

CUNY Five-Year Capital Outlay Request FY 2008-09 through FY 2012-13

CUNY is the nation's largest urban public university, comprised of 11 senior colleges, 6 community colleges, The William E. Macaulay Honors College, The Graduate School and University Center, The CUNY School of Professional Studies, The CUNY Graduate School of Journalism, The CUNY School of Law, and The Sophie Davis School of Biomedical Education. More than 232,000 students are enrolled in degree credit courses, and another 250,000 are enrolled in adult and continuing education courses at campuses located in all five New York City boroughs.

From its beginnings 1847 as the Free Academy, which later became The City College of New York, CUNY has upheld New York State Education Law in supporting "an independent and integrated system of higher education on the assumption that the university will continue to maintain and expand its commitment to academic excellence and to the provision of equal access and opportunity for students, faculty and staff from all ethnic and racial groups and from both sexes." The law requires CUNY to "remain responsive to the needs of its urban setting and maintain its close articulation between senior and community college units."

The facilities at CUNY's 21 campuses include the traditional and the innovative. More than 290 buildings with 26.1 million square feet of space include classrooms, state-of-the-art computer centers, science and language laboratories, theaters, gymnasiums, greenhouses, astronomy observatories, and many more features. It is worth noting that a substantial amount of the space on the campuses is more than 30 years old; more than 75% was created before 1970; and that the average building age is approximately 50 years. All of these factors directly impact the University's capital program need.

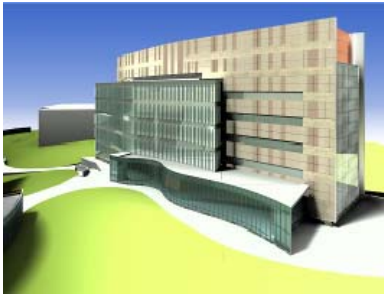
The University's Capital Budget Request for the five-year period of FY 2008-09 through FY 2012-13 is an unprecedented \$8.052 billion: \$5.9 billion for the Senior Colleges and \$2.09 billion for the Community Colleges and Medgar Evers College. The Five-Year Capital Budget Request was developed by the Office of Facilities Planning, Construction and Management in consultation with the colleges. The projects requested originate from approved college master plans and from ongoing condition assessments of the existing building stock and are prioritized in the campus sections that follow. The University's overall priorities for the next five years include:

- CUNY-Wide projects to ensure health, safety, security, facilities preservation, and compliance with codes, including ADA, asbestos regulation, and energy conservation;
- Completion of active and ongoing work;
- Projects to support the Chancellor's Initiatives, including construction of new science facilities as part of the "Decade of Science" and a University-wide program to update existing science labs;
- The CUNY FIRST initiative that will allow CUNY to develop unified data systems for tracking student information, human resources data and fiscal operations at individual campuses and across the system;
- A Critical Maintenance initiative intended to bring CUNY campuses to a state of good repair (see following section "Basis of Program" for further details).

The Request also contains a separate contingency fund for projects to account for market changes and unexpected needs over the next five years, "Evolving Strategic Initiatives," for both the Senior Colleges and Community Colleges/Medgar Evers College.

Additionally, this year \$83.1 million is being requested from New York City Borough Presidents and the City Council ("Reso A" funding) to address small-scale projects and equipment purchases.

The images on the following pages illustrate a sample of projects within this Capital Request.



Advanced Science Research Center Phase I City College New Science Facility

City College South Campus

Architect: Flad & Associates / Kohn Pedersen Fox Associates

CUNY-Wide Advanced Science Research Center

Phase I of the CUNY-Wide Advanced Science Research Center (ASRC) project will construct a new 189,000 GSF shared research facility to support the concept of an integrated university by providing state-of-the-art laboratories for

the University's top research faculty in one location. The research performed in the ASRC will incorporate technology in the areas of nanoscience, photonics, and bio-sensing.

City College New Science Facility

City College's Science Division currently occupies facilities that cannot be cost-effectively renovated to support research at the College. The New Science Building will address this need by providing an additional 200,000 GSF of research space. The building will be designed and constructed in tandem with the ASRC; the two facilities will be separate entities with shared core science facilities and amenities.

