The City University of New York
Five-Year Capital Improvement Plan
FY 2019-20 through FY 2023-24
New York City Reso-A Request FY 2020

The City University of New York provides high-quality, accessible education to more than 270,000 degree-credit students at 25 campuses across New York City. The University is an integrated system of senior and community colleges, graduate and professional schools, research centers, institutes and consortia. From certificate courses to Ph.D. programs, CUNY offers post-secondary learning to students of all backgrounds.

Located in all boroughs of New York City, the facilities at CUNY’s campuses include the traditional and the innovative. The University has 300 buildings comprising 29 million square feet of classrooms, computer centers, science and other instructional and research labs, theaters, athletic facilities, greenhouses, astronomy observatories, and spaces for many other purposes.

The University’s Five-Year Capital Plan to the State of New York and City of New York for Fiscal Year FY 2019-20 through FY 2023-24 is $6.2 billion: $4.7 billion is for the senior colleges, professional and graduate schools, and $1.5 billion is for the community colleges. By program need, the Five-Year Plan breaks down to $4.7 billion for Capital Infrastructure & Equipment and Programmatic Renovations and $1.5 billion for Strategic Initiatives. The state is responsible for 100% of the capital funding for the senior colleges; the city shares 50% of the funding responsibility for the community colleges, as per New York State education law that requires matching state-city funding equally for community colleges.

The Five-Year Capital Plan was developed by the CUNY Office of Facilities Planning, Construction and Management in consultation with CUNY colleges and schools. The University’s priorities include:

- An ongoing Capital Infrastructure and Equipment initiative to bring CUNY campuses to a state-of-good-repair and address health, safety, security, facilities preservation and code issues.
- Completion of active and ongoing work.
- Technology projects, including infrastructure upgrades, systems engineering, and new equipment that will allow the University to develop integrated data services at the campuses and across the system; in addition a request was added for digital CUNY to expand online learning offerings.
- Projects to meet energy conservation and performance objectives, including State Executive Order 88 and Local Law 87.
- Strategic Initiatives for new construction of space needed for academic programs. Highest priority is assigned to classroom and instructional laboratory facilities and to the replacement of temporary or leased space with permanent facilities.

For City Fiscal Year 2020, the University also is requesting $93 million in discretionary funding (Reso-A funding) from the New York City Council and borough presidents to address smaller-scale projects.

CUNY’s ability to provide access to students is made possible through modern facilities designed to accommodate its increased enrollment. To that end, CUNY’s Five-Year Capital Plan aligns with the University’s Four-Year Strategic Investment Plan by requesting funds that will renovate or build facilities essential to the support of student success. The projects included in the capital plan preserve the University’s infrastructure, recapture underutilized spaces, improve technology and provide for campus expansion where necessary. It is only through upgrading the University’s facilities portfolio that CUNY will be able to continue providing the city and region with graduates trained for high-demand positions in the sciences, technology, mathematics, teaching, nursing and other fields.
Highlights of the Capital Plan

CUNY Facilities Needs

The University’s facilities capital requests can be divided into two categories: Capital Infrastructure and Equipment projects and Strategic Initiatives.

Capital Infrastructure and Equipment: Investment in Existing Facilities

CUNY’s Capital Infrastructure and Equipment program aims to undertake the work necessary to keep buildings and infrastructure operating effectively in support of the educational mission; without this, students and faculty cannot do their best work.

The Capital Infrastructure and Equipment Funding Need includes projects that:

- Extend the life of CUNY facilities
- Provide life/safety enhancements and meet code requirements
- Improve operational efficiency, including energy conservation
- Support academic programs and enhance the University’s mission by modernizing spaces for academic, student life, and student services.

Since 2007, CUNY has analyzed and reported on the state-of-good-repair of its facilities. Most recently, in 2017, CUNY undertook a self-audit of its 254 owned buildings using life-cycle methodology. The analysis identified the University’s backlog of deferred maintenance and projected anticipated future needs which together are used to shape CUNY’s Facilities Renewal request.

Current Capital Infrastructure and Equipment Needs by system
A large portion of CUNY’s 27 million square feet of owned space is at least half a century old. Frequently, facility conditions dictate the need for projects that combine the two types of Capital Infrastructure and Equipment projects: upgrade of entire building systems or campus-wide infrastructure (e.g., heating, ventilation, and cooling, electrical, plumbing, and building envelopes), followed by modernization of instructional and support space to current standards. Of the hundreds of Capital Infrastructure and Equipment projects that need attention, some of the largest are listed below.

