

Morningside Heights Campus Presentation

March 2021

Executive Summary



David M. Greenberg Executive Vice President, Facilities and Operations

Columbia's historic Morningside Heights campus, home to the University for more than a century, is central to Columbia's future, providing world-class research facilities befit for the brightest minds in academia and equally exemplary spaces to nurture a rich campus life.

To keep to that high standard, the University invests significantly in the Morningside campus each year, paying homage to the beauty of the historic grounds and buildings while transforming spaces to serve the 21st century and beyond. This report exemplifies our continuous investment in the Morningside campus to help cement the University's place as a leader in higher education.

Over the past ten years, new construction and renovation at the Morningside campus have totaled more than 1.6 million square feet of space and have occurred in nearly every building. Aging buildings have been upgraded with modernized lecture halls, high-tech classrooms, specialized labs, and enhanced residence halls. Unused spaces were repurposed and transformed into institutes, classrooms, and student spaces to spark innovation. Historic restorations preserved and renewed our campus gems, and century-old infrastructure was brought into the 21st century with the installation of disability ramps and lifts as well as plant and utilities upgrades. New construction and leased space added 320,000 square feet to the Morningside campus – equivalent to three Kent Halls – with the most prominent addition being the interdisciplinary research hub at the Northwest Corner Building.

The projects to follow – including some brought to life in this <u>video</u> – exemplify a strategy of long-term and ongoing investments to strengthen the Morningside campus.

McKim, Mead, and White's Beaux Arts Morningside Campus



A place of "doubled magic" where "the best things of the moment were outside the rectangle of Columbia; the best things of all human history and thought were inside the rectangle."

-Herman Wouk

Morningside and Manhattanville: Campus Expansion and Renovations, 2009 to 2019

	Manhattanville*	Morningside**
Campus expansion (construction, leases)	641,000	320,530
Renovated spaces, sq. ft.	172,715	1,285,467
Total square feet added/improved	813,715	1,605,997

*Manhattanville estimates exclude the Business School.

**Morningside space estimate includes undergraduate residence hall renovations placed in service (556,616 sq. ft.).

Source: Team analysis, Columbia University Facilities and Operations, February 2020.



Morningside and Manhattanville Campus Expansion and Renovations for FY 2020

	Manhattanville*	Morningside**
Campus expansion (construction, leases, acquisitions)	0	0
Renovated spaces, sq. ft.	6,000	32,819
Total square feet added/improved	6,000	32,819

*Manhattanville estimates exclude the Business School. Renovated square feet includes Public Safety offices placed in service.

**Morningside space estimate includes undergraduate residence hall renovations (6,344 sq. ft.) and academic space renovations (24,950 sq. ft.) placed in service

Source: Team analysis, Columbia University Facilities and Operations, February 2021.



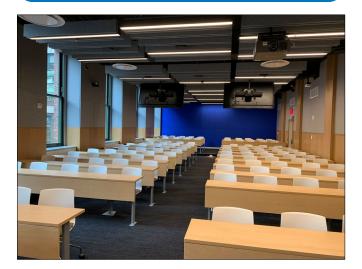
The Morningside Campus: A Decade of Investment



Capital Investment in Morningside Campus from 2009 to 2019

This investment addresses important strategic goals for research and education:

