

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Buildings and Facilities

FY 2013.....	BudgetPage No.
Appropriation Language	2
Amounts Available for Obligation.....	3
Major Changes in Budget Request	4
Summary of Changes	5
Budget Graphs	6
Budget Authority by Program.....	7
Authorizing Legislation	8
Appropriations History	9
Justification of Budget Request	10
Budget Authority by Object.....	19

National Institutes of Health

Buildings and Facilities

For the study of, construction of, renovation of, and acquisition of equipment for, facilities of or used by NIH, including the acquisition of real property, [\$125,581,000] \$125,308,000, to remain available until [September 30, 2016] *expended. (Department of Health and Human Services Appropriations Act, 2012.)*

NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities

Amounts Available for Obligation ¹
(Dollars in Thousands)

Source of Funding	FY 2011 Actual	FY 2012 Enacted	FY 2013 PB
Appropriation	50,000	125,581	125,308
Type 1 Diabetes	0	0	0
Rescission	(100)	(237)	0
Supplemental	0	0	0
Subtotal, adjusted appropriation	49,900	125,344	125,308
Real transfer under Secretary's transfer authority	0	(36)	0
Recovery of prior year obligations	6,063	0	0
Unobligated balance, start of year	9,223	3,025	0
Subtotal, adjusted budget authority	65,186	128,333	125,308
Total Obligations	62,161	128,333	125,308
Unobligated balance, end of year	3,025	0	0
Unobligated balance lapsing	0	0	0

¹ Excludes the following amounts for reimbursable activities carried out by this account:

FY 2011 - \$112 FY 2012 - \$2,500 FY 2013 - \$2,500

Figure 1

Major Changes in the Fiscal Year 2013 President's Budget Request

Major changes by budget activity are briefly described below. The FY 2013 Buildings and Facilities President's Budget request is equal to the FY 2012 Enacted level, for a total of \$125.308 million.

Repairs and Improvements (-\$28.900 million; total \$70.008 million): The NIH-wide Repairs and Improvements (R&I) program goal is to sustain efficient and effective facility performance throughout the life cycle of facilities. NIH develops annual program investment levels to help ensure that NIH achieves the full service life of its facilities and components. This requested funding level supports NIH's efforts to maintain research requirements.

New Construction (+\$28.900; total \$39.300 million):

NIH's FY 2013 plan includes funding to demolish Buildings 7 and 9. These buildings have been determined to be functionally obsolete and cannot economically be maintained as a state-of-the-art biomedical facility. The demolition of these buildings is essential to the expansion of research space with direct adjacency to the Clinical Center Complex.

In FY 2013, NIH plans to design the renovation of the E-wing in Building 10 to take 217,285 gross square feet of former patient care and laboratory areas on Floors 2 through 13 and convert it to build-out laboratory, laboratory support space, and offices for 520 personnel supporting the clinical research programs of multiple IC's.

In FY 2013, NIH also plans to design two projects to ensure the reliable delivery of essential chilled water on the Bethesda Campus. The first project, Assure/Expand Chilled Water Capacity, is to design the renovation of an existing multi-level chiller plant building to accommodate three new 5,000 ton chillers. The second project, Emergency Generator to Assure Chilled Water funds the design of an emergency power generation system that will, in the event of a Central Utility Plant power outage, provide emergency power generation and assure the reliable delivery of chilled water.

Also in FY 2013, NIH plans to design the construction of a new North underground utility loop between the East and West underground distribution piping systems on the Research Triangle Park Campus located in North Carolina. Once constructed, this loop will address earlier identified issues of redundancy and reliability by providing the ability to pipe Chilled Water (CHW) and High Temperature Hot Water (HTHW) to either side of the campus depending on the need.