- At Baruch College, the Lawrence and Eris Field Building at 17 Lexington Avenue has been used continuously as an educational center with minimal upgrades since 1928. The 284,000-square-foot facility is being renovated in phases, due to the need to maintain occupancy. The initial phase of construction is underway.

- At The City College, funding is requested to continue the renovations to the 621,000-square-foot Marshak Building that houses science and athletic facilities. This ongoing project will provide structural and mechanical repairs and space.

- At New York City College of Technology, $35 million is requested to continue infrastructure and programmed space upgrades to the 136,000-square-foot Pearl Building that dates from the 1920’s. With the completion and occupancy of the new Academic Building, most of the space on floors 4 - 6 has become available.

- At the 30-building Bronx Community College campus, funding is requested to continue critical campus-wide state-of-good-repair work, including fire alarms, roofs, window replacement and critical utility upgrades.
Strategic Initiatives: Programmatic Renovations and New Buildings to Increase Capacity

Projects of this type originate from CUNY-approved master plans and address space deficits on campus.

**Brooklyn College / Roosevelt Hall Science Complex** - a 180,000-square-foot science facility with high-tech instructional laboratories, general-purpose classrooms and support spaces.

**College of Staten Island / High-Performance Computational Center** - a 175,000-square-foot facility to house a high-performance computer that will serve as a University resource for computer-based modeling and simulation.

**Hunter College / Science and Health Building** - a 390,000 square foot building that will support its health professions programs, including nursing and physical therapy, and provide research labs for its chemistry, biology, psychology and physics departments.

**Medgar Evers College / Academic Success Center** - a 130,000-square-foot mixed-use facility that will include classrooms and instructional labs, offices, the new School of Education, and the School of Professional Development, and support spaces to enhance the student experience.

**School of Labor and Urban Studies / Expansion Space** - the Joseph S. Murphy Institute transitioned to the CUNY School of Labor and Urban Studies in 2018. This project will provide additional space to support its academic programs, sponsored research, and public programming.

**York College / Academic Village-Conference Center** – a 165,000-square-foot facility will become the new home of the School of Business and contain classrooms, computer labs and conference rooms that will be available for use by the community, as well as the campus student center.

**Hostos Community College / Allied Health and Sciences Building Complex** – a 170,000-square-foot facility that will provide classrooms and science labs in support of the college’s Natural Science and Allied Health programs in dental hygiene, radiologic technology and nursing, and house a dental clinic that will provide students with practical experience and furnish the community with services.
In the past several years, CUNY has initiated and completed a considerable number of projects on virtually every CUNY campus. An additional 1.5 million gross square feet of renovations and new construction are now in planning, design or construction.

Aging facilities
The most significant issue affecting CUNY’s capital program is the age of its facilities. The University’s facilities portfolio consists of 29 million square feet in 300 buildings across 25 campuses. Some of these buildings are more than 100 years old, and a majority of the inventory exceeds 30 years; the average building at CUNY is more than 50 years old.

History of deferred maintenance and the Capital Infrastructure and Equipment program
Over the previous two decades, the bulk of capital funding supported programmatic renovations and new facilities with a lesser investment in preservation of the physical plant. The age of CUNY’s facilities and this history of deferred maintenance have increased the need for a state-of-good-repair program to systematically address the University’s capital facility renewal.

The state-of-good-repair program originated from condition assessment surveys that CUNY completed in 2007 with the assistance of the State University Construction Fund. Using a life-cycle model based on current replacement costs, CUNY was provided with the estimate of the funding needed to eliminate its backlog of deferred maintenance, as well as an estimate of the funding needed to replace or reconstruct essential facilities and their components and subsystems as they approach the end of their useful life (renewal costs). Items identified include utilities and related controls, equipment and distribution systems; exterior walls, roofs, doors and windows; electrical equipment, power, wiring and lighting; built-ins for science facilities; campus hardscapes; and interior finishes. The 2007 analysis identified a capital infrastructure and equipment funding need of over $4 billion over 10 years.

Since 2008, CUNY has received over $2 billion in funding to address facilities renewal. Many projects, including numerous large capital infrastructure and equipment projects, have been completed and hundreds more are active as a result, such as City College’s Marshak Building HVAC upgrades, Queens College’s central chiller plant upgrades and York College’s escalator replacements. Many more projects are in the planning phase.

Allocations to the community colleges and completion of projects for them have been slower, due to the need to match funding before it can be used. The city must provide its 50% share of funds first and the state’s 50% match is generally provided in the following state fiscal year budget (approximately nine months later). Over $650 million in facilities renewal projects at the community colleges have been funded since 2009. As a result, many important projects have been completed and many more are underway, including the fourth phase of construction of Bronx Community College’s campus-wide utility upgrades, Queensborough Community College’s campus-wide electrical system upgrades, and the replacement of the enormous façade of LaGuardia Community College’s Center 3 Building.