Advancing the academic and research mission



Enhancing student and community life on campus



Restoring and modernizing buildings, grounds, infrastructure





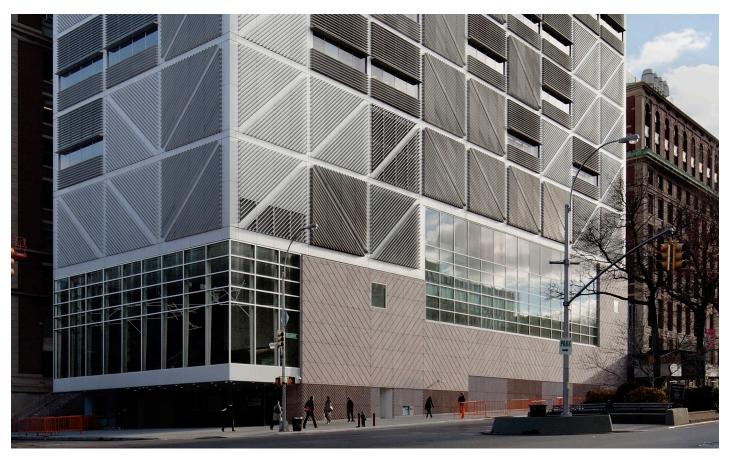
Video: New Spaces at Morningside

INSIDE AND INSIGHT: NEW SPACES AT MORNINGSIDE

Advancing the academic and research mission



Advancing the academic and research mission Expanding the Morningside campus



Northwest Corner Building

ARCHITECTURE REVIEW

A Building Forms a Bridge Between a University's Past and Future



"This is superb architecture: clean, compact and perfectly calibrated."



hwest Corner Building Designed by José Rafael Moneo, Columbia University's new addition is ipated as a gateway to a campus planned for West Harlem. Robert Caplin for The New York Times

By Nicolai Ouroussoff

Feb 8 2011

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Advancing the academic and research mission Expanding the Morningside campus

Knox Hall Renovation



This LEED-Gold renovation added 52,009 square feet of classrooms and offices for several University departments and institutes.

Northwest Corner Building



Opened in 2010, this new construction added 207,843 square feet of offices, classrooms, labs, a science library, and interdisciplinary research.

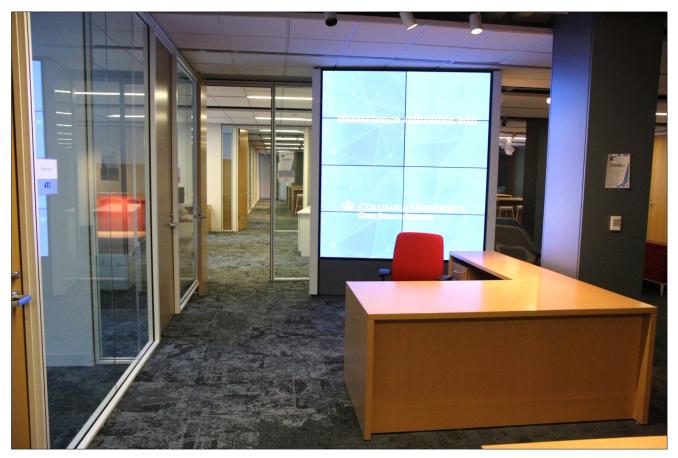


Added and renovated 60,678 square feet of space for Arts and Sciences, Engineering and Business academic offices. *Morningside campus 2009 to 2019*

New construction 207,843 sq ft

Leased spaces 112,687 sq ft Total 320,530 sq ft

Advancing the academic and research mission Scholarly innovations: new research centers and institutes



"Just as the architects focused on 'diffusing boundaries' within the physical space, we hope the space will encourage students and faculty to diffuse across disciplinary boundaries."

- Jeannette Wing, Avanessians Director of the Data Science Institute and Professor of Computer Science

Data Science Institute

Advancing the academic and research mission Scholarly innovations: new research centers and institutes



The Center for Theoretical Physics

"We need to stand shoulder to shoulder and do calculations together, with one person injecting an idea and another taking it in a different direction. Those are the kinds of moments that will happen all the time in the new space. These improvements are absolutely vital for the recruitment of new faculty and students."

- Brian Greene, Professor of Mathematics and Physics



Advancing the academic and research mission

Scholarly innovations: new research centers and institutes

Brown Institute for Media Innovation



A signature collaborative space with a technologydriven multimedia newsroom enables experimentation with new content, delivery platforms.

SIPA Center on Global Energy Policy



Build-out of ground-level space provides a mix of offices, workstations, conference rooms, and support spaces.

Institute for Israel and Jewish Studies



Kent Hall renovated space includes a room for speakers and conferences supporting 50+ events the Institute hosts each year. Total of similar academic centers and institutes across Morningside campus 2009 to 2019

42,970 square feet renovated

Generations COLUMBIA UNIVERSITY Facilities and Operations

Advancing the academic and research mission Spaces that bring education to life



Columbia Engineering Makerspace





Products made in Makerspace

Advancing the academic and research mission Spaces that bring education to life

Computer Science 400 Level Renovation



A full, gut-renovation adds classroom and computing lab capacities, provides infrastructure upgrade and an attractive learning environment.

