting	235	500	500	500	500	500
DC - Rock Creek	General Repair	A3	Improve Animal Exhibits	100	100	100	100	100	100
DC - Rock Creek	General Repair	B1	Road Repairs & Erosion Control	60	60	60	60	60	60
DC - Rock Creek	General Repair	B1	Repair Roads and Bridges Throughout Site	0	700	0	500	600	700
DC - Rock Creek	General Repair	B1	Repair Graphics, Exhibits & Glass Throughout Site	310	310	310	310	310	310
DC - Rock Creek	General Repair	B1	Tree, Turf & Soil Improvements	200	200	200	200	200	200
DC - Rock Creek	Major Renewal	B1	Design Elephant House Renovation	500	1,500	2,000	0	0	0
DC - Rock Creek	Major Renewal	A2	Design Renovation of Small Mammal Facility	200	1,000	0	0	0	0
DC - Rock Creek	Major Renewal	B1	Design Giraffe Relocation Area	0	1,000	0	0	0	0
DC - Rock Creek	Major Renewal	B1	Design Seal/Sea Lion & Lower Bear Areas	0	800	1,000	0	0	0
DC - Rock Creek	Major Renewal	A1	Design Deer & Tapir Area	1,400	0	0	0	0	0
DC - Rock Creek	Major Renewal	A1	Design Reptile & Small Mammal Roofs	1,200	0	0	0	0	0
DC - Rock Creek	Major Renewal	A1	Design Holt House Restoration	0	0	0	300	0	0
DC - Rock Creek	Major Renewal	A1	Renovate Deer & Tapir Area	0	7,000	0	0	0	0
DC - Rock Creek	Major Renewal	B1	Complete Mane Building Renovation	200	0	0	0	0	0
DC - Rock Creek	Major Renewal	B1	Improve Utility Infrastructure	1,000	0	2,000	1,000	2,000	2,000
DC - Rock Creek	Major Renewal	B1	Construct Giraffe Relocation Area	0	0	5,000	0	0	0
DC - Rock Creek	Major Renewal	A1	Replace Reptile & Small Mammal Roofs	0	0	2,000	0	0	0
DC - Rock Creek	Major Renewal	B1	Renovate Elephant House	0	0	0	20,000	38,500	0
DC - Rock Creek	Major Renewal	B1	Renovate Seal/Sea Lion & Lower Bear Areas	0	0	0	0	0	30,000
DC - Rock Creek	Major Renewal	A1	Restore Holt House	0	0	0	0	0	3,000
DC - Rock Creek	Safety	A2	Improve Animal Containment Throughout Site	340	340	340	340	340	340
DC - Rock Creek	Safety	B2	Amazonia: Replace Railings	0	200	200	0	0	0
DC - Rock Creek	Safety	B3	Abate Asbestos	50	50	50	50	50	50
DC - Rock Creek	Security Repair and Improvem	B3	Improve Safety & Security System	105	105	105	105	105	105
DC - Rock Creek	Utility Repair	B1	Repair Pools Zoo Wide	100	100	100	100	100	100
DC - Rock Creek	Utility Repair	B1	Irrigation & Sewer System Maintenance	50	55	55	55	55	55
DC - Rock Creek	Utility Repair	B1	Telecom. & Electrical Repair & Improvements	45	45	45	45	45	45

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	*Category*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
DC - Rock Creak	Utility Repair	A2	Amazonia Filter Maintenance	10	10	15	15	15	15
DC - Rock Creak	Utility Repair	B1	Relamping	10	10	10	10	10	10
Front Royal, VA	Access	A3	Accessibility/Dorm & Conference Ctr. Sprinklers	10	300	150	150	150	150
Front Royal, VA	Advance Planning and Design	B3	Update Master Plan, Front Royal	0	0	1,000	0	0	0
Front Royal, VA	Facade, Roof and Terrace	A1	Replace/Repair Roofs, Windows, & Doors	300	435	435	450	450	450
Front Royal, VA	FIR	A3	Install Fire Alarms & Sprinklers	100	100	100	100	100	100
Front Royal, VA	FIR	B3	Install/Improve Fire Protection Systems	250	500	500	500	500	500
Front Royal, VA	General Repair	A2	Repair/Improve HVAC Systems at Front Royal	235	150	150	150	150	150
Front Royal, VA	General Repair	A2	Minor Maintenance Throughout Site	125	125	125	125	125	125
Front Royal, VA	General Repair	B1	Improve Roads and Site	110	110	110	110	110	110
Front Royal, VA	General Repair	A1	Renovate Buildings and Barns	0	400	400	400	450	500
Front Royal, VA	General Repair	A2	General Repair and Painting	310	350	350	350	350	350
Front Royal, VA	Major Renewal	A1	Construct Consolidated Maintenance Facility	0	0	0	0	0	4,700
Front Royal, VA	Safety	B3	Abate Asbestos & Lead	25	50	50	50	50	50
Front Royal, VA	Safety	A2	Containment Repair & Improvements	20	20	20	20	25	25
Front Royal, VA	Utility Repair	B2	Main Water Reservoir	50	0	0	0	0	0
Front Royal, VA	Utility Repair	B2	Electrical Improvements & Testing	40	30	40	30	40	30
Front Royal, VA	Utility Repair	B2	Communicetions	15	15	15	15	15	15
Front Royal, VA	Utility Repair	A2	Boilers - Annual Replacement	10	10	10	10	10	10
Front Royal, VA	Utility Repair	B2	Sewer/Storm Drain Repair	10	10	10	10	10	10
Front Royal, VA	Utility Repair	B3	Improve Site Utilities	0	400	500	500	500	500
Front Royal, VA	Utility Repair	B2	Main Water Reservoir	0	250	0	0	0	0
			NZP SUBTOTAL	9,560	22,500	19,405	28,510	50,125	46,715
			PATENT OFFICE BUILDING						
DC - Gallary Plac	Major Renewal	A1	Restore Patent Office Building	15,000	45,000	38,000	34,000	0	0
			POB SUBTOTAL	15,000	45,000	38,000	34,000	0	0
			QUADRANGLE: NATIONAL MUSEUM OF AFRICAN ART, SACKLER GALLERY, RIPLEY CENTER						
DC - Mall	Facade, Roof and Terrace	B3	Modify Loading Dock	350	0	0	0	0	0
DC - Mall	Facade, Roof and Terrace	C1	Repair Haupt/Sacklar Fountain	0	0	0	0	300	0
DC - Mall	FIR	A2	Replace Fire Protection System	0	1,500	0	0	0	0
DC - Mall	General Repair	C1	Repair Interior Stone	0	0	0	0	0	250
DC - Mall	Major Renewal	B2	Replace Mechanical System & Roof	0	0	0	4,000	0	0
DC - Mall	Major Renewal	B2	Replace Mechanical System & Roof	0	0	0	0	0	40,000
DC - Mall	Security Repair and Improvem	D	Improve NMAA Courtyard Access	0	0	0	0	100	0
DC - Mall	Utility Repair	A2	Replace Steam Humidification System	0	0	0	950	0	0
DC - Mall	Utility Repair	A2	Replace Steam Humidification System	0	0	0	0	1,750	0
DC - Mall	Utility Repair	C2	Replace Ripley Kiosk Elevator	0	0	0	0	0	300
			QUAD SUBTOTAL	350	1,500	0	4,950	2,150	40,550

