



Columbia University Facilities

ANNUAL REPORT FISCAL YEAR 2012





From the Executive Vice President

WELCOME TO OUR FY 2012 ANNUAL REPORT

Columbia University Facilities is a large organization, with an important mission: supporting our faculty, students and administrative colleagues. That's why whether we are planning a campus renovation, breaking ground on a new building, maintaining our award winning buildings and grounds or keeping our campus safe, facilities is here 24 hours a day, 7 days a week to help keep the University moving forward.

As you will see throughout these pages, 2011-2012 was an exciting year for us and we are poised to serve you even better in the coming year. We hope this annual report will help you learn more about who we are and how we help support you.

Joe Ienuso

Executive Vice President

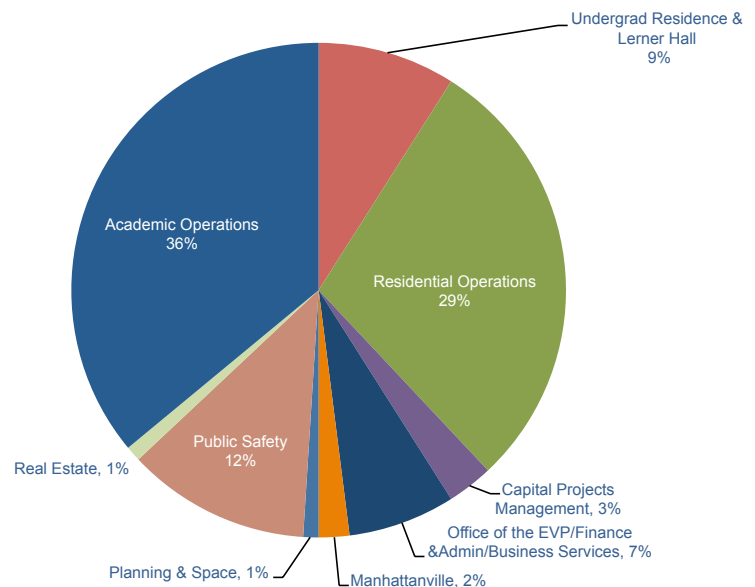
What we do

Columbia University Facilities (CUF) supports the core educational and research mission of the University by maintaining a safe, beautiful, and functional campus environment. CUF plans and manages new building design and construction; ensures the renovation, repair, and restoration of existing spaces; and operates and maintains the University apartment housing inventory and grounds, while also ensuring campus public safety. We also spearhead many of the University's "green" efforts, such as increasing the number of buildings on campus with LEED (Leadership in Energy and Environmental Design) certification, a national green building rating system.

A client-focused organization, Columbia University Facilities has over 1,100 full-time employees with responsibility for an operating budget in excess of \$300 million per year and a capital budget in excess of \$1 billion. Facilities manages more than 295 buildings—15 million gross square feet across Morningside, Baker Field (athletics facilities at 218th Street and Broadway) and the Nevis Laboratories (for physics research, located in Irvington, NY). Except for Public Safety and Real Estate, and specific areas of responsibility as noted, facilities at the Columbia University Medical Center (CUMC) are managed independently of our organization.

The organizational chart on page 23 listing CUF's Executive Staff and their direct reports represents just a small part of our talented team. Professionals in architecture, communications, engineering, energy, environmental design, finance, work with the dedicated union employees of the Transport Workers Union (TWU) Local 241, Service Employees International Union (SEIU) 32BJ (32BJ) and United Auto Workers (UAW) Local 2110 (office workers) to meet our core mission, as represented by our tagline—**plan, design, build, operate, and secure**—in preserving and maintaining Columbia's physical assets.

CUF DEPARTMENTS BY SIZE



The Columbia University Facilities Team



Facilities is leading the way to a greener Columbia



FACILITIES FAST FACT

In FY12 CU reduced GHG Emissions by 10.9%

In FY12 **CREATIVE THINKING** was the hallmark of Facilities' efforts to make Columbia greener. The increased use of hybrid patrol vehicles saved roughly 2,200 gallons of gas and reduced greenhouse gas emissions by more than 20 metric tons of carbon dioxide equivalent. Increasing the number of bicycle racks on campus is just one of the ways facilities creates **a more bike friendly campus** and you can expect more bike friendly improvements in FY13.

Green roofs delivered benefits in the form of cleaner air and energy conservation; during summer heat waves, heat coming off a building without a green roof could be as high as 138°F while heat radiating from the green roof was roughly half at 70°F. The conversion of all University Apartment Housing laundry rooms to **energy efficient, coin-less laundry machines** saved nearly 8.5 million gallons of water.

In addition to **"REDUCING"**, Facilities helped the University tackle the other "R's" **"REUSING"** AND **"RECYCLING"** in a myriad of ways.

Expanding recycling initiatives to include light bulbs and batteries meant less waste and more conservation of resources. Undertaking **preservation projects** restored existing buildings like McVickar, Knox, Faculty House and the townhouses on W. 113th Street instead of building

new ones helped maintain the historic character of the Morningside community while fostering sustainability.

Facilities continued testing **LED (light-emitting diodes) fixtures** in FY12 as an alternative lighting source. LEDs use substantially less power than fluorescent and incandescent bulbs, and have a much longer lifespan, reducing both energy use and the waste stream. They also do not require the replacement of ballasts, devices needed to start fluorescent lights. Ballasts and fluorescent bulbs both contain mercury, while LEDs do not. The fixtures have been installed in several buildings on the Morningside campus, including 47 Claremont, where every University-owned light fixture in the building is now LED.

