

INCLUSION INNOVATION IMPACT

THE POWER OF PENN



THE POWER OF PENN

Welcome to the Facilities & Real Estate Services *FY19 Annual Report*. I'm proud to be able to share this document with you and all that it represents of our division's work in alignment with the principles of the *Penn Compact 2022* — Inclusion, Innovation, Impact.

The *Penn Compact* is the vision that Dr. Gutmann has put forward to guide the University — a vision designed to motivate all members of the Penn community to:

- **BE RADICALLY INCLUSIVE**
- **INNOVATE**
- **AND TO POSITIVELY IMPACT THEIR LOCAL, NATIONAL, AND GLOBAL COMMUNITIES.**

For FRES, Inclusion means embracing diversity and striving for excellence. In our work, we reach out to those around us and find the value in what everyone has to offer. Inclusion is an exchange between Penn and our community — starting in West Philadelphia and reaching out globally.

Innovation occurs daily at FRES, as we make every effort for multidisciplinary excellence in the work we do for all of our schools and centers across campus. Few groups at Penn deal with the broad mix of customers, challenges, contractors, and neighbors that we do in Facilities. The ability to think creatively and act quickly is a valuable asset in our staff.

FRES makes an Impact each day with our work to establish and maintain a sustainable and innovative urban campus. Our guiding principles are found in our campus development plan, *Penn Connects*, which has led our vision since 2006, now in version 3.0.

As you review our projects and activities in FY19, keep in mind the diverse talents and skill sets of FRES staff that make our vision a reality. I'm sure you'll agree that each of us plays a part in the success of this University and contributes to the Power of Penn.

Sincerely,

Anne Papageorge

Vice President—Facilities & Real Estate Services

DESIGN AND CONSTRUCTION



Stemmler Hall

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 improvement projects.

COMPLETED PROJECTS

The multi-phased renovations of the 250,000 GSF Stemmler Hall at the Perelman School of Medicine were completed in early 2019. Funded partly through the Century Bond program and supplemented by Perelman School of Medicine funding, this \$124.2M renovation included infrastructure enhancements and replacements, as well as laboratory, office, and conference room improvements, creating a more energy efficient and functional environment for the building's research laboratories and support facilities.

Renovations to Richards Medical Towers A&B, also part of the Perelman School of Medicine, finished in early 2019. Designated a National Historic Landmark in 2009, the \$30.3M restoration includes new lighting, mechanical, electrical,

plumbing and fire protection (MEP/FP) systems, and creates new dry lab space for the Center for Cognitive Neuroscience (CCN) for research, office and conference room space.



Kelly Writers House

Kelly Writers House, a gathering place and incubator for writers at Penn and the greater Philadelphia community, underwent a \$2.2M renovation in FY19. Built in 1851, the Writer's House is one of the oldest buildings on Penn's campus. The front parlor known as the Arts Cafe, which stages community readings and public events, was revitalized and expanded to be more usable and technologically friendly.



Richards Medical Towers A&B

Houston Market



Houston Market, located on the lower level of Houston Hall, underwent a \$15.15M renovation over the summer of 2018 in order to update and modernize its space. The enhanced market offers revamped stations, a brighter, more comfortable and convenient atmosphere to eat and work, and extended hours for patrons -- including on Saturdays. Featuring breakfast, lunch, and dinner options, everything served at Houston Market is made from scratch, as well as sourced locally when possible.

Cohen Admissions Visitor Center



The Cohen Admissions Visitor Center was relocated from College Hall to Claudia Cohen Hall in 2019, in order to increase its square footage and feature enhanced amenities including an auditorium to host potential students and their families. The \$4.3M relocation and renovation was substantially complete in May 2019.

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Also completed during this period:

- » *Enhancements to Museum Garage 7*
 - » *Van Pelt Library HVAC Improvements*
 - » *3401 Walnut Street HVAC Improvements and Chilled Water Line Extension*
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ECONOMIC INCLUSION

For years, a robust diversity program has been in place within Facilities & Real Estate Services to reach economic inclusion goals for minority and women-owned businesses and for minorities and women in the work force.

From FY2015 through FY2019, annual construction spending on Penn capital projects over \$5 million averaged 27% with minority and women-owned businesses.

From FY2015 through FY2019, the combined minority and women workforce on Penn capital projects of at least \$5 million averaged 26%.

Last year, a gap analysis was done to determine areas of opportunity. The results included: architecture, catering, consultants, design, engineering, furniture, printing, promotional, and various trades. New goals have subsequently been established:

- Operations & Maintenance ~ trades diversity spend was around 25% last year and achieved 31% in FY19
- Office of the University Architect ~ set a goal of 20-25% for on-call contracts and are currently at 29% for diversity spend
- Real Estate ~ spent \$1.3M with 19 WMBE vendors and increased spend in both capital and operations by over 10%

PROJECTS IN CONSTRUCTION

Construction began on **New College House West**, the \$169.5M, 250,000 GSF residential building designed specifically as an undergraduate college house. With 450 beds as well as dining services, New College House West will provide common areas including study, living, seminar and music practice rooms. New College House West is expected to be completed by August 2021 for student move in.