GSAPP Urban Planning and Design Studio



Gut renovation of an underutilized space in Fayerweather offers highdemand studios, group meeting spaces, and classrooms.

Chandler 400 Level Classrooms



Conversion of former Chemistry Library provides a 126-seat lecture room, classrooms, disability testing rooms, and a wellness room. Total of similar classrooms, lecture halls, and specialized academic spaces across Morningside campus 2009 to 2019

163,657 square feet renovated

Advancing the academic and research mission Grand spaces for hosting world-renowned events





World Room at Pulitzer Hall



Advancing the academic and research mission Grand spaces for hosting world-renowned events





A modernized space with specialized technology, new wood flooring, LED lighting, and a custom acoustic ceiling to serve a range of academic events.

Case Lounge in Jerome L. Greene Hall



Renovation of this highdemand space improved the appearance and provided greater flexibility for the room's diverse uses.

Advancing the academic and research mission Facilities for highly specialized research



Nanofabrication Clean Room



Advancing the academic and research mission Facilities for highly specialized research

Psychology Research Lab, Schermerhorn Hall



Refurbished, modern lab with new testing rooms, workstations, a video wall, and upgraded infrastructure.

Chemistry Lab in Chandler Hall



Renovated several labs to meet the evolving needs of the Chemistry Department.

Quantum Physics Lab in CEPSR



Specialized lab for faculty research in quantum optics requiring precision in temperature, humidity, electromagnetic frequency; controlling dust, noise. *Total of similar laboratory projects across Morningside campus 2009 to 2019*

116,390 square feet renovated

Enhancing student and community life on campus



Enhancing student and community life on campus *Creating social spaces for relaxing and interacting*



"It's such a great community space; it's really a squad, a family in here. If I need someone to tell me if a sentence makes sense, there's someone in here. If I need someone to give a hug to, there's someone in here. I just really like that it's so much more personal than most of the other spaces on campus."

- Sitara Herur, GS'19

General Studies Student Lounge

Enhancing student and community life on campus *Creating social spaces for relaxing and interacting*

Graduate Student Center



New Graduate Student Center in Philosophy Hall, offers social space dedicated to graduate students, breakout rooms and A/V for events.

Carleton Lounge and Mudd Lobby



Transformation of former Carleton Lounge into a versatile meeting, study, and event space, coupled with a modernized building lobby.

Lerner Hall Renovations



Spaces within Lerner Hall were reimagined in keeping with expressed student preferences as the center for undergraduate student life. Total of similar social spaces and cafés across Morningside campus 2009 to 2019

94,555 square feet renovated

Enhancing student and community life on campus Investments in the undergraduate living experience



Major upgrades, phased over three summers, modernized a first-year residence hall, including new furniture, bathroom fixtures, accessible rooms, infrastructure, and the creation of new lounges on each floor.

Carman Hall Renovations

Enhancing student and community life on campus Investments in the undergraduate living experience

John Jay Hall Renovations



Improvements enhanced student comfort and included new flooring, lighting, gender-neutral restrooms, updated lounges, and more.

619-623 West 113th Street Renovation



A full interior renovation for the Living Learning Center, creating a unique environment for students to explore and cultivate common interests.

East Campus Building Electrification



A gas-to-electric utilities conversion at the 32-story residence hall ensures the integrity of the building's infrastructure for years to come. Total of similar undergraduate residential renovations across Morningside campus 2009 to 2019

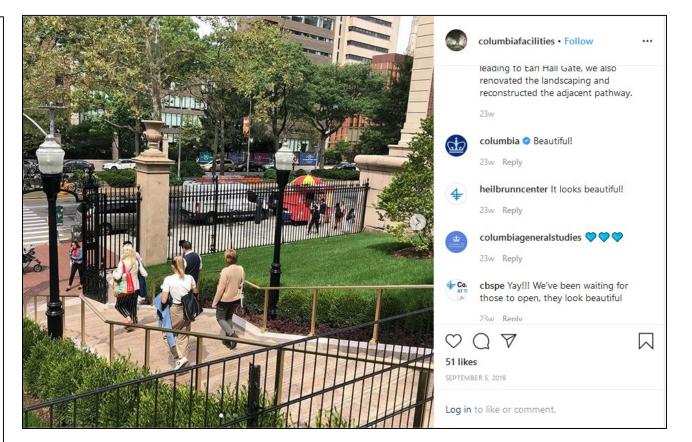
611,980 square feet renovated

Enhancing student and community life on campus Improving outdoor spaces

Columbia remodels lawns in attempt to increase accessibility of outdoor common spaces



Facilities has improved the drainage of the Lewisohn lawn and South Lawn to reduce the amount of time that these lawns are unusable and ensure the community can utilize the spaces faster after a rainfall.



