



FUNDED
**FEDERAL
CAPITAL
IMPROVEMENTS
PROGRAM**

for the National Capital Region

FY 2016-2021

Federal Capital Improvement Program (FCIP) Summary for Fiscal Years 2016–2021

The National Capital Planning Commission (NCPC) is responsible for planning the orderly development of the federal establishment in the National Capital Region (NCR). The NCR consists of the District of Columbia, the official seat of federal government, and the surrounding counties within Maryland and Virginia including: Montgomery, Prince George’s, Arlington, Fairfax, Loudoun, and Prince William counties.

Each year NCPC evaluates capital improvement projects proposed by federal agencies. NCPC evaluates projects based on the extent to which they conform to planning and development policies in the region as described in plans and programs adopted by the Commission, regional planning bodies, and local and state governments (including the *Comprehensive Plan for the National Capital: Federal Elements* and other plans prepared by the NCPC). NCPC’s recommendations help inform the Office of Management and Budget’s (OMB) decisions about proposed capital projects for inclusion in the President’s Annual Budget. NCPC also uses the FCIP to guide its planning activities in the region.

Upon release of the President’s Final Annual Budget, NCPC compiles the final FCIP for public distribution. This document represents those capital projects endorsed by the President for which funding is proposed. A project’s inclusion in the FCIP neither represents a commitment by a federal agency to propose funding nor a commitment by OMB to approve funding in subsequent budgets.

The approved projects and their descriptions are presented below.

Department of Commerce

NATIONAL INSTITUTES OF STANDARDS AND TECHNOLOGY

GAITHERSBURG, MONTGOMERY COUNTY, MARYLAND

BUILDING 245 MODERNIZATION

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 2,880 | 305,500 | 308,380 |

The Radiation Physics Building 245 Modernization Project is necessary to ensure that NIST's radiation physics measurements and research is not compromised due to the condition of the facility or the inadequate or inappropriate space in which the research is conducted. Completed in 1964, Building 245 totals 208,000 gross sq. feet and was the first research facility built on the NIST Gaithersburg Campus. Constructed to accommodate radiation physics research, it is a highly specialized facility with concrete shield walls nearly 10 feet thick and large subterranean program areas. Consisting of five occupied floors, mechanical penthouses and seven wings, this purpose-built facility continues to support its original mission and is highly valued for its physical characteristics. A recent study was conducted that identified numerous architectural, mechanical, plumbing, electrical and life safety/fire code deficiencies. Many of the building's infrastructure systems are beyond their useful life and will need to be replaced over the course of the next 5 to 20 years. As a result, the aged facility can no longer adequately support the environmental requirements of the twenty-first century research program housed within it. A modernization of Building 245 is needed to strengthen and expand NIST's research capabilities as well as provide increased support to critical stakeholders and customers. There are currently approximately 150 occupants in this building, and the primary parking lot serving the facility contains 135 parking spaces. The existing facility consists of a poured in place concrete structure and the exterior finish is primarily brick as well as poured in place concrete, vertical metal panels and aluminum (single pane) window assemblies with aluminum infill panels. Typical of this construction period, there is no insulation included in the exterior wall assemblies. NIST is currently evaluating its entire Gaithersburg campus for determination of eligibility to the National Register of Historic Places in compliance with Section 110 of the National Historic Preservation Act (NHPA). Preliminary findings identify potential historic resources on the site. However, Building 245 is not included as a potential historic resource. NIST has a Programmatic Environmental Assessment that was completed in conjunction with its 2009 Master Plan. NIST will conduct an individual Environmental Assessment and a NHPA Section 106 review for this project in FY2016. This project first appeared in the FYs 2015-2020 program