Figure 2

National Institutes of Health
Buildings and Facilities

Summary of Changes

FY 2012 Enacted		125,308,000
FY 2013 Estimated Budget Authority		125,308,000
Net change		0
	FY 2013 Estimate	Change from FY 2012 Enacted
<u>Increases:</u>		
A. Program:		
1. Fire Protection and Life Safety Program	5,000,000	0
2. Environmental Assessments / Remediation	3,200,000	0
3. Rehabilitation of Animal Research Facilities	5,000,000	0
4. Physical Security Improvements	1,800,000	0
5. Sustainability Program	1,000,000	0
6. Concept Development Studies	1,000,000	0
7. Renovation of Building 10 E-Wing	20,600,000	20,600,000
8. Assure/Expand Chilled Water Capacity	8,200,000	8,200,000
9. Demolition of Building 7	3,300,000	3,300,000
10. Demolition of Building 9	2,900,000	2,900,000
11. Emergency Generator to assure chilled water	2,100,000	2,100,000
12. Research Triangle Park Site Utility Loop	1,200,000	1,200,000
Total Increases	55,300,000	38,300,000
<u>Decreases:</u>		
A. Program:		
1. Renovate Building 29A	0	(9,400,000)
12. Repairs and Improvements	70,008,000	(28,900,000)
Total Decreases	70,008,000	(38,300,000)
Total Changes	125,308,000	\$0