The state-of-good repair survey was updated by the CUNY schools in 2012; the results indicated that system deterioration had increased at a faster rate than the 2007 analysis had anticipated. However,
this was offset somewhat by a $700-million reduction in the backlog due to funding provided and CUNY’s efforts to reduce the backlog in the aging and overtaxed system. The 2012 update reported an investment need of $6 billion over the following 10 years to keep pace with the backlog of deferred-maintenance needs.

CUNY’s most recent analysis identified a $2.1 billion backlog at the senior colleges, with $5.9 billion needed over the next ten years to fully address both the deferred maintenance backlog and on-going renewal.

**Enrollment trends**
This Five-Year Capital Plan reflects the need to preserve and upgrade the University’s aging facilities, and in some cases, due to unprecedented crowding, add space such as the Interdisciplinary High-Performance Computational Center at the College of Staten Island, the new Academic Success Center at Medgar Evers College, and the Allied Health and Sciences Building Complex at Hostos Community College.

**Changing pedagogy, changing facility requirements**
More than a decade ago, CUNY set forth a strategy of institutional renewal committed to academic distinction. The University has implemented bold, strategic measures to position itself among the most highly regarded and respected institutions of public higher learning. Today, CUNY is navigating a course of academic achievement and innovation while sustaining its traditional roles and responsibilities. Indeed, CUNY is a leader in defining public higher education for the 21st century. In order to continue this momentum, the University must provide modern classrooms and laboratories. Appropriate facilities are an imperative element in supporting the development of new approaches to student learning, building collaborative research models, and creatively partnering with the city’s communities. Flexible spaces with appropriate furnishings and state-of-the-art technology provide students with greater opportunities to learn and prepare to join the city’s and state’s workforce.

CUNY’s libraries, like libraries across the country and the world, are in a moment of transition—technology is having a tremendous impact as more and more academic resources are available digitally. The layout of libraries is shifting away from stack areas to information commons and small study rooms. Furthermore, as pedagogy adapts to better prepare students with critical-thinking and problem-solving skills, CUNY students are spending more time collaborating on campus in the college libraries. Additionally, the advent of dormitories at some of the senior colleges has affected campus life. These trends are transforming CUNY campuses from commuter campuses that close at night to 24-hour facilities.

**CUNY 2020 Challenge Grant Program**
In 2013, the governor enacted the CUNY 2020 Challenge Grant Program that expanded a statewide strategy of utilizing higher-education institutions for long-term economic development initiatives; CUNY’s inclusion in the program is recognition that the University is a catalyst for economic revitalization in New York City and New York State. The $55 million in capital funds provided annually for five years will support programmatic needs and provide academically aligned, sustainable long-term economic development affecting students and the surrounding community.
Other milestones of the capital program

Economic impact and Minority and Women Business Enterprises (MWBEs)
CUNY spends over $300 million each year on construction in New York City, supporting nearly 3,000 jobs in the city annually. Since the beginning of Governor Andrew M. Cuomo’s Minority and Women Business Enterprises (MWBEs) Initiative seven years ago, over $178 million spent on the CUNY Capital Program by the City University Construction Fund (CUCF) has gone to New York State-certified MWBE firms through construction and design contracts directly managed by the CUNY Office of Facilities Planning, Construction and Management. This accounts for an average of over 27% of the total reportable spending of about $649 million during that seven-year period. This long-term performance is the result of building contractual relationships at multiple tiers, including prime contractors, with a large number of MWBEs. As of 2016, the initiative for Service-Disabled Veteran Owned Business, introduced to provide opportunities for veterans, has grown and with both MWBE and SDVOB programs CUNY continues to expand its network. The capstone to CUNY’s extensive and ongoing outreach efforts in 2018 was the annual MWBE/SDVOB conference sponsored by CUNY and CUCF that attracted over 650 vendors.

Public-private initiatives
CUNY Office of Facilities Planning, Construction and Management endeavors to finance and develop new facilities for the University by monetizing CUNY’s real estate assets, creating revenue-supported projects and using the efficiencies of the private sector. Recent efforts included the initiation of CUNY’s Startup-NY program and a University student-housing expansion study.

Physical master plans
Master Plan updates are under way for Borough of Manhattan Community College and Medgar Evers College. Master plans are discussed in greater detail in the section below.