A Project Labor Agreement (PLA) with a Guaranteed Maximum Price (GMP) will be used on this project instead of Wick's Law. Design is nearly complete and construction start is scheduled for Fall 2008.



New Science Facility

Lehman College

Architect: Perkins + Will

This project will create a modern science facility of a combined 185,000 GSF that will include laboratories for teaching and research, science learning centers, offices, and a research facility. The fully-funded Phase I will construct approximately 55,000 GSF. Design is underway with construction start planned for June 2008.



Roosevelt Hall Replacement, Phase I

Brooklyn College

Feasibility Study: FXFOWLE Architects
& Shepley Bulfinch Richardson and Abbott

Roosevelt Hall and Roosevelt Hall Addition will be replaced with a new 180,000 gross square foot building that will provide instructional laboratories for the College's Science programs.



Science Upgrades – Remsen Addition

Queens College

Architect: Mitchell Giurgola Architects

This project will begin to address the College's science facilities needs. Phase I will construct a 26,000 GSF addition to Remsen Hall to house the College's chemistry labs. Vacated space will then be renovated to house some of the less infrastructure-intensive chemistry uses. Construction is underway with anticipated completion planned for August 2009.

Building Expansion Project

John Jay College of Criminal Justice
Architect: Skidmore Owings Merrill LLP



A new academic facility will be built adjoining the College's Haaren Hall Building, to create a unified college campus on one city block. The 625,000 GSF addition will contain classrooms and lecture halls, laboratories, faculty offices, an instructional resource center, and student/faculty lounges. Construction started on this project in early 2007 with occupancy planned for Spring 2011.

Academic Building I

Medgar Evers College
Architect: Polshek Partnership LLP
& Roberta Washington Architects



This new 194,000 GSF building will provide Medgar Evers College with a complete range of state-of-the-art instructional spaces, faculty offices and support facilities. Construction is well underway. Anticipated occupancy of the new building is Spring 2010.

Fiterman Hall Replacement

Borough of Manhattan Community College
Architect: Pei Cobb Freed & Partners Architects LLP



The original Fiterman Hall was irreparably damaged on September 11, 2001. This project will construct a new, mixed-use 377,000 GSF replacement facility that will include classrooms, computer labs, music rooms, a virtual library, offices, support space and an art gallery that is open to the public.

North Instructional Building

Bronx Community College
Architect: Robert A.M. Stern Architects



A new, 98,000 GSF facility will be constructed at Bronx CC that will house instructional spaces, a new library, and support areas. The new building will complete the north quadrangle of the campus. Design started in February 2006 and construction will begin August 2008 with an anticipated occupancy of Fall 2011.

Basis of the Program

The objective of the Capital Outlay Program is to support the mission of the City University of New York by providing facilities that serve the University's approved educational programs. 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 entirely 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 2008-09 through FY 2012-13 is based on the following guidelines:

1. Approved Academic Master Plan

In May, 2004 The City University Board of Trustees approved a new Academic Master Plan for 2004-2008, which established a variety of critical goals that the University continues to pursue. Key objectives of the Academic Master Plan include: creating a flagship environment; fostering a research environment; achieving greater diversity; stronger programs for the education of educators; improving undergraduate education; providing the student body with a comprehensive program of personal, academic, career and supportive services; increased collaboration with the public schools; stronger coordination and collaboration between academic departments and adult and continuing education divisions; continued expansion of work force development programs; increased use of educational technology; and enhanced University planning and enrollment management.

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, both the University's annual Capital Budget request and the Five-Year Capital Program must reflect the academic policies outlined in the overall Academic Master Plan.

This year's capital budget responds to the Academic Master Plan by continuing previous years' emphasis on remodeling and renovation of existing facilities so they can more effectively serve academic programs, as well as by proposing new construction that is called for by campus master plans, by new University initiatives, or by the changing needs of its multiple constituencies.