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	Category	Priority	Project	FY02	FY03	FY04	FY05	FY06	FY07
			RENWICK GALLERY						
DC - Lafeyette Pa	Advance Planning and Design	B2	Building Assessment	500	0	0	0	0	0
DC - Lafayette Pa	Major Renewal	B2	Design Major Restoration/Renewal	0	0	2,000	0	0	0
DC - Lafeyette Pa	Major Renewal	B2	Major Restoration/Renewal	0	0	0	20,000	0	0
DC - Lafeyette Pa	Utility Repair	A2	Emergency Circuit Repair	250	0	0	0	0	0
			RG SUBTOTAL	750	0	2,000	20,000	0	0
			SMITHSONIAN ASTROPHYSICAL OBSERVATORY						
Hawaii	Safety	B1	Oxygen Enrichment, Summit Facility	50	0	0	100	0	0
Hawaii	Utility Repair	B2	Install SMA Emergency Generator	0	0	200	0	0	0
Tuscon, AZ	Facade, Roof and Terrace	B1	Repair Roof	0	0	0	0	200	0
Tuscon, AZ	Facade, Roof and Terrace	B1	Paint FLWO Base Camp Warehouse/Security Improvemen	0	100	0	0	0	100
Tuscon, AZ	Facade, Roof and Terrace	B1	Replace Commone Building Deck	60	0	0	0	0	0
Tuscon, AZ	Facade, Roof and Terrace	B1	Repair Building Exteriors	0	0	170	0	0	0
Tuscon, AZ	General Repair	B1	Repair/Improve Whipple Road	0	500	1,000	0	0	0
Tuscon, AZ	General Repair	B	General Repairs, All Locations	150	200	200	250	250	250
Tuscon, AZ	Safety	B1	Abate Asbestos Throughout Site	0	0	0	100	0	0
Tuscon, AZ	Utility Repair	C2	Replace HVAC	0	200	0	0	0	300
Tuscon, AZ	Utility Repair	B2	Improve Water System	350	0	0	375	0	0
Tuscon, AZ	Utility Repair	B2	Install Base Camp Microwave Link	0	0	150	0	0	0
Tuscon, AZ	Utility Repair	B2	Install MMT Rotary Uninterruptible Power	0	0	150	0	0	0
Tuscon, AZ	Utility Repair	B2	Replace FM Repeater	0	0	60	0	0	0
			SAO SUBTOTAL	610	1,000	1,930	825	450	650
			SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER						
Edgewater, MD	Facade, Roof and Terrace	C1	Small Bldg. Roof Repairs	0	0	50	0	0	0
Edgewater, MD	General Repair	B2	Repair Corn Island Barn	200	200	0	500	0	0
Edgewater, MD	General Repair	C2	Install Muddy Creek Bridge	0	0	0	0	1,000	0
Edgewater, MD	General Repair	B1	Repair & Pave Roads Throughout Site	125	0	0	500	0	0
Edgewater, MD	General Repair	B3	Improve Signage, Security and Accessibility	0	275	125	200	B30	0
Edgewater, MD	General Repair	C1	Paint & Repair Water Tower	0	0	0	80	0	0
Edgewater, MD	Safety	B3	Improve Entrance Road	100	0	350	0	500	0
Edgewater, MD	Safety	B2	Construct Chemical Storage Building Addition	0	0	0	150	0	0
Edgewater, MD	Security Repair and Improvem	B3	Install Perimeter Fire Lane	0	0	0	0	1,750	0
Edgewater, MD	Security Repair and Improvem	B2	Upgrade Security & Telecommunications Systems	0	0	300	0	0	0
Edgewater, MD	Security Repair and Improvem	B3	Improve Security Lighting	0	0	0	0	0	100
Edgewater, MD	Utility Repair	B3	Install Utility Connection to Waterfront	0	550	0	0	0	0
Edgewater, MD	Utility Repair	B2	Repair Sanitary Sewer	500	0	0	500	0	0
Edgewater, MD	Utility Repair	B2	Replace Fans & Plumbing, Building 100	0	0	150	0	0	0
Edgewater, MD	Utility Repair	C2	Upgrade HVAC System	0	0	0	100	0	100
			SERC SUBTOTAL	925	1,025	975	2,030	4,080	200

SMITHSONIAN INSTITUTION FEDERAL CAPITAL PROGRAM

Program by Building

$(000)s

Campus	*Category*	*Priority*	*Project*	*FY02*	*FY03*	*FY04*	*FY05*	*FY06*	*FY07*
			SILVER HILL FACILITY						
Suitland, MD	Safety	B3	Abate Asbestos Bldgs. In 15, 16, &18	0	500	500	500	0	0
Suitland, MD	Safety	B3	Abete Asbestos in Building 16 Collection	0	0	750	0	0	0
Suitland, MD	General Repair	B3	Repeir Roed Between Bldgs. 3 & 6	100	300	700	0	0	0
Suitland, MD	Facade, Roof and Terrece	B1	Repeir Building 10 Roof	0	500	0	0	0	0
Suitland, MD	Utility Repair	B2	Improve Environmental Conditions, Bldgs... 15/16	0	0	300	0	0	0
Suitland, MD	Utility Repair	B2	Repeir HVAC, Buildings 22 & 23	0	0	0	600	0	0
Suitland, MD	Safety	B3	Monitor Asbestos Condition Throughout Site	0	150	150	150	0	0
Suitland, MD	Safety	C1	Install Emergency Intercom	0	0	0	120	0	0
			SHF SUBTOTAL	100	1,450	2,400	1,370	0	0
			SMITHSONIAN INSTITUTION BUILDING (CASTLE)						
DC - Mall	Major Renewel	B2	Design Restoretion Project	0	0	0	0	5,000	0
DC - Mell	Major Renewel	B2	Restore Smithsonian Castle	0	0	0	0	0	20,000
			SIB SUBTOTAL	0	0	0	0	5,000	20,000
			SMITHSONIAN TROPICAL RESEARCH INSTITUTE						
Paname	Fecede, Roof end Terrece	B3	Repeir Tupper Fecede & Roof	0	275	0	540	0	0
Panama	Facade, Roof end Terrece	A1	Repeir Soces Roof end Structure	400	0	0	0	0	0
Panama	Facede, Roof end Terrece	B2	Repeir Exteriors et BCI	0	0	445	0	0	0
Panama	Facede, Roof end Terrece	B3	Repelr Neos Fecede & Roof	60	180	0	0	0	0
Panama	Fecede, Roof end Terrece	B2	Tivoli Animel Ceges Roof & BCI Roof	0	150	0	0	0	0
Paname	FIR	B2	Instell BCI Fire Alerm System	0	0	75	0	0	0
Panema	General Repeir	B2	Desiqn Tivoli Interior/Exterior	0	0	0	0	300	0
Panama	Genaral Rapeir	B2	Repeir Tivoli Interior/Exterior	0	0	0	0	0	1,500
Panama	Generel Repeir	A1	Repair Tivoli Structure	280	0	0	0	0	0
Panama	Genaral Repair	B1	Repeir Gigente/Tivoli/Tupper/Neos & Gemboe/BCI/Boat Ac	50	330	275	0	100	100
Panama	General Repair	B	Generel Repairs/Peinting of Structures/Dock Repair	225	230	255	255	280	280
Panama	General Rapair	B	Install Sheet Piling at BCI	170	0	0	0	0	0
Panama	General Repair	B	Procurement Storage Spece	40	0	0	0	0	0
Panama	General Repair	C2	Renovete Heskins Bldg. at BCI	0	0	125	0	0	0
Penama	General Rapair	A2	Improve BCI Fecility	0	0	0	150	0	0
Panama	General Repair	B2	Repair Librery Interior/Exterior	0	0	0	100	0	0
Panama	Genarel Rapair	B3	Repair Naos Fecilities/Naos Dock	85	0	80	0	40	0
Panema	Utility Repair	B	Elevator/HVAC/Fire Sprinkler Meintenence	20	100	100	100	100	100
Panama	Utility Repair	B3	Repeir HVAC & Electrical Systems et Heedquerters	100	0	0	375	0	0
Panama	Utility Repair	B1	Repeir HVAC & Plumbing et Naos/BCI	0	0	250	0	0	0
Panama	Utility Repair	B2	Improve Communications/OIT Systems	0	0	225	0	0	0
Panama	Utility Repair	B3	Lighting System Autometion/ Elec. Surge Prot.	0	0	0	350	0	0
Panama	Utility Repair	B2	Replace/Relocate Tupper Cooling Towers	0	0	100	0	0	100
			STRI SUBTOTAL	1,430	1,265	1,930	1,870	820	2,080
TOTAL; REPAIR, RESTORATION AND ALTERATION PROGRAM				67,900	129,600	180,000	243,000	281,500	275,000

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	Old Patent Office Building
Project Title	Major Capital Renewal Project
Project Description & Purpose	Renovation of Architectural, Electrical, Mechanical, Plumbing,
	Accessibility and Life Safety Systems
Projected Gross Square Footage	354,000 s.f. including courtyard basement
Authorization Date (or Projected)	approx 5/93
Design Start/ Completion Dates	04/1996 to 04/2002
Construction Start/Completion Dates	03/2001 to 2005
Beneficial Occupancy Date	
Full Occupancy Date	

Responding Office	
Office Contact	
OPP Project Manager	
Date	September 6, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
FUNDING SOURCES														
Federal		33,600		15,000		45,000		38,000		34,000				
Non-Federal						3,000		47,000						
TOTAL CONSTRUCTION FUNDING SOURCES		33,600		15,000		48,000		85,000		34,000				

Construction Project Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
Programming and Planning (incl. W/ Design)														
Design		12,500		500		3,000								
Site Preparation 1/														
Construction		18,000		7,500		42,000		80,500		30,700				
Equipment and Furnishings														
Project & Construction Management		3,100				3,000		4,500		2,000				
Other 2/				7,000						1,300				
TOTAL CONSTRUCTION COSTS		33,600		15,000		48,000		85,000		34,000				

1/ Includes landscaping, if required.