Earl Hall Gate Stair Replacement

Enhancing student and community life on campus

Improving outdoor spaces

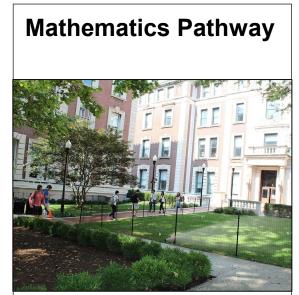
Computer Science Courtyard



The interior courtyard was transformed into a lush seating area, revitalized with new trees, shrubs, and greenery. Lawn Improvements



Enhancements encourage use of campus lawns, including landscaping and new drainage systems to increase lawn recovery time.

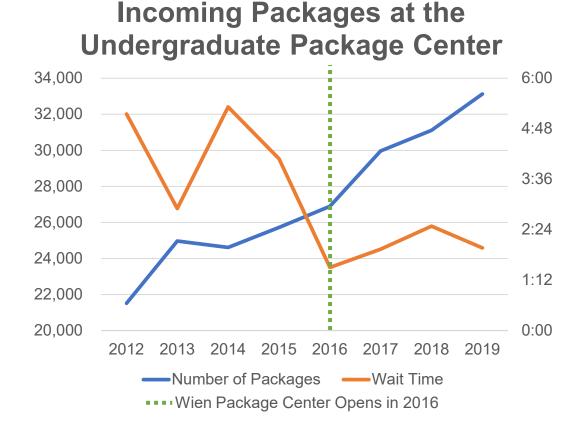


Pathway reconstructed consistent with campus architecture, preserved Sycamore tree and created sloped ADA pathway to Havemeyer.

Enhancing student and community life on campus Renovations that improve the student experience



Undergraduate Package Center in Wien Hall





Enhancing student and community life on campus *Renovations that improve the student experience*

Columbia Health Renovations John Jay



Renovations provide centralized and improved space for Medical Services, Gay Health Advocacy Project, Alice!, Insurance & Immunization.

University Life office renovation



Renovation of adjacent offices provides an accommodating and functional office suite for University Life activities. Total of similar, student-facing office projects across Morningside campus 2009 to 2019

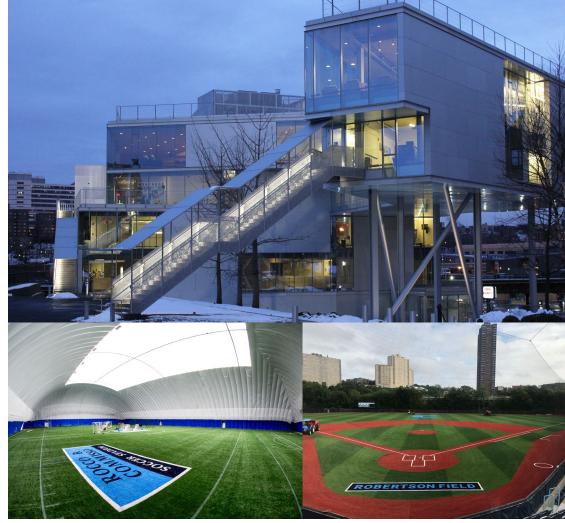
29,141 square feet renovated

Enhancing student and community life on campus Baker Athletics Complex

An extension of the Morningside campus as a major contribution to the student experience

"The Bubble at Baker is so important to our longterm success. The new facility provides us a state-ofthe-art indoor winter practice space for our field sports and will also alleviate seasonal overcrowding in Dodge Fitness Center that negatively affects our indoor varsity sports, as well as our clubs and our recreational users."

