# **Buildings and Facilities**

CONGRESSIONAL JUSTIFICATION FY 2023

Department of Health and Human Services National Institutes of Health

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#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### NATIONAL INSTITUTES OF HEALTH

#### Buildings and Facilities (B&F)

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#### **Director's Overview**

America's continuing leadership in biomedical research requires infrastructure and facilities capable of housing safe, reproducible research in compliance with all laws and regulations and conducive to cutting-edge research and research support. The National Institutes of Health (NIH) strives to ensure that its facilities enable scientists to discover new diagnostics, therapies, and cures. NIH continuously evaluates its property inventory to ensure that the buildings and infrastructure on its campuses are safe and reliable and to ensure that these real property assets evolve in support of science. These buildings include the Clinical Research Center (CRC), which includes 240 inpatient beds and 82 day-hospital stations, Biosafety Level 3 and 4 high containment facilities, biomedical research laboratories, a world-class Central Utility Plant (CUP), and buildings housing research support activities.

The Building and Facilities (B&F) program is essential to conducting safe, reproducible science for the Intramural Research Program (IRP). It is critical to ensuring patient safety in the NIH Clinical Center and the conduct of specialty research functions, such as infectious disease research, genomic sequencing, cellular therapy, and unique imaging capabilities. Today's biomedical research requires facilities capable of providing the proper mechanical, electrical, plumbing, fire protection, and architectural environment in which science can flourish. A major component of the B&F program is the Repair & Improvement (R&I) program, which enables NIH to maintain and improve the performance of existing facilities throughout their life cycle. As the responsible steward of its 261 facilities, a key aspect of NIH's strategy is to sustain the condition of existing facilities to prevent premature deterioration and the curtailment of research. These investments help reduce the likelihood and consequences of building emergencies associated with NIH's Backlog of Maintenance and Repairs (BMAR), estimated at approximately \$3.0 billion across all campuses as of the end of FY 2021. The President's Budget requests \$300.0 million for the B&F program.

As directed by Congress in the Consolidated Appropriations Act of 2017, NIH entered a contract with the National Academies of Science, Engineering, and Medicine (NASEM) to assess the condition of the facilities on the Bethesda Campus. An ad hoc committee comprised of medical, architectural, engineering, planning, and maintenance experts was established to conduct the analysis. On August 26, 2019, the committee's report was made public. The report found that "The buildings and facilities at the NIH Bethesda Campus are in need of significant improvement and upgrading to sustain their current mission and ongoing functionality." The report highlights pressing campus-wide infrastructure needs and recommends improvements to NIH's capital planning and funding processes, including updating the B&F prioritization model and developing an annual budget request for BMAR reduction. It also suggests that NIH strengthen internal governance process by assigning and empowering a senior leader to manage capital planning. NIH is taking steps to address all 14 recommendations of the NASEM report. Two were related to increased resources for NIH and 12 dealt with procedural and governance improvements. NIH is moving forward with implementation of the 12 procedural and governance recommendations as explained in more detail below. Also as directed by Congress, NIH has been providing quarterly briefings to the staff of the House and Senate Appropriations Committees regarding the backlog of facilities projects, project prioritization, and overall

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<sup>&</sup>lt;sup>1</sup> https://nap.edu/read/25483/chapter/1

facilities governance. It should be noted that the NASEM recommendations were related to the Bethesda backlog and did not address the backlog at other NIH sites. While the scope of the report was limited to the Bethesda Campus, the NIH also has facilities at other sites in Maryland, Montana, and North Carolina.

In FY 2023, NIH requests a \$100.0 million increase to the B&F account, raising its appropriation from \$200.0 million in the FY 2022 Continuing Resolution level to \$300.0 million. In addition, the budget includes a general provision that would allow NIH to transfer and merge up to one percent of other NIH appropriations to the B&F account. Appropriations for Institutes, Centers, and the Office of the Director generally have a one-year period of availability, which is not sufficient for construction projects, and existing NIH transfer authorities do not change the period of availability. Together, the B&F increase and transfer authority would enable NIH to dramatically improve the condition of its facilities and halt the growth of the BMAR. The COVID-19 pandemic has made biomedical research and the facilities that support it even more important than ever. Facilities will play an important role in NIH's ability to respond to national and global health threats. This budget aims to adapt NIH buildings and infrastructure to a changing biomedical research landscape, while maintaining the safety and reliability of its buildings and infrastructure.

#### Fact Sheet



#### Buildings and Facilities (B&F) Program

#### **OVERVIEW**

The B&F program is essential to conducting safe, reproducible science for the Intramural Research Program (IRP). It is critical to ensuring patient safety in the NIH Clinical Center and the conduct of specialty research functions, such as infectious disease research, genomic sequencing, cellular therapy, and unique imaging capabilities.

