

FACILITIES AND REAL ESTATE SERVICES FY23 ANNUAL REPORT

FRES Forward











MISSION

Facilities and Real Estate Services, as stewards of Penn's physical environment, strives to provide innovative and cost-effective solutions that embrace our rich past and enhance the quality of the University's living and learning experience.

VISION

Collaborating for a sustainable tomorrow.









FRES FORWARD

Welcome to the Penn Facilities & Real Estate Services FY23 Annual Report.

In Facilities & Real Estate Services, we have a broad and significant presence in and influence on Penn's campus. We are more than 900 people impacting every building and open space on this 276-acre campus in West Philadelphia. Our work – whether we are designers, project managers, professional trades, housekeepers, or administrative support – physically shapes the day-to-day life of the Penn community.

Our work is guided by the understanding that we affect the Penn students, staff, and faculty who live, work, and study on this campus where breakthroughs in research, scholarship, and education are made. We know too that our work in construction, retail offerings, sustainability, and landscape design touch on the neighborhood around campus and influence perceptions of the University and its people.

Given our division's inclusive perspective - the idea that all of us are working together for the whole of Penn - we thought it would be interesting to ask FRES staff the question:

How does what you do in FRES help to move Penn Forward?

You'll discover the answers scattered throughout this Annual Report. I hope you'll take a few minutes to reflect on these personal responses and consider just how much individuals bring to the university community through their work together here each day. Indeed, many building projects, training sessions, and other plans are featured in this publication, but absolutely none of it would be possible without what each of our staff members does every day to move FRES Forward.

Sincerely,

Anne Papageorge

Senior Vice President-Facilities & Real Estate Services

FINANCE AND ADMINISTRATION

The Administration department is responsible for Finance and Business Planning, Information Technology, and Human Resources. Responsibilities include management of the capital planning and approval process for the University, financial planning and analysis, evaluation of accounting treatments for our real estate and development transactions, payroll, purchasing transactions, and capital accounting for design and construction projects.

HUMAN RESOURCES

FRES welcomed 154 new hires this fiscal year, and the Human Resources team also processed 28 internal promotions.

After a three-year hiatus due to the pandemic, Penn's annual Take Our Children to Work Day event returned to campus on April 27, 2023. Over 75 FRES staff children attended and participated in one of the 33 activities offered across campus, including live Zumba hosted by FRES. Other events included a demo from the Penn Vet Working Dog Center, and a session on Robots, Mazes, and Innovative Work at the Pennovation Center.

FRES union staff participated in mandatory safety trainings throughout FY23, as well as specialized shop trainings like electrical safety, confined space, mobile elevated working platform, overhead crane, hazard communication, and CPR.

All FRES staff members were offered training under the umbrella of the Principles of Responsible Conduct, which articulates the basic expectations that guide every individual's work at Penn. Additionally, staff went through Respectful Workplace training.



Mark Quigley, 40 Years of Service

I am responsible for reviewing and confirming that all cost related aspects of a construction project are completed smoothly and efficiently. I ensure the projects are staying within budget and capitalize the completed projects on time according to the University's capitalization policy, thus assisting in the accuracy of University's financial reports.

-LI JUN BAI, PROJECT ACCOUNTANT/FINANCIAL ANALYST

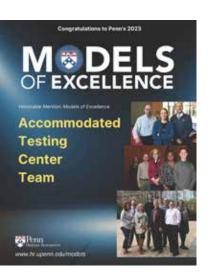




Monica Alexander



David Maute



STAFF RECOGNITION

In April, FRES held a luncheon in Houston Hall's Hall of Flags, honoring the staff members celebrating years of service milestones at Penn, as well as those who had received STEP-UP awards. Special recognition was given to Electrical Charge person Mark Quigley, who reached 40 years of service in 2022.

View the full list of years of service and see photos from this special event.

Thank you to those recognized for going above and beyond with notable and impactful work at Penn!

Within FRES, the STEP-UP recognition program for staff provides a means to reward FRES staff for exemplary behavior, displaying the following attributes: Safe Work Practices, Teamwork, Eminent Service, Pioneering, Urgent Action, and Proactive. In FY23, 35 staff were recognized by colleagues and managers through the STEP-UP program.

My primary responsibilities include assisting Directors with creating and maintaining operating budgets for new buildings and renovations, and assessing the financial status of Operations & Maintenance. I am proud to be a FRES employee where the high quality output is apparent each day in well-designed buildings and beautiful landscaping.

-ANITA M. HALL, BUDGETING AND FINANCE MANAGER

Two FRES Staff Members, Monica Alexander and David Maute, received Honorable Mentions as part of the University-wide Models of Excellence staff recognition program in 2023. As part of the Accommodated Testing Center Team, which worked collaboratively, mid-pandemic, Monica and David worked to advocate and develop a state-of-the-art, 21st-century academic testing center equipped to support a diverse range of learning accommodations and student needs.

DIVERSITY, EQUITY & INCLUSION

The Diversity and Inclusion Advisory Council (DIAC) hosted a meeting for all Working Group volunteers who had been selected through an application process the previous summer. The DEI Strategic Plan was presented to the group, and all participated in a series of roundtable exercises.

Since the fall, the DIAC - a group made up of co-chairs, council secretaries, and the co-chairs of each Working Group - has met monthly to review FRES and University DEI resources and to support the Working Group (WG) chairs in leading their respective WGs in generating ideas for upcoming initiatives and aligning efforts to propose and execute events.

The FRES Diversity and Inclusion Advisory Council (DIAC) also provides training for each working group in processes like procurement, presentations to Executive Directors, and collaboration with Penn resource offices. Highlights from each Working Group include:

Promoting Equal Growth

- Hosted guest speakers from FRES HR and Labor Relations and Central HR on topics for employee growth.
- Set up a training program for Administrative Coordinators around Five Core Competencies for their roles, with Communications as the first module. Other subjects included Effective Listening, Message Context, Understanding the Big Picture, and Cultural Communications.
- Reviewed currently available career development resources with HR's Talent Development division, discussing career training topics with HR consultant to develop future initiatives for all FRES staff.