2. 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. 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 at regular intervals or as warranted by changing conditions. In developing or amending 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 and their urban context.

A CUNY Trustees policy reflected in master plans is to phase out leased and temporary facilities as soon as funds become available to replace them with appropriate permanent facilities.

3. Approved Space and Utilization Guidelines

Instructional space needs are calculated by applying adopted space guidelines for various academic disciplines to current and projected enrollment of full-time equivalent students (FTES) in each discipline. Instructional support and administrative spaces are also subject to utilization guidelines summarized below. Both the space and utilization guidelines are reviewed and revised as applicable for each college master plan and for individual proposed projects. The University's instructional space utilization guidelines are as follows:

	Hours Per Week To Be Scheduled	Stations Occupancy Guidelines
Lecture Classrooms, Senior Colleges	30	80%
Lecture Classrooms, Community Colleges	30	80%
Teaching Laboratories	24	80%

Faculty office space need is calculated based on the projected number of full-time equivalent faculty (FTEF) for each campus. Single station office space is planned at the rate of 130 net assignable square feet (NASF) per FTEF, with an additional 40 NASF of support space for each office.

Existing space calculations are based on the CUNY Facilities Database inventory. See "University Statistics" section that follows for selected statistics from the available data. Additional facilities data can be accessed online at www.CUNY.EDU by clicking on "Administration" and "Capital Budget."

4. Cost Estimates/Schedules

Original cost estimates are developed through specific feasibility studies or by applying comparable cost data. The Dormitory Authority of the State of New York (DASNY) reviews the major bonded projects whose cost exceeds \$2 million, based upon their experience in similar locations by type of construction. 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 as requested. If appropriations are delayed, completion dates and costs are adjusted accordingly.

5. Green Architecture

CUNY is committed to achieving greater sustainability throughout the University. Mayor Bloomberg recently unveiled the City's initiative to reduce greenhouse gas emissions by 30 percent by the year 2030. The mayor challenged the City's colleges and universities, which are major holders of real estate in the City, to reduce their carbon footprints by 30 percent in just 10 years. All new CUNY buildings will be LEED-certified Silver or have green elements as part of their design and construction.

6. Energy Conservation

In compliance with the Governor's Executive Order #111, CUNY seeks to achieve a reduction of 35 percent in energy consumption by the year 2010, relative to its 1992 baseline, as well as compliance with NYC Local Law 86 where New York City funding of projects is involved. Following are some of the initiatives being implemented to reach this goal:

- CUNY is working with DASNY to expand its best-value procurement approach (Energy Performance Contract) beyond boiler, chillers and mechanical equipment replacement to include building envelopes, retro-commissioning and alternative energy systems, in order to take advantage of standardized metering and verification methodologies contained in ASHRAE-14 guidelines. The expanded procurement methods will be applied to several projects in the capital outlay program, including: Queens College's "Science Building Controls & Ventilation" project and Borough of Manhattan Community College's "Central Plant and Ventilation Upgrades" project.
- CUNY plans to develop a method for the installation of alternative energy systems through a collaborative contract effort with the New York Power Authority (NYPA) and DASNY, which will support cost-effective projects through capital as well as heat, light, and power operating funds.

- CUNY, together with the New York Power Authority, plans to complete a CUNY-Wide program that utilizes web-based, electronic collection of utility metering data. This program will provide real-time, weather-adjusted baseline consumption data required to develop energy savings budget incentives for the Colleges. It will also provide timely information to the University Budget Office on price and consumption increases that might affect the budget. Installations are already complete at College of Staten Island, The Graduate Center, York College, Baruch College and John Jay College.
- Finally, CUNY is working with Massachusetts Institute of Technology software programmers to refine their building analysis software tool to use in the planning of new and retrofit construction. The software tool will have the capability to predict building energy consumption and greenhouse gas emissions so the environmental (and capital cost) impact of new and substantial modification building designs can be predicted at the planning stage.