NIH continuously evaluates its property inventory to ensure that the buildings and infrastructure on its campuses are safe and reliable and to ensure that these real property assets evolve in support of science. These buildings include:

- The Clinical Research Center (CRC), which houses 240 inpatient beds and 82 day-hospital stations
- Biosafety level 3 and 4 containment facilities
- · Biomedical research laboratories
- · A world-class central utilities plant
- · Buildings that house research support activities



#### **FUTURE PROJECTS**

#### BETHESDA CENTRAL UTILITY PLANT: CRITICAL REPAIRS

Upgrade Boiler Water Feed System, Building 11

- Removal and replacement of the existing feedwater pumps with new feedwater pumps with automatic recirculation (ARC)
- The pumps have reached the end of their useful life and need to be replaced.

#### Central Utility Plant (CUP) Roof Repair Building 11, Phase 2

- Sections of the roof are in poor condition with breachings in outer membrane and are no longer under warranty.
- Roof is also experiencing substantial water ponding and infiltration that could lead to leaks if not replaced.
- This could potentially damage CUP equipment or jeopardize CUP operations.

#### Cooling Tower Variable Frequency Drives, Building 11

- This project will replace twelve cooling tower fan motors and associated Variable Frequency Drives (VFDs).
- The existing VFDs are over 20 years old and need replacement to ensure system reliability.

#### Replace CC Patient and Visitor Parking (MLP-12)

- The Ambulatory Care Research Facility (ACRF) parking garage is the primary parking facility for the CCC
- Over the past 45 years, the concrete has deteriorated from water, salt, and the original use of chlorides during construction, causing it to spall and separate from the structure, leading to safety hazards for people and vehicles below each level
- The plan to is to move patient, visitor, and crucial employee parking spaces to MLP-9, which has a capacity of 900 cars.
   The remaining spaces from the ACRF Garage and the spaces displaced from MLP-9 would move to the new MLP-12 garage for a total of 1,400 spaces

#### Demolition of Buildings 29 & 29A

- A new building for the Center for Disease Research will replace 10 outdated, costly, and energy-intensive buildings
- CDR will address the needs of modern translational research leading to improved therapeutics

#### STATUS OF BUILDINGS AND FACILITIES

At the end of FY 2021, the estimated Backlog of Maintenance and Repairs (BMAR) was \$3.0 billion. In 2019, the National Academies of Science, Engineering, and Medicine (NASEM) published a consensus study on the facilities needs at the NIH campus in Bethesda, MD. The report found that "The buildings and facilities at the NIH Bethesda Campus are in need of significant improvement and upgrading to sustain their current mission and ongoing functionality." The report also contained 14 recommendations, 2 of which are focused on increased appropriations to the NIH Buildings and Facilities Program. NIH is working to implement the other 12 recommendations, which were largely procedural in scope. NIH's facilities play an important role in NIH's ability to respond to national and global health threats, and continued investment into the B&F program is essential to sustain the integrity of NIH's research.









#### **Appropriations Language**

#### National Institutes of Health

#### **BUILDINGS AND FACILITIES**

For the study of, construction of, demolition of, renovation of, and acquisition of equipment for, facilities of or used by NIH, including the acquisition of real property, \$300,000,000, to remain available through September 30, 2027.

SEC. 214. Not to exceed 1 percent of funds appropriated by this Act to the offices, institutes, and centers of the National Institutes of Health may be transferred to and merged with funds appropriated under the heading "National Institutes of Health-Buildings and Facilities":

Provided, That the use of such transferred funds shall be subject to a centralized prioritization and governance process: Provided further, That the Director of the National Institutes of Health shall notify the Committees on Appropriations of the House of Representatives and the Senate at least 15 days in advance of any such transfer: Provided further, That this transfer authority is in addition to any other transfer authority provided by law.

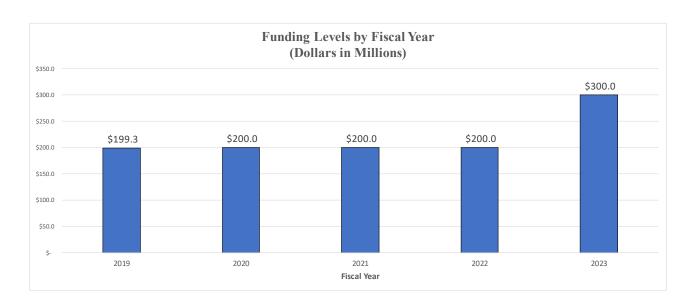
### NATIONAL INSTITUTES OF HEALTH

# Buildings & Facilities Summary of Changes

(Dollars in Thousands)	
FY 2022 CR	\$200,000
FY 2023 President's Budget	\$300,000
Net change	\$100,000