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Budget Graph

Figure 3

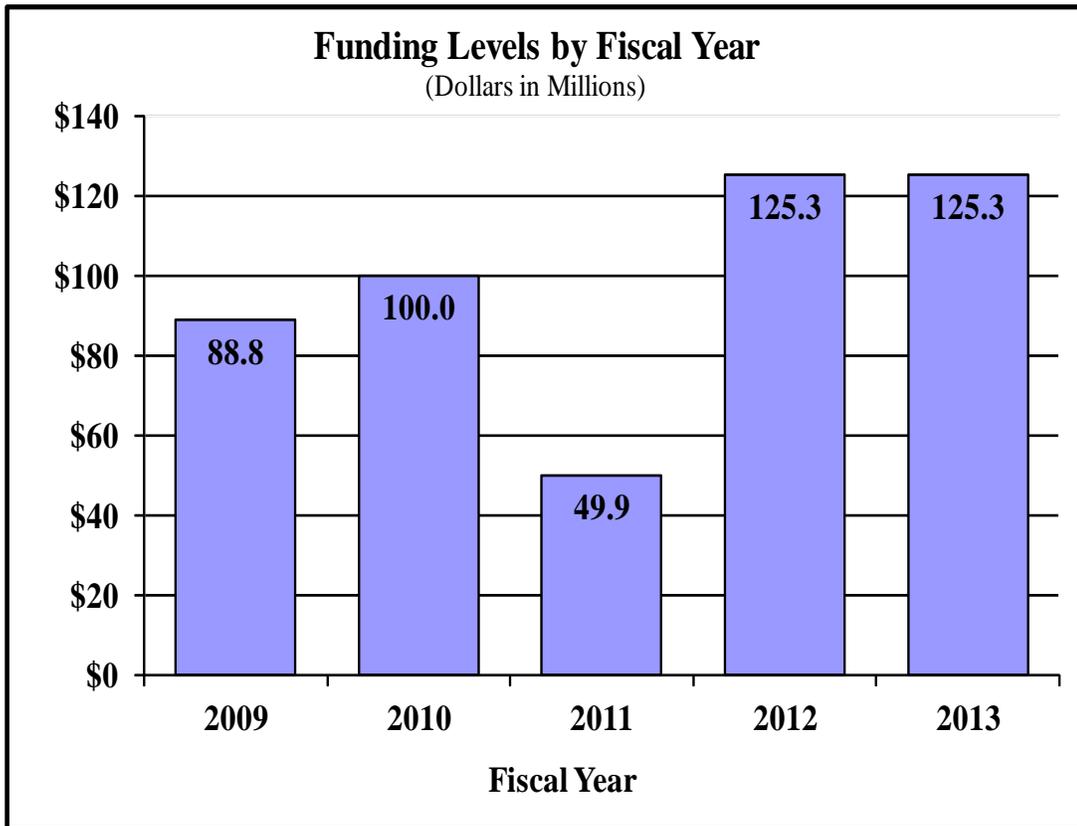


Figure 4

**National Institutes of Health
Buildings and Facilities**

**Budget Authority by Program
(Dollars in Thousands)**

Project	FY 2012 Enacted	FY 2013 PB	Change FY 2012 to FY 2013
<u>Essential Safety & Regulatory Compliance:</u>			
Fire Protection & Life Safety Program	5,000	5,000	0
Environmental Assessments / Remediations	3,200	3,200	0
Rehabilitation of Animal Research Facilities	5,000	5,000	0
Physical Security Improvements	1,800	1,800	0
Sustainability Program	1,000	1,000	0
<u>New Construction:</u>			
Renovation of Building 10 E-Wing	0	20,600	20,600
Assure/Expand Chilled Water Capacity	0	8,200	8,200
Demolition of Building 7	0	3,300	3,300
Demolition of Building 9	0	2,900	2,900
Emergency Generator to assure chilled water	0	2,100	2,100
Research Triangle Park Site Utility Loop	0	1,200	1,200
Concept Development Studies	1,000	1,000	0
Renovate Building 29A	9,400	0	-9,400
Repairs & Improvements	98,908	70,008	-28,900
Total budget authority	125,308	125,308	0
Unobligated balance, start of year	3,025	0	-3,025
Unobligated balance, end of year	0	0	0
Total obligations	128,333	125,308	-3,025

Buildings and Facilities includes funds only appropriated to this account. Some Institutes and Centers also budget for facilities renovations and associated construction costs in other operating mechanisms, which are not reflected in this table. The HHS Facilities Manual provides specific guidelines for use of operating funds.

Figure 5

NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2011 Amount Authorized	FY 2012 Enacted	2013 Amount Authorized	FY 2013 PB
Research and Investigation	Section 301	42§241	Indefinite	\$125,308,000	Indefinite	\$125,308,000
Buildings and Facilities	Section 401(a)	42§281	Indefinite		Indefinite	
Total Budget Authority				\$125,308,000		\$125,308,000

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2004	\$80,000,000	\$80,000,000	\$89,500,000	\$89,500,000
Rescission				(\$528,000)
2005	\$99,500,000	\$99,500,000	\$114,500,000	\$111,177,000
Rescission				(\$889,000)
2006	\$81,900,000	\$81,900,000	\$113,626,000	\$81,900,000
Rescission				(\$819,000)
Transfer				(\$55,700) ¹
Transfer				\$4,480,000 ²
2007	\$81,081,000	\$81,081,000	\$81,081,000	\$81,081,000
Transfer				\$2,500,000 ³
2008	\$136,000,000	\$121,081,000	\$121,081,000	\$121,081,000
Rescission				(\$2,115,000)
Supplemental				\$0
2009	\$125,581,000	\$125,581,000	\$146,581,000	\$125,581,000
Rescission				\$0
2010	\$125,581,000	\$125,581,000	\$100,000,000	\$100,000,000
Rescission				\$0
2011	\$125,581,000		\$125,420,000	\$50,000,000
Rescission				(\$100,000)
2012	\$125,581,000	\$125,581,000	\$125,581,000	\$125,581,000
Rescission				(\$237,348)
Transfer				(\$35,709)
2013	\$125,308,000			

¹ Reflects HHS Secretary's transfer of \$55,700,000 to the Centers for Medicare and Medicaid Services.

² Reflects NIH Director's transfer of \$4,480,000 from the NIEHS appropriation for the Clinical Research Unit.

³ Reflects NIH Director's transfer of \$2,500,000 from NIAID appropriation for the Modular Animal Vivarium Facility.

Figure 6

Justification of Budget Request

Buildings and Facilities

Authorizing Legislation: Section 301 and title IV of the Public Health Services Act, as amended.

