

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Buildings and Facilities

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FY 2008 Proposed Appropriation Language

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 the National Institutes of Health, including the acquisition of real property, \$136,000,000, to remain available until expended

Supplementary Exhibit

**Comparison of Proposed FY 2008 Appropriation Language to
Most Recently Enacted Full-Year Appropriations**

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 the National Institutes of Health, including the acquisition of real property,

~~[\$81,900,000]~~ **\$136,000,000**, to remain available until expended. [Department of Health and Human Services Appropriations Act, 2006]

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Amounts Available for Obligation ^{1/}

Source of Funding	2006 Actual	2007 Continuing Resolution	2008 Estimate
Appropriation	\$81,900,000	\$170,513,000	\$136,000,000
Rescission	-819,000		
Subtotal, adjusted appropriation	81,081,000	170,513,000	136,000,000
Transfer to CMS through HHS Secretary's one-percent transfer authority	-56,000		
Transfer to B&F through NIH Director's one percent transfer authority for construction of a Clinical Research Unit	4,480,000		
Subtotal, adjusted budget authority	85,505,000	170,513,000	136,000,000
Unobligated Balance, start of year	166,886,000	77,454,000	58,600,000
Unobligated Balance, end of year	-77,454,000	-58,600,000	
Total obligations	174,937,000	189,367,000	194,600,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:
FY 2006 - \$3,000,000; FY 2007 - \$3,000,000; FY 2008 - \$2,000,000.

Major Changes in the FY 2008 Budget Request

Major changes by budget activity detail are briefly described below. Note that these highlights will not sum to the total change for the FY 2008 budget request for the Buildings and Facilities, which is \$54.919 million more than the FY 2007 Continuing Resolution, for a total of \$136 million.

Repair and Improvements (+\$31,819 million; total \$97.7 million): The NIH-wide Repairs and Improvements (R&I) program sustains efficient and effective facility performance throughout the life cycle of the facility. This requested funding level will enable the NIH to maintain research requirements. This investment ensures that NIH achieves the full service life of its facilities and its components.

Emergency / Back up Power for the NIH Data Center, Phase I (+\$13.3 million): Service demands on the NIH Center for Information Technology (CIT) Data Center are growing. This request, to install additional network transformers and an additional Uninterrupted Power Supply (UPS) with backup generator capacity, is essential to prevent service interruptions for mission critical scientific and administrative information processing systems.

Justification of Budget Request

Authorizing Legislation - Section 402(b) of the Public Health Service Act, as amended.

	<u>2006</u> <u>Actual</u>	<u>2007</u> <u>Continuing Resolution</u>	<u>2008</u> <u>Estimate</u>	Increase or Decrease
Budget authority.....	\$85,505,000	\$170,513,000	\$136,000,000	-\$34,513,000
<u>Total obligations</u>	<u>174,937,000</u>	<u>189,367,000</u>	<u>194,600,000</u>	<u>5,233,000</u>

This document provides justification for the Fiscal Year (FY) 2008 activities of the Buildings and Facilities appropriation.

DIRECTOR'S OVERVIEW

NIH strives to strike a balance between the infrastructure needs of tomorrow's research to address a broad spectrum of emerging health threats and the need for responsible stewardship of yesterday's investments in the "bricks and mortar" of the research enterprise. Of the major components of the B&F program, the R&I program has the most significant impact on NIH facilities' condition. The major goal of the R&I program is to sustain efficient and effective facility performance throughout the life cycle of the facility. Deterioration of a facility's condition, and ultimately its performance, has both direct and indirect impacts on overall program performance, and the ability to perform research in an environment that promotes scientific advancements.

As responsible stewards, part of the NIH strategy is to sustain the condition of existing facilities to prevent deterioration and over time seek to increase the average Condition Index (ratio of cost of repair needs to replacement value at a specific point in time) to 90 or greater.

With the increase requested in FY 2008 NIH will be able to progress in improving its portfolio's average CI and will be able to sustain, renew and make facility improvements.

FY 2008 Justification by Program Activity Detail

Budget Policy

Table 1 is a summary of the funding for Buildings and Facilities (B&F) in FY 2000 through FY 2007.