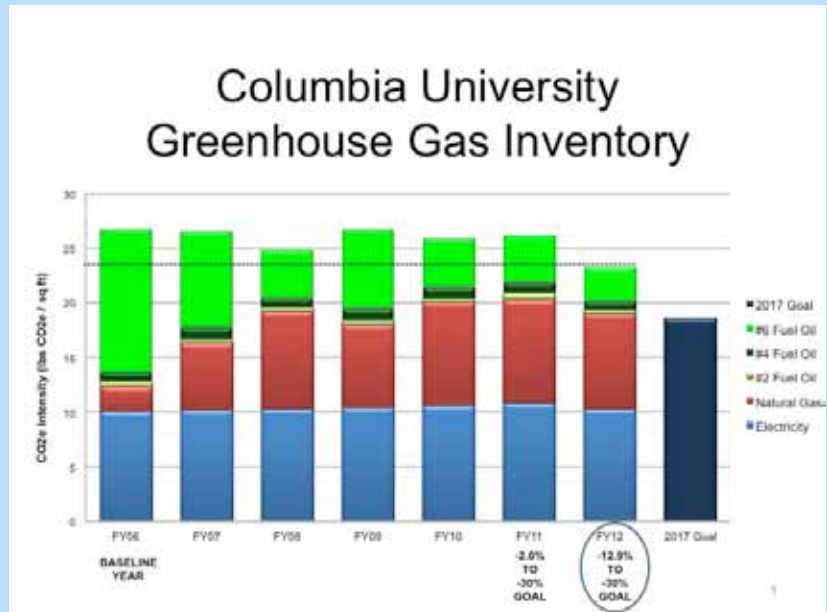
The fixtures were combined with bi-level lighting and daylight harvesting sensors, allowing individual rooms and spaces to be lit automatically according to how much natural light they receive and whether or not they are occupied.

IN FY12 CUF EXCEEDED UNIVERSITY TARGETS FOR THE PLANYC MAYORAL CHALLENGE

As one of the first nine PlaNYC Challenge Partners, Columbia University established itself as a leader in environmental stewardship by committing to reduce its greenhouse gas emissions for its Morningside campus and residential properties by 30% per gross square foot from the baseline year of July 2005–June 2006.

This action plan anticipates that Columbia University will reduce 78,765 metric tons of carbon equivalent (MtCO₂e) by the year 2017. Facilities is achieving this reduction by replacing old chillers and Air Handling Units, installing green roofs, replacing failing windows, modernizing Heating/Ventilation/Air Conditioning control systems, replacing florescent lights with LEDs, and evaluating new technologies such as CoGeneration and Ice Storage for managing energy consumption.

In FY12, the University reduced greenhouse gas emissions by 10.9%, for a total reduction of 12.9% as compared to baseline year levels.



PUBLIC SAFETY'S HYBRID CAR & BIKE PATROLS MEAN LESS FUEL USE AND CLEANER AIR



RESIDENTIAL BUILDINGS BEGIN CONVERSION FROM OIL TO GAS

Beginning in the summer of 2011, in conjunction with Con Edison and the City of New York, the University began converting all of its Morningside campus residential buildings to natural gas as the primary fuel source for heat and hot water. This transition from reliance on heavy heating oil and the oil delivery trucks, will cut the University's greenhouse gas emissions and result in a more efficient heating as well as improved air quality. By the end of FY12 conversion was completed in thirteen residential buildings. The remainder of the portfolio's buildings will be converted over the next two years. When this conversion is complete, the Morningside campus will have eliminated its use of heavy (number 4 and number 6) heating oils.

In each of the residential buildings the gas supply to the building from the street is increased, new piping and gas meters are installed and existing oil tanks are emptied and cleaned. On some blocks Con Edison is replacing portions of their gas mains, allowing our Morningside Heights neighbors to take advantage of conversions for their own buildings.



WELCOMING A NEW CLASS OF “GREEN” RESIDENTIAL BUILDING SUPERINTENDENTS

Nearly 70 University residential building superintendents celebrated completion of the 1,000 Green Superintendents program, which provides environmental stewardship training across New York City. The training promotes a building service workforce prepared to reduce energy use, conserve water, save money and maintain the environment. Administered by the Building Service 32BJ Thomas Shortman Training Fund, the program is also funded by a grant from the U.S. Department of Labor. U.S. Secretary of Energy Steven Chu served as the keynote speaker at the program's graduation event.



Facilities' Green Superintendents

Maintaining the security and well being of the university community

COLUMBIA DEEMED SAFE BY MORE THAN 99% OF ITS STUDENTS.

In the National College Health Assessment conducted by the American College Health Association in 2009, more than 99% of both undergraduate and graduate students expressed 'feeling safe' on campus during the daytime, exceeding the national average by more than 12 percentage points. During nighttime hours, Columbia exceeded the national average by more than 45 percentage points.

Facilities' Department of Public Safety is responsible for safety and security across all of Columbia's campuses. All Public Safety officers are licensed by the State of New York. On the Morningside Campus, officers are assigned to guardbooths at the main campus gates on 116th Street at both Broadway and Amsterdam Avenue. These fixed posts are supplemented by foot, bicycle and motorized patrols that provide a highly visible presence in the areas around all three campuses. All undergraduate residence hall entrances are staffed on a 24 hour basis by Public Safety personnel or trained student aides who control access to these buildings and screen all entrants. Highly trained investigators work closely with N.Y.P.D.'s 26th, 33rd and 34th Precinct detectives on investigations relating to the Columbia campuses. In addition, all Fire Safety compliance on the Morningside Campus is under the oversight of Public Safety. Columbia's outstanding crime prevention initiatives include:

- An extensive network of more than 3,000 video cameras across all three campuses constitutes an unparalleled investigation response.
- The Morningside Heights Intra Campus Evening Shuttle—two disability accessible buses provide scheduled service throughout the Morningside campus area during the evening hours, between 6:00 P.M. and 4:00 A.M. This service ranges as far

south as 106th Street and as far north as 135th Street.

- Operation Safe Haven—provides storefront locations across all campuses (over 80 in the Morningside area alone) where people who may feel threatened can take refuge. Participating merchants will call Public Safety and/or the N.Y.P.D. who will respond immediately. Safe Haven locations are identified by the "Red Lion" sticker in the window of the store.
- Student Escort Service—radio-equipped pairs of trained students are available to provide walking escorts any time from 7:00 P.M. until 3:00 A.M. This service is available between 108th Street and 122nd Street, between Riverside and Morningside Drives.
- The installation of an automated barrier system and secure pedestrian entryway at the Grove Entrance, located on the west side of Amsterdam Avenue at 119th Street. The Grove Entrance serves as an access point to several areas of upper campus.
- Emergency Text Messaging system—used to transmit emergency messages to portable devices such as cell phones.