Fostering a Learning Organization

- Reviewed survey data from the prior year's unconscious bias training sessions to make recommendations for FY23 training topics.
- Held Respectful Workplace training sessions for staff in summer 2022 with the assistance of Penn's Office of Affirmative Action.
- Finalized an all-FRES training program and received approval to implement Culturally Competent Communication training for FY23. These sessions were held in the spring with approximately 50% of staff participating. Additional sessions were held in September 2023 so that all staff have the chance to complete the training.

Enhancing Cultural Inclusion

- In celebration of National Housekeeper Appreciation Week (Sept 11-17), FRES delivered thank-you notes and a Penn logo umbrella to all housekeepers.
- The Women of FRES employee resource group held a networking event, a school supplies drive, and a film screening on the topic of global feminine hygiene awareness.
- A holiday gift exchange event and the "How FRES Celebrates Holidays" display board in the Left Bank marked this Working Group's Q2 activities.
- · Organized, planned and executed the FRES Holiday Party on January 10, 2023. A superior level of effort was made to present culturally inclusive decorations and food selections for a celebration of our entire division and a number of Penn collaborators.
- Held a TED Talk video screening in February 2023 to honor Black History Month, as well as building a plan to encourage clubs and programs on cultural awareness, inclusion and belonging.

Fostering a Learning Organization working group, I am helping to further the inclusivity of FRES by developing educational training opportunities. -ERIC DELSS, SENIOR ARCHITECT/PLANNER

As co-chair of the DIAC

- Collaborated with the FRES Summer Picnic Committee on the June 21, 2023 event, weaving in a tropical island theme.
- Promoted Central HR's Pride Month programming.
- In July 2023 started the new FRES Book Club.

Building Diverse Teams

- Focused on the best ways to communicate existing resources to staff so they feel engaged, challenged, and welcomed.
- · Partnered with Penn's College of Liberal and Professional Studies (LPS) to pilot information sessions for FRES staff to outline the academic opportunities and other benefits available to Penn employees.

Karoline Prosperi, the FRES Senior Procurement Manager, was selected as the winner of **Penn's 2023 Supplier Diversity Impact Award**. She was recognized for the work she does to intentionally include diverse suppliers in opportunities with Facilities & Real Estate Services, as well as the effort she takes to successfully grow relationships between diverse suppliers and colleagues within FRES, across Penn, and among regional peers.



Karoline Prosperi, Suppier Diversity Impact Award

FINANCE AND INFORMATION **TECHNOLOGY**

Members of the FRES finance team. led by Sudha Menon, worked with the Wharton Data Analytics group to automate the monthly cost to budget reporting process. This effort will save the Capital Accounting group countless hours of manual data entry and improve the accuracy of the reported data. The next step in this process is to create an automated dashboard that can share key performance indicators with the University's senior leadership.

In FY23 the FRFS Information Technology Team completed a number of software application upgrades, including AiM Work Order Management, the Customer Service Contact Center, WebCtrl; an application used by Engineering to capture and report on energy meter consumption and BG Maps; the mapping software that the Office of the University Architect uses to track and collect data for Penn's campus trees and plants.

Additionally, the infrastructure for the SCADA Mod 7 Data Center was upgraded, allowing for improved security and redundancy.

The FRES printer fleet was also upgraded with 22 new models, and a rollout of Mobile Device Management software to FRES-managed Trades phones was completed.

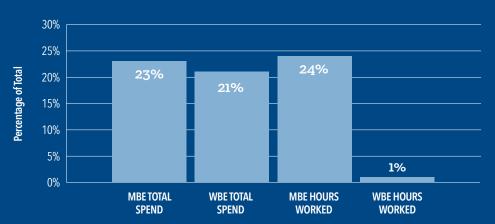


FRES welcomed in July a new Senior Director of Information Technology Dennis Langlois. Pictured are the IT team: (standing, L to R): Darryl Mitchell, Bob Stein, Dennis Langlois, Jerry Cheng; (seated, L to R): Perry Bloomfield, Jonathan Klein

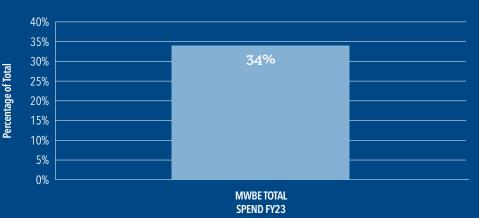
I support Penn's strategic plan for campus development by ensuring smooth processing of budget and cost related functions of construction projects on a day to day basis at FRES. I work towards creating a culturally diverse and inclusive workspace at FRES as a member of FRES's Diversity and Inclusion Advisory Council.

> -SUDHA MENON, SENIOR CAPITAL ACCOUNTING MANAGER

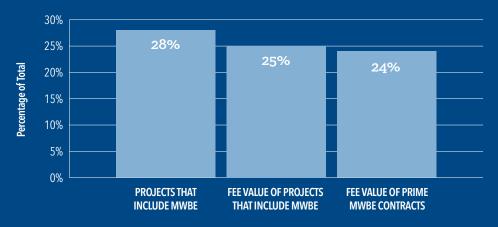
DESIGN & CONSTRUCTION



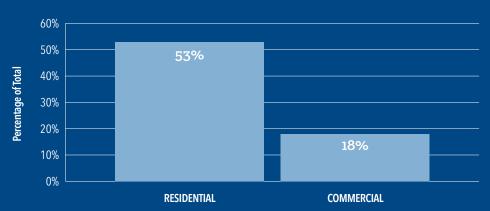
OPERATIONS & MAINTENANCE



OFFICE OF THE UNIVERSITY ARCHITECT



REAL ESTATE - OVERALL MWBE SPEND FOR CAPITAL AND OPERATIONS COMBINED



FRES MINORITY AND WOMEN OWNED BUSINESS ECONOMIC INCLUSION GOALS

A robust diversity program has been in place within Facilities & Real Estate Services to reach economic inclusion goals for minority and women-owned businesses (MWBE), and for minorities and women in the workforce.