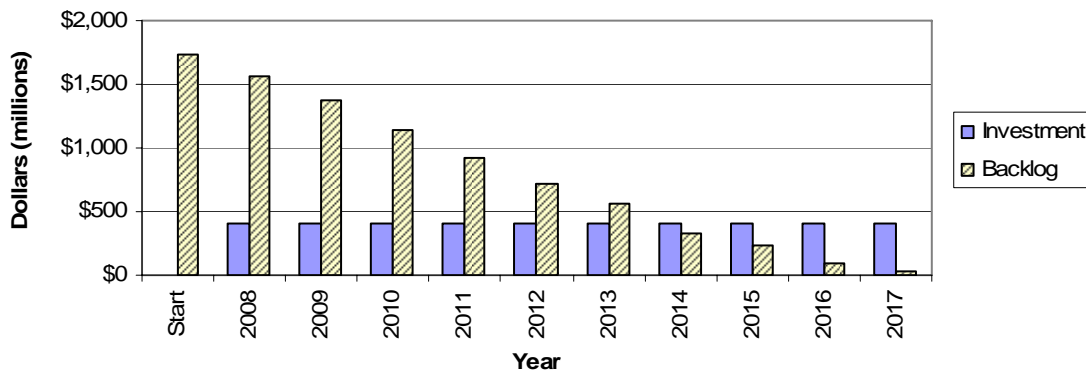
7. Critical Maintenance

A new initiative in this Capital Budget Request will be the implementation of a state of good repair program to uniformly and systematically address the University's capital facility renewal needs by replacing or reconstructing systems that are past their useful lives, over a ten year period. Items to be addressed will 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. These repairs and renewal activities are essential to maintaining a state of good working order for existing facilities and their supporting infrastructure.

In September 2007, CUNY with the assistance and support of the New York State University Construction Fund (SUCF) initiated and completed a Building Condition Assessment Survey (BCAS) using software developed by SUCF. The results of the BCAS were analyzed by Dr. Frederick Biedenweg of the Pacific Partners Consulting Group. Using the life cycle model based on current replacement cost, Dr. Biedenweg was able to provide CUNY with the funding needs required to eliminate its backlog of deferred maintenance as well as the funding needed to replace or reconstruct facilities, their components, and subsystems as they approach the end of their useful life (renewal costs).

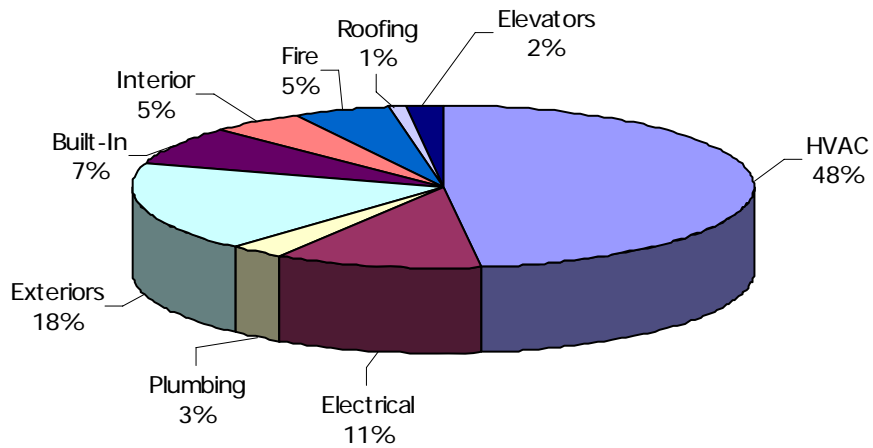
The following chart illustrates how a rate of investment of \$400 million annually will eliminate the \$1.7 billion backlog of deferred maintenance within ten years; upcoming renewal costs are also shown:

Backlog Growth at \$400M/Year Investment



This chart shows a breakdown by building components of the University's deferred maintenance:

Building Backlog by Subsystem



The Critical Maintenance need for this Five Year Capital Plan is \$2 billion (\$400 million times 5 years). As this capital budget request contains several projects that have a Critical Maintenance component or are themselves Critical Maintenance projects, the requested funding for Critical Maintenance nets at \$757.3 million.