2/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime. Also includes building commissioning.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE Patent Office Building Renovation	DATE 8/31/01	Page 2
RESPONDING OFFICE			

Operating Funding Sources $(000)s	PRIOR YR.		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005 +		FY 2006		FY 2007	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES																
Federal				14,564	214	15,464	245	28,027	247	23,171	247	18,871	247	18,871	247	18,871
Non-Federal																
TOTAL OPERATING FUNDING SOURCES					214	15,464	245	28,027	247	23,171	247	18,871	247	18,871	247	18,871

Operating Costs $(000)s	PRIOR YR.		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS																
Operating Costs for NMAA and NPG 1/			208	14,764	208	14,764	208	14,764	208	14,764	208	14,764	208	14,764	208	14,764
Staff																
Other Objects, ongoing																
Initial Automation(hard/software) 2/							4	3,400	4	440	4	440	4	440	4	440
Initial furnishings and equipment								750		500		200		200		200
Other objects, one-time																
Building management & maintenance							10	576	10	576	10	576	10	576	10	576
Move Costs 5/								3,000		3,000						
Special costs 3/				100	6	1,000	10	4,500	12	2,854	12	1,854	12	1,854	12	1,854
TOTAL PROGRAM COSTS			208	14,864	214	15,764	232	26,990	234	22,134	234	17,834	234	17,834	234	17,834
FACILITIES SERVICES																
Security							12	420	12	420	12	420	12	420	12	420
Physical Plant																
Design & Construction Support																
Operations & Maintenance																
Utilities & Communications																
Utilities & Postage				(300)		(300)		575		575		575		575		575
Communications																
TOTAL FACILITIES SVCS. COSTS				(300)		(300)	12	995	12	995	12	995	12	995	12	995
SI/CENTRAL OVERHEAD (SUPPORT)																
SI Libraries																
Environmental Management & Safety 4/																
Central Administration Costs VIARC							1	42	1	42	1	42	1	42	1	42
TOTAL SI COSTS							1	42	1	42	1	42	1	42	1	42
GRAND TOTAL OPERATING			208	14,564	214	15,464	245	28,027	247	23,171	247	18,871	247	18,871	247	18,871

1/ FY 2001 Congressional Request

2/ Include installation and communication requirements.OIT estimate for networking POB w/ Victor. $3 million in FY 2003.

3/ Includes exhibit installation costs

4/ Includes Health Services costs

5/ Does not include move from POB to Victor

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	National Museum of Natural History
Project Title	Master Plan - HVAC Renovation
Project Description & Purpose	Upgrade existing HVAC, fire protection, electrical, data, and water systems. Abate asbestos, encapsulate lead
Projected Gross Square Footage	1,300,000
Authorization Date (or Projected)	
Design Start/ Completion Dates	1985 - 2007
Construction Start/Completion Dates	1990 - 2012
Beneficial Occupancy Date	
Full Occupancy Date	

Responding Office	
Office Contact	
OPP Project Manager	
Date	September 7, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
FUNDING SOURCES														
Federal		76,000		12,000		22,000		18,000		18,000		18,000		131,000
Non-Federal														
TOTAL CONSTRUCTION FUNDING SOURCES		76,000		12,000		22,000		18,000		18,000		18,000		131,000

Construction Project Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
Programming and Planning		2,100												
Design		6,700		2,000		2,000		2,000		3,000		3,000		18,750
Site Preparation 1/														
Construction		62,325		9,350		18,700		14,900		14,000		14,000		103,500
Equipment and Furnishings														
Project & Construction Management		4,600		450		900		800		800		800		6,250
Other 2/		275		200		400		300		200		200		2,500
TOTAL CONSTRUCTION COSTS		76,000		12,000		22,000		18,000		18,000		18,000		131,000

1/ Includes landscaping, if required.

2/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE National Museum of Natural History-Master Plan-Major Renewal	DATE	Page 2
RESPONDING OFFICE	OFFICE CONTACT	TELEPHONE	

Operating Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES														
Federal														
Non-Federal														
TOTAL OPERATING FUNDING SOURCES														

Operating Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS														
Staff														
Other Objects, ongoing														
Initial Automation(hard/software) 1/														
Initial furnishings and equipment														
Other objects, one-time														
Building management & maintenance														
Move costs														
Special costs 2/														
TOTAL PROGRAM COSTS														
FACILITIES SERVICES														
Security														
Physical Plant														
Design & Construction Support														
Operations & Maintenance														
Utilities & Communications														
Utilities & Postage														
Communications														
TOTAL FACILITIES SVCS. COSTS														
SI/CENTRAL OVERHEAD (SUPPORT)														
SI Libraries														
Environmental Management & Safety 3/														
Central Administration Costs														
TOTAL SI COSTS							No additional operating requirements are anticipated.							
GRAND TOTAL OPERATING					0	0	0	0	0	0	0	0	0	0

1/ Include installation and communication requirements.

2/ Include exhibit installation costs here.

3/ Include Health Services costs here.

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	Arts & Industries Building
Project Title	Major Restoration/Renewal
Project Description & Purpose	Replace building systems to meet current standards, repair roof and architectural restoration.
Projected Gross Square Footage	185,000
Authorization Date (or Projected)	
Design Start/ Completion Dates	10/98 - 4/03
Construction Start/Completion Dates	2005-2008
Beneficial Occupancy Date	2008
Full Occupancy Date	2008

Responding Office	
Office Contact	
OPP Project Manager	
Date	September 6, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR. Dollars	FY 2002 Dollars	FY 2003 Dollars	FY 2004 Dollars	FY 2005 Dollars	FY 2006 Dollars	FY 2007 + Dollars
FUNDING SOURCES							
Federal	7,200	6,000	2,000	8,000	40,000	60,000	47,000
Non-Federal							
TOTAL CONSTRUCTION FUNDING SOURCES	7,200	6,000	2,000	8,000	40,000	60,000	47,000

Construction Project Costs $(000)s	PRIOR YR. Dollars	FY 2002 Dollars	FY 2003 Dollars	FY 2004 Dollars	FY 2005 Dollars	FY 2006 Dollars	FY 2007 + Dollars
Programming and Planning							
Design	7,200	6,000	2,000				
Site Preparation 1/							
Construction					33,000	53,000	39,000
Equipment and Furnishings							4,000
Project & Construction Management					4,000	4,000	3,000
Other 2/				8,000	3,000	3,000	1,000
TOTAL CONSTRUCTION COSTS	7,200	6,000	2,000	8,000	40,000	60,000	47,000

2/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime. Also includes building commissioning.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE Arts & Industries Major Renewal	DATE: 9/6/01 Page 2
RESPONDING OFFICE	OFFICE CONTACT	TELEPHONE

Operating Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES														
Federal														
Non-Federal														
TOTAL OPERATING FUNDING SOURCES														

Operating Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS														
Staff														
Other Objects, ongoing														
Initial Automation(hard/software) 1/														
Initial furnishings and equipment														
Other objects, one-time														
Building management & maintenance														
Move costs														
Special costs 2/														
TOTAL PROGRAM COSTS														
FACILITIES SERVICES														
Security														
Physical Plant														
Design & Construction Support														
Operations & Maintenance														
Utilities & Communications														
Utilities & Postage														
Communications														
TOTAL FACILITIES SVCS. COSTS														
SI/CENTRAL OVERHEAD (SUPPORT)														
SI Libraries														
Environmental Management & Safety 3/														
Central Administration Costs														
TOTAL SI COSTS														
GRAND TOTAL OPERATING							Operating requirements are in development.							

1/ Include installation and communication requirements.

2/ Include exhibit installation costs here.

3/ Include Health Services costs here.

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	Smithsonian National Zoological Park
Project Title	Renovate Deer & Tapir Area
Project Description & Purpose	Replace failed holding and exhibit areas, upgrade utilities
	improve accessibility
Projected Gross Square Footage	6.25 acres
Authorization Date (or Projected)	
Design Start/ Completion Dates	FY 2001- FY 2002
Construction Start/Completion Dates	FY 2003 - FY 2005
Beneficial Occupancy Date	FY 2004
Full Occupancy Date	FY 2005

Respondlng Office	SNZP Facilities Directorate
Office Contact	
SNZP Project Manager	
Date	September 6, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR.	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 +
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
FUNDING SOURCES							
Federal	350	1,400	7,000				
Non-Federal		1,000	8,000				
TOTAL CONSTRUCTION FUNDING SOURCES	350	2,400	15,000				

Construction Project Costs $(000)s	PRIOR YR.	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 +
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Programming and Planning	350						
Design		2,400					
Site Preparation 1/							
Construction			13,500				
Equipment and Furnishings							
Project & Construction Management			1,500				
Other 2/							
TOTAL CONSTRUCTION COSTS	350	2,400	15,000				

1/ Includes landscaping, if required.