Graphics on this page represent minority and women owned businesses percentage of actual spend in FY23.

For Design & Construction, these goals apply to projects greater than \$5M in construction.

DESIGN AND CONSTRUCTION

The Design and Construction department implements the University's capital plan for new construction and renovation of existing properties. The team works closely with the Schools and Centers, design teams, and contractors to ensure that capital projects are completed on time and on budget, while meeting the quality level expectations of the University. The Project Managers lead the Schools and Centers through the budget approval process, design, procurement, and construction of these capital projects.







Meiklejohn Stadium

COMPLETED PROJECTS

The addition and renovation to the University of Pennsylvania Boathouse, renamed as the **Burk-Bergman** Boathouse, was completed in late summer 2022. The primary goal of the \$13.5M renovation project was to showcase the history of Penn Rowing and bolster recruitment for the program by restoring the original historic, 15,500 GSF boathouse while creating more usable space. Highlights of the renovation include improved ADA accessibility, the creation of an event space, and improved locker rooms with equal space and amenities for the men's and women's teams.

As part of the University's Century Bond program, the **Laboratory for** Research on the Structure of Matter underwent a \$42.5M infrastructure renovation, including a complete electrical and HVAC upgrade, as well as the installation of a new sprinkler system. The 92,500 GSF infrastructure upgrades were substantially completed in late 2022.

The 42,700 GSF **Biomedical Research** Building, built in 1999, received an updated building HVAC controls system, as well as replacement and repairs to reheat piping and valves. This \$18.5M, three-phased controls upgrade was completed in July 2022.

Phase 2 of the extension of the 34th Street Chilled Water Line from 34th and Smith Walk to Chestnut Street was completed during the summer of 2023. The \$3.4M extension includes crosstie branches along Woodland Walk servicing the Dietrich, Van Pelt and Jaffe buildings.

Meiklejohn Stadium, Penn's baseball field originally constructed in 1999, and now renamed Tommy LaSorda Field, received a \$4.2M upgrade in 2023. The improvements included a new baseball turf field, enlarged dugouts, and the creation of a new visitor bullpen and pitcher development area. The stadium also got upgraded wall padding and a new windscreen.

The \$35.5 million addition to the Graduate School of Education at the southwest corner of 37th and Walnut Streets creates a new welcoming entrance to connect the existing Graduate School of Education and Stiteler buildings. The addition focuses on connectivity, flexibility, and accessibility and allows the GSE to consolidate many of their functions into one location. It houses instructional laboratories, mixed-use classrooms, offices and student collaboration space within 16,200 GSF of new space and 16,900 GSF of renovated space. The GSE renovation was completed in summer 2023.

Stouffer College House, originally built in 1972 and one of the university's original College Houses, also underwent a recent makeover. It included a full renovation of all student rooms, the installation of single use restrooms, and refurbished student amenity spaces. The \$35.3M renovation of the 42,000 GSF building was completed for fall 2023.

PROJECTS IN CONSTRUCTION

In February 2023, a ceremony marked the placing of the final steel beam atop the Vagelos Laboratory for Energy Science and Technology (VLEST)

The \$173M, 112,500 GSF Vagelos Laboratory will be the interdisciplinary home of Penn's energy research programs, including programs within the School of Arts & Sciences and School of Engineering and Applied Science. VLEST is scheduled for occupancy in early 2025.

The \$137M Amy Gutmann Hall, currently rising on the site of the former parking lot at 34th and Chestnut Streets, will serve as a hub for cross-disciplinary collaborations that harness research and data across Penn's 12 schools and numerous academic centers, including active learning classrooms, collaborative spaces for student projects, and a data science hub for the entire Penn community. The 116,058 GSF building project is expected to be completed in summer 2024.



Graduate School of Education



Stouffer College House

I help manage the design and construction of capital projects on Penn's campus, supporting the development of state-ofthe-art facilities that advance Penn's academic and research priorities, foster innovation and interdisciplinary collaboration, and enrich the campus environment.

-JENNIFER KINKEAD, AIA, LEED AP BD+C, DIRECTOR, DESIGN & CONSTRUCTION



Vagelos Laboratory for Energy Science and Technology

As a Project Manager for Design and Construction, I'm proud to be a part of a collaborative team who are not only building and renovating spaces that support our students and staff, but also ensuring we are conscientiously designing and planning our physical impact towards a sustainable and innovative future within our unique urban campus and community.

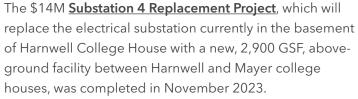
-ALICE CHENG, PROJECT MANAGER

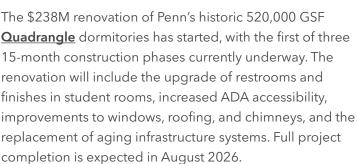


the University of Pennsylvania Health System, the \$360M overbuild project at 3600 Civic Center Boulevard will add 7 floors to the existing eight-story office building. With expected completion in 2025, the 217,800 GSF overbuild will include wet and dry research facilities, as well as a vivarium.

The 19,868 GSF Franklin Field Team Operations project finished its first phase of construction in summer 2023 with the renovation and expansion of the Penn Football locker rooms. Phase 2, which includes meeting rooms and support spaces for the football team and men's and women's track programs, is expected to be completed in spring 2024.

Currently in construction, under the management of







3600 Civic Center Boulevard



Franklin Field Team Operations

It's very rewarding to be a part of growth. I have an integral job and work very diligently at FRES, organizing very complex meetings that help to build the infrastructure of Penn. These projects enhance the Penn campus for students, staff and faculty.