	F	Y 2022	F	Y 2023	Y 2022 +/- FY 2023
<u>Increases</u>					
A. Program:					
Replace Clinical Center Patient and Visitor Parking (MLP-12)		1,950		40,051	38,101
NIAID VRC 40A		4,000		12,700	8,700
NIHAC - Convert Building 102 A and B Wings, Poolesville		-		1,016	1,016
Repair Parking Garages, Bethesda		-		13,356	13,356
Demolition of Bldg 29/29A (CDR Enabling Task 2)		-		27,000	27,000
Repairs & Improvements		33,750		163,877	130,127
Total Increases	\$	39,700	\$	258,000	\$ 218,300
	F	Y 2022	F	Y 2023	Y 2022 +/- FY 2023
<u>Decreases</u>					
A. Program:					
Surgery, Radiology and Lab Medicine Building (SRLM)		87,000		40,000	(47,000)
Clinical Center E Wing Renovation Construction		2,000		-	(2,000)
NIAID RML Comparative Medicine Center (RCMC), MT, Building B		3,300		2,000	(1,300)
Electrical Switching Station & Emergency Generators 59/59A		62,000		-	(62,000)
Bldg. 10 CC Radiopharmacy & Biologics Radiolabeling Facility		6,000		-	(6,000)
Total Decreases	\$	160,300	\$	42,000	\$ (118,300)
Total Changes	\$	200,000	\$	300,000	\$ 100,000

# **Budget Graph**



#### **Budget Authority by Activity**

(Dollars in Thousands)

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022 CR	
	FTE Amount	FTE Amount	FTE Amount	FTE Amount	
Detail					
Surgery, Radiology and Lab Medicine Building (SRLM)	4,000	87,000	40,000	(47,000)	
Electrical Switching Station & Emergency Generators	-	62,000	-	(62,000)	
Permanent IVAU CC	311	-	-	-	
Replace R22 Refrigerant Chillers	34,575	-	-	-	
Replacement of Direct Buried Steam Pipe Along	19				
Bldg. 10 CC Radiopharmacy & Biologics Radiolabeling	21,454	6,000	-	(6,000)	
NIHAC - Convert Building 102 A and B Wings,	-	-	1,016	,	
Clinical Center E Wing Renovation	15,000	2,000	-	(2,000)	
NIAID VRC 40A	4,000	4,000	12,700	8,700	
B38 NLM 1st Floor Renovations (Phase 1)	9,534				
Building 51 NIH Fire House	3,098				
Demolition of Bldg 29/29A (CDR Enabling Task 2)	-	-	27,000		
NIAID RML Comparative Medicine Center (RCMC),	-	3,300	2,000	(1,300)	
Repair Parking Garages, Bethesda	-	-	13,356	13,356	
Replace Clinical Center Patient and Visitor Parking	-	1,950	40,051	38,101	
Repairs & Improvements	108,009	33,750	163,877	130,127	
TOTAL	200,000	200,000	300,000	100,000	

#### **Justification of Budget Request**

#### **Buildings and Facilities**

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

#### Budget Authority (BA):

		FY 2022	FY 2023	
	FY 2021	Continuing	President's	FY 2023 +/-
	Final	Resolution	Budget	FY 2022
BA	\$200,000,000	\$200,000,000	\$300,000,000	\$100,000,000
Obligations	179,714,586	334,322,000	300,000,000	34,322,000

#### **Program Descriptions**

NIH plans to execute various modernization and repair projects including: supporting NIH's research hospital programs; providing near term back-up, a remote campus addition, and ultimately replacement of the Bethesda campus research animal facilities with a centralized and more efficient facility; improving or adding facilities that advance laboratory and computational and data science; repairing and/or replacing obsolete support facilities with new buildings and structures; improving the energy and water efficiency of buildings; and supporting the coevolution of science and buildings.

The below projects are included in the current program based upon status as an ongoing project or based on the NIH prioritization program for capital projects at the time of program development. There can be instances where design only is being proposed within a current program in order to ensure that NIH is ready with a portfolio of shovel-ready projects. In instances where a higher priority project's construction is not included in the current program, it is attributable to one or more of a number of conditions and/or policy guidance. Some of these attributable factors include: limitations based upon current NIH budget guidance, the project's cost being below the line-item threshold to be listed in the program (R&I funded projects), and/or a project's coordination/logistics related to other projects on the campus.

