The City University of New York provides high-quality, accessible education to more than 274,000 degree-credit students and 260,000 adult, continuing, and professional-education students at 24 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. It provides the city with graduates trained for high-demand positions in the sciences, technology, mathematics, teaching, nursing and other fields. As CUNY has grown, the University also has strengthened its mission as a premier research institution, building an array of modern facilities and expanding the ranks of its world-class faculty.

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 comprised of 28 million square feet of classrooms, computer centers, science and language labs, theaters, gymnasiums, greenhouses, astronomy observatories and spaces for many other purposes.

This book details the University’s Five-Year Capital Plan Request to the state and city for Fiscal Year 2015-16 through Fiscal Year 2019-20. The capital request is $6.8 billion: $5.2 billion for the senior colleges and $1.6 billion for the community colleges. The total amount requested for the first year is approximately $1.4 billion. The Five-Year Capital Plan Request was developed by the Office of Facilities Planning, Construction and Management in consultation with CUNY colleges and schools. The University’s priorities include:

- An ongoing critical maintenance 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.
- Projects to meet energy conservation and performance objectives, including State Executive Order 88 and Local Law 87.
- 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 space.
- The New York State “CUNY 2020” initiative to promote capital projects that encourage sustainable job creation (discussed in more detail in the following pages).

For city Fiscal Year 2016, the University also is requesting approximately $85 million from the New York City Council and borough presidents (Reso-A funding) to address smaller-scale projects.

The images that follow illustrate some of the projects in the University’s Capital Plan Request.
Roosevelt Hall Science Complex
Brooklyn College
Architect: Mitchell | Giurgola Architects

The college's science facilities are in the worn and dated Ingersoll Hall and Ingersoll Hall Extension, whose spaces are functionally obsolete for modern science instruction and research. A recent feasibility study determined that Roosevelt Hall cannot be transformed into the science facilities envisioned in an earlier master plan. This project will demolish Roosevelt Hall and construct a 180,000-square-foot science facility with high-tech instructional laboratories, general-purpose classrooms and support spaces. The new facility will support the college's academic goal of transitioning to an interdisciplinary teaching model. Design development phase has been completed.

Academic Village/Conference Center
York College
Architect: Ennead Architects

This project will create an Academic Village/Conference Center on the site of the Classroom Building. The 165,000-square-foot facility will become the new home of the School of Business with state-of-the-art classrooms, computer labs and conference rooms that will be available for use by the community. It also will serve as the student center. The new building will transform the west side of the campus and add a vibrant new presence to the Jamaica, Queens community. Design is ongoing.
This project will construct 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. The new facility will contain spaces dedicated to state-of-the-art scientific computing hardware, labs for visualization, instructional and research labs, classrooms and dedicated student work areas. Design is ongoing.

The Field Building at 17 Lexington Ave.
Baruch College
Architect: Davis Brody Bond

The Lawrence and Eris Field Building, Baruch’s facility at 17 Lexington Ave., was built in 1928, and since then, the 284,000-square-foot facility has been used continuously as an educational center with minimal upgrades. This project will renovate the building in phases. The initial phase of construction will commence shortly and will include infrastructure upgrades and select programmatic fit-outs. The remaining phases will continue renovation of the Field building’s 16 stories. The result will be a modern, state-of-the-art educational center.
Allied Health and Natural Science Building Complex
Hostos Community College
Architect: TBD

The college’s 2012 Master Plan Amendment recommended a new 170,000-square-foot facility to address campus space deficits and provide state-of-the-art classrooms and science labs. The new complex will support the college's Allied Health programs in dental hygiene, radiologic technology and nursing by housing dental and wellness clinics that will provide students with practical experience. The community will receive wellness education and expanded services delivered through partnerships with leading health care providers. Also, the building will house the college’s Natural Science, Engineering and STEM (Science, Technology, Engineering and Mathematics) programs that articulate with baccalaureate programs at other CUNY senior colleges. Design start is pending.

CUNY Office of Facilities Planning, Construction and Management
Issues Shaping the Capital Program and Selected Program Milestones

In the past several years, CUNY has initiated and completed work at a rapid pace. Since 2008, the University has added 22 new buildings and additions, comprising more than 3 million gross square feet. An additional 2 million gross square feet of renovations and new construction are in planning, design or construction.

Issues Shaping the Capital Program

Economic benefit of investing in CUNY’s capital program
CUNY plays a critical role in nearly every aspect of New York City’s everyday life. CUNY employs thousands of New Yorkers, prepares future leaders, fosters the discoveries that will propel the city’s economy for decades to come and plays an active role in the community surrounding each campus.