Basis of the capital program
The objective of the capital program is to support the mission of CUNY, as articulated in the University’s Master Plan, by providing facilities that serve the University’s approved educational programs. The projects requested originate from approved college master plans and from ongoing condition assessments and are prioritized in the campus sections that follow. Funding is requested for projects of appropriate quantity and quality, with environments conducive to learning and consistent with the mandates of New York State education law and CUNY policies. The Five-Year Capital Plan for FY 2019-20 through FY 2023-24 is based on the following guidelines:

1. Returning campuses to a state of good repair
   Discussed above in Issues Shaping the Capital Program.

2. Approved academic master plan
   CUNY’s Academic Master Plan for 2016-20 reflects CUNY’s commitment to expanding its portals of opportunity and access, raising success rates, setting the standard for academic quality in the urban university, and operating efficiently in the service of its academic mission.

   CUNY colleges are required by the Board of Trustees to conform to the Academic Master Plan in developing their curricula and degree programs. When requesting capital projects, the University’s annual Capital Budget Request and the Five-Year Capital Plan reflect the policies in the Academic Master Plan.

   This year’s Capital Plan responds to the Academic Master Plan by continuing previous years’ emphasis on the remodeling and renovation of facilities so they can more effectively serve academic programs. In addition, it proposes new construction that is called for by campus master plans, by new University initiatives, or by the changing needs of its constituencies.
3. **Approved physical master plans**

Along with the Academic Master Plan, each campus has a trustee-approved physical master plan, developed by appropriate planning professionals in consultation with the campus facilities staff and members of the college community. Updated in 10-year cycles or as needed, these plans are the basis for the Five-Year Capital Plan Request. The physical master plans detail existing and anticipated facilities necessary to accommodate a University-approved enrollment projection for a given target date. Physical master plans are prepared and updated regularly or as warranted by changing conditions. In developing or amending physical master plans, the campuses and Central Office consider the cost and functions of proposed projects as well as the opportunities they present for fostering mutually beneficial relationships with neighboring communities.

4. **Cost estimates/schedules**

Cost estimates for the requests are developed through feasibility studies or by applying comparable cost data after defining a project’s scope and square footage. These estimates include escalation, based on current and projected market conditions, to align with the anticipated project schedules and funding. If appropriations are delayed, completion dates will be pushed back and project costs will increase accordingly.

5. **Implementation of energy efficiency goals**

CUNY’s capital program and initiatives contained in this Five-Year Capital Budget Request reflect the University’s commitment to green technology and energy efficiency. New CUNY buildings will be a minimum of LEED-certified Silver or have equivalent green elements as part of their design and construction.

CUNY’s capital program is guided by the following state and city initiatives:

*Executive Order 88/BuildSmart NY and Executive Order 166*

CUNY participates in the BuildSmart NY Program, initiated by the governor’s Executive Order 88 that requires state entities to collectively reduce average energy use in state-owned and managed buildings by at least 20 percent by April 2020. The program is an extension of the governor’s NY Works initiative aimed at developing a strategic, comprehensive and coordinated capital planning process across the state. Agencies, including CUNY, have been provided with specific energy use reduction targets for the 2020 deadline. CUNY’s targets apply to the senior colleges. Executive Order 166 is administered by NYSERDA and mandates a Greenhouse Gas reduction of 40% by 2030 and 80% by 2050. It is a state-wide environmental action plan to move toward a more sustainable future with regard to land, water, air, transportation, and in particular, energy and climate-change metrics. CUNY’s targets apply to the senior colleges.

*City’s “One City: Built to Last” Initiative and Local Laws 84, 86, 87 and Executive Order 26*

CUNY community colleges are participants in the mayor’s “One City: Built to Last” program (formerly PlaNYC) that mandates a reduction in carbon emissions of 80 percent by 2050. It is a city-wide environmental action plan to move toward a more sustainable future with regard to land, water, air, transportation, and in particular, energy and climate-change metrics, mirroring NYS Executive Order 166.

To satisfy program requirements and comply with Local Laws 84, 86, and 87 as well as NYC EO26/NYS EO 88 and 166 which commit the city and state to the goals of the Paris Climate Accord, CUNY has established an Energy Assessment Program. Under this program, campus buildings and operating systems are being assessed to summarize existing conditions and identify greenhouse gas emission reduction opportunities for both the capital and operating campus functions.

Going forward, CUNY has established a plan of energy conservation measures targeted to achieve the One City: Built to Last and Executive Order 88/166 goals. This includes routine replacement of
fluorescent lamps with high-efficiency fluorescent tubes and replacement of academic space lighting with LED technology; the upgrading, renewal and/or expansion of digital environmental control systems and migration from pneumatic building management systems; retro-commissioning of CUNY buildings; and installation of real-time utility metering systems and building sub-metering.