Table 1 - Summary of B&F Funding by Program Activity FY 2000 through FY 2007:

Year	Construction	Essential Safety and Regulatory Compliance	Physical Security	Repairs and Improvements	Renovations	Equipment/ Systems/ Enabling	Total
FY 2000	68,300,000 (67,000,000 CRC ^{1/})	29,174,000	0	50,676,000	7,200,000	10,000,000	165,350,000
FY 2001	62,015,000	12,971,000	0	60,090,000	8,200,000	17,600,000	160,876,000
FY 2002	127,100,000	61,700,000	25,000,000	64,600,000	14,100,000	3,600,000	296,100,000
FY 2003	470,618,000	6,200,000	80,000,000	55,800,000	24,069,000	2,000,000	638,687,000
FY 2004	9,500,000	13,472,000	0	70,500,000	5,500,000	0	98,972,000
FY 2005	28,059,000	6,000,000	0	58,429,000	10,800,000	7,000,000	110,288,000
FY 2006	5,180,000	13,944,300	0	66,381,000	0	0	85,505,300
FY 2007	700,000	14,500,000	0	155,313,000	0	0	170,513,000

1/ Includes \$10,000,000 comparable adjustment for IC R&I projects.

The FY 2008 budget authority request of \$162,300,000 provides funds for specific projects in four program areas. The listed projects and programs will help enable the NIH to effectively fulfill its ongoing continuing commitment to sustain its facilities and begin to improve its overall Condition Index.

Table 2 - Summary of FY 2008 Request

Year	Construction	Essential Safety and Regulatory Compliance	Repairs and Improvements	Renovations	Equipment/ Systems/ Enabling	Total
FY 2008	9,500,000	15,500,000	97,700,000	0	13,300,000	136,000,000

Program Activities

The Buildings and Facilities (B&F) budget request funds the NIH's multiple research infrastructure priorities. Rapid advances in the understanding of basic biology and the complexity of human disease are providing unique research challenges and opportunities for new treatments and cures. To continue this success, facilities are upgraded to integrate new research tools that could accelerate the pace of research discoveries. These proposals for construction, renovations and improvements will support creating and sustaining a robust, modern, safe and secure physical infrastructure to support the research agenda and maintain the vitality and competitiveness of the NIH biomedical research enterprise.

The proposed FY 2008 B&F budget request provides funds for specific projects in four program areas (Construction, Essential Safety and Regulatory Compliance, Repairs and Improvements, and Equipment/ Systems/ Enabling) within the context of a five-year strategy. The following programs and projects are included in the B&F tables and described in greater detail below:

Construction: Planning, design, and construction of new research and research support facilities for ongoing and new scientific initiatives.

- PET Current-Good Laboratory Practices Facility and Radio-Chemistry Laboratory
- Fit-Out of B3-East Laboratory for the NIMH
- Concept Development Studies

Essential Safety and Regulatory Compliance: Planning, design, and construction to remediate unsafe conditions, upgrade obsolete non-code complying systems, and bring existing facilities into compliance with current regulatory requirements.

- Asbestos Abatement Program
- Fire Protection and Life Safety Program
- Elimination of Barriers to Persons with Disabilities
- Rehabilitation of Animal Research Facilities
- Environmental Assessments / Remediation Program
- Physical Security Improvements

Repairs and Improvements: Replacement of major building systems that have worn out and/or failed, which will extend the useful life and utility of the facility.

- Repairs and Improvements Program

Equipment / Systems / Enabling: Design, purchase, and installation of major pieces of building service and building system equipment.

- Emergency / Back Up Power for NIH Data Center, Phase I

Construction - \$9.5 million

While the FY 2008 Budget does not request resources to construct stand-alone, new facilities, it does include the conversion of empty space into labs. According to guidelines, this constitutes construction activities.

PET Current-Good Laboratory Practices Facility and Radio-Chemistry Laboratory, Bethesda: \$7.0 million

The Food and Drug Administration Modernization Act of 1997 directed the FDA to establish Current Good Laboratory Practice (cGMP) requirements for Positron Emission Tomography (PET) tracer drugs. In addition, the FDA has published a Draft Guideline to PET cGMP to help the PET community better understand PET cGMP (2002). The NIH PET Department is a recognized leader by the world PET community. There are currently about 55 active Institute-directed clinical protocols that use 17 different radiopharmaceuticals for PET imaging. Institutes

involved include: NIMH, NINDS, NIAAA, NICHD, NIDDK, NIAID, NCI, and NHGRI. The number of PET radioligand studies scheduled in patients has increased from 5 per month in 1991 to 35 per month in 2002 to a current average of 120 per month in 2006 and the demand continues to increase. The list of new IND radiopharmaceuticals is still growing. At the current rate of growth, the number of compounds required at NIH will easily double in the next 10 years. The new PET cGMP laboratory is essential for NIH to continue to meet the needs of its physicians to image patients under the pending FDA cGMP regulations (21 CFR 212).