- From 1998 through 2013, the state invested $6.3 billion in CUNY’s aging academic facilities through three consecutive multi-year capital plans.
- This multi-year investment transformed the execution of CUNY’s capital program. The investment enabled the completion of more comprehensive rehabilitations and modernizations at all college campuses across the University.
Also, the funds allowed CUNY to invest in campus-specific facilities master plans that align mission, enrollment and academic program plans with physical space needs.

CUNY has created and sustained over 4,400 construction and construction-related jobs since 2009.

Aging facilities
The most significant issue impacting CUNY’s capital program is the age of its facilities. The University’s facilities portfolio consists of 28 million square feet of space in 300 buildings across 24 campuses. Some of these buildings are more than 100 years old, and a majority of the inventory is more than 30 years old; the average building age is more than 50 years.

History of deferred maintenance and the critical maintenance 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.

CUNY’s state-of-good-repair program aims to undertake the work necessary to keep buildings open and infrastructure operating in support of its educational mission; without fully operational facilities, students and faculty cannot do their best work. The state-of-good-repair program originated from a building condition assessment survey 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 initial 2007 analysis identified a critical maintenance funding need in the billions. Since that year, CUNY has received six state appropriations of $284 million each. Many projects have been completed (noted later), and hundreds more are active as a result, including numerous large projects such as City College’s Marshak Building HVAC upgrades, Lehman College’s utilities plant expansion, Queens College’s central chiller plant upgrades and Hunter College’s escalator replacement in the East and West Buildings. Many more projects are in the planning phase.

Allocations to the community colleges have been slower due to the need to match state funds with an equal share of city funds, but the current-year city budget matches all funding over a multi-year period. Over $400 million in critical maintenance projects at the community colleges have been funded since FY 2008-09. Several important projects are under way or will begin shortly on the community college campuses, including the third 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 system-wide survey was updated by the CUNY schools in 2012 and analyzed by a consulting firm. The results indicated that system deterioration had increased at a faster rate than the 2007 analysis had anticipated, but this was offset by a $700-million reduction in the backlog due to funding provided and CUNY’s efforts to reduce the backlog. The updated survey confirmed that an investment of $6 billion is needed over the next 10 years to keep pace with the backlog of deferred maintenance
needs. This year’s request for critical maintenance funding for the next five years is more than $2 billion.

Enrollment trends
CUNY has had a surge in enrollment over the last decade. This fall marked an all-time high in CUNY’s enrollment—an increase of more than 35 percent from 2000, when 195,000 students enrolled for the fall semester. The Capital Plan Request reflects the need to preserve and upgrade the University’s aging facilities and in some cases, due to the unprecedented crowding, add space such as the new Academic Building I at New York City College of Technology, the Academic Village/Conference Center at York College, the new Roosevelt Hall at Brooklyn College and the Interdisciplinary High-Performance Computational Center at The College of Staten Island.

Changing pedagogy, changing facility requirements
CUNY needs to address the classroom inventory across the University. Bringing CUNY’s classrooms in line with modern teaching methods requires flexible spaces and furnishings for individual as well as group learning. In addition, there is a demand for smart classrooms wired for new technology. Furthermore, science labs and classrooms are being renovated or built to provide students with greater opportunities to learn technological skills, particularly in the allied health fields. Technology is also impacting the design of libraries, in which information commons and small study rooms are replacing stack areas as more text is available digitally. Campus life is also changing at some of the senior colleges with the opening of dormitories on campus. This trend is 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 economic development initiatives; CUNY’s inclusion in the program is recognition that the University is a leading catalyst for economic revitalization in New York City and New York State. The goal of the CUNY 2020 program is to incentivize long-term economic development implementation plans, driven by CUNY’s campuses in areas of their academic strengths. The capital funds provided will support programmatic needs and provide academically aligned, sustainable long-term economic development affecting students and the surrounding community. The success of this program is intended to impact future economic development decisions.

The CUNY 2020 program provided $55 million in capital funding for state Fiscal Year 2013-14 and $55 million in state Fiscal Year 2014-15. The competitive process for the first year’s funding allocation is complete and projects are being initiated. As in the previous year, next year’s competition will be open to CUNY senior colleges, graduate and professional schools and community colleges. Joint as well as individual applications are encouraged. In the second round, multiple awards will be made to support transformational projects that provide significant economic impact by creating jobs, advancing academic research and student success, encouraging collaborations and leveraging investment, including public-private partnerships created through the CUNY START-UP NY program. The University’s budget request this year includes a request for the next three years’ allocations of CUNY 2020 funding.