2/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE Renovate Deer & Tapir Area	DATE: September 6, 2001 Page 2
RESPONDING OFFICE	OFFICE CONTACT	TELEPHONE

Operating Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES														
Federal														
Non-Federal														
TOTAL OPERATING FUNDING SOURCES		0		0		0		0		0		0		0

Operating Costs $(000)s	PRIOR YR		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS														
Staff														
Other Objects, ongoing														
Initial Automation(hard/software) 1/														
Initial furnishings and equipment														
Other objects, one-time														
Building management & maintenance														
Move costs														
Special costs 2/														
TOTAL PROGRAM COSTS		0		0	No change to operating costs anticipated									
FACILITIES SERVICES														
Security														
Physical Plant														
Design & Construction Support														
Operations & Maintenance														
Utilities & Communications														
Utilities & Postage														
Communications														
TOTAL FACILITIES SVCS. COSTS		0		0	No change to operating costs anticipated									
SI/CENTRAL OVERHEAD (SUPPORT)														
SI Libraries														
Environmental Management & Safety 3/														
Central Administration Costs														
TOTAL SI COSTS		0		0	No change to operating costs anticipated									
GRAND TOTAL OPERATING		0		0		0		0		0		0		

1/ Include installation and communication requirements.

2/ Include exhibit installation costs here.

3/ Include Health Services costs here.

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	Fred L. Whipple Observatory
Project Title	VERITAS Site Development
Project Description & Purpose	Construct roads, foundations, utilities & control buildings for gamma-ray observatory
Projected Gross Square Footage	12,000
Authorization Date (or Projected)	10/1/02
Design Start/ Completion Dates	10/30/02 to 4/30/03
Construction Start/Completion Dates	5/30/03 to 6/30/04
Beneficial Occupancy Date	5/30/04
Full Occupancy Date	6/30/04

Responding Office	SAO
Date	September 6, 2001
Purpose	FY 2003 OMB Book

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
FUNDING SOURCES														
Federal						4,500								
Non-Federal														
TOTAL CONSTRUCTION FUNDING SOURCES						4,500								

Construction Project Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
Programming and Planning														
Design						500								
Site Preparation 1/						1,500								
Construction						2,400								
Equipment and Furnishings						100								
Project & Construction Management														
Other 2/														
TOTAL CONSTRUCTION COSTS						4,500								

1/ Includes landscaping, if required.

2/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE	VERITAS Site Development, F. L. Whipple Observatory	DATE 9/6/01	Page 2
RESPONDING OFFICE				

Operating Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES														
Federal							1	65	1	80	1	80	1	80
Non-Federal														
TOTAL OPERATING FUNDING SOURCES														

Operating Costs $(000)s	PRIOR YR.		FY 2000		FY 2001		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS														
Staff: one WG-7							1	45	1	45	1	45	1	45
Other Objects, ongoing														
Initial Automation(hard/software) 1/														
Initial furnishings and equipment														
Other objects, one-time														
Building management & maintenance 2/								8		20		20		20
Move costs								5						
Special costs														
TOTAL PROGRAM COSTS		0		0		0	1	58	1	65	1	65	1	65
FACILITIES SERVICES														
Security (Service Contract)														
Physical Plant														
Design & Construction Support														
Operations & Maintenance (Service Contracts)														
Utilities & Communications														
Utilities & Postage								5		10		10		10
Communications								2		5		5		5
TOTAL FACILITIES SVCS. COSTS		0		0		0		7		15		15		15
SI/CENTRAL OVERHEAD (SUPPORT)														
SI Libraries														
Environmental Management & Safety														
Central Administration Costs														
TOTAL SI COSTS		0		0		0		0		0		0		0
GRAND TOTAL OPERATING		0		0		0	1	65	1	80	1	80	1	80

1/ Includes installation and communication requirements.

2/ Includes maintenance contracts for fire & security systems and HVAC equipment

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	National Museum of the American Indian
Project Title	Mall Museum
Project Description & Purpose	Construction of a new museum building on the Mall
Gross Square Footage	449,239
Net Square Footage	250,992
Net Public Space	111,000
Authorization	11/89
Planning & Programming- Venturi Scott Brown	11/91-03/94
Concept Design by GBQC and Douglas Cardinal	11/94-12/97
Termination of GBQC Contract	01/98
Restart of Design with Polshek	04/98
Groundbreaking Ceremony	09/99
K-Lo Contractors Awarded Site Prep. Contract	09/99
Request for Technical Proposals based on 75%	06/00
Construction Documents Complete	09/00
Request for Cost Proposals based on 100%	10/00
Site Preparation Contract complete	01/01
Final Cost Proposals Due	04/01
Notice-to-Proceed for Building Construction	June 2001
Beneficial Occupancy (staggered)	December 2003, March 2004
Full Occupancy and Public Opening	Summer 2004

Responding Office	NMAI
Date	September 6, 2001
Purpose	FY 2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s			PRIOR YR.	FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006	
			Dollars	Non-Fed	Federal	Non-Fed	Federal	Non-Fed	Federal	Non-Fed	Federal	Non-Fed	Federal	Non-Fed	Federal	Non-Fed	Federal
FUNDING SOURCES																	
Federal	$73,300		54,300		19,000												
Non-Federal /1	$36,700		33,400	3,300													
SUBTOTAL	$110,000																
Supplemental Federal	$50,000								30,000		20,000	2/					
Additional Non-Federal	$39,300			6,300				33,000									
TOTAL	$199,300		87,700	9,600	19,000			33,000	30,000		20,000	2/					

1/ $1,000 from Ford Foundation for Resource Center.

2/ Smithsonian Projection

Construction Spending Plan $(000)s	GRAND TOTAL	PRIOR YR. Dollars	FY 2000 Dollars	FY 2001 Dollars	FY 2002 Dollars	FY 2003 Dollars	FY 2004 Dollars	FY 2005 Dollars	FY 2006 Dollars
Programming and Planning	1,200	1,200							
Design	22,100	18,800	1,100	2,200					
Site Preparation 4/	4,700		3,800	900					
Construction 5/ 6/ 7/ 8/	152,300			60,700	71,500	19,900	200		
Equipment and Furnishings (not Const.)	1,000					1,000			
Project & Construction Management	18,000		700	5,900	6,200	2,000	3,200		
Other 3/									
TOTAL CONSTRUCTION COSTS	199,300	20,000	5,600	69,700	77,700	22,900	3,400		

3/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime.

4/ Includes excavation, sheeting, shoring, and dewatering.

5/ Foundation and Superstructure: pile foundations, footings, concrete slabs, superstructure up to and including roof.

6/ Core and Shell: Exterior walls and roof systems completing total, watertight enclosure of building; interior stairs and elevators;mechanical, electrical, plumbing, fire protection, communications, and security equipment and trunk lines (but no distribution).

7/ Remaining Building and Fitout: Interior fit-out of entire building plus finish landscaping

8/ Includes estimated contingency

Capital Budget: Operating Cost Projection	PROJECT TITLE	NMAI Mall Museum													DATE	August 23,2001										Page 2
RESPONDING OFFICE																										
Operating Funding Sources $(000)s	PRIOR YR.		FY 2000			FY 2001			FY 2002			FY 2003			FY 2004			FY 2005			FY 2006			FY 2007		
	FTE	Dollars	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal
FUNDING SOURCES																										
Federal	59	6,135	67		8,753	74		12,437	74		12,437	116		23,832	252		22,255	252		19,195	252		19,302	252		19,302
Non-Federal			4	2,866	*	4	2,866		4	3,485		4	3,346		4	3,375		4	3,075		4	3,075		4	3,075	
TOTAL OPERATING FUNDING SOURCES	59	6,135	71	2,866	8,753	78	2,866	12,437	78	3,485	12,437	120	3,346	23,832	256	3,375	22,255	256	3,075	19,195	256	3,075	19,302	256	3,075	19,302

NOTES
Cost to open 20 exhibits ($20,000 federal of which as much as $10,000 could be supported by gifts) and 10 public programs and events and associated costs ($10,000 non-federal).
Six million estimated annual visits
Number of new FTEs 112
4,000 objects displayed