Budget Authority:

Figure 7

	FY 2011 Actual	FY 2012 Enacted	FY 2013 President's Budget	FY 2013 +/- FY 2012
BA	49,900,000	125,308,000	125,308,000	0
Total Obligations	62,161,000	128,333,000	125,308,000	-3,025

Director's Overview

Facilities are a key element in the success of the NIH mission. State-of-the-art research requires state-of-the-art facilities that are safe and in compliance with all laws and regulations. The NIH strives to balance new facilities needed to support the study of emerging health threats and leverage innovative research opportunities with the need to remain responsible stewards of the existing research facilities. NIH's portfolio of federally owned buildings comprises 281 constructed assets with estimated replacement values of \$5.47 billion dollars. The functions of these buildings range from administrative support to one of the largest government owned utility generation and distribution systems in the country, and from a 240 bed research hospital to biosafety level 3 (BSL3) and biosafety level 4 (BSL4) "high containment" facilities.

The Repair & Improvement (R&I) program, a major component of the Buildings & Facilities (B&F) appropriation, has the most significant impact on the condition of existing NIH facilities. The R&I program's goal is to maintain and improve the performance of existing facilities throughout their life cycle.

As responsible stewards, part of NIH's strategy is to support the research mission by sustaining and improving the Condition Index (CI). This index is a function of the ratio of needed repairs' cost to the replacement value at a specific point in time. NIH's goal is to improve the CI of each facility to 90 or greater. However, improvement of the CI is only a part of the R&I program goal and NIH employs an elaborate prioritization process to ensure that only the most meritorious projects are funded. The evaluation criteria include:

- Program Impact, which addresses items such as the impact on research, number of occupants affected, building use, and the number of Institutes and Centers affected;

- Project Impact, which addresses items such as life safety, regulatory, legal, CI, security, building systems, and operating cost;
- Existing Condition, which addresses items such as the age of the building, age of construction, campus CI; and
- Project Status, which addresses items such as the readiness to execute the repair or improvement, building replacement options, and funding.

Another significant stewardship responsibility is improving the energy, water, and environmental performance of our buildings to comply with the sustainability requirements within the Energy Independence and Security Act of 2007, Executive Orders 13514 and 13423, the DHHS Sustainable Buildings Plan, and the DHHS Strategic Sustainability Performance Plan. While much of the mandated improvements in performance will occur within the areas of operations and maintenance, much must also come from improvements to the buildings themselves. Two of NIH's significant challenges looking forward will be achieving the goal of raising all buildings to a CI of 90 and achieving all of the mandated sustainability goals.

Complementing the R&I program are a series of essential safety and regulatory compliance activities, such as ensuring that all facilities meet fire protection and life safety codes, remediating environmental contaminants in existing facilities, providing for physical security improvements, and rehabilitating animal research facilities to ensure they are in compliance with all regulations.

In summary, by balancing a broad range of investment criteria, the Office of Research Facilities manages its real property assets in a manner that optimizes the support of NIH's dynamic research mission.

Table 1 is a summary of the funding for B&F from FY 2003 through FY 2013.

Figure 8

Table 1 - Summary of B&F Funding by Program Activity FY 2003 through FY 2013

Year	Construction	Essential Safety and Regulatory Compliance	Physical Security	Repairs and Improvements	Renovations	Equipment/ Systems/ Enabling	Total
FY 2003	470,618,000	6,200,000	80,000,000	55,800,000 ^{1/}	24,069,000	2,000,000	638,687,000
FY 2004	9,500,000	13,472,000	-	70,500,000 ^{1/}	5,500,000	-	98,972,000
FY 2005	28,059,000	6,000,000	-	58,429,000	10,800,000	7,000,000	110,288,000
FY 2006	5,180,000	13,944,300	-	66,381,000	-	-	85,505,300
FY 2007	3,200,000	14,500,000	-	65,881,000	-	-	83,581,000
FY 2008	30,500,000	15,500,000	-	72,966,000	-	-	118,966,000
FY 2009	61,500,000	17,500,000	-	46,581,000	-	-	125,581,000
FY 2009 ARRA	428,000,000	-	-	72,000,000	-	-	500,000,000
FY 2010	16,000,000	16,000,000	-	68,000,000	-	-	100,000,000
FY 2011	-	1,127,000	-	48,773,000	-	-	49,900,000
FY 2012	10,400,000	16,000,000	-	98,908,000	-	-	125,308,000
FY 2013	39,300,000	16,000,000	-	70,008,000	-	-	125,308,000

1/ Amount includes \$10,000,000 comparable adjustments for IC R&I projects.