PUBLIC SAFETY FAST FACTS



James McShane
Vice President, Public Safety

- Facilities' Public Safety has over **150** uniformed personnel as signed to its campuses.
- The Public Safety Department publishes an Annual Report that includes campus crime and fire safety statistics.
- To learn more about Public Safety and access their annual report, go to:
<http://www.columbia.edu/cu/publicsafety/>

Manhattanville—an urban campus environment promoting interaction among students, faculty researchers and neighbors



The Jerome L. Greene Science Center

FY12 saw work well underway in Manhattanville with the completion of 12th Ave. Storm Sewer Project. The Project provides a badly needed dedicated storm sewer for Manhattanville, upgrading and relocating an outdated 19th century that combined sewage and water main systems (sanitary and storm). The new storm sewer is designed to improve service for the community and provide cleaner water in the Hudson River.

FY12 also saw substantial progress in the slurry wall project to install new foundation walls for future buildings on the new campus.

Completion of these phases will allow building construction of the Jerome L. Greene Science Center to begin before the end of 2013. The nine-story, 450,000 SF building, scheduled to open in 2016, will have 60 laboratories designed for research with implications of benefit in the treatment of Parkinson's, Alzheimer's and other neurological diseases.



*Phillip Pitruzzello
Vice President,
Manhattanville*

MANHATTANVILLE FAST FACTS:

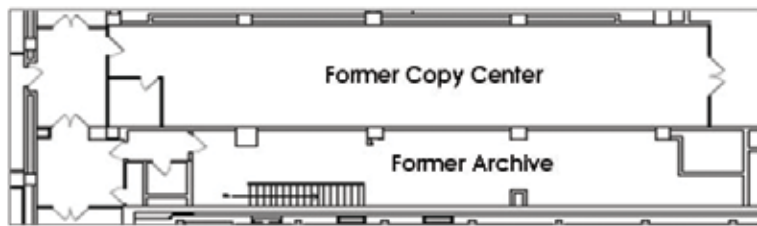
- Manhattanville's **17 acre** campus will develop **6.8 million** square feet over the next several decades.
- The Manhattanville plan will add **over 2 acres** of publicly accessible open space.
- The Manhattanville Project has earned LEED Platinum for its Community Plan.
- **38** buildings in the project have been abated and **37** buildings have been demolished.
- Columbia's use of clean construction techniques during construction has become a model for programs all over the country.

“Can you imagine having a building that is just concerned with brain sciences, in which we can bring engineers, physicists, chemists, psychologists all into the same buildings? We could bring neural science to a completely new level.”

– Eric Kandel, University
Professor & Kavli Professor of Brain Science,
Co-director of the Mind, Brain Behavior Initiative

plan. design. build. operate. secure.

Tactical responses to space needs as well as long range planning are essential to Facilities' mission



SIPA 4 space before renovation



SIPA 4 space after renovation

potential solutions that involve strategic space additions and reorganizations, both on-campus and off. Analyses include development of test-fit floor plans that can later become design and construction projects, subject to funding availability. Changes in departmental space assignments are defined in collaboration with all affected parties and are subject to approval by a Capital Budget and Space Committee (BISS) chaired by the Provost.

CUF collects and manages all University-occupied spaces (except at CUMC) on computerized (CAD) floor plans and a linked database with detailed information on size, use, occupancy and departmental assignment. These are used for a variety of analytical and reporting purposes both by CUF and by many other departments.

In FY13 CUF will integrate Space Planning fully with Capital Projects Management (CPM) to streamline the capital project origination and implementation process from client request through project definition, feasibility analysis, design, construction, commissioning and operation.

Creating new classrooms in the School of International and Public Affairs building (IAB) - 4th floor

Facilities provides a long-term perspective on University space with respect to its development, use and management. CUF's Planning and Space Information department objectively evaluates space needs and offers



Geoffrey Wiener
Assist. Vice President
Planning & Space
Management

PLANNING & SPACE FAST FACTS:

- Facilities was involved in approximately **56 new** planning efforts involving spaces in Morningside Heights and/or Manhattanville in FY12.
- **22** planning assignments were completed and transferred for detailed engineering and design work and eventual construction.
- Facilities is responsible for ensuring that approximately **15 million square feet** of academic, administrative and residential space across **295** buildings on five campuses is developed, used and managed wisely.
- There are **46** major buildings on the "core" Morningside campus between 114th St., 120th St., Broadway and Morningside Dr.; an additional **26** academic buildings and residence halls are located "off-campus," as well as **14** off-campus leased locations.
- Among the larger Columbia-owned buildings at the main campus: **24** are strictly academic, i.e., classrooms, faculty and research offices, libraries and study spaces; **11** contain laboratory research; **17** are undergraduate residence halls; **5** are predominantly used for student activities; and **9** are devoted to central administration or central support services (including 2 in Manhattanville).

The spaces that Facilities builds and renovates for the sciences are created as environments where Columbians of different disciplines can interact

Interdisciplinary science has a new home on the Morningside campus. The Northwest Corner Building added 188,000 GSF at the corner of campus at Broadway and 120th Street. The project helps fulfill Columbia's great need for more space for science instruction and academic research facilities.

Designed by Pritzker Prize-winning architect José Rafael Moneo, the 14-story building houses faculty offices, classrooms, a science library, a café and interdisciplinary research facilities for the departments of chemistry, biology, engineering and physics.

The building fosters interdisciplinary approaches by forming physical and programmatic bridges between neighboring science buildings and departments, and offices and labs are clustered by interdisciplinary projects rather than by academic departments. Researchers who are doing innovative work at the interfaces of disciplines find it easy to interact, to chat in the hallway and to naturally connect.



Science & Engineering Library at Northwest Corner Building

"If you put a physicist next to a biologist these days, good things are bound to happen."

—Ann McDermott, Columbia Chemistry and Biology Professor.