New College House West



Wharton Academic Research Building



The 80,450 GSF **Wharton Academic Research Building** will link to the south side of Steinberg Hall-Dietrich Hall and include four floors of academic and research space, including flat floor classrooms, group study rooms, research centers and shared conference rooms. On the ground level, a new enclosed loading dock and Substation 2 replaced the existing structures in work completed in February 2019. This \$87.65M project is expected to be completed in summer 2020.

The Penn Museum continued renovations to its **Coxe and Harrison** wings throughout FY19. This first of three planned phases included renovation of the first and second floors of the Harrison wing, including the Harrison Auditorium, and a small portion of all three floors of the Coxe wing. There was also renovation of the Main (Kamin) Entrance and the construction of a new Main Entrance Gallery, which is the new home of the Sphinx. ADA accessibility and restroom improvements have been included. The estimated completion of phase one is November 2019.

Sphinx Relocation



Penn Squash Center



In 2018, the University began a major update to Penn Athletics' **Penn Squash Center**. The renovation improved the area's circulation and connectivity and enhanced the spectator experience by relocating columns, renovating mezzanine seating, and updating lighting and design features. The number of squash courts was increased from 10 to 12, featuring two new glass exhibition courts, and all courts are now sized to International court dimensions. The \$18.7M project was completed in September 2019.

Kings Court English College House and **Du Bois College House** had air conditioning installed in the summer 2019, and completed by Move In 2019.



Also in construction during this period:

- » Center for Programs in Contemporary Writing (CPCW) Relocations to McNeil and 3809 Walnut
- » College Hall Phase 1 MEP Infrastructure upgrades
- » Franklin Field Concrete Restoration Phase 2 (Upper South and Lower East sections) (pictured above)
- » Huntsman Hall HVAC upgrades
- » Lauder Institute Renovations
- » Multiple Classroom Renovations in David Rittenhouse Labs and Silverman Hall
- » Multiple Campus Façade Improvement Projects
- » Quad Exterior Façade and Roof Repairs and Interior Maintenance Repairs
- » Vance Hall Renovations - 3rd and 4th floors

ACE MENTOR PROGRAM

For the 6th year, FRES has hosted an ACE (Architecture, Construction, and Engineering) Mentor Program team. ACE gives students from local high schools an opportunity to learn more about potential careers in architecture, engineering and construction. The students work on projects where they get exposure to all facets of the design and construction industry. Approximately 90 students have participated during the 6 years FRES has had an ACE team.

The team for the school year 2018-19:

- visited an architect's office
- learned how to circuit lights with help from an electrical engineer
- learned basic psychometrics and completed a hands-on lab with help from mechanical engineers
- reviewed drawings and BIM models with a construction manager
- discovered options available in the multitude of building trades.



OFFICE OF THE UNIVERSITY ARCHITECT

Perelman Center for Political Science and Economics



The Office of the University Architect is responsible for the oversight of the design, physical development, and preservation of University facilities, including off-campus facilities (Morris Arboretum and the New Bolton Center for Veterinary Medicine). The University Architect oversees the University's design review process, campus planning, and designer selection, as well as zoning and accessibility requirements. The staff in the Department also facilitates the Capital Plan, oversees landscape design and improvements, signage, and sustainability efforts for the University. The Department is responsible for tracking and maintaining all space data, such as floor plans, square feet, and departmental areas for the University.

PROJECTS IN DESIGN

An upcoming \$13.5M renovation to the Penn Boathouse will improve training and team spaces in this historic landmark building, expand and upgrade the locker rooms, and upgrade existing infrastructure in order to improve the functionality for the crew teams and bolster recruitment.

Penn Boathouse



Athletics Indoor Training Facility



The University is currently designing what will be a new Athletics Indoor Training Facility adjacent to Hollenback Center. The 63,000 GSF, \$28.25M project will feature a track, dedicated pole vaulting area, high jump, throwing area and spectator seating.



Also in the planning stages is a new \$150M **Energy Science and Technology Building**. The 100,000 GSF building will be the home of the Vagelos Institute for Energy Science and Technology, and will house researchers from both the School of Arts and Sciences and the School of Engineering.

Plans are in the works for the **SEAS Data Science Building**, a dry lab and office research building that will be located at 34th and Chestnut streets. With a budget of \$75M, the 80,000 GSF building will be used by the data science and engineering departments.