#### Surgery, Radiology, and Laboratory Medicine Building (SRLM)

The Ambulatory Care Research Facility (ACRF), a major component of the Clinical Center Complex (CCC), opened in 1982 and houses the Departments of Perioperative Medicine, Interventional Radiology, Radiology & Imaging Sciences, and Laboratory Medicine. These Departments utilize advanced and technology-dependent cutting-edge programs supporting NIH's translational research initiatives to improve the nation's health.

The project will construct an 8-story, 527,000 gross square feet (GSF) addition, as well as repurpose and renovate two floors (103,000 GSF) of the west laboratory wing of the CRC. The new SRLM Building will include the Clinical Center's (CC) Surgical (Department of Perioperative Medicine and Interventional Radiology – DPM/IR), Radiology (Radiology and Imaging Sciences – RADIS) and the Laboratory Medicine (Department of Laboratory Medicine - DLM) departments now located in the ACRF's S and T wings and the National Cancer Institute's research laboratories located on floors 1W and 3W of the CRC West laboratory wing.

#### Surgery, Radiology, and Laboratory Medicine Building

The Ambulatory Care Research Facility (ACRF) opened in 1982 and houses departments that involve some of the most advanced and technology dependent cutting-edge programs supporting NIH's Translational Research initiatives. This project is focused on developing a facility that supports new medical research initiatives to improve the nation's health and strengthen NIH's biomedical research capacity in close proximity to the Clinical Research Center. To further the NIH healthcare mission, NIH will pursue the goal of comprehensive phenotyping and genotyping to complement ongoing intramural and extramural genetic studies and thereby enable the development of more effective treatments. The Clinical Center (CC) at the NIH leads the global effort in discovering tomorrow's cures and training today's investigators, so it is essential that the CC has stateof-the-art patient care, treatment and diagnostic facilities that support this effort.

These departments are involved in some of the most advanced programs supporting NIH's Translational Research initiatives, which is the cornerstone of the ability for the NIH to perform its fundamental mission of clinical research. The addition will also house the National Heart, Lung, and Blood Institute's Catheterization Laboratory.

Recent reports have determined a high degree of risk to patient safety based on deteriorating infrastructure conditions of the 1982-era ACRF. This project will mitigate several major deficiencies, such as undersized and unreliable infrastructure systems (normal and emergency power, communication systems, heating, cooling, and ventilation), as well as inefficient routes of circulation and limitation restricting the flexibility and adaptability to address growth and change. This project will also address

structural problems that have caused unacceptable vibration levels in various areas of the building and functional space inadequacies and inefficiencies. While the initial contract award of a design-build contract was funded with prior year Nonrecurring Expenses Fund and prior year B&F funds, the FY 2023 request is associated with construction contingency needs to address issues such as potential unforeseen conditions.

#### Replace Clinical Center Patient and Visitor Parking (MLP-12)

The existing three-level substructure Ambulatory Care Research Facility (ACRF) parking garage is the primary parking facility for the Clinical Center Complex (CCC), providing 1,400 parking spaces for patients, visitors, and staff. Eighty percent of the concrete structure is beneath occupied facilities, which constitutes a security risk. Over the past 45 years, the structural steel rebar in the concrete has deteriorated from water, salt, and the original use of chlorides during construction. This has caused the concrete to spall and separate from the structure, causing a potential safety hazard to people and vehicles below each level.

Currently, there is a shortfall of surface parking on the NIH Bethesda campus of 600 spaces due to various construction projects, including the new Thermal Energy Storage tank and the

Industrial Water Storage tank. The plan to mitigate this issue is to move the patient and visitor (400) and crucial employee (500) parking spaces to the multi-level parking garage (MLP)-9, which has a capacity of 900 cars. The remaining 500 general purpose spaces from the ACRF Garage and the 900 general purpose spaces displaced from MLP-9 would move to the new MLP-12 garage for a total of 1,400 spaces. This maintains the status quo of campus parking in the approved Master Plan. The new pre-cast concrete, 480,000 GSF parking structure will be located on the south side of the campus, as shown on the approved 2013 Master Plan (identified as MLP-12), adjacent to the Lot 41, Medlars Drive, and the North South service road.