Joseph Mannino
Vice President
Capital Project
Management

CAPITAL PROJECT MANAGEMENT FAST FACTS:

- The Northwest Corner Building won a major award in FY12 for engineering.
- The Northwest Corner Building is the **7th** Columbia University LEED Certified project and **4th** Columbia LEED Gold Certified building, joining Knox Hall, Faculty House and the Columbia Alumni Center.
- The Campbell Sports Center, the University's new 5 story, **47,700 GSF** sports facilities at the Baker Field Athletic Complex is scheduled to be completed in fall of 2012. (see highlight on next page)
- In FY12 Capital Project Management (CPM) completed various Chemistry, Biology, Physics and Engineering laboratories totalling **10,000 GSF**.
- In FY12 the CPM group managed various interior renovations of administrative spaces on the Morningside Campus totaling **30,000 GSF**
- Renovation began in FY12 to transform **3** townhouses at 619-623 West 113th Street (formerly an Episcopal convent) with an area of approximately **21,000 gross square feet**, into housing for approximately **65 to 80** undergraduate students.

THE CAMPBELL SPORTS CENTER WILL BE THE CORNERSTONE OF THE REVITALIZED BAKER ATHLETICS COMPLEX

CONCEPTUAL RENDERING



CAMPBELL SPORTS CENTER IN CONSTRUCTION



In record time Facilities is completing The Campbell Sports Center, a flagship for Columbia's athletic renewal. The Campbell Sports Center is the new cornerstone of the revitalized Baker Athletics Complex.

The Center's signature presence at 218th Street and Broadway sends a powerful message—to student-athletes, to coaches, to the campus community, to alumni and to the sporting public—about Columbia's commitment to athletics. The building will have a

tangible, immediate impact on the athletics program.

The Center is a state-of-the-art facility featuring a theatre-style meeting room, conference rooms, a strength-and-conditioning center, a student-athlete lounge and study center, a hospitality pavilion, and coaches' offices. The Campbell Sports Center is designed to be attractive year-round hub for student-athletes, coaches, staff, and administrators.

EXPANDED WATERFRONT ACCESS AT INWOOD HILL PARK TO INCLUDE RESTORED MARSH



Working cooperatively with the New York City Parks Department, Facilities is restoring the onetime marshland adjacent to Inwood Hill Park for public use. The 40,000-square-foot Boathouse Marsh park will recreate a habitat for native wetland plants and birds, as well as a dramatic setting for seasonal changes in flora and fauna. The site will be organized in three tiers that progressively receive, treat and slow down storm water runoff before it enters the tidal system, improving water quality in the river. The University will also establish environmental education programming at the Inwood site, as well as formalize community access to facilities at Baker Athletics Complex.

Facilities works around the clock to support the university with a services center that is staffed 24/7 and operations personnel that work through the night

In FY12 CUF continued its strategy of balancing the need to restore and renew aging facilities with the need to provide state-of-the-art services and amenities for Columbia's world-class excellence in teaching and research.

Facilities works around the clock to support the University with a Services Center that is staffed 24 hours a day, seven days a week and operations personnel that work through the night. CUF is dedicated to providing easy access to our many services and staff through the Services Center. CUF knows the campus inside and out with the skills and knowledge of the campus infrastructure and policies to provide hundreds of services ranging from event setup and cleanup to painting and locksmith services. Whenever or wherever we are needed to keep the campus beautiful, functional, clean and safe, Facilities is there.



OPERATIONS FAST FACTS:



Frank Martino
Vice President
Facilities Operations

- Annually, Facilities successfully completes over **67,000** service requests.
- The CUF Services Center answered **85,939** calls in FY12.
- The **top** percentages of Services Center calls are: 13% for custodial support, 11.2% "hotcold" calls, 7.2% plumbing and 7 % electrical.
- In FY12 we supported **6,857** on-campus events.
- We maintain over **15 million square feet** of built space in **295** buildings in the vicinity of the Morningside Campus, Baker Field and the Nevis Laboratories.
- There are over **3,900** undergraduate residential rooms.
- More than **12,000** affiliates are housed by Facilities, including **5,463** undergraduate students and almost **5,075** graduate students.



The Morningside Campus Central Plant Improvement

KEEPING COLUMBIA'S AGING INFRASTRUCTURE UP-TO-DATE

In FY12 Facilities completed the third year of a five-year \$135M core campus State of Good Repair (SGR) program. Facilities SGR program provides critically needed improvements to the physical plant to improve chilled water and steam production for the University and help achieve our goal of reducing our Green House Gas emissions 30% by 2017.

An annual allocation of \$27M for core campus SGR projects focuses on Sustainability, Code Compliance, Life Safety, Life Cycle Replacements, Emergencies and Promoting University Goals. On average half of the allocation is spent on Arts and Science buildings for public spaces and classroom upgrades, roof and window replacements, and Heating Ventilation Air Conditioning (HVAC) and Elevator repairs, upgrades and improvements.

From enhancing energy to the University's main data center to completing central plant improvements that convert boiler fuel oil system to more efficient fuels, Facilities is dedicated to modernizing the University's infrastructure.

Funded by a grant from the National Institutes of Health (NIH), in FY12 Facilities started work on a **Shared Research Computing Facility** that will enhance energy to the current main data center. The project, for the Columbia University Information

Technology group, (CUIT), creates additional space in the data center by substituting a large unit Uninterruptable Power Supply (UPS) for all the individual UPS's now in use by CUIT. The new shared UPS will sit in a purpose-built box that will hang from the underside of the plaza bridge on the upper Morningside campus that crosses the Grove between the gym, Uris Hall and Havemeyer Extension.



Expanded technology in areas like the NWC Library call for enhanced energy for CUIT

BUILDING & MAINTAINING MODERN FACILITIES WHERE STUDENTS, FACULTY AND STAFF CAN THRIVE AND LEARN IS CENTRAL TO FACILITIES' SUPPORT OF THE CORE TEACHING AND RESEARCH MISSIONS OF THE UNIVERSITY



FIN ERP offices in Nash

Creating a home for Financial Enterprise Resource Planning (FIN ERP) and ARC

Facilities renovated space in the Nash building for the Department of Finance to provide a home for the FIN ERP project team as they completed the task of replacing the University's out-dated financial accounting and reporting systems.

The project created a collaborative work environment for close to 80 occupants. Flexible workstations with nesting tables allow for different configurations for informal meeting that are paired with breakout areas with white boards and more flexible seating. The 11,700 GSF project was completed in 4 months.