-LINDA CORBIN, ADMINISTRATIVE COORDINATOR





Quadrangle

FY23 CAMPUS CONSTRUCTION BY THE NUMBERS*

\$1.4B

Approved Total Budgets

25

Projects Closed

421

Active Projects FY23

\$313M

FY23 Actual Expenditures

\$324M

FY23 Projected Expenditures

MBE 23% WBE 21%

Contracts

MBE 24% WBE 1%

Workforce

*As of 12/31/2023

The Ott Center for Track and Field

will be a \$69.3M, 73,000 GSF, state-of-the-art indoor track and field facility on the eastern side of campus that will include a banked track, long and high jump pits, a throwing area, and more than 1,000 spectator seats. The new facility will be a reflection of Penn's long tradition of excellence in track and field, and is slated for completion in spring 2024.

The **David Rittenhouse Laboratory**,

home of Penn's mathematics, physics, and astronomy departments, received a \$11.6M mechanical infrastructure upgrade in 2023, including new air handler and HVAC systems.

The restoration to Penn's historic

College Hall will include new,
historically appropriate and energy
efficient systems and infrastructure,
repair of roof and window
replacements, masonry walls, and
stone cladding, renovation and
upgrades to interior suites, offices, and
classrooms, and more accessibility
options, including new elevators.
Construction on this Century Bond
funded, 35,330 GSF, \$87.4M project
began in early 2023 and is expected to
be substantially completed by August
2024, with occupancy in January 2025.



Ott Center for Track and Field



College Hall



In FY23, Design and Construction instituted a continuing education initiative for department staff, with the aim of enhancing understanding of all aspects of design and construction. These include lunch time seminars featuring experts from fields like lighting, acoustics and mechanical engineering, as well as visits to actual construction sites around campus to see projects in various phases, and visits to major completed buildings and infrastructure projects.

OFFICE OF THE UNIVERSITY ARCHITECT

The Office of the University Architect (OUA) is responsible for the Penn Connects campus development plan, capital project design oversight, and preservation of University's 300-acre urban campus, including facilities at the Pennovation Center, the Morris Arboretum and the New Bolton Center for Veterinary Medicine. The OUA leads the architect and design consultant selection process, manages design review and coordinates zoning and accessibility requirements. OUA staff also maintain all space data, oversee all landscape design, environmental graphics, and track progress on the Climate and Sustainability Action Plan 3.0.

PROJECTS IN DESIGN

Stuart Weitzman Hall, located at 205 S. 34th Street, is currently completing construction documents for a renovation and expansion that will double the building's existing space. A planned addition on the building's east side features an accessible entrance foyer and glazed exhibition gallery along with fine arts studios, classrooms, and faculty and research center offices. Construction on the \$57.5M, 41,000 sq. ft. building is scheduled to begin in spring 2024, with an anticipated completion in fall 2025.

Plans are underway for the **Stuart** Weitzman Theatre, a new 250-seat theatre venue with flexibility for multiple performance and rehearsal space configurations. The Weitzman Theatre will be an addition to the existing Annenberg Center and will use a portion of the plaza between Locust Walk and Walnut Street. Construction is expected to begin in 2025, with occupancy slated for 2027.



Stuart Weitzman Hall



Stuart Weitzman Theater

I am helping to develop the New Student Performing Arts Center, on time and on budget, providing much needed space for students to rehearse, perform, and showcase the vibrant creative life on campus.

-ROBERT PIASECKI, AIA, LEED AP BD+C, SENIOR PROJECT MANAGER

Also currently in design is Phase 2 of the 25,000 sq. ft. renovation to the Penn Museum's Coxe and Harrison Wings. Phase 1, which included upgrades and restoration to the Harrison auditorium and the Lower Egypt galleries, was substantially completed in 2019. Phase 2 includes proposed renovations to the Coxe Wing, the first floor Collections Storage Area, and the Upper Egypt Gallery, and is expected to be completed in 2024.

The design for a new \$75M, 38,000 sq. ft. Student Performing Arts Center to be constructed at the intersection of Chestnut Street and Woodland Walk, adjacent to Lauder and Hill College Houses is progressing. The new Student Performing Arts Center will include performance, rehearsal, practice and teaching spaces. Constriction is to begin in summer 2024 and is expected to be completed in 2027.

Currently in the programming phase the \$350M David Rittenhouse **Laboratory Building Renovation** and New Physical Sciences Building Addition will create more space for teaching labs, an auditorium, faculty and student offices, and research centers.

Penn Museum's Egypt Galleries

LANDSCAPE ARCHITECTURE

In May of 2023, in partnership with TreePhilly and Philadelphia Parks & Recreation, Penn gave away 140 trees to staff and faculty living in Philadelphia as part of the **Creating Canopy** program. Since 2011 Creating Canopy has given away over 2,500 trees to Penn employees.

As stewards of Penn's campus landscape, the FRES Landscape Architecture team helped develop the **Ecological Landscape Stewardship** Plan (ELSP) in 2018. The plan outlines a framework to design, maintain, and celebrate the beauty of the campus landscape with an emphasis on its role as a balanced ecological system. In 2023, Penn Today published an article on the **ELSP**, exploring the ways our Landscape Architecture team has implemented the plan by planting climate-adapted species and using native plantings.



Student Performing Arts Center



Creating Canopy

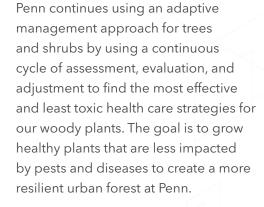
Every day is game day for my team. We need to be ahead of every scheduled event to ensure the field or facility is well-maintained, providing the best experience for the student athlete. The effort of my team creates a visual impact that I hope will stay fresh in the mind of all new and potential students.

-MARK CONWAY, ATHLETIC GROUNDS SUPERVISOR FOR URBAN PARK



Shakespeare Garden





The Landscape Architecture team continued their work restoring and updating the beautiful gardens on Penn's campus, including the Shakespeare Garden adjacent to the Fisher Fine Arts Library and gardens in honor of the classes of 1964 and 1968. For the fourteenth year in a row, Penn has been named a **Tree Campus** Higher Education recognized campus (formerly known as Tree Campus USA) by the Arbor Day Foundation, providing further evidence of our commitment to ecological stewardship.