Department of Health and Human Services

NATIONAL INSTITUTES OF HEALTH

BETHESDA, MONTGOMERY COUNTY, MARYLAND

EMERGENCY POWER GENERATION TO ASSURE CHILLED WATER, BETHESDA CAMPUS GREEN

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 2,180 | 1,077 | 90,130 |

2,180 23,200 25,380 The project, Emergency Power Generation to Assure Chilled Water for the NIH Bethesda Campus, consists of the installation of three 2,500 KW emergency generators and associated electrical gear adjacent and within the Building 11 Central Utility Plant. The generators will be located directly east of Building 11 in the open parking and plant access area off of the Service Road South. The system will include an emergency generation plant of three, 2.5 MW, 4,160 volt diesel engine generators powering a three section, 1200 amp switch gear line-up. The generator circuit breaker, engine generator controls, generator protective relaying package, tie circuit breaker and distribution circuit breakers will be located in each generator enclosure along with the engine generator, battery plant and engine mounted radiator system. Each engine generator system will be housed in a stand-alone outdoor, aluminum enclosure mounted on a steel frame. This unit frame will be placed on top of another similarly sized enclosure housing enough diesel fuel for 96 hours of operation. From the generator switch gear the power will be fed through Building 11 to the East and West Electrical Rooms to ultimately feed the various components supporting the three steam driven Chillers 21, 22 and 23. These components include various pumps, condensers, fans and cooling towers that make up the emergency generation system supporting these chillers. NIH's Bethesda campus operates one of the largest chiller plants (Building 11) on the east coast. These chillers are absolutely essential in providing cooling capability for NIH's 240 bed hospital, over 1.3 million research animals, three data centers and over 12 million square feet of sophisticated bio medical research facilities. In order to assure a minimum reliable backup electrical system for chilled water during a power outage, alternative power generation is required. A recent report identified the minimum backup electrical requirements to provide 15,000 tons of cooling or 25% of the total chilled water capacity for the campus. The emergency power generation would be provided to the chillers that currently have an alternative energy source, (Chillers 21, 22 and 23) which have both steam and electric driven engines. The other generators which run solely on electrical power would require too much power to operate from an emergency generation system. The report determined the scope based on a 96 hour fuel storage requirement at NIH for the generators. The loads as determined by the report are 7.36 MW and several alternative fuel systems were presented for consideration. Based upon those considerations, a diesel engine driven generator based solution was deemed the most cost effective and reliable source of alternate standby generation. This system will assure a minimum level of chilled water to the campus in an electrical failure situation. This project first appeared in the FYs 2015-2020 program

RENOVATION OF BUILDING 10 E WING, BETHESDA CAMPUS

YELLOW

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 21,430 | 62,100 | 90,130 |

The mission of the NIH is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce the burdens of illness and disability. It is a "bench to bed side" research and training requiring both hospital and biomedical research laboratories. The Clinical Center Complex (CCC) on the Bethesda Campus is a group of facilities that collectively support these missions. Building 10 is a 60 yr. old facility that provides clinical services, laboratories and supporting office space. With failing infrastructure, the condition of Building 10 has impaired its ability to fully support the NIH mission. The renovation of the E wing in Building 10 is the conversion of 217,285 gross square feet of former patient care and laboratory areas on Floors 2 through 13 in order to build out laboratory, laboratory support space and offices for 520 personnel in the NIH

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clinical research programs. The project scope for the E wing portion of the incremental renovation and infrastructure upgrade includes full interior and systems renovations for new laboratory facilities on floors 2 through 5 (phase 1), 6 through 9 (phase 2) and 10 through 13 (phase 3), The renovation will include new office and laboratory facilities on floors 2 through 13 (offices on North Corridor portion only), supply/exhaust fan and mechanical equipment rooms on the floors 9, 13 and 14 and vertical building and lab service distribution risers including new HVAC supply and exhaust systems. Mechanical, electrical, plumbing and laboratory services will come from campus supplied central utilities. Building 10 has been determined "Not Eligible" for listing on the National Register of Historic Places. This project first appeared in the FYs *2010-2015* program

Department of Agriculture

AGRICULTURAL RESEARCH SERVICE

WASHINGTON, DISTRICT OF COLUMBIA

INFRASTRUCTURE MODERNIZATION AT BARC

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 8,400 | 2,000 | 8,400 |

\$54,400,000 (estimated project cost during FYs 2016-2021). Replace and repair sanitary and storm water systems; replace domestic water distribution; repair steam and condensate distribution piping; upgrade electrical sub stations and distribution systems; and upgrade central utility and waste water treatment plants. Project is necessary to provide reliable and efficient infrastructure support to research facilities.