Operating Costs* $(000)s	PRIOR YR.		FY 2000			FY 2001			FY 2002			FY 2003			FY 2004			FY 2005			FY 2006			FY 2007		
	FTE	Dollars	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal	FTE	Non-Fed	Federal
PROGRAM COSTS																										
Staff	59	4,298	67		4,708	74		5,011	74		5,011	97		6,465	151		9,634	151		9,634	151		9,634	151		9,634
Other Objects, ongoing		1,437	4	2,866	1,752	4	3,112	1,935	4	3,485	1,935	4	3,346	2,449	4	3,375	3,444	4	3,075	3,050	4	3,075	3,217	4	3,075	3,217
Initial Automation(hard/software) 1/											0			3,714												
Initial furnishings and equipment											0			2,970			1,155									
Other objects, one-time					3			111			111			266			253									
Building management & maintenance 2/									0		0	11		572	34		1,522	34		1,522	34		1.522	34		1,522
Move costs from L'Enfant Plaza																	100									
Special, includes $10M for exhibit installations		400			2,290			4,901			4,901			5,901			998									
TOTAL PROGRAM COSTS	59	6,135	71	2,866	8,753	78	3,112	11,958	78	3,485	11,958	112	3,346	22,337	189	3,375	17,106	189	3,075	14,206	189	3,075	14,373	189	3,075	14,373
FACILITIES SERVICES																										
Security 3/															50		2,288	50		2,068	50		2,068	50		2,068
Physical Plant																										
Design & Construction Support																										
Operations & Maintenance												7		520	16		1,186	16		1,186	16		1,186	16		1,186
Utilities & Postage 4/								459			459			809			1,509			1,509			1.509			1,509
Communications 4/								20			20			70			70			130			70			70
TOTAL FACILITIES SVCS COSTS								479			479	7		1,399	66		5,053	66		4,893	66		4,833	66		4,833
SI/CENTRAL OVERHEAD (SUPPORT)																										
SI Libraries																										
Environmental Management & Safety												1		96	1		96	1		96	1		96	1		96
Central Administration Costs																										
TOTAL SI COSTS												1		96	1		96	1		96	1		96	1		96
GRAND TOTAL OPERATING	59	6,135	71	2,866	8,753	78	3,112	12,437	78	3,485	12,437	120	3,346	23,832	256	3,375	22,255	256	3,075	19,195	256	3,075	19,302	256	3,075	19,302

NOTE: Estimates are based upon FY 2003 Budget Request to SI. Assumes full project funding and on schedule. May be adjusted based on construction option selected.
1/ Include installation and communication requirements. /2 FY 2003-2004 figures represent partial year requirements
/3 FY 2004 estimate includes $220k in one-time start up costs.
/4 Partial year requirement provided in FY 2001; additional funding required in FY 2003 with full operation in FY 2004

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	Museum Support Center
Project Title	Alcohol Collections Storage Pod (Pod 5)
Project Description & Purpose	To provide code compliant storage facility and necessary
	laboratories for biological collections preserved in alcohol
Projected Gross Square Footage	108,000
Authorization Date (or Projected)	2002
Design Start/ Completion Dates	2003 - 2004
Construction Start/Completion Dates	2004 - 2006
Beneficial Occupancy Date	2006
Full Occupancy Date	2006

Responding Office	
Office Contact	
OPP Project Manager	
Date	September 7, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Construction Project Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
FUNDING SOURCES														
Federal						2,000		23,500		2,800				
Non-Federal														
TOTAL CONSTRUCTION FUNDING SOURCES						2,000		23,500		2,800				

Construction Project Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
Programming and Planning														
Design						2,000								
Site Preparation 1/								3,125						
Construction								16,450						
Equipment and Furnishings								2,500		2,500				
Project & Construction Management								850		200				
Other 2/								575		100				
TOTAL CONSTRUCTION COSTS						2,000		23,500		2,800				

1/ Includes landscaping, if required.

2/ Other discrete project expenses not included in the design or construction contract, i.e. security requirements, such as reimbursement to OPS for overtime.

NA - not applicable.
TBD-to be determined.

Capital Budget: Operating Cost Projection	PROJECT TITLE Museum Support Center, Pod 5	DA19/7/01 Page 2
RESPONDING OFFICE	OFFICE CONTACT	TELEPHONE

Operating Funding Sources $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES														
Federal														
Non-Federal														
TOTAL OPERATING FUNDING SOURCES														

Operating Costs $(000)s	PRIOR YR.		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 +	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS														
Staff														
Other Objects, ongoing														
Initial Automation(hard/software) 1/														
Initial furnishings and equipment														
Other objects, one-time														
Building management & maintenance														
Move costs														
Special costs 2/														
TOTAL PROGRAM COSTS														
FACILITIES SERVICES														
Security														
Physical Plant														
Design & Construction Support														
Operations & Maintenance														
Utilities & Communications														
Utilities & Postage														
Communications														
TOTAL FACILITIES SVCS. COSTS														
SI/CENTRAL OVERHEAD (SUPPORT)														
SI Libraries														
Environmental Management & Safety 3/														
Central Administration Costs														
TOTAL SI COSTS														
GRAND TOTAL OPERATING							Operating requirements are in development.							

1/ Include installation and communication requirements.

2/ Include exhibit installation costs here.

3/ Include Health Services costs here.

Capital Budget Schedule and Operating Cost Projections

Schedules and Other Data	
Facility (Building)	National Air & Space Museum
Project Title	Steven F. Udvar-Hazy Center
Project Description & Purpose	Construct New Facility at Dulles Airport for Exhibit Space, Artifact Restoration Area, Collections Storage & Archives, and Support Areas
Gross Square Footage	760,057
Phase 1	421,590
Board of Regents endorsement of Study	09/83
SI completes formal study and recommends Dulles	12/89
Congress authorizes design	08/93
Design Start/Completion	01/96
MOU between SI and Virginia	04/96
Design concept completed	05/96
Congress authorizes construction	10/96
Construction documents completed	03/99
Request for Proposals for construction issued	05/00
Technical evaluation of proposals complete	10/00
Groundbreaking	10/25/00
Site Package A Site Preparation complete	11/01
Site Package B Parking/Haul Road advertised	08/01
Site Package C Interchange advertised	09/01
Site Package D Wetland Mitigation advertised	9/01
Building construction contract executed	03/29/01
Notice-to-Proceed, building construction begins	04/23/01
Beneficial Occupancy, main hangar	02/03
Full Occupancy (Opening)	12/03

Responding Office	Dulles Center Planning
Date	August 13, 2001
Purpose	FY2003-FY2007 Planning Period

NOTES:

Building construction contract awarded 3/29/01
Notice-to-Proceed issued 4/23/01.

Construction Project Funding Sources $(000)s		PRIOR YR. Dollars	FY 2000 Dollars	FY 2001 Dollars	FY 2002 Dollars	FY 2003 Dollars	FY 2004 Dollars	FY 2005 Dollars	FY 2006 Dollars
FUNDING SOURCES									
Federal		8,000	0	0	0	0		0	0
Trust		12,680	8,500	117,500	52,330	13,290		0	0
Other									
Commonwealth of Virginia	40,000		40,000						
Virginia Counties and Cities	1,000								
TOTAL CONSTRUCTION FUNDING SOURCES		20,680	8,500	117,500	52,330	13,290		0	0

Construction Spending Plan $(000)s	GRAND TOTAL	PRIOR YR. Dollars	FY 2000 Dollars	FY 2001 Dollars	FY 2002 Dollars	FY 2003 Dollars	FY 2004 Dollars	FY 2005 Dollars	FY 2006 Dollars
Programming and Planning	1,847	1,847							
Design	13,116	12,580	200	336					
Site Preparation	35,000		9,000	14,000	11,000	1,000	0	0	0
Construction 1/	149,000	0	0	127,000	8,000	9,000	5,000	0	0
Equipment and Furnishings 2/	10,632	0	0	0	6,632	4,000	0	0	0
Project & Construction Management 3/	18,500	0	0	0	6,000	10,500	2,000	0	0
Other 4/ Financial Studies and OPP/ODC	4,000	1,600	750	750	750	150	0	0	0
TOTAL CONSTRUCTION COSTS	232,095	16,027	9,950	142,086	32,382	24,650	7,000	0	0

1/ Includes base building construction/contingencies, permits/fees, Davis-Bacon adjustment, alternates awarded. Award of remaining alternates unknown.
2/ Includes allowances for fit-out above theater, theater, main exhibit cabinets (9,000) and furniture alternate (1,632)
3/ Includes construction supervision, administration, OFEO costs, engineering during construction, commissioning.
4/ Other discrete project expenses not included in the design or construction contract, i.e. relocation and security requirements, such as reimbursement to OPS for overtime. Spending plan for financial studies determined by Treasurer.