Individual private offices, conference and training rooms, a lunchroom, copy & storage spaces and toilet rooms were all included in the project.

The University's new fully-integrated system Accounting and Reporting at Columbia (ARC) went live July 9, 2012. For more on Facilities preparation for ARC, see Finance and Administration's Fast Facts.

Spotlight on a Facilities Renovation for Arts & Sciences

As part of the Morningside Academic Plan, a series of initiatives to address the need for academic space for several Arts and Sciences teaching departments, this project fully renovated suites and rooms on the 11th floor of the International Affairs Building (IAB) for the **Department of Economics**.

The renovation required construction of new partitions, new distribution of electrical connections, new lighting, data and telecommunication wiring, redistribution of heating, ventilating and air-conditioning, and the installation of carpeting. New furnishings and finishes were provided throughout.



IAB 11th Floor

Building strong relationships with our neighbors as well as qualified MWL business benefits both Columbia and the economic vitality of our local community

CBSC FAST FACTS:

- CUF conducts extensive community outreach that includes hosting public meetings for the local community and sending updates (over **200** in FY12) about upcoming construction activities.
- CBSC produces a quarterly Facilities newsletter called **Off the CUF** which highlights department news, a newsletter for residents of University Apartment Housing called **The Morning-side Resident**, and monthly newsletters for major construction projects.
- Columbia is committed to the goals of awarding at least **35%** of construction, maintenance and repair spend to MWL firms and that at least **40%** of the labor force on major projects is MWL.
- During the past four fiscal years, Facilities spent over **\$308 million** in construction and repair & maintenance services with MWL firms.
- Columbia's MWL Construction Trades Certificate Mentorship Program has already graduated **53** firms that have received more than **\$60 million** in contracts with the City of New York and Columbia. This year, 4 corporate partners – BNY Mellon, Con Edison, Goldman Sachs and National Grid – joined the program.
- CBSC manages the relationship with the Columbia University Construction MWL Advisory Council, a group of industry experts who assist the University in meeting its MWL contracting goals.
- 24 local community high school students participated in a University-wide internship program coordinated through CBSC.



La-Verna Fountain
Vice President
Construction Business
Services & Communications



FY12's Construction Mentorship Program.

Partnerships between the University and the community are important. Facilities Construction Business Services and Communication (CBSC) team reaches out to the University and surrounding community — through newsletters, e-mails, Web sites, community meetings and other community relationships — to share information regarding initiatives from construction projects to conservation innovations.

CBSC also enhances Facilities' long-standing commitment to working with minority-owned, women-owned and locally based (MWL) businesses and individuals by managing programs such as Columbia's MWL Construction Trades Certificate Mentorship Program. Formed in January 2008 in conjunction with New York City's Department of Small Business Services, the two year mentorship program was recently expanded as part of New York City's new Corporate Alliance Program and now boasts corporate partners BNY Mellon, Con Edison, Goldman Sachs and National Grid. Academic work in the program covers such topics as marketing and communications, disputes and negotiations, insurance and bonds, as well as project planning and sustainability. Professionals in the program work on a case study and are assigned mentors from large construction firms to gain a better understanding of the challenges of bidding on large-scale projects. When they complete the program, participants receive a certificate from Columbia's School of Continuing Education.

By creating and supporting these types of innovative partnerships, Facilities expands the pool of capable contractors that can compete for opportunities at the University, resulting in higher quality and better value for our clients.

Facilities management of Columbia's real estate portfolio is dedicated to benefiting the economic vitality of our local community

CUF acquires and manages a broad range of property interests that includes the negotiation of contracts to purchase property or development rights; the negotiation of leases for off-campus space requirements; the management of leased space occupied by the University; and the oversight of a portfolio of properties leased to commercial tenants.

CUF is involved in satisfying the space requirements for Columbia University affiliates (user groups) that require lease agreements with third party property owners. Consequently CUF is responsible for the negotiation, execution and administration of a diverse range of real estate lease transactions involving all components of the University community. CUF is responsible for the disposition of surplus real estate assets. We acquire, through purchase or lease, housing where there is a shortfall within the University inventory.

In FY12 facilities leasing supported the re-location of Columbia's faculty practice organization

In FY12 the Real Estate Department completed the successful lease negotiation of **125,000 square feet** at 1290 Avenue of the Americas to support the relocation of the ColumbiaDoctors Faculty Practice Organization. The physician-led practice, which is currently located at 16 East 60th Street, has over 200 physicians and practitioners providing 200,000



Conceptual rendering of the new ColumbiaDoctors Lobby at 1290 Avenue of the Americas

annual visits and approximately 65,000 procedures to patients.

Upon the relocation, the name of the practice will change to ColumbiaDoctors Midtown. The name, location and the design of the new facility reflect the commitment of ColumbiaDoctors to provide outstanding medical care in a modern location, scheduled to open in 2013, which is easily accessible. ColumbiaDoctors Midtown will have 25 specialties, more than 125 medical exam rooms, and over 30 procedure rooms. The transaction also secured a private entry way so that patients will continue to be greeted through a separate Columbia-Doctors lobby.

REAL ESTATE FAST FACTS

- Our clients include Morningside Heights and West Harlem residents and businesses, the Columbia University Medical Center and businesses located in the Manhattanville project area.
- CUF oversees a portfolio of over **219** properties as either landlord or tenant.
- As a tenant, Facilities maintains **43** lease agreements associated with the Morningside Campus and **47** leases associated with the Medical Center.
- Our portfolio of commercially leased space includes **71** leases in Morningside Heights (primarily retail and restaurants), **33** leases in Manhattanville and **25** leases at the Medical Center (**16** of which are biotech).



Phillip Silverman
Vice President,
Real Estate

In FY12 Facilities added valuable analytical tools with expanded enterprise reporting



Prabhat Ranjan, Reza Kashef, Mohammad Ozair, Don Otondi and Lorant Kando spearheaded the RTMS project

In FY12 CUF's Finance & Administration group continued to focus on processing times for invoices and purchase orders while substantially supporting the University-wide Financial Enterprise Resource Planning (FIN ERP) project.