This project first appeared in the FYs *2014-2019* program

RENOVATION OF BUILDING 307, BARC

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 3,589 | 37,100 | 40,689 |

The renovation of Building 307 will complete the consolidation for the Beltsville Human Nutrition Research Center. The building was originally constructed from 1939 to 1941. The building is a three story, plus basement and attic floors, rectangular laboratory building with a side gable roof, concrete foundation, concrete skeleton structure, and brick veneer facade. The east and west facades have a 15 bay organization. The project will completely gut and restore the interior of the building. The restored building will accommodate office and laboratory space for approximately 112 people belonging to four research groups. Note: \$3,589,000 funding was rescinded in FY 2011. This project is part of the USD/ARS Capital Investment Strategy and is currently in the President's budget to fund in FY 2016.

This project first appeared in the FYs *2014-2019* program

STORM WATER MANAGEMENT PROJECT

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 0 | 100 | 4,500 |

\$4,500,000 (estimated project cost during FYs 2016-2021). This project will replace the existing system. A comprehensive storm water management plan will be prepared for the 446-acre USNA. The plan will be environmentally sound, and incorporate new technology and techniques to retain much of the storm water on the property. The project will include a survey of the existing antiquated 1950's storm water management system and a detailed plan for the entire acreage. This project will be referred to NCPC, CFA, DCHPO and other referral agencies if required. This project previously appeared in the FYs 2006 - 2011 program as part of the Hickey Run Storm Water Abatement Program.

This project first appeared in the FYs *2006-2011* program

Department of Transportation

FEDERAL HIGHWAY ADMINISTRATION

WASHINGTON, DISTRICT OF COLUMBIA

ARLINGTON MEMORIAL BRIDGE REHABILITATION

GREEN

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 985 | 1,864 | 180,985 |

The project consists of the rehabilitation of the entire bridge. The concrete arch approach spans work includes replacing the existing deck and sidewalks, removing and resetting light poles, resetting granite curbs, concrete repairs of the arches and spandrels, cleaning/repairing the existing drainage system, replacing existing access hatches and ladders, removing/resetting/repointing the existing bridge railing, installing new lighting system with conduits inside each span, repairing or replacing personnel/maintenance platforms, installing new expansion joints and other miscellaneous work. The work on the bascule span consists of rehabilitating existing bascule span or replacing the existing bascule span with a new span. Either option may require removing the existing span as a single unit to do the work. This will require placing a temporary support structure on a barge to support the existing span allowing the removal of concrete counterweights. The new superstructure is proposed to have a concrete deck overlay which would give the riding surface a different appearance from what currently exists. It will have exposed aggregate sidewalks constructed of lightweight HPC that will match the existing sidewalks in appearance. Other work involved on the bascule span superstructure will include removing/refurbishing/resetting the existing bridge railing, installing new inspection/maintenance access platforms, removing/refurbishing/reinstalling the existing fascia panels on the exterior faces of the span, replacing expansion joints and other miscellaneous work.

This project first appeared in the FYs 2014-2019 program

ROCK CREEK PARKWAY REHABILITATION

YELLOW

| Prior Funding | Total Funded FY 2016 | Total Project Cost |
|---------------|----------------------|--------------------|
| 21,950 | 6,664 | 21,950 |

This project consists of resurfacing and rehabilitating Beach Drive, from the Rock Creek and Potomac Parkway intersection to the National Park boundary at the Maryland State line. There are 11 parking areas and 16 intersections within the project limits. The project includes asphalt-paving, milling, pavement patching, shoulder stabilization, curb and gutter removal and replacement, drainage work, guardrail, signing, pavement marking, and intersection safety upgrades work. Propose alternate safety solutions that address roadside hazards and excessive speeds. Propose alternates that include Traffic Calming measures (but not limited to Traffic Calming only). This project first appeared in the FY's 2010-2015 program.

This project first appeared in the FYs 2014-2019 program