The City University of New York provides high-quality, accessible education for more than 269,000 degree-credit students and 270,000 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 postsecondary 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 across the five boroughs of New York City, the facilities at CUNY’s campuses include the traditional and the innovative. The University has 300 buildings comprised of 27.6 million square feet of classrooms, computer centers, science and language labs, theaters, gymnasiums, greenhouses, astronomy observatories and many other purposes.

This book details the University’s Five-Year Capital Plan Request to the state and city for Fiscal Year 2014-15 through Fiscal Year 2018-19. The capital request is $6.7 billion: $5.3 billion for the senior colleges and $1.4 billion for the community colleges. The total amount requested for the first year is approximately $1.7 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.
- Continuation of projects to support the chancellor’s initiatives, including the Decade of Science and CUNY First, which will allow the University to develop integrated data services at the campuses and across the system.
- 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 2015, the University also is requesting approximately $94 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.
**Academic Building I**
New York City College of Technology
Architect: Perkins Eastman

This project will address the college’s acute space deficit. Academic Building I will be a 350,000-square-foot facility constructed on the site of the college’s Klitgord Building. The mixed-use facility will contain classrooms, computer and science labs, a 1,000-seat auditorium, physical education facilities, administrative offices, student services, a nursing simulation center and a dental hygiene clinic. Demolition of the Klitgord Building has been completed and construction of the new facility has begun; additional funding requested this year is needed to fully fund the project.

**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 be 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.

**The Field Building at 17 Lexington Ave.**
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 is underway and includes 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.
Interdisciplinary High-Performance Computational Center
College of Staten Island
Architect: HDR

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 center 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 under way.

Science and Health Professions Building
Hunter College
Architect: Ennead Architects and Perkins Eastman

As recommended in the college’s 1999 Master Plan, this project will relocate Hunter College’s science programs, partially at its Brookdale campus on East 25th Street, within walking distance of the main campus on East 68th Street. In a public-private partnership with Memorial Sloan-Kettering Cancer Center (MSKCC), CUNY-Hunter College and MSKCC propose to develop more than 1 million square feet on East 74th Street. Hunter’s share will be an approximately 390,000-square-foot science building that will support its health professions programs, including nursing and physical therapy; provide research labs for its chemistry, biology, psychology, physics and astronomy departments; and provide a lecture hall. Design is ongoing.
Campus-Wide Utility Upgrades
Bronx Community College
Architect: Chu & Gassman / RCM Technologies

Another of CUNY’s significant critical maintenance needs, this project will provide upgrades to the failing Bronx Community College campus heating, cooling and electrical infrastructure, including central plant and distribution networks. The first phase of construction is completed and the second is under way. Additional funding is needed to complete the remaining phases.

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 19 new buildings and additions, translating to more than 2.3 million gross square feet. An additional 2 million gross square feet of renovations and new construction are also in planning, design or construction.

Issues Shaping the Capital Program

Aging facilities
The most significant issue impacting CUNY’s capital program is the age of its facilities. The University’s facilities portfolio consists of 27.6 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. A result of the age of CUNY’s facilities and this history of deferred maintenance is the need for a state-of-good-repair program to systematically address the University’s capital facility renewal needs.

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. The results were analyzed by Pacific Partners Consulting Group. Using a lifecycle model based on current replacement cost, CUNY was provided with the estimate of the funding needed to eliminate its backlog of deferred maintenance as well as 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 included: 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 critical maintenance funding need of approximately $4 billion for the 10 fiscal years 2008-09 through 2017-18. In response to the analysis, in the FY 2008-09 budget, the state began to allocate $284 million in critical maintenance funding annually to the senior colleges to address state of good repair. Since that year, CUNY received five appropriations of $284 million each. Hundreds of projects are active as a result, including numerous large projects such as City College’s Shepard Hall façade repair, Queens College’s New Science Building ventilation upgrades and upgrades to New York City College of Technology’s Voorhees Hall, in addition to numerous small projects that have been completed with these funds. 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 intends to match all funding over a multi-year period. Nearly $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 second 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 Sightlines Group. The initial results indicated that system deterioration had increased at a faster rate than the 2007 analysis anticipated, but this was offset by a $700 million reduction in the backlog due to funding provided and CUNY’s efforts at reducing the backlog. The updated survey confirmed that an investment of $6 billion is needed over the next 10 years to eliminate the backlog of deferred maintenance. This year’s request for critical maintenance for the next five years is more than $2 billion.

Enrollment trends
CUNY has had a surge in enrollment over the last decade. Between 2001 and 2011, the number of degree-seeking students grew from approximately 197,000 to 269,000 — a nearly 37 percent increase that has strained already burdened facilities. The number of registrations in adult, continuing and professional education programs grew from 208,000 to 223,000 between 2001 and 2011, a seven percent increase. And the number of faculty and staff has increased from 29,000 to 39,000 to meet enrollment demands. 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 also has 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. 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. The competitive process for the first year’s funding allocation is ongoing and is open to the CUNY senior colleges, graduate and professional schools, and community colleges. Joint as well as individual applications are encouraged. 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. The University’s budget request this year includes a request for the next four 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.
o 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).

o 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).

o Hunter College: Silberman School of Social Work and CUNY School of Public Health at Hunter College, September 2011. Added 147,000 square feet (project part of a public-private partnership with a developer).

o John Jay College: Building Expansion, November 2011. Added 625,000-square-foot, mixed-use facility.