# National Institute of Allergy and Infectious Disease (NIAID) Rocky Mountain Lab (RML) Comparative Medicine Center (RCMC), Montana, Building B

The animal holding space at RML, located in Missoula, Montana, is currently operating at full capacity; therefore, there is insufficient holding space for nonhuman primates and no holding space for new non-traditional research animals, such as bats and certain rodent species, which are crucial to RML's research on emerging infectious diseases. A lack of animal holding space delays the RML response to ongoing research and outbreaks as they occur. In addition, the space limitation forces shortened acclimation periods for incoming animals. Longer acclimation periods would allow animals time to stabilize in a new environment and promote both animal welfare and more consistent research subjects. The lack of sufficient holding space for nontraditional research species such as bats, which are an important reservoir host for several emerging infectious diseases including Ebola virus, has negatively impacted RML's critical research mission. RML scientists currently have a research program in Africa on bats as vectors of disease but cannot start a vigorous program at RML without new animal holding space. Without adequate holding space, RML's research response to outbreaks such as Ebola, Lassa, or Zika will be significantly compromised or delayed. RML is also seriously limited on the amount of storage space available for the Rocky Mountain Veterinary Branch (RMVB) and the RCMC would include adequate storage for RMVB's caging, bedding, and feeding requirements.

There are no animal research facilities that can be leased or contracted operations for these types of animals near Hamilton or nearby Missoula, Montana. There are no other facilities available and the proximal need for animal housing on the RML campus is paramount to continuing the mission of research on infectious diseases. While the initial contract award of a construction contract was funded with the Coronavirus Aid, Relief, and Economic Security (CARES) Act and prior year B&F funds, this request is associated with construction contingency needs to address issues such as potential unforeseen conditions.

#### NIAID VRC Lab Expansion Bldg 40A North, Bethesda

The NIAID Vaccine Research Center (VRC) is in the forefront of developing vaccines for infectious disease threats, including coronaviruses (SARS-CoV-2, MERS-CoV, SARS-CoV), influenza, HIV-AIDS, and Ebola. The VRC is frequently called upon to address biodefense threats and global pandemic emerging infectious disease threats.

The current VRC Building 40 research space is not sufficient to support the surge in research aimed at protecting against global health threats. Building use is currently 35 percent to 45

percent over designed capacity. Its space allocation of approximately 130 Net Assignable Square Feet (NASF) per person is well below the NIH intramural utilization metric of 200 NASF per person, stressing personnel workflow and VRC infrastructure, potentially compromising laboratory safety, and constricting the VRC's ability to recruit and retain mission-critical expertise to create new programs. Additional space is urgently needed to alleviate overcrowding and to help accelerate development, manufacturing, and clinical study of vaccines and biologics against pandemic health threats. Additionally, the added space would allow NIAID to move costly off-campus research space located in contract facilities back to federally owned facilities on the Bethesda campus. While the initial contract award of a construction contract was funded with CARES Act and prior year B&F funds, this request is associated with construction contingency needs to address issues such as potential unforeseen conditions.

#### NIH Animal Center (NIHAC) – Convert Building 102 A and B Wings, Poolesville

To meet current research demands and keep pace with future projections, additional animal housing is needed for the NIH intramural research program that is both suitable for nonhuman primates and flexible enough to be adapted to other species as research directions evolve. To illustrate, changes to current research directions at the NIH have diminished the need for canine and other animal models housed in kennels. There has been a significant increase in the need for nonhuman primate and multi-species housing across the NIH, bringing animal housing space on the Bethesda campus near capacity. This need has only increased as a result of requirements for COVID-19 research. This project will demolish the existing, underutilized A and B wings (originally used for housing canines) of Building 102 at the NIHAC in Poolesville, MD and construct a new facility on the existing footprint (approximately 40,000 GSF) to include animal holding, cage wash, procedure, lab, administrative functions, support spaces, and mechanical rooms. The new facility can accommodate an increase in demand and provide swing space in the event of short or long-term building closures on the Bethesda campus.

#### Repair Parking Garages, Bethesda

The NIH Bethesda Campus hosts 27 ICs, employs more than 10,000 employees, and houses more than 20,000 patients and visitors every day. To meet the parking needs of the NIH community, parking surface lots, parking garages, and metered spaces are offered across the Bethesda campus. As part of this parking system, there are several multi-level parking (MLP) garages; all at full capacity and experiencing high traffic volume, especially during weekday working hours between 8:00 a.m. and 5:00 p.m.

The MLP garages on the Bethesda campus were constructed at different times, so their condition and service life vary. However, all have common issues -- the structures are deteriorating at an alarming rate. Several engineering inspections and condition assessments have been performed in the parking structures, dating back to 2012. Assessment results have identified deficiencies and critical issues that are causing failing conditions that make it difficult to maintain and service the garages. Notably, adding to major deterioration problems, recently discovered pieces of falling delaminated concrete from the underside of garage deck slabs are posing serious safety risks to garage users, including visitors, patients, and NIH staff and contractors. To correct and mitigate garage deterioration and safety issues, the NIH is proposing a garage repair/restoration

program that will provide for a complete remediation of the parking structures (including stair towers) to include concrete and drainage repairs, as well as any other repairs necessary to ensure the safety and structure integrity of the parking garage system.