Overall Budget Policy: The FY 2013 President’s Budget request is \$125.308 million, the same as the FY 2012 Enacted level. This request provides funds for specific projects in three program areas: Construction, Essential Safety and Regulatory Compliance, and Repairs and Improvements. These programs and projects will help the NIH to fulfill its continuing commitment to sustain its facilities and improve the overall Condition Index (CI).

Figure 9

Table 2 - Summary of FY 2013 Request

Year	Construction	Essential Safety and Regulatory Compliance	Physical Security	Repairs and Improvements	Renovations	Equipment/Sy stems/ Enabling	Total
FY 2013	39,300,000	16,000,000	-	70,008,000	-	-	125,308,000

Program Descriptions and Accomplishments

The B&F FY 2013 budget request for B&F supports NIH’s multiple research infrastructure priorities. NIH faces unique research infrastructure challenges due to the complexities that human disease present and the rapid advances in our understanding of basic biology. To address these challenges, NIH must continue to upgrade its facilities to incorporate new research tools that can accelerate the pace of research discoveries. The proposed renovations and improvements will support creating and sustaining a robust, modern, safe, and secure physical infrastructure for the research agenda and maintain the vitality and competitiveness of the NIH biomedical research enterprise.

This budget request provides funds for specific projects in two program areas, within the context of a five-year strategy: (1) Construction, (2) Essential Safety and Regulatory Compliance, and (3) Repairs and Improvements. The following programs and projects are included in the B&F tables and are described in detail below:

Construction Program: Planning, design, and construction of new research and research support facilities for on-going and new scientific initiatives:

- Concept Development Studies
- Renovation of Building 10 E-Wing
- Assure/Expand Chilled Water Capacity
- Demolition of Building 7
- Demolition of Building 9
- Emergency Generator to assure chilled water
- Research Triangle Park Site Utility Loop

Budget Policy: The FY 2013 President’s Budget request is \$39.300 million, an increase of \$28.900 million over the FY 2012 Enacted level.

Concept Development Studies: The request for Concept Development Studies will fund pre-

project planning activities to define the scope, cost, and life cycle benefits of projects before NIH initiates formal requests for design and construction funds. The concept development studies are the tools that ORF uses to provide accurate budget estimates for large construction and repair projects. This approach informs and enhances the HHS-wide B&F priority-setting process and expedites project design.

Budget Policy: The FY 2013 President's Budget request is \$1.000 million, the same as the FY 2012 Enacted level.

Renovation of Building 10 E-Wing: The FY 2013 President's Budget request includes funds to design the renovation of the E-wing in Building 10 located on the Bethesda Campus so that 217,285 gross square feet of former patient care and laboratory areas on Floors 2 through 13 can be converted to build-out laboratory, laboratory support space and offices for 520 personnel supporting the clinical research programs of multiple IC's. This design effort is required in advance of proceeding with an implementation plan to renovate the E wing in three separate construction phases consisting of four floors each starting in 2015 with completion in 2021. Per the 2011 B&F Strategic Plan, each renovation phase will be funded separately in 2015, 2018, and 2019.

Budget Policy: The FY 2013 President's Budget request is \$20.600 million.

Assure/Expand Chilled Water Capacity: The FY 2013 President's Budget request includes funds to design the renovation of approximately 72,547 GSF of an existing multi-level chiller plant building (Building 34/34A) located at the corner of Lincoln Drive and the Service Road West on the Bethesda Campus. This building formerly housed chillers and cooling towers which are now decommissioned and have not been used for several years. The designed plant will accommodate three new 5,000 ton chillers along with associated pumping, cooling towers, piping, concrete equipment pads and electrical services which will ensure the reliability of a chilled water system that is essential to the NIH mission.

Budget Policy: The FY 2013 President's Budget request is \$8.200 million.