2012


o 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.

o Queens College: Kupferberg Center for the Arts complex, April 2012. Project provided upgrades to complex containing three performing arts facilities and a museum.

o CUNY School of Law Building, June 2012. Added 260,000-square-foot condominium in a new location in Long Island City, Queens.

o 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 9/11/01.

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 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.

Major construction projects ongoing

o Hunter College: Science research floor in new Belfer Research Building (partnership with Weill Cornell Medical College). Anticipated completion summer 2014.

o Advanced Science Research Center, Phase I and City College New Science Facility. Anticipated completion August 2014.
o Medgar Evers College: Bedford Library Expansion. Anticipated completion summer 2014.


o Baruch College: Renovation of the Lawrence and Eris Field Building at 17 Lexington Ave. Anticipated completion of Phase 1A fall 2016.

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

Other milestones of the capital program

o The capital program’s contribution to the local economy. Since the regional economy slowed in 2008, the University, in partnership with the state and city, has not wavered in its commitment to the capital program. Several large projects were in progress or starting at the beginning of the economic downturn, and the state has allowed CUNY to complete them. As a result, thousands of workers in the construction trades in New York City have been active at a time when the region needed well-paying jobs. Investing in CUNY facilities has been and can continue to be an opportunity to stimulate the economy of New York City.

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, and CUNY School of Law at 2 Court Square; 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 and the launching of the CUNY 2020 and CUNY START-UP NY initiatives. Currently, the PPP group is coordinating formation, selection, and submission of the CUNY 2020 grant proposals for the initial $55 million appropriation made available in FY 2013-14.

Looking ahead, the PPP group plans to complete the acquisition of one floor in the new Belfer Research Building for Hunter College and to embark on a public-private project for Guttman Community College on a site near John Jay College on Amsterdam Avenue.

o 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.

o Completed physical master plan updates for The College of Staten Island in 2010, York College and Brooklyn College in 2011 and Hostos Community College in 2012. City College, Medgar Evers College and Borough of Manhattan Community College are preparing to undertake master plans in the coming year.

o Initiated an update of University space guidelines. The existing guidelines were approved in the early 1970s and have not had a comprehensive revision since. The goal is the adoption of space
guidelines that are flexible and adaptable for all CUNY institutions and the creation of a tool that will allow the campuses to plan and utilize space more efficiently. A strategic process and timeline for periodic review and evaluation of the guidelines also will be established.

- Minority and Women Business Enterprises (MWBEs). Governor Andrew Cuomo set a goal of 20 percent for overall participation by MWBEs in New York State contracting, and the capital program of The City University of New York and City University Construction Fund (CUCF) has met that goal for the past two state fiscal years for work managed by the Office of Facilities Planning, Construction and Management. In state fiscal year 2012-13, the capital program spent $14.7 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 2013 was the annual MWBE conference that CUNY and the CUCF held in August that attracted more than 400 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 2014-15 through FY 2018-19 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**
   
   The Five-Year Capital Plan Request also reflects CUNY’s commitment to green technology and energy efficiency. CUNY is the primary public partner in New York City’s PlaNYC “30 in 10” University Challenge, which commits to reducing the University’s greenhouse gas emissions by 30 percent by 2017. Since FY 2010, the University has received over $19 million in PlaNYC capital funding from the city for various projects at the community colleges that will increase energy efficiency.

   Additionally, CUNY is compliant with New York City Local Law 86 and the recent New York State Executive Order 88 that require it to reduce facility energy consumption below current energy code for new and retrofit construction as well as reduce overall energy consumption. Among the capital initiatives being implemented to reach these goals are:

   **Green Building Construction**
   
   New CUNY buildings will be a minimum of LEED-certified Silver (Leadership in Energy & Environmental Design) or have green elements as part of their design and construction.

   **Energy Conservation Program**
   
   The University has maintained a facility energy conservation program since 1992. It is structured to achieve a 30-percent reduction in greenhouse gas emissions by 2017 as outlined in the PlaNYC University Challenge as well as comply with New York City Local Law 86 and New York State Executive Order 88-mandated 20-percent reduction in overall University energy consumption. This program consists of the following efforts:

   o As a first step for PlaNYC and Executive Order 88 compliance, CUNY has developed Climate Action Plans for its campuses. The Climate Action Plans include comprehensive energy audits for CUNY buildings. The energy audits meet the requirements of New York City Local Law 87 and Executive Order 88 and identify the most cost-effective areas for energy-efficient investment.

   o Concurrent with the Climate Action Plans, CUNY is instituting a 10-year program for energy-efficient solid-state lighting and lighting controls, retro-commissioning, demand-control ventilation, steam equipment upgrades and building controls upgrades for its campuses. The program will address these elements, identified as common and cost-effective efficiency measures, at all campuses.

   o As part of the Climate Action Planning process, CUNY is identifying those major infrastructure renewal projects that can yield significant energy savings along with alternative approaches that will reduce energy consumption in existing designs. The program will be funded through critical-maintenance sources.
Finally, CUNY is installing an internet-based real-time energy monitoring system at the senior colleges to assist campus operating staff in identifying energy waste and thereby reducing energy consumption.