#### Demolition of Building 29/29A (Enabling Task 2 for the Center for Disease Research)

The Center for Disease Research (CDR) will address the needs of modern translational research practices, namely traditional bench laboratory space integrated with advanced biocomputational and cell-line/animal space to most effectively advance the development of therapeutics, which then would be applied at the NIH Clinical Center and at clinical centers of excellence nationwide.

The CDR will replace 10 outdated, BMAR-intensive, energy-intensive buildings and an animal area in Building 10 with an energy-efficient facility. NIH anticipates a 50 percent reduction in operating costs and a \$49.5 million reduction in BMAR.

#### Repairs & Improvements (R&I)

The Repairs & Improvements (R&I) program will address the physical plant, building structures, utility systems, roads, and grounds at all NIH sites. These projects will help sustain efficient and effective performance of NIH's real property assets to meet ongoing and projected research requirements and to offset the deterioration and obsolescence caused by age and use.

Facilities infrastructure improvements are necessary to meet shifting research priorities and to meet NIH and HHS goals for improving the condition of NIH buildings. Such efforts include upgrading building systems, extending utility infrastructure, and implementing other capital repairs to the buildings and infrastructures to extend their useful life.

These projects support the continued repair and upgrade of deteriorated infrastructure, including steam and chilled water distribution systems; structural repairs to older buildings that NIH may continue using effectively; upgrading plumbing systems; repairing elevators; upgrading heating, ventilating, and air conditioning systems; replacing deteriorated fan coil units in multiple facilities; and addressing evolving research requirements.

Additionally, this program supports a comprehensive series of repairs and improvements to ensure NIH retains accreditation by the Joint Commission (for its healthcare facilities) and by the Association for the Assessment and Accreditation of Laboratory Animal Care (for its animal research facilities).

The FY 2023 request for B&F is critical to NIH's long-term effort to provide the necessary funding for stewardship of NIH facilities. The conduct of safe, reproducible science depends heavily on the provision of safe, reliable buildings. The requested increase will enable NIH to provide its scientists with the facilities and infrastructure that they need to preserve and enhance the NIH's position as the world's premier biomedical research organization.

The following table provides the Facility Project Approval Agreement (FPAA) Number, Project Title, and fiscal years with B&F funding allocations for the capital projects mentioned above.

FPAA Number and Project Title	Fiscal Year(s)
N-15-009 Surgery, Radiology and Lab Medicine Building (SRLM)	FY 2023, FY 2024, FY 2025
N-17-001 Replace Clinical Center Patient and Visitor Parking (MLP-	
12)	FY 2023
N-17-003 NIAID RML Comparative Medicine Center (RCMC), MT,	
Building B	FY 2023
N-17-005 NIAID VRC Lab Expansion Bldg 40A North, Bethesda	FY 2023
N-19-014 NIHAC - Convert Building 102 A and B Wings, Poolesville	FY 2023, FY 2024
N-20-008 Repair Parking Garages, Bethesda	FY 2023, FY 2024
N-22-003 Demolition of Bldg 29/29A (CDR Enabling Task 2)	FY 2023

#### Status of the National Academies of Sciences, Engineering, and Medicine (NASEM) Report

The FY 2017 Labor, Health and Human Services, and Education, and Related Appropriations Bill directed NIH to enter into a contract with the NASEM to study the capital needs of NIH's Bethesda Campus. It is important to note that while the NASEM Consensus Study was limited to the Bethesda Campus of NIH, the B&F appropriation must satisfy the facilities requirements for all of NIH's sites, not just Bethesda. These other sites are: Poolesville, MD; Frederick, MD; Research Triangle Park, NC, and Rocky Mountain Labs, MT. The 185-page NASEM report was made public on August 26, 2019 and is available on-line. The report contains 14 recommendations. Two of the recommendations focus on the need for increases to the B&F appropriation. This Congressional Justification includes an increase that is consistent with the NASEM recommendations. The remaining 12 recommendations relate to project prioritization, governance, networking with other large facility owners, and leveraging best practices. Following is a more detailed summary of the 12 procedural recommendations:

• 4.3: NIH should implement a Deferred Maintenance and Repair Program that will reduce Backlog of Maintenance and Repair (BMAR) and meet building Condition Index (CI) targets. Status: NIH has developed a strategy to deploy an Integrated Workplace Management System (IWMS) that will assist with the achievement of this goal. Secondly, NIH entered into a contract with SmithGroup, an international architectural, engineering, and planning firm, to advise NIH as to how to reduce the BMAR and achieve CI targets. Thirdly, NIH awarded a contract for deployment of the IWMS, which is in progress. While all three of these efforts will enhance NIH's ability to best target available resources, there will also be a need to increase facilities investments as mentioned in recommendations 4.1 and 4.2.