Finance & Admin's own expanded Facilities-wide enterprise reporting provided valuable analytical tools throughout the department. Increasingly a valued resource, CUF's SharePoint-based Intranet site provides the department with a central portal to team sites, management reporting, applications, IT updates, employee HR resources, department forms, a document library including policies and procedures, announcements, and Web links to university sites.

In addition to supporting critical training in the University's new financial system, CUF's Human Resources expanded internal training programs to include on-boarding, performance management, University Policies and Task Order vendor training.

NEW RESIDENTIAL AND COMMERCIAL TENANT MANAGEMENT SYSTEMS

In FY12 Facilities successfully completed the implementation two Tenant Management System projects for Commercial and Residential Tenants (Tririga and RTMS). The projects included the development, testing and implementation of web based systems to manage applications, assignments, leases, monthly billing and payment receipts. The new systems allow for more efficient management of the University's commercial and residential property portfolio while providing visibility into the Accounts Receivable process. The systems improve collaboration between the various CUF groups associated with managing the University's residential and commercial portfolios. For residents, the new tenant web portals give easy access to all housing applications, identification records and initial assignment payments.

F&A FAST FACTS

- CUF's total operating spend was over **\$306 million** and total capital spend was over **\$318 million**.
- Close to **49,000** invoices totaling more than **\$375 million** are processed annually (including utilities)
- **90%** of invoices processed are completed within 30 days.
- Over **10,900/ \$26 million** contractor transactions were processed through the P-Card system with an average payment time (from submission to payment) of **4 business days**
- Over **401 current users** are now in the Project Management (SKIRE/Unifier) software system managing **1,008 projects**.
- The Facilities IT Help Desk completed **3,071** requests in an average of **4.8 hrs** response time.
- F&A staff mapped over **2,400** existing accounts to the new Chart of Accounts in Accounting and Reporting at Columbia ARC).
- F&A mapped over **260** CUF employees to new security roles in ARC for training and access to the system.
- **10** major systems were retrofitted by CUF-IT for integration into ARC.
- Over **900** existing projects in Project Management (SKIRE/Unifier) were integrated into ARC.
- Over **71,000** Service Requests were managed via MP2 which resulted in **\$4.4** million in billable work orders
- Over **64,000** employee payroll transactions were processed in the Kronos timekeeping system by the CUF HR group.



David Greenberg
Vice President Finance & Administration

Operating Expenses—FY12 (\$ in millions)

COMPARISON SUMMARY OF FY11 TO FY12

FY12 Actual Expenses	FY11 Total Spend	FY12 Total Spend	% of FY12 Spend	Variance FY12 vs FY11	% Change
Residential Operations	\$178.70	\$161.35	53%	-\$17.35	-10%
Construction Administration	\$9.26	\$10.08	3%	\$0.82	9%
Academic Operations	\$48.52	\$50.10	16%	\$1.58	3%
Space Planning and Finance & Administration	\$5.29	\$5.72	2%	\$0.42	8%
Real Estate	\$13.94	\$14.82	5%	\$0.88	6%
Utilities	\$38.70	\$33.42	11%	-\$5.28	-14%
Public Safety	\$17.25	\$18.43	6%	\$1.18	7%
Student Services	\$11.78	\$12.31	4%	\$0.53	4%
Total Actual Expenses	\$323.45	\$306.25	100%	-\$17.22	-5.32%

RESIDENTIAL OPERATIONS EXPENSES SUMMARY

FY12 Residential Expenses	FY11 Total Spend	FY12 Total Spend	% of FY12 Spend	Variance FY12 vs FY11	% Change
Direct Expense	\$19.53	\$20.13	12%	\$0.60	3%
Indirect Expense	\$123.67	\$105.86	66%	-\$17.81	-14%
Debt Service	\$35.50	\$35.36	22%	-\$0.14	0%
Total Residential Expenses	\$178.70	\$161.35	100%	-\$17.35	-9.71%

COMPARISON SUMMARY OF FY11 TO FY12 RECOVERIES BY CUF DEPARTMENT

FY12 Recoveries	FY11 Total Recoveries	FY12 Total Recoveries	% of FY12 Total Recoveries	Variance FY11 vs FY12 Recoveries	% Change
Construction Administration	-\$8.78	-\$12.58	29%	\$3.80	43%
Academic Operations	-\$16.97	-\$17.17	39%	\$0.20	1%
Space Planning and Finance & Administration	\$0.08	\$0.02	0%	\$0.06	-75%
Real Estate	-\$0.18	-\$0.18	0%	\$0.00	0%
Utilities	-\$4.36	-\$3.49	8%	-\$0.88	-20%
Public Safety	-\$9.80	-\$10.12	23%	\$0.31	3%
Student Services	-\$0.38	-\$0.17	0%	-\$0.21	-54%
Total Recoveries	-\$40.39	-\$43.68	100%	\$3.29	8.15%

*Numbers may not total due to rounding

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Capital Spend—FY12 (\$ in millions)

COMPARISON SUMMARY OF FY11 TO FY12 CAPITAL SPEND BY STRATEGIC GOAL

Strategic Goal	FY11 Total Spend	FY12 Total Spend	% of FY12 Spend	Variance (FY12 less FY11)	% Change
Academic/Student Facilities	\$28.9	\$33.0	10.4%	\$4.1	14.2%
Administration	\$5.4	\$1.8	0.6%	(\$3.6)	-66.7%
Expand and Strengthen Sciences	\$61.1	\$17.0	5.3%	(\$44.1)	-72.2%
Faculty/Graduate Student Housing	\$31.9	\$31.5	9.9%	(\$0.4)	-1.3%
Information Technology	\$0.7	\$1.1	0.3%	\$0.4	57.1%
Manhattanville	\$77.8	\$135.7	42.6%	\$57.9	74.4%
Academic SOGR	\$28.3	\$31.4	9.9%	\$3.1	11.0%
Property Acquisition/Infrastructure	\$13.0	\$66.8	21.0%	\$53.8	413.8%
Total	\$247.1	\$318.3	100.0%	\$71.2	28.8%