Design is in process to update and expand 3808-10 Walnut Street as a new **University Meeting and Guesthouse** for distinguished University visitors. The projected budget is \$26.25M, and the estimated completion date for occupancy is early 2021.

Residential HVAC upgrades for Gregory College House are in design for the summer of 2020. Gregory will complete the air conditioning installation in all of the University's college houses.

Plans to expand the **Graduate School of Education** include the creation of a new four-story student pavilion and an innovation lab. The projected budget for the project is \$24M.

Also in design during this period:

- » *School of Veterinary Medicine New Bolton Veterinary Diagnostic Lab Study*
- » *Quad Renovations Feasibility Study*
- » *Laboratory for Research on the Structure of Matter (LRSM) HVAC Replacement*
- » *Secondary Campus Steam Line—South Street route*
- » *Palestra Window Replacement*
- » *BRB II Controls Replacement*
- » *3401 Walnut Façade Repairs*
- » *Biotech Commons Library*
- » *Circulation, Traffic, and Parking Study*
- » *High-Bay Lab Facility Relocation*

LEED CERTIFICATIONS

The campus development plan, [Penn Connects](#), recommends sustainable development for all new projects. New buildings and major renovation projects currently under design are registered with the US Green Building Council, and are targeting LEED Silver rating or higher.

We are very proud that many of our projects are receiving GOLD ratings:

- [Evans Restoration – School of Dental Medicine](#)
- [Robbins House for Fisher M&T Program – Penn Engineering and Wharton](#)
- [Perelman Center for Political Science and Economics](#)
- [Evo and Cira Green](#)
- [Richards Medical Towers A&B](#)

Penn currently has approximately 25 projects with a LEED designation.

College Green



LANDSCAPE ARCHITECTURE

» *Tree Campus USA*

Penn has earned the recognition of Tree Campus USA for the 10th year in a row. Tree Campus USA, an Arbor Day Foundation program, honors colleges and universities and their leaders for promoting healthy trees and engaging students and staff in the spirit of conservation.

» *Ecological Landscape Stewardship Plan*

The ELSP is a broad study of Penn's landscape maintenance practices aimed at maximizing the ecological benefits of the campus landscape.

This study includes:

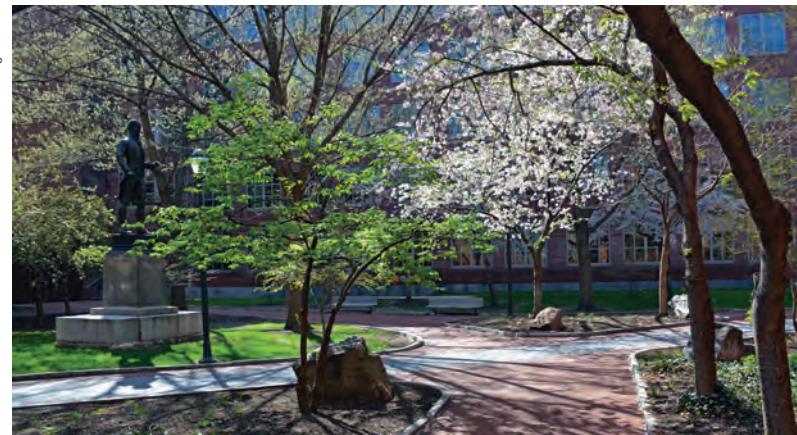
- an evaluation of the health of the landscape itself,
- the execution of various maintenance practices, and
- the various external forces influencing these maintenance practices.

There are a number of study sites on campus, including Shoemaker Green and Kane Park.

» *Campus as an Arboretum*

The University of Pennsylvania campus in West Philadelphia has been recognized with a Level II Accreditation by The ArbNet Arboretum Accreditation Program. The original Level 1 Accreditation was achieved in April 2017. Penn's urban campus has achieved particular standards of professional practices deemed important for arboreta and botanic gardens.

College Green



Penn's nearly 300 acres in West Philadelphia are the primary home of the University, populated by more than 21,000 graduate and undergraduate students and 17,000 faculty and staff. The Arboretum at the University of Pennsylvania encompasses the entire campus, and is now one of Penn's two arboretums; the Morris Arboretum of the University of Pennsylvania is the official Arboretum of the Commonwealth of Pennsylvania, and is located in Chestnut Hill, a mature suburban community about 15 miles from Penn's main West Philadelphia campus. The Morris Arboretum and Penn have a robust partnership promoting shared research, outreach and education programs highlighting the importance of trees.

» *Creating Canopy*

Since 2011, FRES has sponsored, in partnership with Philadelphia Parks and Recreation, the Creating Canopy tree giveaway for Penn and UPHS employees. The goal of the very popular program is to encourage the continual 'greening' of our communities in the Greater Philadelphia area. In 2019, we distributed about 300 trees to our staff and faculty.