Demolition of Building 7: The FY 2013 President's Budget request includes funds to demolish building 7, a 53,313 gross square foot, 3 story building located on the Bethesda Campus. This building was constructed in 1947 and formerly had a ground level laboratory. Most recently this building had been used for temporary research space. A 2007 analysis determined this building was functionally obsolete and could not economically be maintained as a state-of-the-art bio-medical facility. In 2009 this building was mothballed and has been inactive ever since. The NIH Master Plan call for demolishing this building, along with Building 9, as part of the plan to clear the Southeast portion of the site closest to Building 10 for its use as a new Research Facility (Building D). The demolition of Buildings 7 and 9 is essential to the expansion of research space with direct adjacency to the Clinical Center Complex.

Budget Policy: The FY 2013 President's Budget request is \$3.300 million.

Demolition of Building 9: The FY 2013 President's Budget request includes funds to demolish

building 9, a 38,887 gross square foot, 1 story building located on the Bethesda Campus. This building was constructed in 1943 and had a raised basement level laboratory. In 1955 this building was converted to a permanent facility to house research laboratories and office functions and this building currently houses several IC's. NIH Architects and Engineers have determined this building is functionally obsolete and can not economically be maintained as a state-of-the-art bio-medical facility. The NIH Master Plan call for demolishing this building, along with Building 7, as part of the plan to clear the Southeast portion of the site closest to Building 10 for its use as a new Research Facility (Building D). The demolition of Buildings 7 and 9 is essential to the expansion of research space with direct adjacency to the Clinical Center Complex.

Budget Policy: The FY 2013 President's Budget request is \$2.900 million.

Emergency Generator to assure chilled water: The FY 2013 President's Budget request includes funds to design a necessary emergency power generation system to assure reliable delivery of chilled water to the NIH Bethesda Campus. Once designed, funds for an emergency power generation system will provide for the installation of three 2,500 KW emergency generators plus associated electrical gear directly east of Building 11 in the open parking and plant access area off of the Service Road South, adjacent and within the Building 11 Central Utility Plant. Currently a loss of electrical power from PEPCO would result in the complete loss of chilled water service that is essential to the Bethesda Campus and the NIH Mission. It is necessary to design a generator system that will provide needed emergency power generation and assure that, in the event of a power outage the Central Utility Plant will still be able to operate at a reduced capacity.

Budget Policy: The FY 2013 President's Budget request is \$2.100 million.

Research Triangle Park Site Utility Loop: The FY 2013 President's Budget request includes funds for the design to construct a new North underground utility loop between the East and West underground distribution piping systems on the Research Triangle Park Campus located in North Carolina. Once designed, subsequent funding will construct this closed loop utility system serving National Institute of Environmental Health Sciences (NIEHS) Buildings 101(Rall), 102 thru 108 (approximately 1,000,000 GSF) on the west side and Environmental Protection Agency/National Computer Center (EPA/NNC) buildings (approximately 1,160,000 GSF) on the east side of the Research Triangle Park Campus. Once constructed, this loop will address earlier identified issues of redundancy and reliability by providing the ability to pipe Chilled Water (CHW) and High Temperature Hot Water (HTHW) to either side of the campus depending on the need.

Budget Policy: The FY 2013 President's Budget request is \$1.200 million.

Essential Safety and Regulatory Compliance Program: The Essential Safety and Regulatory Compliance activities enable NIH to maintain valuable research capacity and to ensure the safety of NIH facilities and their occupants. As buildings age and health and safety guidelines change, facilities once considered modern become outmoded, non-compliant, and in some cases hazardous. NIH continues to upgrade many of its older facilities for safe use so research and

research support activities may continue without disruption. NIH plans, designs, and constructs facilities to remediate unsafe conditions, upgrade obsolete non-code compliant systems, and bring existing facilities into compliance with current regulatory requirements. These activities include the following:

- Fire Protection and Life Safety Program
- Environmental Assessments / Remediation Program
- Rehabilitation of Animal Research Facilities
- Physical Security Improvements
- Sustainability Program

Budget Policy: The FY 2013 President's Budget request is \$16.000 million, the same as the FY 2012 Enacted level.