Capital Budget: Operating Cost Projection	PROJECT TITLE Udvar-Hazy Center Planning/Operations	DATE 8/24/01	Page 2
RESPONDING OFFICE			

Operating Funding Sources $(000)s	PRIOR YR.		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
FUNDING SOURCES																		
Federal	32	1,919	32	3,100	51	4,616	62	6,498	76	16,389	88	16,572	127	14,905	88	16,581	88	16,911
Non-Federal		291																
TOTAL OPERATING FUNDING SOURCES	32	2,210	32	3,100	51	4,616	62	6,498	76	16,389	88	16,572	127	14,905	88	16,581	88	16,911

Operating Costs $(000)s	PRIOR YR.		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
PROGRAM COSTS 1/																		
Federal Staff 2/	32	1,919	32	1,977	51	3,197	61	3,912	67	4,334	73	4,737	73	4,843	73	4,990	73	4,990
Trust Staff 3/							1	160	4	385	7	535	7	535	7	535	7	535
Other Objects, ongoing								360		893		1,110		1,138		1,323		1,525
Initial Automation(hard/software) 4/		40		40		0		543		1,153								
Initial furnishings and equipment 5/																		
Other objects, one-time 6/		85		310		80		360		3,331		1,009		835		349		349
Building management & maintenance 7/										576		3,215		3,410		3,650		3,725
Move costs 8/		141		543		169		663		1,266		883		590		205		122
Special costs 9/		25		200		1,170		500		850								
TOTAL PROGRAM COSTS	32	2,210	32	3,070	51	4,616	62	6,498	71	12,788	80	11,489	80	11,351	80	11,052	80	11,246
FACILITIES SERVICES																		
Security Option 1 10/									32	1,550	46	1,895	46	1,895	46	1,895	46	1,895
Security Option 2 Outsource 10a/									5	1,375	7	1,700	7	1,755	7	1,779	7	1,825
Physical Plant																		
Design & Construction Support																		
Operations & Maintenance 11/				30														
Utilities & Communications																		
Utilities & Postage 12/, 13/										2,151		3,213		3,411		3,565		3,650
Communications										75		110		119		125		130
TOTAL FACILITIES SVCS. COSTS		0		30		0	0	0	5	3,601	7	5,023	7	5,285	7	5,469	7	5,605
SI/CENTRAL OVERHEAD (SUPPORT)																		
SI Libraries											1	60	1	60	1	60	1	60
Environmental Management & Safety 12/											0	0	0	0	0	0	0	0
OIPPS											0	0	0	0	0	0	0	0
TOTAL SI COSTS											1	60	1	60	1	60	1	60
Grand Total Federal Operating							61	6,338	72	16,004	81	16,037	81	16,161	81	16,046	81	16,376
GRAND TOTAL All OPERATING	32	2,210	32	3,100	51	4,616	62	6,498	76	16,389	88	16,572	88	16,696	88	16,581	88	16,911

FOOTNOTES ON FOLLOWING PAGE

1/ Does not include debt service costs on borrowed construction funds.
2/ Staff includes existing 32 base positions at Garber.
3/ Includes Trust funded operations/does not include changes resulting from phased construction
4/ Include installation and communication requirements.
5/ FF&E included in construction; non-fixed equipment & furnishings included in 1-time costs.
6/ Includes 1-time costs for Education, Exhibits Maint/AV, Admin, Facilities, Vehicles, Health Unit set-up, Safety, plus a contingency line item.
7/ Building Management included with Physical Plant, as an integrated building services contract including IT services. Contract nurse requirements included here.
8/ For collections and archives; includes preparations.
9/ Include exhibit installation costs here.
10/ Includes MWAA fee for emergency fire, rescue, and security support; 1-time costs; operations.
10/a Management of security contract 7FTE and $600,000; security contract for $1,100,000 annually.
11/ Also includes basic facilities mgmt costs, as an integrated building services contract (study underway to determine whether to use contract or in-house staff for building operation/maintenance; see also note 8. OPP will do routine facility assessment and other special work on cost reimbursable basis.
12/part of outsourced operations
13/ Includes funding for contracted IT services.

Exhibit 52

Report on Resources For Financial Management Activities

Smithsonian Institution (in millions of dollars) Federal	PY	CY	BY
Asset Management			
1001 No. of FTE	12	12	12
1002 Obligations/Budget Authority	0.2	0.3	0.3
Accounting and Reporting			
2001 No. of FTE	270	265	265
2002 Budget Authority	20.0	19.0	20.0
Contractor Accounting and Reporting			
2102 Obligations/Budget Authority	0.6	0.4	0.5
Audits of Financial Statements			
3001 No. of FTE	3	3	3
3002 Obligations/Budget Authority	0.4	0.4	0.5
Financial Management Systems			
4001 No. of FTE	10	12	15
4002 Obligations/Budget Authority	1.3	1.3	1.3
Subtotal			
5001 No. of FTE	295	292	295
5002 Obligations/Budget Authority	22.5	21.4	22.6
Adjustments			
6001 No. of FTE	0	0	0
6002 Obligations/Budget Authority	0	0	0
Total, Net			
7001 No. of FTE	295	292	295
7002 Obligations/Budget Authority	22.5	21.4	22.6
Audit of Financial Statements			
Component Contract Audits			
8102 Obligations/Budget Authority	0	0	0
Component In-House Audit Costs			
8201 No. of FTE	0	0	0
8202 Obligations/Budget Authority	0	0	0
Organization-wide (department) financial statements			
Contract Audit Costs			
9102 Obligations/Budget Authority	0.2	0.3	0.4
In-House Audit Costs			
9201 No. of FTE	3	3	3
9202 Obligations/Budget Authority	0.2	0.2	0.2
Total, all reporting entities			
9401 No. of FTE	3	3	3
9402 Obligations/Budget Authority	0.4	0.5	0.6
9998 Agency Contact			
9999 Telephone Number			

Federal

Report on Information Technology
Smithsonian Institution

(in thousands of dollars)

Line Number Code	Entry	FY 2001	FY 2002	FY 2003
	Part 1. Data on IT Systems by Program Area			
	Program Area 1: **Finance & Administration**			
	Major IT:			
	Enterprise Resource Planning			
	Development/modernization/enhancement	3,880	6,200	5,800
	Steady state			1,856
	Subtotal, IT costs	3,880	6,200	7,656
	Major IT:			
	Financial Management (SFS, BUMPPS, PAYES *et al*)			
	Development/modernization/enhancement			
	Steady state	1,309	1,262	1,280
	Subtotal, IT costs	1,309	1,262	1,280
	Major IT:			
	Facilities Management (SPAN-FM, PFITS *et al*)			
	Development/modernization/enhancement			
	Steady state	931	1,150	1,112
	Subtotal, IT costs	931	1,150	1,112
	Major IT:			
	Human Resources Management			
	Development/modernization/enhancement	75	79	82
	Steady state	380	422	442
	Subtotal, IT costs	455	501	524
	Significant IT:			
	Archival & Library (SIRIS, CIS, CMS *et al*)			
	Development/modernization/enhancement	50	534	1,004
	Steady state	1,948	2,279	2,317
	Subtotal, IT costs	1,998	2,813	3,321
	Significant IT:			
	Collections Information Systems			
	Development/modernization/enhancement			450
	Steady state	958	960	960
	Subtotal, IT costs	958	960	1,410
	Significant IT:			
	Other Finance & Administration			
	Development/modernization/enhancement	312	197	209
	Steady state	724	941	823
	Subtotal, IT costs	1,036	1,138	1,032
	Total Program Area 1			
	Development/modernization/enhancement	4,317	7,010	7,545
	Steady state	6,250	7,014	8,790
	Subtotal, Program Area 1	**10,567**	**14,024**	**16,335**

Federal

Report on Information Technology
Smithsonian Institution

(In thousands of dollars)

Line Number Code	Entry	FY 2001	FY 2002	FY 2003
	Program Area 2: **Science**			
	Major IT:			
	Collections Information & Management			
	Development/modernization/enhancement	1,122	1,445	1,561
	Steady state	2,653	2,979	3,511
	Subtotal, IT costs	3,775	4,424	5,072
	Research			
	Development/modernization/enhancement	417	869	820
	Steady state	1,325	1,432	1,549
	Subtotal, IT costs	1,742	2,301	2,369
	Major IT:			
	Exhibitions (plus Outreach & the Web)			
	Development/modernization/enhancement	1,645	1,846	2,666
	Steady state	401	430	421
	Subtotal, IT costs	2,046	2,276	3,087
	Total Program Area 2			
	Development/modernization/enhancement	3,184	4,160	5,047
	Steady state	4,379	4,841	5,481
	Subtotal, Program Area 2	**7,563**	**9,001**	**10,528**
	Program Area 3: **American Museums & National Programs (TMS, CIS, Multi MIMSY *et al*)**			
	Major IT:			
	Collections Information & Management			
	Development/modernization/enhancement	1,231	1,582	1,642
	Steady state	1,634	1,375	2,302
	Subtotal, IT costs	2,865	2,957	3,944
	Major IT:			
	Exhibitions (plus Outreach & the Web)			
	Development/modernization/enhancement	671	739	1,217
	Steady state	468	651	1,102
	Subtotal, IT costs	1,139	1,390	2,319
	Total Program Area 3			
	Development/modernization/enhancement	1,902	2,321	2,859
	Steady state	2,102	2,026	3,404
	Subtotal, Program Area 3	**4,004**	**4,347**	**6,263**