Major completed projects since 2008

2008
- New York City College of Technology: Namm Hall façade replacement, November 2008. Renovated façade and replaced windows of the 497,000-square-foot facility.
2009
- City College: The Bernard and Anne Spitzer School of Architecture, July 2009. Renovated 182,000 square feet.
- Queens College: The Summit residence hall, August 2009. Added a 506-bed student housing facility (project completed by means of private developer agreement).
- Queensborough Community College: Kupferberg Holocaust Resource Center and Archives, September 2009. Added 7,000 square feet and renovated 2,000 square feet.
- Brooklyn College: West Quad Building, October 2009. Added 146,000 square feet.
- Queens College: Remsen Hall Addition, November 2009. Added 33,000 square feet.

2010
- Hunter College: Roosevelt House renovation, March 2010. Renovated 21,000 square feet.
- Medgar Evers College: Academic Building I, October 2010. Added 178,000 square feet.

2011
- Bronx Community College: Early Childhood Center, April 2011. Added 13,000 square feet.
- Stella and Charles Guttman Community College, July 2011. The first new community college in New York City in four decades opened in a 74,000-square-foot leased space in Midtown Manhattan.
- New York Simulation Center for the Health Sciences, August 2011. Added 25,000-square-foot state-of-the-art training facility for first responders and healthcare students and professionals (project was completed as a joint venture between CUNY and NYU Langone Medical Center).
- Graduate Center apartments, August 2011. Added 77 apartments for graduate students, postdoctoral fellows and faculty members (project was part of a public-private partnership with a developer).
- Hunter College: Silberman School of Social Work and CUNY School of Public Health at Hunter College, September 2011. Added 147,000 square feet (project was part of a public-private partnership with a developer).

2012
- City College: Marshak Science Building façade replacement, April 2012. Replaced reinforced concrete façade with a glass curtain wall on this 621,000-square-foot facility.
- Queens College: Kupferberg Center for the Arts complex, April 2012. Project provided upgrades to complex containing three performing arts facilities and a museum.
- CUNY School of Law Building, June 2012. Added 260,000-square-foot condominium in a new location in Long Island City, Queens.
- Bronx Community College: North Hall and Library Building, August 2012. Added 100,000-square-foot new classroom and library facility.
o Borough of Manhattan Community College: Fiterman Hall replacement, August 2012. Added a 390,000-square-foot, mixed-use facility to replace the one irreparably damaged on 9/11.

2013

o LaGuardia Community College: New admissions/bursar offices, January 2013. Renovated 24,000 square feet to provide new and expanded student service facilities for the college.

o Bronx Community College: Phase I of campus-wide utility upgrades, April 2013.


o New York City College of Technology: Voorhees Hall Façade Replacement, May 2013. Replaced aging masonry façade with a new glass curtain wall.

o College of Staten Island: Dolphin Cove Residence Halls, August 2013. Added a 450-bed student housing facility (project was completed by means of private developer agreement).

o Lehman College: Child Care Center, September 2013. Added 13,000-square-foot new facility.

o CUNY School of Professional Studies, September 2013. Opened a new 76,000-square-foot leased facility in Manhattan.

2014

o Hunter College: Added 37,000-square-foot science research floor in new Belfer Research Building (public-private partnership with Weill Cornell Medical College), November 2014.

o Medgar Evers College: Bedford Library Expansion, December 2014. Upgraded and reorganized 46,000 square feet of space, including a 12,000-square-foot addition.

o City College campus: CUNY Advanced Science Research Center and City College Center for Discovery and Innovation, December 2014. Completed the combined 400,000-square-foot science research complex; the two facilities are separate entities with shared core science facilities and amenities.

Major construction projects ongoing

o Brooklyn College: Leonard and Claire Tow Center for the Performing Arts. Anticipated completion fall 2015.

o Baruch College: Renovation of the Lawrence and Eris Field Building at 17 Lexington Ave. Anticipated completion of Phase 1A mid-2017.

o New York City College of Technology: Academic Building I. Anticipated completion spring 2017.


Other milestones of the capital program

o Completed a number of public-private initiatives. The Public-Private Partnership group (PPP) in CUNY’s Office of Facilities Planning, Construction and Management has the goal of financing and developing new facilities for the University by monetizing CUNY’s real estate assets, creating revenue-supported projects and using the efficiencies of the private sector.