Fire Protection and Life Safety Program: These activities support upgrades fire protection and life safety systems, features, and equipment in NIH buildings to provide full protection for all occupants and research subjects. A fire protection master plan was developed in 1994 and since that time, the NIH has implemented elements of the plan including the installation of fire alarm and automatic sprinkler systems, and other fire suppression systems. In addition, this program's plan is to meet fire safety code requirements pertaining to fire barriers and emergency egress components throughout NIH facilities by upgrading fire doors, fire door hardware, emergency lighting, exit signage, and related fire safety improvements. In FY 2011, the installation of the sprinkler system in Building 1 was completed and a design-build contract for the installation of sprinkler systems in Buildings 15H and 15I was awarded. Additionally, fire alarm upgrades were completed for Buildings 25, 15K and MLP-8.

Budget Policy: The FY 2013 President's Budget request is \$5.000 million, the same as the FY 2012 Enacted level.

Environmental Assessments/Remediation: This program allows for environmental remediation activities at all NIH owned sites. The program conducts environmental audits to identify potentially hazardous conditions and, when warranted, remediates conditions that could pose a health and safety threat to NIH employees, visitors, and contractors, or the general public and the environment. This includes the ongoing development and implementation of a program to clear and decontaminate laboratories at NIH prior to their renovation, continued ongoing work in soil and groundwater remediation, and rapid response to new remediation requirements. This program also supports the continued removal of asbestos-containing materials from various NIH buildings. Asbestos is present in virtually all the older NIH buildings' insulation, fireproofing, ceilings, and walls. Disturbed or deteriorating asbestos fibers can be released into the air, potentially risking the health of those persons exposed. The NIH is committed to removing asbestos as part of any renovation or when the material is in a friable condition.

The key component of this program is to abate asbestos-containing material in building utility spaces on the Bethesda Campus, where the majority of friable, deteriorated asbestos is located. Environmental remediation is an ongoing B&F goal; for the past several years, ORF has assessed the environmental remediation requirements for each project and used the funds to address any issues.

Budget Policy: The FY 2013 President's Budget request is \$3.200 million, the same as the FY 2012 Enacted level.

Rehabilitation of Animal Research Facilities: An important factor in the effective application of animal models in biomedical research is high-quality animal care provided in well-built, well-maintained, and well-equipped facilities. This program will continue to support a comprehensive program of repairs and improvements needed to ensure compliance with stringent Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) standards. The AAALAC standards and guidelines drive improvements in heating, ventilation, and cooling systems, provisions for appropriate storage space, animal housing requirements, and repairs or replacement of various interior finish systems to help ensure strict sanitary conditions. Projects supported by this program include the replacement of damaged building finishes and repairs or replacements of heating, ventilation and cooling systems or components. For example, we funded extensive repairs and modifications to aging HVAC ductwork and air-balanced over 800 animal rooms in compliance with AALAC requirements. In addition, B&F funds small, but critical repairs to our animal facilities.

Budget Policy: The FY 2013 President's Budget request is \$5.000 million, the same as the FY 2012 Enacted level.

Physical Security Improvements: Physical security improvements continue to enhance NIH's ability to provide a safe and secure environment for research staff, employees, and visitors. As the nation's preeminent leader in medical and behavioral research, we apply federally mandated security and emergency response requirements and foster an environment for open and free exchange of information within NIH's scientific community. In pursuit of both objectives, NIH has enhanced the overall security posture and expedited NIH's first responder capabilities for the various NIH locations by integrating existing physical security, intruder detection, and surveillance systems using non-proprietary open architecture solutions.

Budget Policy: The FY 2013 President's Budget request is \$1.800 million, the same as the FY 2012 Enacted level.