<sup>&</sup>lt;sup>2</sup> www.nap.edu/read/25483/chapter/1

- 5.1: NIH should revise its Building and Facilities (B&F) prioritization model so no less than one-third of the total points are assigned to Condition Index and Mission Dependency. Status: Complete. The new model is in use and 80% of the total points are assigned to Condition Index and Mission Dependency. The Research Facilities Advisory Committee (RFAC) utilizes this model to prioritize all projects with a construction value of \$3.5 million or greater.
- 5.2: NIH should move forward as quickly as possible with the following projects: Replace Building 12; Replace Building 14/28 complex; Renovate or replace portions of Building 10 complex. Status: NIH continues to work with the Department of Health and Human Services and the Office of Management and Budget to investigate feasibility of funding these projects. The most critical is the Surgery, Radiology, and Laboratory Medicine (SRLM) project, NIH's highest priority project, which was funded; bids are currently being solicited and the contract award is scheduled to occur in March 2022. A site for the replacement of the Building 14/28 site has been identified, but it is encumbered by Buildings 29 and 29A, which are beyond economical repair and need to be demolished; this Congressional Justification includes funding for the demolition of Buildings 29 and 29A.
- 5.3: NIH should seek out other federal agencies and private sector advisors to determine best practices in administering the NIH Capital Asset Management Program. Consider quarterly reviews with these peer advisors. Status: NIH has established an agreement with the Federal Facilities Council (FFC), which was established in 1953, to share with NIH best practices across the federal sector. Additional outreach is underway but has been hampered somewhat by the fact that directors of other large facilities portfolios are dealing with the impacts of COVID-19, and thus have limited time to provide.
- 6.1: NIH should integrate its research strategic plan with its capital facility asset management plans, with explicit prioritization aimed at relating the long-term research strategy to the long-term campus Master Plan. These plans should undergo annual review, at the highest levels of NIH. Status: The recently-issued NIH-Wide Strategic Plan for Fiscal Years 2021-2025 includes important guidance regarding facilities, a topic that was not addressed in the previous strategic plan.<sup>3</sup>
- 6.2: NIH should establish a formal external interdisciplinary peer review panel to provide ongoing review of NIH capital assets, the annual project plan, the 5-year plan, the master plan, and the integrated research strategic plan and master plan. Status: The Federal Facilities Council has agreed to review the NIH capital assets, annual project plan, 5-year plan, master plan, and the integrated research strategic plan and master plan. This formal, external, interdisciplinary approach will provide objective perspectives to identify opportunities that might not be apparent to NIH staff.
- 6.3: NIH should establish processes and a system that ensure third-party, expert peer review of all adopted Office of Research Facilities (ORF) preplanning programs of

<sup>&</sup>lt;sup>3</sup> The NIH-Wide Strategic Plan is available at https://www.nih.gov/about-nih/nih-wide-strategic-plan.

- requirements (PORs) and total project capital cost models. Status: NIH concurs and will implement in all future PORs.
- 7.1: NIH should study non-NIH federal research programs and adopt functionally similar assessment, prioritization, and funding strategies to better meet facilities and infrastructure investment needs. Status: NIH concurs and continues to share best practices and lessons learned with the Federal Facilities Council as well as eight federal organizations: CDC, the Environmental Protection Agency (EPA), FDA, the National Aeronautics and Space Administration (NASA), the National Institute of Standards and Technology (NIST), the Naval Research Laboratory (NRL), Smithsonian, and the United States Department of Agriculture (USDA).
- 7.2: NIH should implement a capital facilities planning governance structure, facilitating an integrated, transparent, and inclusive capital asset planning decision making process that tracks progress toward strategic and programmatic objectives. Status: On September 6, 2019, the NIH Director enhanced the existing governance structure, referred to as the Facilities Working Group (FWG). These improvements include: added the Director of the Office of Research Support and Compliance, increased number of Scientific/Clinical Directors from two to three, and improved diversity in the composition of the governance body.
- 7.3: NIH should convene an annual capital facilities planning workshop or similar forum with other federal agencies and academic research institutions to assess NIH capital asset management program processes and identify improvements. Status: The first annual capital facilities planning workshop occurred on October 22, 2020. The second occurred on November 4, 2021 and involved presentations by the Smithsonian Institution regarding Capital Project Risk Management and by the University of Wisconsin regarding Asset Management.
- 7.4: NIH should align its organizational structure with scientific research and capital assets management strategies and plans. In doing so, NIH should consider assigning a senior organizational leader with such responsibilities and empowering that person with commensurate authority. Status: On January 31, 2020, the NIH Director appointed, in writing, the Deputy Director for Management as the NIH Senior Real Property Officer.
- 8.1: NIH should prioritize and synchronize the NIH-wide Strategic (Research) Plan and the 2013 Bethesda Campus Master Plan enhancing interactions and collaboration among research personnel with shared space and facilities, and flexible and adaptable facilities that accommodate collaboration. Status: This is an ongoing effort and will not have a discrete completion date.