The **Penn Campus Arboretum** received ongoing accreditation for its Level 2 Arboretum status through 2027, due in part to Penn's long-term vision for urban forestry management.





In FY23, FRES's Urban Parks gardeners continued their steadfast work of maintaining Penn's campus grounds and athletic fields, while managing campus spaces for major events like the Penn Relays.

CAMPUS GRAPHIC ART & DESIGN

Over 110 of Penn's standard building identification signs, including freestanding aluminum blade signs and building mounted plate signs, were refurbished in the spring of 2023. The intent of the project was to update the text on the signs with a more inclusive approach to highlighting all architects and landscape architects who have worked at Penn.

FY23 brought a refresh to the **Discover Penn** campus tour program. This refresh included a revised list of locations, with the addition of Julian Abele at Eisenlohr Hall, Simone Leigh's Brick House sculpture at the entrance to College Green, as well as Gutmann College House, Robbins House and other locations. The stops also include updated recorded narratives, featuring a broader diversity of artists, architects, landscape architects and university staff. Eighteen new signs with updated graphics and recordings were installed in July 2023, with additional locations to follow.

Cascode, the landmark public art installation planned for the garage façade facing the entrance to Amy Gutmann Hall, is part of the Philadelphia Housing Development Corporation's (PHDC) Percent for Art program. The artwork is currently being designed by artist Eto Otitigbe. Installation of the piece should begin at 34th and Chestnut Streets in summer 2024.

DATA & DOCUMENTATION

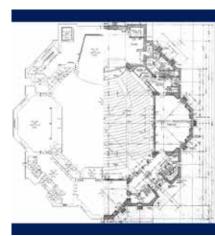
The Data and Documentation staff at FRES maintains multiple databases and collections that contain campus and building information including current room and floor areas for over 200 buildings and 17M square feet of space. In FY23, they surveyed and loaded space for the Graduate School of Education and Stiteler buildings, Gutmann College House, the relocated High Bay research lab, the renovated Burk-Bergman Boathouse, and Penn Squash Center.

Other Data & Documentation accomplishments:

- · Permanently removed, reviewed and processed over 6000 drawings from 20-year archive storage.
- Downloaded, reviewed, approved and loaded documentation for over 120 Capital Projects.
- Responded to over 500 requests from contractors and Operations personnel for Penn-owned building and utility information.







Irvine Historical Drawing, 1923

PENN SUSTAINABILITY

The Penn Sustainability Office released the Climate and Sustainability Action Plan 3.0 - FY22 Annual Report, based on data and metrics for fiscal year 2022 gathered from across many academic and administrative units at the University. The report tracks metrics in Academics, Utilities & Operations, Physical Environment, Waste Minimization & Recycling, Purchasing, Transportation, and Outreach & Engagement.

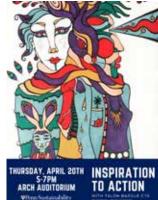
Climate Week at Penn featured over 80 events and several thousand participants in its first four years, conveying urgency and a spirit of innovation, locally and globally, with an emphasis on the intersections of race, equity, and the environment. Climate Week is run by a committee comprised of key faculty, student leaders, the Environmental Innovations Initiative, and the Penn Sustainability Office. The Environmental Innovations Initiative acts as the administrative lead for the series, which highlights and promotes the wide range of research, education, and outreach that combat climate change and promote sustainability.

Earth Week at Penn was a weeklong initiative supported by Penn Sustainability. From April 17 - 23, over 40 Penn schools, centers, green teams, and student groups organized 52 events centered on themes such as environmental justice, climate action, and nature-based solutions. Campus groups poured creativity and commitment into their events, which included workshops, quest speakers, litter clean-ups, community gardening, e-waste drives, live performances, and more.

Construction continued on the solar energy project that is part of Penn's Power Purchase Agreement (PPA) Two new solar energy facilities were completed in central Pennsylvania, from which Penn purchases all the electricity produced - an amount equal to approximately 70% of the total electricity demand of the academic campus and the University of Pennsylvania Health System in the Greater Phiadelphia area. The solar facilities became operational by the end of 2023.









Solar Field (AES)

The world is at a pivotal moment in the planet's climate history. Through initiatives like Penn Sustainability, the Integrating Sustainability Across the Curriculum Fellowship, and participation in The Presidents' Climate Leadership Commitments, I help Penn meet its climate neutrality goals and continue to be a leader in addressing global climate change.

-AUSTIN SUTHERLAND, SUSTAINABILITY ANALYST

In November 2022, the University of Pennsylvania announced that for the first time, it has begun purchasing carbon offsets for Penn's air travel emissions, as part of its plan to achieve carbon neutrality by 2042. The offsets purchased through the Travel Sustainability Fund are supported by a Climate Impact Offset charge (CLIO) applied to Penn's schools and centers that make travel-related purchases.

In October 2022, Quacquarelli Symonds (QS), a global higher education analytics company, announced that Penn ranked #2 in the nation and #8 globally in their 2023 World University Rankings for Sustainability. Explore the full list of QS World Sustainability Rankings on their website.

Penn ranked #2 in the Food & Dining category in the 2022 AASHE Sustainable Campus Index and was also recognized for the Sustainable Catering@Penn directory.

Penn made impactful progress in FY23 to promote safe and sustainable transportation behavior on and around its campus. Notable was the October 2022 debut of four electric shuttle vans, the first full-size electric vehicles in the University's fleet. The Ford passenger vans, retrofitted from cargo vehicles, will collectively reduce Penn's carbon footprint by 53.04 MTCO2 annually. The shuttles serve a number of routes, including the On-Request Evening Shuttles, Penn Accessible Transit, A.M. Medical Service Shuttle, FMC Shuttle, and Pennovation Works Shuttle.