Sustainability: The HHS Sustainable Buildings Plan requires the assessment of all existing facilities for compliance with the Guiding Principles in the *Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding* referenced in Executive Order 13423; the 2005 Energy Policy Act; the 2007 Energy Independence and Security Act; and the Green House Gas (GHG) reduction strategy required by Executive Order 13514. As part of our compliance with these directives, NIH strives to build facilities in a sustainable manner, to identify priorities for improvements, and to complete sustainability improvements and re-commissioning at all facilities over a prescribed schedule of several years. The program will

emphasize: (1) the reduction of GHG emissions; (2) improvement in water use efficiency and management, pollution prevention and waste elimination; (3) implementation of high performance sustainable buildings from design to deconstruction; (4) advancement of sustainable acquisition; and (5) the promotion of electronics stewardship and sustainable environmental management systems. This program will evaluate existing buildings, analyze, track, and monitor projects, and collect and implement lessons learned to ensure that NIH is meeting required goals. On-going sustainability funded LEED EBOM (Leadership in Energy and Environmental Design existing building operations and maintenance) assessments have identified ways to improve building sustainability and achieve LEED certification.

Budget Policy: The FY 2013 President's Budget request is \$1.000 million, the same as the FY 2012 Enacted level.

Repairs and Improvements (R&I) Program: This program repairs and improves major building systems that have worn out or failed. These repairs and improvements are meant to maintain or extend the useful life and improve the overall CI of NIH's facilities and allow for improvements that will enable its facilities to better support NIH's mission.

This program supports repairs and improvements to the physical plant, building structures, utility systems, roads, and grounds at all the sites in which the NIH has an asset interest. It helps sustain efficient and effective performance of NIH's real property assets to meet current and projected research requirements and to offset the deterioration and obsolescence caused by age and use. The NIH built a new switching station to improve reliability and availability of the power distribution to the western part of the Bethesda campus; repaired numerous steam manholes and a balcony on Building 60 that were in danger of collapse within a few years; funded a study of the existing Bethesda campus chilled water plant to plan for increased future cooling demand, phasing out of ozone depleting refrigerants and increased reliability; repaired and replaced heating ventilation and air conditioning equipment in Building 28 that was doubtful to provide adequate heating in the 2011/2012 winter; and replaced heating water pipes in Building 5 which had begun to develop pinhole leaks.

Projects for the R&I program are identified using NIH facilities and program staff recommendations, various facilities studies, and by facilities assessments performed on each building, in a three-year cycle by a firm experienced in facility assessment methodology. To ensure that funds are allocated to the most critical projects within resource constraints, projects are ranked using a decision model with input from program officials and Subject Matter Experts (SMEs). Final project selections are made by an R&I Board consisting of senior facilities personnel. Facilities infrastructure improvements are necessary to meet changing mission requirements and to meet NIH and HHS goals for improving the condition of NIH buildings. Such efforts may include upgrading building systems, extending utility infrastructure, and implementing other changes that extend the useful life of existing facilities.

This program specifically supports the continued repair and upgrade of deteriorated infrastructure, including steam and chilled water distribution systems, structural repairs to older buildings, upgrade of plumbing systems, repair of elevators, upgrade of HVAC systems, and replacement of deteriorated fan coil units in multiple facilities. This program supports

improvements to address evolving research requirements and supports, and when needed, certain limited IC renovations. A focus area for NIH is Building 10, the original Warren Grant Magnuson Clinical Center on the Bethesda campus.

The weighted CI of NIH's facilities at the end of FY 2011 was 73.8, whereas the target weighted CI for FY 2012 is 75.4, requiring a net improvement of 1.6 CI points. This projected improvement may be offset by the impact of normal aging in FY 2012.

Budget Policy: The FY 2013 President's Budget request is \$70.008 million, a decrease of \$28.900 million under the FY 2012 Enacted level.

Figure 10

**National Institutes of Health
Buildings and Facilities**

Budget Authority by Object

	2011 Actual	2012 Enacted	2013 PB	Increase or Decrease	Percent Change from FY 2012
Operations & Maintenance of Facilities (32.0)	49,900,000	125,308,000	125,308,000	0	0.0%
Obligations *	62,161,000	128,333,000	125,308,000	-3,025,000	-2.4%
Total budget authority by object	49,900,000	125,308,000	125,308,000	0	0.0%
Total obligations by object	62,161,000	128,333,000	125,308,000	-3,025,000	-2.4%

* includes obligations against prior year recoveries