Federal

Report on Information Technology
Smithsonian Institution

(In thousands of dollars)

Line Number Code	Entry	FY 2001	FY 2002	FY 2003
	Program Area 4: **International Art Museums**			
	Major IT:			
	International Art Museum Systems (TMS *et al*)			
	Development/modernization/enhancement	72	206	300
	Steady state	774	998	1,133
	Subtotal, IT costs	846	1,204	1,433
	Total Program Area 4			
	Development/modernization/enhancement	72	206	300
	Steady state	774	998	1,133
	Subtotal, Program Area 4	846	1,204	1,433
	Total, All Program Areas	**22,980**	**28,576**	**34,559**
	Part 2. Data on IT Infrastructure & Office Automation			
	Central Infrastructure & Office Automation			
	Development/modernization/enhancement	1,011	849	849
	Steady state	4,946	5,290	7,484
	Subtotal, IT costs	5,957	6,139	8,333
	Managed Information Technology Infrastructure			
	Development/modernization/enhancement	927	2,614	
	Steady state		232	6,232
	Subtotal, IT costs	927	2,846	6,232
	Telephone System Replacement			
	Development/modernization/enhancement			
	Steady state	10,020	10,020	10,020
	Subtotal, IT costs	10,020	10,020	10,020
	Unit Infrastructure & Office Automation			
	Development/modernization/enhancement	655	1,434	717
	Steady state	4,844	5,428	7,525
	Subtotal, IT costs	5,499	6,862	8,242
	Total, IT Infrastructure & Office Automation	**22,403**	**25,867**	**32,827**
	Part 3. Data on IT Architecture & Planning			
	Major IT Architecture & Planning:			
	Development/modernization/enhancement			
	Steady state	165	165	165
	Subtotal, IT costs	165	165	165
	All IT Architecture & Planning			
	Development/modernization/enhancement			
	Steady state	165	165	165
	Total, Data on IT Architecture & Planning	**165**	**165**	**165**

Federal

Report on Information Technology

Smithsonian Institution

(In thousands of dollars)

Line Number Code	Entry	FY 2001	FY 2002	FY 2003
	Part 4. IT Resources Summary			
	Program Area, Infrastructure & Architecture Totals:			
	Development/modernization/enhancement	12,068	18,594	17,317
	Steady state	33,480	36,014	50,234
	Total, All IT Costs	**45,548**	**54,608**	**67,551**

Space Budget Justification

Agency Smithsonian Institution
Bureau
GSA Bureau Code 0
Date September 7, 2001

Smithsonian Institution

(obligations in thousands of dollars)

	FY 2001		FY 2002		FY 2003		FY 2004	
	Sq. Ft.	$	Sq. Ft.	$	Sq. Ft.	$	Sq. Ft.	$
OMB approved inflation factor:		2.00%		2.00%		2.10%		2.10%
PART 1: RENTAL PAYMENTS TO GSA								
GSA rent estimate	0	$0	0	$0	0	$0	0	$0
Agency adjustments to the bill:								
Chargebacks: (FY2001 only)	0	$0	0	$0	0	$0	0	$0
Other adjustments	0	$0						
Statutorily imposed rent caps	0	$0						
Planned changes to inventory:								
FY2001	0	$0	0	$0	0	$0	0	$0
FY2002			0	$0	0	$0	0	$0
FY2003					0	$0	0	$0
FY2004							0	$0
Requested program changes:								
FY2001			0	$0	0	$0	0	$0
FY2002					0	$0	0	$0
FY2003							0	$0
FY2004								
Total, net rental payments to GSA	-	$0	0	$0	0	$0	0	$0
FUNDING SOURCES FOR RENTAL PAYMENTS to GSA								
Funded by direct appropriations:								
Account title and IO code:								
Acct. 1 Salaries and expenses 016-10-1166.		$0		$0		$0		$0
Acct. 2 Miscelleneous Account 017-36-2222		$0		$0		$0		$0
Acct. 3		$0		$0		$0		$0
Acct. 4		$0		$0		$0		$0
Acct. 5		$0		$0		$0		$0
Acct. 6		$0		$0		$0		$0
Acct. 7		$0		$0		$0		$0
Acct. 8		$0		$0		$0		$0
Subtotal, direct appropriations		$0		$0		$0		$0
Funded by other sources:								
Account title and IO Code:								
Acct. 1 Resources control 016-12-2650		$0		$0		$0		$0
Acct. 2 User Fees 016-12-2750		$0		$0		$0		$0
Acct. 3		$0						$0
Acct. 4		$0		$0		$0		$0
Acct. 5		$0		$0		$0		$0
Acct. 6		$0		$0		$0		$0
Subtotal, other funding sources		$0		$0		$0		$0
Total funding sources (object class 23.1)		$0		$0		$0		$0
Control difference		$0		$0		$0		$0
PART 2: RENTAL PAYMENTS TO OTHERS								
Non-Federal sources (object class 23.2)	668,947	$9,518,931	632,245	$9,408,343	632,245	$9,098,605	586,981	$8,187,596
Federal sources (object class 25.3)	0	$0	0	$0	0	$0	0	$0
Total rental payments to others	**671,862**	**$9,518,931**	**632,160**	**$9,408,343**	**632,160**	**$9,098,605**	**586,896**	**$8,187,596**

*Victor Building square footage pending final as-built drawings

Smithsonian Institution
FY 2003 - FY 2007 Estimates
(Dollars in Millions)

SALARIES AND EXPENSES										
FY 2002 Congressional Appropriation (Estimate)	4,221	398,122	4,221	398,122	4,221	398,122	4,221	398,122	4,221	398,122
FY 2003 Changes										
	FTEs	FY 2003	FTEs	FY 2004	FTEs	FY 2005	FTEs	FY 2006	FTEs	FY 2007
Adjustment for STRI Workyears	66	0	66	0	66	0	66	0	66	0
Non-Recurring Costs	-2	-2,098	-2	-2,098	-2	-2,098	-2	-2,098	-2	-2,098
Mandatory Increases for Sustaining Operations		29,338		30,209		30,539		30,352		30,346
Program Increases:										
NMAI	55	12,352	159	21,050	160	20,803	161	21,058	161	21,058
NASM Dulles Center	11	7,900	20	9,024	20	9,107	20	9,382	20	9,489
NMNH	0	500		500		500		500		500
NZP Farm Exhibit	7	375	7	375	7	375	7	375	7	375
SAO, Veritas	1	157	1	157	1	157	1	157	1	157
MSI, Veritas	0	1,000		500		744		277		277
Enterprise Res. Planning	12	5,800	12	3,734	12	2,961	12	0	12	0
Managed IT Infrastructure	2	3,400	2	5,470	2	7,487	2	6,037	2	6,037
Information Res. Management Pool	5	2,196	5	2,196	5	2,196	5	2,196	5	2,196
Security Systems Modernization	0	1,100	0	1,350	0	1,350	0	1,350	0	1,350
Repair Restoration and Alteration: Staff Support	40	4,800	54	6,600	54	6,600	54	6,600	54	6,600
Holocaust Restitution Research	0	100		100		100		100		100
SI Libraries - Serials Inflation	0	300		300		300		300		300
TOTAL SALARIES AND EXPENSES	4,418	465,342	4,545	477,589	4,546	479,243	4,547	474,708	4,547	474,809

CAPITAL PROGRAM										
Repair, Restoration and Alteration of Facilities	37	129,600		180,000		243,000		281,500		275,000
Construction										
--SAO- VERITAS		4,500								
--NMAI Mall Museum		20,000								
--Museum Support Center, Pod 5 (design)		2,000		23,500		2,800				
Subtotal		26,500		23,500		2,800				
TOTAL, CAPITAL PROGRAM	**37**	**156,100**		**203,500**		**245,800**		**281,500**		**275,000**
TOTAL, ALL ACCOUNTS	**4,455**	**621,442**	**4,545**	**681,089**	**4,546**	**725,043**	**4,547**	**756,208**	**4,547**	**749,809**

SMITHSONIAN INSTITUTION
PROJECTED OUTLAYS IN THE OUTYEARS
FY 2003 - FY 2007
(Dollars in Millions)

	FY 2003		FY 2004		FY 2005		FY 2006		FY 2007	
	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Salaries & Expenses	465	457	478	476	479	479	475	475	475	475
Repair, Restor.& Alt.	130	63	180	118	243	173	282	225	275	261
Construction	27	27	24	4	3	12	0	13	0	1
Special Foreign Curr.	1	1	0	0	0	0	0	0	0	0
Total	623	548	682	598	725	664	757	713	750	737

Dollars in thousands
FTE = Full Time Equival.