# **Appropriations History**

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2014	\$126,111,000		\$125,308,000	\$128,663,000
Rescission				\$0
2015	\$128,663,000			\$128,863,000
Rescission				\$0
2016	\$128,863,000	\$132,640,000	\$128,863,000	
Rescission				\$0
20171	\$128,863,000			\$128,863,000
Rescission				\$0
2018	\$98,615,000	\$128,863,000	\$128,863,000	\$128,863,000
Rescission				\$0
2019	\$200,000,000	\$200,000,000	\$200,000,000	\$200,000,000
Rescission				\$0
2020	\$200,000,000	\$200,000,000	\$300,000,000	\$200,000,000
Rescission				\$0
2021	\$300,000,000	\$200,000,000	\$200,000,000	\$200,000,000
Rescission				\$0
2022	\$250,000,000	\$250,000,000	\$275,000,000	\$200,000,000
Rescission				\$0
2023	\$300,000,000			

#### **Authorizing Legislation**

	PHS Act/ Other Citation	U.S. Code Citation	2022 Amount Authorized	FY 2022 CR	2023 Amount Authorized	FY 2023 President's Budget
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
			>	\$200,000,000	>	\$300,000,000
Buildings & Facilities	Section 401(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				\$200,000,000		\$300,000,000

#### Amounts Available for Obligation

(Dollars in Thousands)

Description	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Appropriation	\$200,000	\$200,000	\$300,000
Rescission	\$0	\$0	\$0
Sequestration	\$0	\$0	\$0
Supplemental	\$0	\$0	\$0
Subtotal, adjusted appropriation	\$200,000	\$200,000	\$300,000
Secretary's Transfer	-\$600	\$0	\$0
Recovery for prior year obligations	\$4,382	\$0	\$0
Unobligated balance, start of year	\$110,254	\$134,322	\$0
Subtotal, adjusted budget authority	\$314,036	\$334,322	\$300,000
Unobligated balance, end of year	-\$134,322	\$0	\$0
Unobligated balance lapsing	\$0	\$0	\$0
Total obligations	\$179,714	\$334,322	\$300,000

#### **Budget Authority by Object Class**

(Dollars in Thousands)

	OBJECT CLASSES	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
	Personnel Compensation			
11.1	Full-Time Permanent	0	0	0
11.3	Other Than Full-Time Permanent	0	0	0
11.5	Other Personnel Compensation	0	0	0
11.7	Military Personnel	0	0	0
11.8	Special Personnel Services Payments	35	37	1
11.9	Subtotal Personnel Compensation	\$35	\$37	\$1
12.1	Civilian Personnel Benefits	0	0	0
12.2	Military Personnel Benefits	0	0	0
13.0	Benefits to Former Personnel	0	0	0
	Subtotal Pay Costs	\$0	\$0	\$0
21.0	Travel & Transportation of Persons	0	0	0
22.0	Transportation of Things	0	0	0
23.1	Rental Payments to GSA	0	0	0
23.2	Rental Payments to Others	0	0	0
23.3	Communications, Utilities & Misc. Charges	0	0	0
24.0	Printing & Reproduction	0	0	0
25.1	Consulting Services	924	944	20
25.2	Other Services	21,677	22,153	477
25.3	Purchase of goods and services from government accounts	628	642	14
25.4	Operation & Maintenance of Facilities	10,785	10,785	0
25.5	R&D Contracts	0	0	0
25.6	Medical Care	0	0	0
25.7	Operation & Maintenance of Equipment	1,113	1,138	24
25.8	Subsistence & Support of Persons	0	0	0
25.0	Subtotal Other Contractual Services	\$35,127	\$35,662	\$536
26.0	Supplies & Materials	0	0	0
31.0	Equipment	62,150	63,517	1,367
32.0	Land and Structures	102,686	200,782	98,096
33.0	Investments & Loans	0	0	0
41.0	Grants, Subsidies & Contributions	0	0	0
42.0	Insurance Claims & Indemnities	0	0	0
43.0	Interest & Dividends	2	2	0
44.0	Refunds	0	0	0
	Subtotal Non-Pay Costs	\$164,838	\$264,301	\$99,463
	Total Budget Authority by Object Class	\$200,000	\$300,000	\$100,000