Over the past several years, the PPP group has completed several academic buildings, student residences, consultant studies and special projects. They include the Silberman School of Social Work at Hunter College and CUNY School of Public Health; the New York Simulation Center for the Health Sciences; CUNY School of Law at 2 Court Square; one floor of Weill Cornell’s Belfer
Research Building for Hunter College; residence halls at City College, Queens College, the College of Staten Island and for The Graduate Center; studies for Baruch College, Lehman College, Queens College and the chancellor’s asset-management report; and special projects, including the rezoning of a Brooklyn College parcel. The Public-Private Partnership group also coordinated awarding the first round of CUNY 2020 funding to eight projects totaling $55 million and the initiation of CUNY’s START-UP NY initiative.

- Expanded CUNY management of projects. Under a memorandum of understanding, CUNY has the option to use the Dormitory Authority of the State of New York to manage its projects or complete them with CUNY staff. In the past, if state-bonded funds were used, CUNY was required to use the Dormitory Authority.
- Physical master plan updates were completed for The College of Staten Island in 2010, York College and Brooklyn College in 2011, and Hostos Community College in 2012. Currently, John Jay College is working on a space-needs analysis study, and Baruch College has a library master plan under way. Borough of Manhattan Community College and Medgar Evers College are preparing to undertake master plans in the coming year.
- Minority and Women Business Enterprises (MWBEs). For the last three state fiscal years, Gov. Cuomo set a goal of 20 percent for overall participation by MWBEs in New York State contracting, and the capital program of CUNY and The City University Construction Fund (CUCF) have met that goal in each of those years for work managed by the Office of Facilities Planning, Construction and Management. In state fiscal year 2013-14, the capital program spent $20.9 million on MWBEs. CUNY has had contractual relationships at all tiers with more than 100 MWBEs and is looking to expand this network. The capstone to CUNY’s outreach efforts in 2014 was the annual MWBE conference held by CUNY and CUCF in August that attracted 500 MWBE participants.

**Basis of the capital program**

The objective of the capital program is to support the mission of The City University of New York, 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. Senior college major-capital projects are funded by the State of New York. Community college major-capital projects are funded equally by the State of New York and the City of New York. The Five-Year Capital Budget Request for FY 2015-16 through FY 2019-20 is based on the following guidelines:

1. **Critical maintenance and returning campuses to a state of good repair**
   Discussed in Issues Shaping the Capital Program.

2. **Approved academic master plan**
   CUNY’s Academic Master Plan for 2012-16 was approved by the CUNY Board of Trustees in June 2012. It showcases CUNY’s unwavering commitment to maintaining academic excellence and access as well as plans to expand innovative educational programs, invest in the hiring of new, full-time faculty and build 21st-Century facilities in the coming years.

Colleges of The City University of New York 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 Budget Request 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. 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**
   Original cost estimates for the request are developed through feasibility studies or by applying comparable cost data after defining a project’s scope and square footage. Project costs for future years are escalated using rates based on current market conditions. Escalation is calculated from project schedules, which can be met only if funding is received. If appropriations are delayed, completion dates and costs are adjusted accordingly.

5. **Implementation of sustainability 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 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 and BuildSmart NY**
   CUNY participates actively in the BuildSmart NY Program that was initiated by Gov. Cuomo’s Executive Order 88 and 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.

   **City PlaNYC Initiative and Local Laws 84, 86 and 87**
   CUNY community colleges are participants in the mayor’s PlaNYC program that mandates a reduction in carbon emissions of 80 percent by 2050. PlaNYC is a city-wide environmental action plan to move the city toward a more sustainable future with regard to land, water, air, transportation and in particular, energy and climate-change metrics. To satisfy PlaNYC requirements and comply with Local Laws 84, 86 and 87, CUNY has established an Energy Assessment Program wherein campus buildings and operating systems are being assessed to summarize existing conditions and identify greenhouse gas emission reduction opportunities.
To date, CUNY has invested in excess of $20 million in PlaNYC capital funds in infrastructure projects at Bronx Community College, Kingsborough Community College and LaGuardia Community College by replacing inefficient boilers and in-ground campus distribution systems, and in HVAC and controls upgrades at Borough of Manhattan Community College.

Going forward, CUNY has established a plan of energy conservation measures, targeted to achieve both the PlaNYC and Executive Order 88 goals, including routine replacement of existing fluorescent lamps with high-efficiency fluorescent tubes and capital renewal of academic space lighting with LED technology, upgrade, renewal and/or expansion of digital control systems and migration from pneumatic systems, retro-commissioning of CUNY buildings, and installation of a real-time metering system and building sub-metering per Local Law 84.