For the first time since 2010, Penn hosted the Ivy+ Sustainability Collaborative's Annual Summit, June 22-23, 2023, at Perry World House. Including 30 campus sustainability programs across leading U.S. research institutions, the Ivy+ Sustainability Collaborative embodies a shared objective to inform institutional strategic priorities through forecasting of emerging trends, providing current information on best practices and collective impact data-reporting to executive leadership. The summit included a campus ecology tour, conversations on academic and campus partnerships, and tours of Penn community-engaged scholarship work at Andrew Hamilton School and Cobbs Creek.







OPERATIONS AND MAINTENANCE

Operations and Maintenance sustains the University's resources by providing maintenance and repair of existing facilities infrastructure. The Department also manages campus-wide energy related initiatives, provides technical support to construction projects and service contracts, and special events. FRES' Operations & Maintenance leadership team has pledged to strive for excellence in eight Focus Areas. These Focus Areas have management staff support and expectations in: attitude, approach, productivity, resiliency, work environment, human assets, information, and finance.

SAFETY AT WORKPLACE MANAGEMENT

Plans for Roof Fall Protection projects for fifteen buildings were finalized, with bidding and construction anticipated for FY24. Reporting through the SAFE card program continued to address staff safety, and the FRES Occupational Safety Manager worked to enhance staff safety trainings and record keeping programs.

I have many years of experience and history with both the Operations and the Housekeeping Departments; I am always willing and ready to assist when needed.

> -JAMES ALLEN, HOUSEKEEPING OPERATIONS COORDINATOR

MAINTENANCE MANAGEMENT

As part of the **enhanced** recommissioning studies, Operations & Maintenance initiated a project to upgrade the lighting to LED in four campus buildings to save costs and reduce carbon emissions. Penn will take advantage of a PECO rebate program to help fund these projects.

The department also made good progress on the Thermal Imaging of electrical panels program by assessing the condition of the panels deterioration over time and making adjustments and repairs. This preventive maintenance program increases reliability of the electrical supply to the buildings.







CENTURY BOND PROCEEDS

\$342M = \$297M original + \$45M payback

\$8.5M lighting

45 buildings complete 57,000 fixtures \$1.1M/yr savings

\$203M

10 buildings complete

2 buildings in construction

\$107M strategic priorities

Pennovation Center (complete) College Hall (construction)

\$24M

\$36M expected payback FY 25-FY 28

\$60M total available by FY 28

Penn and FRES began the Century Bond program in the spring of 2012 with the issuing of a \$300M bond with a 100-year term. After 11 years, FRES is on the second wave of upgrading lighting and HVAC systems that support energy efficiency and reduce deferred maintenance. Utility cost savings realized through the first decade of HVAC and lighting upgrades are being used to fund projects like HVAC upgrades in the David Rittenhouse Laboratory.

HOUSEKEEPING MANAGEMENT

Housekeeping completed another Summer Turnaround, cleaning nearly 3,500 student rooms and 1.6M square feet before students returned to campus. Also in FY23, Operations and Maintenance initiated a pilot program with peer institutions to share best practices for Housekeeping Management. The department also continued to develop its relationship with the West Philadelphia Skills Initiative (WPSI), a workforce intermediary dedicated to closing the job opportunity gap in West Philadelphia, hiring 22 housekeepers over the past year.

PEST MANAGEMENT

In FY23, FRES O&M staff, in partnership with Schools and Centers, continued monitoring and improving the Integrated Preventative Pest Management (IPPM) plan. It has proven successful in buildings across campus, focusing on service responsiveness and building occupant education.





As a proud member of the FRES team, I not only contribute to nurturing a clean and supportive environment for groundbreaking medical research on our campus but also strive to create a warm and friendly atmosphere.

-KAREEM OUTLAW, HOUSEKEEPER IN BLOCKLEY HALL

As a member of the FRES O&M team, we ensure that the facilities are operating and maintained at a level where occupants are able to perform their tasks in a comfortable environment.

-RONALD R. WALL, O&M TRADES MANAGER



O&M continued its efforts to improve the campus waste diversion rate of 21% and its recycling rate of 15%, and installed scales on a new solid waste truck to be able to monitor the weight of discarded items. O&M also procured new waste management services and a new housekeeping supply vendor and helped facilitate a year-long student eco-rep project focused on desk-side recycling and building signage.



Operations & Maintenance held their monthly **Building Administrators** forums throughout FY23, providing updates on O&M operations and receiving valuable feedback.

HUMAN ASSETS MANAGEMENT

This fiscal year, O&M increased diversity among twenty-six new trades and urban parks hires, with 44% of the new hires coming from underrepresented backgrounds. O&M maintained close contact with union leadership to ensure staff wellbeing and safety, as well as open communication with staff members.

UTILITIES AND LOAD SERVING ENTITY (LSE) MANAGEMENT

While overseeing the daily utilities needs of Penn's campus, O&M also supported the utility projects in design and construction, particularly the 34th Street chilled water line expansion project. The department also completed steam manhole inspections, and continued pro-active maintenance to ensure Penn's chilled water plants were operational throughout the summer months.

ENERGY AND GREENHOUSE GASES (GHG) EMISSION MANAGEMENT

As part of the University's commitment to address carbon emissions, it has desired for some time to include renewable energy in the mix powering our campus. Penn's Power Purchase Agreement reduces the University's overall carbon footprint by 26% from its 2009 baseline. It also supports Pennsylvania's Climate Action Plan by increasing renewable electric generation and helps Philadelphia meet its citywide goal of 100% carbon neutrality by 2050.

Additionally, the O&M team initiated a lighting upgrade pilot in four buildings, and presented a proposal to implement a campus-wide project using Century Bond program funding.





REAL ESTATE

The Real Estate department is responsible for the strategic planning, management, and operation of the non-academic property for the University. The primary centers within the Department are Real Estate Development, Retail, Off-Campus Housing, Office and Warehouse Leasing, Third Party Leasing, and Pennovation Works. Core disciplines include acquisition and disposition of assets, development partnerships in residential, mixed use and office, operations of real estate holdings and office leasing for academic schools and centers. Working in conjunction with other FRES departments, Real Estate implements urban land development and planning that increases the quality of life for Penn and its surrounding community.