SMITHSONIAN INSTITUTION

APPLICATION OF NONAPPROPRIATED TRUST FUNDS - Summary

		General Trust						Donor / Sponsor Designated						Government Grants and Contracts					
		FY 2001		FY 2002		FY 2003		FY 2001		FY 2002		FY 2003		FY 2001		FY 2002		FY 2003	
		FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate
	MUSEUMS AND RESEARCH INSTITUTES																		
	American Museums																		
6900	Anacostia Museum & Ctr for Afr.Amer.History	4	695	4	588	4	688	0	37	0	782	0	6,400	0	100	0	100	0	100
4800	Archives of American Art	0	333	0	240	0	220	14	688	14	773	13	752	0	0	0	0	0	0
5100	Center for Folklife and Cultural Heritage	15	1,245	15	1,153	15	1,173	12	1,852	6	3,637	2	714	5	375	0	375	0	0
5800	Cooper-Hewitt, National Design Museum	29	3,234	29	2,850	29	2,850	8	3,229	9	3,975	9	3,241	1	17	0	1	0	0
3800	National Air and Space Museum	44	8,479	44	4,379	44	4,508	62	7,632	82	10,119	62	6,250	2	2,966	2	245	2	54
5500	National Museum of the American History - Sum	19	3,563	17	2,629	17	2,828	66	14,194	77	30,465	81	82,311	48	3,064	48	3,100	48	3,100
	--National Museum of the American History	19	3,355	17	2,514	17	2,511	66	14,138	77	30,210	81	81,770	2	264	2	500	2	500
3000	--National Postal Museum	0	207	0	115	0	115	0	55	0	255	0	541	46	2,800	46	2,600	46	2,600
5000	National Museum of the Amer. Indian	8	1,680	8	1,148	8	1,123	8	795	8	357	8	323	0	25	0	0	0	0
5200	National Portrait Gallery - Summary	2	534	2	391	2	401	2	22,283	5	4,000	5	3,000	0	0	0	0	0	0
	--National Portrait Gallery	2	526	2	388	2	396	2	22,263	6	4,000	6	3,000	0	0	0	0	0	0
	--1/2 Office of Facilities Mgt. SAAM/NPG	0	8	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0
5300	Smithsonian American Art Museum - Summary	2	2,409	9	1,648	9	1,748	4	3,020	8	4,708	8	4,365	0	0	0	0	0	0
	-- Smithsonian American Art Museum	2	2,401	9	1,643	9	1,743	4	3,020	8	4,708	8	4,365	0	0	0	0	0	0
	--1/2 Office of Facilities Mgt, SAAM/NPG	0	8	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
	International Art Museums																		
5400	Arthur M Sackler Gallery/Freer Gallery of Art	0	448	0	375	0	346	52	6,372	55	7,936	54	8,775	0	2	0	0	0	0
5600	Hirshhorn Museum & Sculpture Garden	1	1,242	1	1,280	1	1,076	0	5,818	3	5,347	4	5,641	0	0	0	0	0	0
5700	National Museum of African Art	2	873	1	413	1	388	0	129	0	300	0	400	0	0	0	0	0	0
	Science Museums and Research Institutes																		
3300	National Museum of Natural History	17	4,217	23	3,012	20	2,377	42	10,031	42	28,781	42	26,247	10	1,642	18	903	4	627
3500	National Zoological Park	5	1,855	5	774	5	788	13	3,450	11	2,627	11	2,007	3	634	3	631	3	730
4000	Smithsonian Astrophysical Observatory	64	14,835	64	13,005	64	12,880	17	3,909	17	4,189	17	4,329	285	68,335	285	71,100	285	71,100
6400	Smithsonian Center for Materials Research	1	178	0	18	0	18	0	69	0	10	0	10	1	42	0	0	0	0
3900	Smithsonian Environmant Research Center	6	864	8	585	6	585	2	726	1	499	1	450	28	1,822	35	2,000	35	2,000
3400	Smithsonian Tropical Research Institute	11	1,391	10	864	10	864	30	2,181	29	2,025	29	2,075	14	1,069	14	1,000	14	1,000
	Subtotal,Museums and Research Institute	228	47,895	238	35,352	233	34,537	332	86,375	345	108,510	348	157,490	395	78,293	403	79,455	391	78,711

Dollars in thousands
FTE = Full Time Equivalent

SMITHSONIAN INSTITUTION

APPLICATION OF NONAPPROPRIATED TRUST FUNDS - Summary

		General Trust						Donor / Sponsor Designated						Government Grants and Contracts					
		FY 2001		FY 2002		FY 2003		FY 2001		FY 2002		FY 2003		FY 2001		FY 2002		FY 2003	
		FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate	FTE	Estimate
	PROGRAM SUPPORT AND OUTREACH																		
	Outreach																		
6100	Smithsonian Inst. Traveling Exh.Svc.	14	1,622	14	1,478	14	1,476	1	994	4	1,810	3	610	0	54	0	10	0	5
3200	Smithsonian Center for Education & Museum Pr	7	599	7	579	7	579	1	241	1	225	1	222	0	25	0	29	0	50
9100	The Smithsonian Associates	3	389	3	375	3	375	0	124	0	346	0	396	0	0	0	0	0	0
7400	Smithsonian Affiliation Program	13	1,152	13	1,164	13	1,164	0	5	0	0	0	6	0	0	0	0	0	0
8200	National Science Resources Center	9	1,375	10	2,234	10	1,806	10	1,334	10	1,341	10	1,372	5	3,295	5	1,016	5	1,464
9200	Smithsonian Press	0	0	0	0	0	0	0	91	0	27	0	30	0	0	0	0	0	0
1900	Office of Fellowships	4	2,611	4	214	4	209	0	204	0	292	0	191	0	0	0	0	0	0
	Subtotal,Outreach	60	7,948	51	6,044	51	5,611	12	2,993	15	4,041	14	3,026	5	3,374	5	1,055	5	1,519
	Communications																		
3100	VIARC	24	1,580	24	1,585	24	1,585	0	99	0	0	0	0	0	0	0	0	0	0
6500	Office of Public Affairs	7	1,105	7	1,087	7	1,087	0	92	0	66	0	66	0	0	0	0	0	0
9300	Smithsonian Productions	6	551	5	431	5	431	0	269	0	0	0	0	0	0	0	0	0	0
	Subtotal,Communications	36	3,236	36	3,103	36	3,103	0	460	0	66	0	66	0	0	0	0	0	0
	Institution-wide Programs																		
3700	Museum Support Center	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7200	Office of Exhibits Central	1	115	1	109	1	109	1	31	0	15	0	15	0	0	0	0	0	0
1700	Smithsonian Institution Archives	2	274	2	184	2	183	0	59	0	74	0	62	0	0	0	0	0	0
6300	Smithsonian Institution Libraries	12	1,440	12	1,167	12	1,196	0	567	0	852	0	831	0	3	0	0	0	0
	Subtotal,Institution-wide Programs	15	1,829	15	1,465	15	1,488	1	676	0	941	0	908	0	3	0	0	0	0
	Subtotal,Administration	276	36,629	277	36,633	277	36,581	0	1,123	0	760	0	2,143	0	9	0	0	0	0
	FACILITIES SERVICES																		
	Office of Physical Plant																		
2500	Office of Protection Services	0	212	0	160	0	160	0	0	0	0	0	0	0	0	0	0	0	0
4700	Office of Physical Plant - Summary	4	5,449	4	5,216	4	5,215	1	13,582	1	96,619	1	40,659	0	155	0	0	0	0
	Subtotal,Facilities Services	4	5,661	4	5,376	4	5,375	1	13,582	1	96,619	1	40,659	0	155	0	0	0	0
	Total Smithsonian	611	103,398	619	88,193	616	88,695	346	105,211	361	211,137	361	204,292	400	61,634	406	60,510	396	60,230

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01680 3991