COMPARISON SUMMARY OF FY11 TO FY12 CAPITAL SPEND BY STRATEGIC GOAL

Campus/Sector	FY11 Total Spend	FY12 Total Spend	% of FY12 Spend	Variance (FY12 less FY11)	% Change
Morningside Campus	\$156.3	\$115.8	36.4%	(\$40.5)	-25.9%
Manhattanville	\$77.8	\$135.7	42.6%	\$57.9	74.4%
Property Acquisition/Infrastructure	\$13.0	\$66.8	21.0%	\$53.8	413.8%
Total	\$247.1	\$318.3	100.0%	\$71.2	28.8%

Facilities continues to achieve recognition for excellence in minority and women advocacy, energy, architectural design and engineering

Facilities was recognized for outstanding advocacy on behalf of the **Minority & Women-Owned Business Enterprise community** at Anchin's **Building the Future: Celebrating MWBEs and Their Advocates**. The event, sponsored by Anchin's Construction Services Team and the Women Builders Council, Inc. in cooperation with the New York Building Congress, was held on May 3, 2012. Facilities Executive Vice President Joe Ienuso received the award on behalf of Facilities.



CUF Executive Director of Construction Business Services Tanya Pope, Gloria Kemper, President of Recon Construction, (award judge) and Executive Vice President Joe Ienuso.



Facilities' Clean + Go Green recycling and reuse program received a **U.S. EPA Environmental Quality Award** in April 2012. The award - the highest recognition presented to the public by the EPA - honors significant contributions to improving the environment and public health.

Columbia was recognized for making "great strides in promoting recycling and reducing waste through its annual "Clean + Go Green" event. Sponsored by Facilities Morningside Campus Operations, the annual Clean + Go Green event enables and encourages community members to donate or dispose of unwanted items in an environmentally responsible manner. In the six years since the first Clean + Go Green event, over 83 tons of items including electronics, clothing, books and furniture have been diverted from landfills and donated to charity.



Environmental Stewardship's Helen Bielak and Operations Asst. Vice President Don Schlosser.

Deputy Mayor Robert K. Steel and Small Business Services Commissioner Robert Walsh presented La-Verna Fountain, Facilities' vice president for Construction Business Services and Communications, with the **Minority and Women-owned Business Enterprise Advocate of the Year Award** for Upper Manhattan. It was presented at the 2012 New York City Neighborhood Achievement Awards, held at Gracie Mansion.

The awards honor organizations, businesses and individuals that have demonstrated excellence in enhancing New York City neighborhoods by fostering economic opportunity.

Fountain helps to lead the MWL Construction Trades Certificate Mentorship Program which helps construction-trade business owners on find business opportunities and bid on projects for minority, women and locally-owned businesses. The Columbia University program, which has been adopted as a citywide model, has already graduated 53 firms that have received more than \$60 million in contracts with New York City and the University.



From Left: NYC Small Business Services Commissioner Robert W. Walsh, Columbia's Senior Executive Vice President Robert Kasdin, La-Verna Fountain and Joe Ienuso.



The Northwest Corner Building from Broadway

Columbia University's Northwest Corner Building received the 2011 **Engineering News-Record (ENR) NY Best Project Award** in the category of Higher Education/Research. The annual competition honors construction and design excellence from across the region. The judges considered criteria including challenges, safety, design, innovation, quality and craftsmanship. 98 contenders were considered by judges from across the A/E/C industries for this year's Best Project Awards.

Northwest Corner was also awarded a **Society for College and University Planning (SCUP) Merit Award for Excellence in Architecture for a new building**. The building was one of 16 projects (in multiple categories) to be honored out of nearly 200 entries for the 2011 awards.

The SCUP/AIA-CAE Excellence in Architecture Award is a juried competition that recognizes that comprehensive campus design and planning are collaborative and involve campus architects, planners, administrators, faculty, professional consultants and many stakeholders. It is open to all professional service providers and institutions that have prepared designs for two-year and four-year colleges, universities, academic medical and research centers, public or private institutions.



The University's newest major research facility, the award-winning Northwest Corner building, received the **United States Green Building Council's LEED Gold Award** on February 23, 2012. For the Northwest Corner building to gain LEED Gold certification, it had to overcome substantial challenges faced by buildings that house laboratories

dedicated to scientific research and are located in the Northeast.

The Northwest Corner building achieved its Gold certification for energy use, lighting, water, and material use, as well as for incorporating a variety of other sustainable strategies.

"This designation is an affirmation of the innovative thinking and hard work of everyone who contributed to making this building a reality. It demonstrates the University's commitment to support the frontiers of interdisciplinary teaching and research within environmentally responsible spaces."

-Joe Ienuso

THE LEED GOLD CERTIFICATION WAS BASED ON A NUMBER OF GREEN DESIGN AND CONSTRUCTION FEATURES INCLUDING:

- Energy efficient fume hoods
- Over 20% of the building materials extracted, processed and manufactured regionally
- Approximately 84% (over 2,000 tons) of construction and demolition debris recycled
- Over 20% of the building's materials contains recycled content
- Optimized indoor air quality
- Intelligent daylighting controls
- High-efficiency light fixtures and occupancy sensors
- Low-flow water fixtures
- Use of green cleaning products
- Enhanced commissioning, measurement and verification system that allows building staff to adjust settings to improve performance
- Design elements meet Labs21® criteria, a voluntary partnership program dedicated to improving the environmental performance of U.S. laboratories



A revitalized West 130th Street will provide access to an approximately one-acre public square that will add open space where none currently exists.

Image Credit: Field Operations

Columbia University's environmentally sustainable design and overall project plan for its 17-acre Manhattanville campus in West Harlem has **earned LEED® Platinum under the LEED for Neighborhood Development rating system** established by the U.S. Green Building Council—its highest designation and the first LEED-ND Platinum certification in New York City, as well as the first Platinum certification for a university campus plan nationally.

The Manhattanville campus plan will create an energy-efficient, pedestrian-friendly environment, with lively local retail and culture and publicly accessible green space. It will bring together members of the University and local communities, and enhance connections between West Harlem and a revitalized Hudson River waterfront.