REAL ESTATE DEVELOPMENT

The \$94.5M redevelopment of Sansom Place East, now known as The Accolade on Chestnut, was substantially completed in the summer, ahead of move in for the 2023-2024 academic year. Interior renovations included the addition of a fitness center, small group study classrooms, and multipurpose areas, as well as a refreshed outdoor plaza. Building on its history as a student residence, the redesigned Accolade on Chestnut provides 588 beds in 473 units of furnished and attainably priced housing for the University's graduate students.

In FY23, a development agreement was executed for a proposed mixeduse development building at 3935 Walnut Street. The existing McDonalds at the site was demolished, and will be replaced by a modern, mixed-use building, with an updated version of the restaurant at ground level, and an office space focused on student life and services above. The \$35M project is anticipated to be completed for occupancy by early 2025.

One UCity Square, an integrated community of office, lab, and retail space, was substantially completed in 2023. The new 115,000 square feet of space will house Penn Medicine's Institute for RNA Innovation and Penn Engineering's Center for Precision Engineering for Health.



The Accolade on Chestnut



3935 Waknut Street



UCity Square

The Rotunda, an arts and events space at 40th and Walnut Streets that's part of the Penn Real Estate portfolio, launched a community pantry in conjunction with Penn's Office of Social Equity and Community to provide much needed toiletries, first aid supplies and more to the surrounding community. Additionally, working with the Penn LGBT Center and other community organizations, they hosted a fall vocal series focused on finding and nurturing the voices of trans and nonbinary people.

SHOP PENN RETAIL DISTRICT

It was a busy year for the Shop Penn retail district, with a variety of new restaurants and unique shops opening in University City.

Five Guys started serving its popular burgers, fries, and over 1,000 varieties of milkshakes to the Penn community in the spring of 2023. (3714 Spruce Street)

Cloudline Physical Therapy

opened on 34th St. in early spring. An outpatient practice owned and operated by physical therapists, Cloudline approaches care collaboratively, empowering patients in their individual recovery goals. (138 S. 34th Street)

Grant Boulevard, a Philadelphiabased, black female-owned, boutique focusing on sustainably-sourced fashion, opened its flagship store in the district in spring 2023. (140 S. 34th Street)

RADIOKISMET, the Shop Penn retail district's first podcast studio, opened in early 2023. The recently renovated audio recording studio, event space, and all-around creative incubator offers a platform to diverse and ambitious local podcasting voices. (130 S. 34th Street)



The Rotunda





Cloudline Physical Therapy



Grant Boulevard



I run an arts and culture venue where we share Penn resources with artists, musicians, West Philadelphians, and Penn staff and students. By providing space, technical and marketing assistance, and support to present their work, I help them reach the public while bridging the gap between campus and community.

-GINA RENZI, DIRECTOR OF THE ROTUNDA

I help ensure that Penn has the space it needs to operate effectively. I work on a team that ensures that Penn's real estate assets are well-maintained and meet the University's environmental goals. By managing its real estate assets effectively, Penn demonstrates that it is a responsible and forward-thinking institution. Having the right space, I think, helps Penn continue to attract new students, faculty, and staff, as well as donors and institutional partners.

-MICHAEL GIOVANNI, REAL ESTATE ASSOCIATE

Franklin's Table, Penn's critically acclaimed food-hall, also welcomed new tenants in 2023. Area-favorite cheesesteak shop **Delco Steaks** opened along with High Street Hoagies, home of made-to-order sandwiches and seasonal salads, and Yi Fang Fruit Tea, purveyor of handcrafted beverages. (3401 Walnut Street)

In March 2023, Franklin's Table celebrated its five-year anniversary on Penn's campus. Visitors to Franklin's Table had the chance to celebrate with giveaways and prizes, including tote bags, mugs, and \$5 coupons to the food hall's vendors. After its opening in 2018, Philadelphia Magazine gave Franklin's Table a Best of Philly nod, noting: "It's not your typical college food hall...it's a fast-casualized highlight reel of some of the best restaurant fare in Philly."

PENNOVATION WORKS

Progress continued on the **Pennovation** Life Sciences Development Building, with the project advancing to schematic design. The state-of-the-art life science building is designed for multiple uses, and will feature a single story biomanufacturing facility, and two five-story towers featuring lab and office space.

In FY23, Penn began work on an infrastructure replacement project, upgrading and modernizing the Pennovation Works campus to support the near and long-term development goals of the site. Utility services will be placed within Pennovation Works' main corridor, creating a utility "loop," and a new electrical substation will be essential as the facilities continue to grow.

In May 2023, Penn Engineering's GRASP Laboratory hosted the inaugural Aerospace Robotics Competition (ARC) for the greater Philadelphia area at Pennovation Works.



Delco Steaks



Franklin's Table



Pennovation Life Sciences Development Building



Penn Vet Working Dog Center



Gravs Ferry Tree Tenders



Denita Henderson

High school students designed drones with an ARC-provided kit, then received hands-on mentoring of their designs from industry professionals.

In October, the research team at the Kleinman Center affiliated Clean **Energy Conversions Lab** moved into a new space within the Pennovation Lab. The Clean Energy Conversions Lab is focused on minimizing the environmental and climate impacts of our dependence on fossil fuels.

Interius Biotherapeutics, a company committed to developing new ways to engineer cells inside the human body using next-generation delivery technologies, has experienced continued growth over the past year and a half since joining the Lab, now occupying the fourth floor in addition to the third floor of the building.

In October, nearly 300 people gathered to mark the 10th anniversary of the **Penn** Vet Working Dog Center that included meet-and- greets with canine graduates, overviews of research projects, and demonstration of the dogs at work.

Penn's **SAFELab**, focused on studying how youth of color experience violence on and offline, is developing the Penn Center for Inclusive Innovation and Technology through SP2 at the Pennovation Center.