Another critical piece for patient diagnosis and treatment using PET is the development of the tracers to be used in the diagnostic studies. Therefore, in conjunction with the PET cGLP addition is a new Radiochemistry/GMP Laboratory designed for the development and implementation of new tracers, with NIMH having the lead in that effort. This NIMH laboratory will produce the radioligands for their initial evaluation in human subjects. This new Radiochemistry laboratory is essential for NIH to develop novel diagnostic PET tools for patient treatment.

Fit-Out of B3-East Laboratory in CRC, Bethesda: \$2.0 million

This request is to fit-out shelled space in the basement of the Clinical Research Center (CRC), B3, Sector G, as laboratory space. This will allow for the expansion of NIMH clinical and basic neuroimaging research programs. This lab will provide the necessary office and basic science research space that is essential to support the development of Positron Emission Tomography (PET) imaging as a diagnostic tool for treatment and study of the pathophysiology of the brain. Some novel PET radiotracers have been prepared and approved by the FDA for human use and will be used by investigators at several Institutes, including NIMH, NINDS, NIAAA, and NIAID. This laboratory space will support the continuation and expansion of these important pre-clinical and clinical studies in animal models and patients within the Clinical Center.

Concept Development Studies: \$ 0.5 million

The request for Concept Development Studies (CDS) will fund pre-project planning activities to define the scope, cost, and life cycle benefits of a project before NIH initiates formal requests for design and construction funds. The studies will provide detailed knowledge of the cost and life cycle benefits of a project before formal requests for design and construction funds are initiated. This approach enhances the HHS-wide B&F priority-setting process and expedites project design.

Essential Safety and Regulatory Compliance: \$15.5 million

The funds allocated to Essential Safety and Regulatory Compliance enable the 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. The NIH continues to upgrade

many of its older facilities for safe use so that valuable activity can be continued efficiently and effectively without disruption.

Asbestos Abatement: \$2.0 million

The budget request level for these activities will support the continued removal of asbestos-containing materials from various NIH buildings. Asbestos is present in virtually all the older NIH buildings' insulation, fireproofing, and ceiling and wall finishes. Disturbed or deteriorating asbestos fibers can be released into the air, risking the health of those persons exposed. The major emphasis of this program is to abate, from the remaining 28 buildings on the Bethesda Campus, asbestos-containing material from utility spaces where the majority of friable, deteriorated asbestos resides.

Fire Protection and Life Safety: \$5.0 million

Funding is requested for these activities to upgrade the fire protection and life safety equipment of NIH buildings. Older facilities will be upgraded to provide full protection to all occupants of NIH facilities, as well as protection of critical research facilities and resources. Early in this program, a master fire protection plan was developed. Since that time, the NIH has been executing elements of the plan including the installation of automatic fire alarm, fire sprinkler and suppression systems. The program is also meeting safety code regulations and enhancing the emergency egress components throughout NIH facilities. These include the upgrade of fire doors, fire door hardware, emergency lighting, exit marking and related improvements. This request for funding will also support the continued phased replacement of the Bethesda Campus Fire Alarm Reporting System, planned to be completed in FY 2008.

Elimination of Barriers to Persons with Disabilities: \$1.5 million

This program continues to systematically remove existing barriers in and around NIH buildings. The NIH is updating its accessibility plan through a systematic facility survey and development of a corrective action prioritization plan. The facility survey is currently in its third phase. The first two survey phases focused on buildings that are older and/or serve a greater NIH population. The first two survey phases have been reviewed and the deficiencies have been placed in category order as required by ABAAS for existing facilities.

Prioritization of the corrective actions identified in the updated plan is underway. The current request will support NIH's short-term goal of ensuring that all facilities have at least one accessible route, entrance, and toilet facility for each gender, and support requests by persons with disabilities for reasonable accommodation where the accommodation is part of the built facility. The requested funds will be used to continue to improve and eliminate barriers to NIH facilities for persons with disabilities.