- Peter Pilling, Campbell Family Director of Intercollegiate Athletics and Physical Education





Restoring and modernizing buildings, grounds, infrastructure

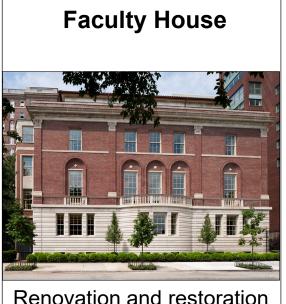


Restoring and modernizing buildings, grounds, infrastructure *Historic restoration*



St. Paul's Chapel Restoration and Roof Replacement

Restoring and modernizing buildings, grounds, infrastructure *Historic restoration*



Renovation and restoration reset the client experience at Columbia's premier reception and meeting venue while earning LEED Gold certification. **Alumni Center**



New home for Office of Alumni and Development and social center for Columbia's 300,000 alumni earned LEED Gold certification. Historic Building Window Replacement



Deteriorating windows in McKim, Mead & White buildings across campus were replaced in keeping with the buildings' historic design.

Restoring and modernizing buildings, grounds, infrastructure Strengthening core campus and building infrastructure



Central Chilled Water Plant Upgrades



"Columbia's approach to this chiller plant was phenomenal. They identified opportunities to gain a return on investment in just over three years. Implementing this plant helps relieves strain from the Con Edison grid and we're hoping other institutions and utilities follow suit."

> - Shaun Hoyte, Specialist, Targeted Demand Management, Con Edison

Restoring and modernizing buildings, grounds, infrastructure Strengthening core campus and building infrastructure

Pipe Replacement ,John Jay Dining & JJ's Place



Replacement of centuryold piping serving the main dining hall and JJ's Place. Will support the primary undergraduate dining venues for decades ahead. Central Steam Plant Boiler Retrofit



Retrofit steam boilers to increase efficiency, reduce emissions, and save energy for campus-wide heating and powering the central chillers.

Electrical Upgrades



Electrical infrastructure upgrades will increase capacity for CEPSR and Pupin and provide capacity to central chiller plant for new electric chiller.

Restoring and modernizing buildings, grounds, infrastructure Improving disability access within historic campus



"It's encouraging to see long-lasting, permanent physical changes to improve disability access on campus. The University needs these kinds of structural changes in order to build a more diverse community."

- Gordon Slater, SOA'19

Restoring and modernizing buildings, grounds, infrastructure Improving disability access within historic campus

Lower Campus Ramp



Permanent accessibility ramp connecting lower campus and College Walk, improving access between residential and academic buildings.

IAB 400-level Lift



Lift connects the entrance and atrium levels, providing seamless access between the building's entrance/ elevators and Altschul Auditorium/Law School.

Butler Plaza Restoration & Ramps



Permanent ramps through campus high-traffic route, provide access to critical amenities. Ramps consistent with campus historic architecture.

Ramp links Low Plaza and College Walk



Permanent accessibility ramp to Low Plaza, a popular social space for students and frequent outdoor event space.

Restoring and modernizing buildings, grounds, infrastructure Common spaces befitting a world-class institution

Morningside Campus Building Corridor Renovations

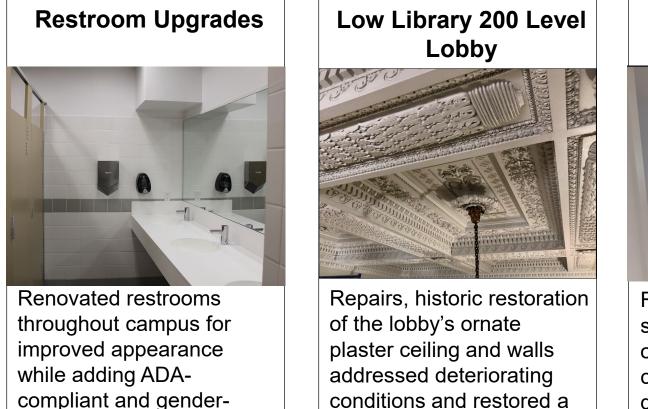


Pupin Hall - Before



Pupin Hall - After

Restoring and modernizing buildings, grounds, infrastructure Common spaces befitting a world-class institution



neutral facilities.

conditions and restored a campus gem.

Avery Hall Common Area Restoration



Restored Avery's public spaces consistent with original intentions, hiding conduit in walls, refinishing details, and adding recessed LED lighting.