The **LEED for Neighborhood Development** pilot program which integrates the principles of smart growth, new urbanism, and green building -the first national benchmark for neighborhood design. The rating system promotes smart location and design of neighborhoods that reduce vehicle miles traveled, and communities where jobs and services are accessible by foot or public transit.

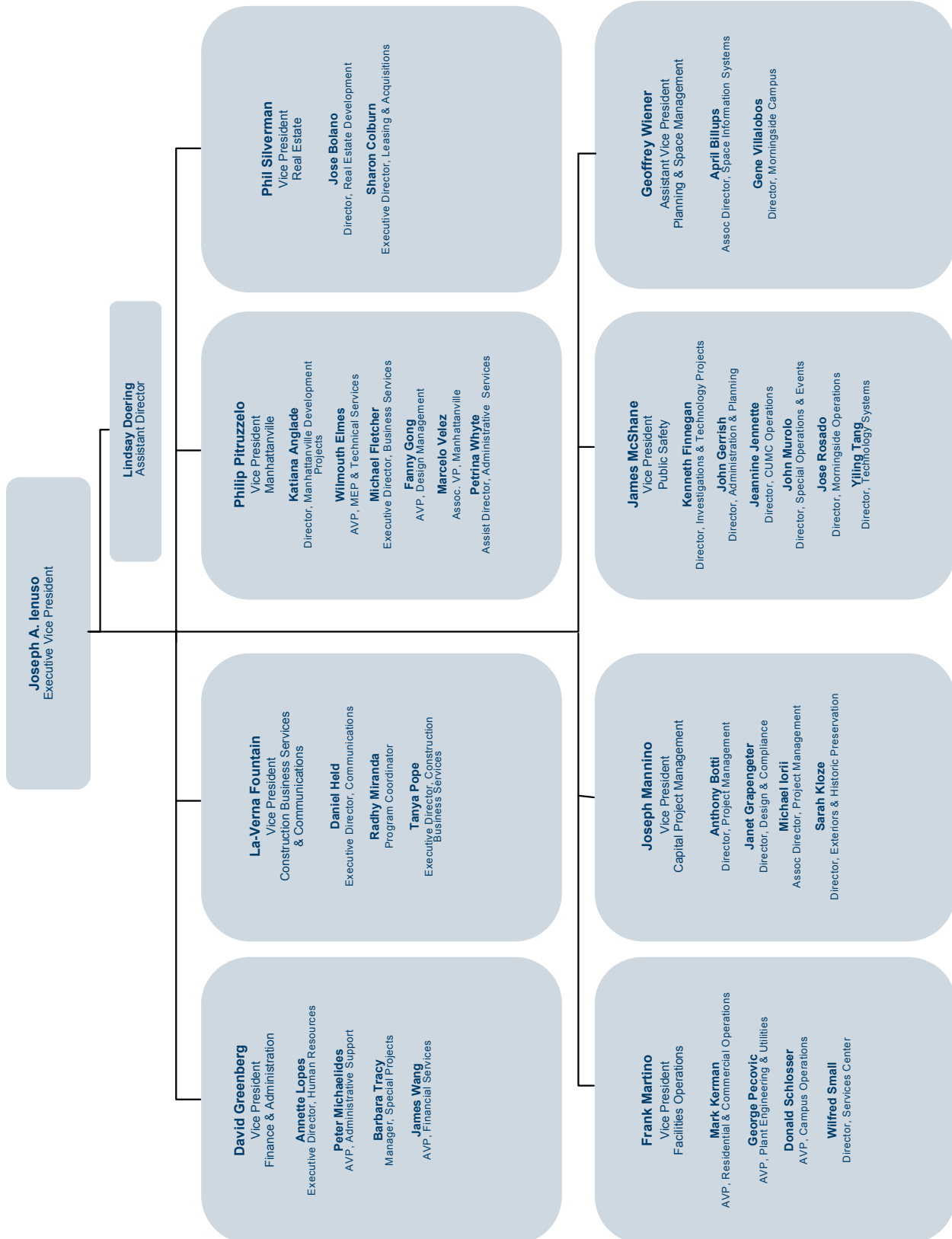
“LEED for Neighborhood Development bridges the gap between buildings and how they are connected,” said Rick Fedrizzi, president, CEO and

founding chair of the U.S.Green Building Council. “The Manhattanville campus will help usher in a new era of development of smarter, healthier communities across the globe.”

Strengths of the Manhattanville campus plan include proximity to mass transit; planned mixed uses including arts, community, academic, retail and residential; open neighborhood access; green open space; pedestrian-friendly streets and sidewalks; and a commitment to best practices in clean, low-emission construction.

Adhering to stringent environmental compliance requirements and the most advanced clean construction techniques, Facilities took steps to sharply reduce noise and vibrations, and traffic and business disruptions. Low-emission equipment and washing stations for trucks departing work sites limits the impact of construction on neighborhood air quality. During demolition and abatement phases, more than 90 percent of removed materials are salvaged and recycled.

CU Facilities Exec Staff and their direct reports



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HOW TO REQUEST OUR SERVICES

Columbia University Facilities is dedicated to providing easy access to our many services and staff. We provide hundreds of services ranging from event setup and cleanup to painting and locksmith services. The information below explains how to request our services:

REPAIR/MAINTENANCE/FACILITIES SERVICES

CUF maintains a 24/7 Facilities Services Center to handle repair and maintenance issues that arise. To request a service please visit our Web site at facilities.columbia.edu or call the Services Center at (212) 854-2222. In order to ensure prompt service and maintain safety, please submit urgent and time-sensitive requests by phone.

CAPITAL PROJECTS

Facilities' Capital Project Management (CPM) group oversees the University's large and small capital projects. If you would like to request a

capital project, please visit the "Construction and Renovations" section of our Facilities Web site (facilities.columbia.edu).

PUBLIC SAFETY

If you have a public safety emergency, please contact our Public Safety department at (212) 854-5555 (MS), x5-7979 (CUMC) 24 hours a day, 7 days a week. For non-emergencies, please contact Public Safety at 212-854-2797.

TO LEARN MORE ABOUT FACILITIES, VISIT OUR WEBSITE AT:

<http://facilities.columbia.edu/>





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