This hub will offer resources and will work with Pennovation startups to think more about diversity, equity and inclusion as they develop their products and companies.

In September, Pennovation Works hosted the first of a new series entitled Warm Intros, offering friendly introductions to investors, advisors and experts from the network, and providing established businesses assistance with funding and business plans.

Pennovation Works members and staff ioined the Pennsylvania Horticultural Society (PHS) **Grays Ferry Tree Tenders** for both a fall and spring session to plant trees in the Grays Ferry community where the Pennovation Works campus is located. Over 35 trees were planted during the two sessions in an effort to increase the canopy throughout the city.

In August of 2022, **Denita Henderson** was appointed as Managing Director at Pennovation Works, in order to help guide the overall direction and oversight of the innovation community. Denita leads business development of the site, including marketing, communications, and leasing, and manages the strategic direction of the Pennovation Center and the Lab Building.

By working in conjunction with our service providers, we ensure that Penn's retail, commercial, office and residential spaces are functioning well mechanically, properly maintained and repaired, and safe for our Penn staff, tenants, residents and customers.

-ALLAN JOHNSON, OPERATIONS MANAGER, REAL ESTATE

IN THE NEWS

August 9, 2023

Hard at work, crews make progress during summer construction

Penn Today

July 28, 2023

UPenn Embraces Sustainability With Mass Timber Construction

Bisnow Philadelphia

June 22, 2023

Translucent floating trapezoids top Steven Holl's arts center for University of Pennsylvania

designboom

April 28, 2023

Grant Blvd Flagship store in University City

Fox29 News

April 18, 2023

Caring for the campus landscape with an ecological mindset

Penn Today

April 13, 2023

Celebrating Earth Week at Penn

Penn Today

February 14, 2023

Inside Penn's \$1.3B construction boom - with another \$440M in the pipeline Philadelphia Business Journal

February 8, 2023

Topping off Penn's new energy science building

Penn Today

January 30, 2023

Everything you need to know about the 2023 restaurant scene in University City

Daily Pennsylvanian

September 14, 2022

A decade of advancing working dogs for the greater good Penn Today

August 1, 2022

Hair scarves and sea life savers won big at Pennovation Accelerator's 2022 pitch day

Technically Philly

As co-lead of the Women in FRES resource group, I bring together a supportive community of women by creating a strong, diverse and inclusive network of people that advocate for each other.

-- CHLOE CERWINKA, LANDSCAPE PLANNER

ON THE WEB



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AWARDS

Numerous Penn building projects and sustainability initiatives were acknowledged for their excellence over the past year.

Penn's Holman Biotech Commons won a first place design award at the American Society of Interior Designers', Philadelphia Region of the Interior Design Awards.

Three Penn construction projects were awarded 2023 Grand Jury Awards from the Preservation Alliance for Greater Philadelphia: the Burk-Bergman Boathouse renovation and addition, repairs to the David Goddard Research Laboratories (Goddard), and the renovation of historic Kelly Writer's House.

For the fourteenth year in a row, Penn earned Tree Campus Higher Education recognition. Tree Campus Higher Education, an Arbor Day Foundation program formerly referred to as Tree Campus USA, honors colleges and universities and their leaders for promoting healthy trees and engaging students and staff in the spirit of conservation.

Penn's campus in West Philadelphia was given renewed accreditation as a Level II arboretum in November 2022, ensuring its status for the next five years.

The Franklin Field Concrete Restoration project, completed in 2021, won an Award of Merit in the Historic category from the International Concrete Repair Institute (ICRI).

Pennovation Works was awarded a Fire Award from PHL Inno in summer 2023, recognized as one of businesses, institutions and individuals driving the region's innovation scene forward.

Denita Henderson, Managing Director of Pennovation Works, was announced as a Technical.ly's RealLIST Connector, one of 20 people in the Philly tech ecosystem who are extremely connected and influential in the community.

While providing service with a smile, I dot the "I's" & cross the "T's," ensuring contractual integrity for FRES contracting University-wide. I have been a Pennsway Department Chair for 11 years. This is near and dear to me because it shows the UPenn community that we at FRES give & care.

-KAREN GIBSON, CAPITOL CONTRACTS MANAGER

DIVISION LEADERSHIP JULY 2022 - JUNE 2023

Anne Papageorge

Senior Vice President

OFFICE OF THE UNIVERSITY ARCHITECT

Mark Kocent

University Architect

Chris Hanson (Retired)

Data & Documentation Manager

Eva Lew

Director of Architecture &

Planning

Robert Lundgren

University Landscape Architect

Nina Morris

Sustainability Director

DESIGN & CONSTRUCTION

Chris Kern

Executive Director

Margo Barnes

Director

Jennifer Kinkead

Director

Colin McKelvie

Director

Sudha Menon

Senior Capital Accounting

Manager

Jennifer Wetzel

Director

John Zurn (Former)

Director

REAL ESTATE

Ed Datz

Executive Director

Carlton Arrendell

Director of Development

Steven Becker

Director of Project Management

Denita Henderson

Managing Director of

Pennovation Works

Allan Johnson

Operations Manager

Laura Park-Smith

Director of Portfolio

Management

OPERATIONS & MAINTENANCE

Faramarz Vakilizadeh

Executive Director

James Bean (Retired)

Director of Labor Relations

Harveen Kothari

Locust Area Director

Walt Molishus

Director of Trades

Dana Pinckney

Woodland Area Director

Betsy Robinson

Director of Special Projects &

Call Center

Wendy Sparks

Director of Housekeeping

Ben Suplick

Director of Engineering and Energy Planning

ADMINISTRATION & FINANCE

Elizabeth Hansen

Executive Director

Victoria lannotta (Retired)

Senior Director of Information

Technology

Chereese Martin

Director of Human Resources

William McKeaney

Executive Director of Finance,

Accounting & Analysis

Sam Sheldon

Director of Fiscal Operations

Mike Stack

Director of Budget &

Capital Planning

COMMUNICATIONS

Jennifer Rizzi

Director of Communications



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