Rehabilitation of Animal Research Facilities: \$5.0 million

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 animal facilities. These funds will continue the support of a comprehensive program for the upgrading and long-term preventive maintenance of NIH animal facilities located on the Bethesda campus and at satellite locations. These funds will support efficient operations and to comply with stringent Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) standards and requirements. The standards drive improvements to heating, ventilation, and cooling systems; the provision of appropriate storage space for sanitized animal caging; and repairs to or replacement of various interior finish systems to help ensure strict sanitary conditions. Examples of the types of projects to be accomplished include the continued replacement of hollow metal core doors with solid doors in the animal facilities because of the tendency of hollow core doors to harbor cockroaches in their recesses; and patching, repairing, painting, and caulking of animal facilities as needed to enhance sanitization and eliminate pest harborage.

Environmental Assessments/Remediation: \$1.0 million

The funds requested will allow for environmental remediation activities at all government owned NIH sites. As the nation's premier health research facility, the NIH must set exemplary standards in complying with federal, state, and local environmental policies and regulations.

The program conducts environmental audits on NIH sites to identify potentially hazardous conditions and, when warranted, remediates conditions that could pose a threat to the health and safety of researchers, the general public, or the environment. This includes the ongoing development and implementation of a program to clear/decontaminate laboratories at NIH prior to their renovation; continued ongoing work in soil and groundwater remediation; and rapid response to any new remediation needs that become necessary.

Physical Security Improvements: \$1.0 million

Physical security improvements will continue to bolster NIH's ability to provide a safe and secure environment to perform its mission at all NIH government owned facilities.

Repairs and Improvements: \$97.7 million

These resources support repairs and improvements to the physical plant, building structure, building infrastructure, utility systems, roads, and grounds at Bethesda, Poolesville, and Baltimore, Maryland, Research Triangle Park, North Carolina; Hamilton, Montana; and other field stations and properties for which the NIH has an asset interest. Its purpose is to sustain the efficient and effective performance of NIH's real property assets to meet ongoing and projected research requirements and to offset the "natural" deterioration and obsolescence caused by age

and use. The NIH looks for opportunities to upgrade current systems with more energy efficient systems. The capital repair costs generally are cyclical and predictable, but in some cases are unanticipated. Roofs, roads, electrical, plumbing and mechanical systems, as well as underground utilities, receive scheduled, as well as ad hoc repairs to ensure dependable and safe operation. Other systems/facilities have unpredicted and largely one-time expenditures for the emergency repair or replacement of major equipment, such as transformers, chillers, and cooling towers. In addition, improvements to the facility infrastructure necessary to meet changing mission requirements. Such efforts may include upgrading building systems, extending utility infrastructure, and other changes that extend the useful life of an existing facility.

This request supports a plan for utility repair and improvement projects including: the continued upgrade of the primary compressed air and natural gas distribution lines and manholes on the Bethesda campus, upgrade of the primary electrical distribution systems in Buildings 38/38A, 7 and 29 on the Bethesda campus; repair of elevators, replacement of roof sections and other miscellaneous roof repairs, upgrade of HVAC systems and repair of fan coil units in multiple research and support facilities; repair of steam distribution lines, construction of the West Utility Electrical Switching Station on the Bethesda Campus, and continuation of the multi-year program to address the under capacity, deteriorated, and obsolete building systems in Building 10 (Building 10 Repair). In addition, the plan supports other repairs and improvements such as: structural repairs to buildings and other site improvements such as roads, bridges, and walkways, upgrade of public spaces including restrooms, and façade repairs including wall systems and windows. This request also supports improvements to the infrastructure and structural systems to provide the necessary capacity to accommodate changes in the direction of research and to support IC renovations. Many of the repairs and improvements are identified by mission need, engineering studies, and facility assessments that aid in the identification and prioritizing of the most critical projects.

Equipment / Systems / Enabling - \$13.3 million

Emergency / Back Up Power for NIH Data Center, Phase I, Bethesda: \$13.3 million

The NIH Center for Information Technology (CIT) Data Center provides NIH with a central computing and networking resource. This resource is used for both scientific and administrative information processing, as well as support for a number of HHS- wide applications, *e.g.*, the Payment Management System. Service demands on the CIT Data Center have grown very rapidly during the past five years. Recent measurements indicate that power consumption is growing at a rate of about 100 kW/year for equipment requiring the protection of an Uninterrupted Power Supply (UPS). Given new technologies, the NIH expects this rate of growth to increase significantly over the next 2 to 3 years.

The requested funding will provide for the installation of additional network transformers to make more power available from PEPCO for IT equipment, additional UPS with a backup generator capacity to prevent service interruptions due to power failures.

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

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

Project	2007 Continuing Resolution	2008 Estimate	Change
<u>Essential Safety & Regulatory Compliance:</u>			
Asbestos Abatement Program	2,000	2,000	0
Fire Protection & Life Safety Program	5,000	5,000	0
Eliminate Barriers to Persons With Disabilities	1,500	1,500	0
Environmental Assessments / Remediations	1,000	1,000	0
Rehabilitation of Animal Research Facilities	5,000	5,000	0
Physical Security Improvements	0	1,000	1,000
<u>New Construction:</u>			
Concept Development Studies	700	500	-200
Pet Current-Good Laboratory Practices Facility & Radio-Chemistry Laboratory	0	7,000	7,000
Fit-Out of B3- East Laboratory for NIMH	0	2,000	2,000
Repairs & Improvements	155,313	97,700	-57,613
Equipment / Systems / Enabling			
Emergency / Back Up Power for NIH Data Center	0	13,300	13,300
Total budget authority	170,513	136,000	-34,513
Unobligated balance, start of year	77,454	58,600	-18,854
Unobligated balance, end of year	-58,600	0	58,600
Total obligations	189,367	194,600	5,233

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 PHS Facilities Manual provides specific guidelines for use of operating funds.

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Summary of Changes

2007 Continuing Resolution		\$170,513,000
2008 Estimated budget authority		136,000,000
Net change		34,513,000
	2007 Estimate Budget Authority	Change from Base Budget Authority
<u>Increases:</u>		
A. <u>Program:</u>		
1. Asbestos Abatement Program	2,000,000	0
2. Fire Protection and Life Safety Program	5,000,000	0
3. Eliminate Barriers to Persons With Disabilities	1,500,000	0
4. Environmental Assessments / Remediation	1,000,000	0
5. Rehabilitation of Animal Research Facilities	5,000,000	0
6. Physical Security Improvements PET Current-Good Laboratory Practices Facility and Radio-	0	1,000,000
7. Chemistry Laboratory	0	7,000,000
8. Fit-Out of B-3 East Laboratory for the NIMH	0	2,000,000
9. Emergency / Back Up Power for the NIH Data Center, Phase I	0	13,300,000
Total increases	14,500,000	23,300,000
<u>Decreases:</u>		
A. <u>Program:</u>		
1. Concept Development Studies	700,000	-200,000
2. Repairs and Improvements	155,313,000	-57,613,000
Total decreases	156,013,000	-57,813,000
Total, Net Change	170,513,000	-34,513,000

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Budget Authority by Object

	2007 Continuing Resolution	2008 Estimate	Increase or Decrease
Operation & Maintenance of Facilities (25.4)	170,513,000	136,000,000	-34,513,000
Obligations	189,367,000	194,600,000	5,233,000
Total budget authority by object	170,513,000	136,000,000	-34,513,000
Total obligations by object	189,367,000	194,600,000	5,233,000

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2007 Amount Authorized	2007 Estimate	2008 Amount Authorized	2008 Budget Estimate
Buildings and Facilities	Title IV, Section 402(b)(4)	40§282(b)	Indefinite	\$170,513,000	Indefinite	\$136,000,000
Total Budget Authority				\$170,513,000		\$136,000,000

**NATIONAL INSTITUTES OF HEALTH
Buildings and Facilities**

Appropriation History

Fiscal Year	Budget to Congress	House Allowance	Senate Allowance	Appropriation ^{1/}
1998	190,000,000	223,100,000	203,500,000	206,957,000
1999	224,309,000 ^{2/}	224,599,000	223,822,000	197,519,000
2000	148,376,000	148,376,000	140,732,000	175,376,000 ^{3/}
Rescission				-10,000,000
2001	148,900,000	178,700,000	148,900,000	153,790,000
2002	236,600,000	311,600,000	306,600,000	234,600,000 ^{4/}
Rescission				-30,000,000
2003	632,800,000	632,800,000	632,800,000	632,800,000
Rescission				-4,113,000
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 ^{5/}
				4,480,000 ^{6/}
2007	81,081,000	81,081,000	81,081,000	170,513,000 ^{7/}
2008	136,000,000			

1/ Reflects enacted supplementals, rescissions, and reappropriations.

2/ Reflects a decrease of \$677,000 for the budget amendment for bioterrorism.

3/ Includes \$40,000,000 of advanced appropriation for the Mark O. Hatfield Clinical Research Center.

4/ Reflects \$75,000,000 for the Global AIDS transfer.

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

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

7/ Annualized current rate