Creating Canopy



A Conversation with MARK KOCENT:
Penn's University Architect

University Architect Mark Kocent stepped into this leadership position in July 2018. Kocent, who formerly served as Penn's Principal Planner going back to 2004, has—alongside his staff at Facilities and Real Estate Services (FRES)—led the charge of the *Penn Connects 3.0* plan that outlines Penn's vision to unite the University's 12 schools, bring communities on and off campus together, and look toward a sustainable future. Read University Communications' profile of Mark Kocent. <https://penntoday.upenn.edu/news/conversation-mark-kocent>.

ENVIRONMENTAL SUSTAINABILITY

Bike Friendly University



Penn Sustainability is a university-wide initiative to advance environmental sustainability at the University of Pennsylvania, and coordinate programs to develop a more sustainable campus.

CLIMATE ACTION PLAN PROGRESS PRESENTED IN FY18 PENN SUSTAINABILITY ANNUAL REPORT

Carbon emissions, academic course selection, physical environment, and advances in waste minimization are areas of significant achievement against the goals of the University of Pennsylvania's *Climate Action Plan 2.0*.

The Penn Sustainability Office in Spring 2019 released the *Penn Sustainability Annual Report FY18*, based on data and metrics from fiscal year 2018 gathered from across many academic and administrative units at Penn.

This report is intended to be an annual, comprehensive, graphic, and concise presentation of progress in key metrics during the previous fiscal year. A PDF of the [Penn Sustainability Annual Report FY18](#) is available on the Penn Sustainability website.

STAFF & FACULTY ECO-REPS

The [Staff & Faculty Eco-Reps Program](#) is a peer education program that provides the tools to improve the environmental sustainability of Penn offices and labs. Staff & Faculty Eco-Reps work with campus stakeholders and within their departments and offices to develop educational events, activities, and campaigns aimed at supporting the University's environmental goals and *Climate Action Plan 2.0*. Initiatives include energy conservation, waste and recycling practices, alternative transportation, consumer choices, and more. In FY19, the number of participants in this group grew to 130 members.

STUDENT ECO-REPS

[Penn's Student Eco-Reps](#) program is an environmental leadership opportunity for students interested in advancing sustainability through the implementation of campus-based projects. Students work as paid employees of Penn's Sustainability Office and collaborate with our University partners to carry out projects in support of [Penn's Climate Action Plan 2.0](#).



Student Eco-Reps work in teams to help implement sustainability projects with various campus partners. Projects in 2019 included:

- » *Composting Pilot*
- » *Green Living Certification*
- » *Housekeeping Sustainability Tracking*
- » *Penn Park Meadows*
- » *Shifting Sands: Soil-less Soils*
- » *Stormwater Collection in Street Trees*
- » *Sustainable Solutions*
- » *Wellness & Sustainability*
- » *Year of Stuff*



GREEN FUND SUPPORTS SUSTAINABILITY IDEAS

The Green Fund was created to support innovative ideas that align with Penn's CAP 2.0 goals and would otherwise be impossible to achieve.

Beekeeping, clothing drying racks, analysis of bird strikes, bike repair stations, a student-run thrift store—these are just a few of the ideas that have come from within the Penn community to support the university's commitment to environmental sustainability since the Fund was established in 2009.

At a meeting in March, the leaders of four Green Fund projects presented their progress on recently funded projects:

- » *New Bolton Center Soil Conservation Plan*
- » *Motus Wildlife Tracking Antenna*
- » *StairWELL UPENN*
- » *Penn Closet Thrift Store*

SUPPORT FOR SUSTAINABLE COMMUTING

Penn again sponsored an information and education location for Philadelphia's Bike to Work Day, May 17. Between 7:30 - 9:30am at the Penn Museum, cyclists could make a stop and pick up snacks, drinks, and freebies.

In November, Penn was again named to the list of Bike Friendly Universities by the League of American Bicyclists, part of a group of 193 colleges and universities in 46 states and the District of Columbia that are transforming the American landscape by providing more bicycle friendly campuses for the benefit of students, staff, and community members.

Penn offers employees a Bike Commuter Expense Reimbursement Program as part of the *Climate Action Plan 2.0*, as well as numerous services and programs for those who bike to campus.

OPERATIONS & MAINTENANCE

Preventative 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.

UTILITIES

One of the priorities for O&M has been the reliability and redundancy of the generation and distribution systems for thermal and electrical utilities. Their team examines costs, reliability, and environmental sustainability issues related to Penn's utility services. Some of the results this year include:

- Substation #2 Academic Research Building was replaced as part of the Wharton project at 3700 Spruce Street.
- Related to domestic water service, redesign and reconditioning of equipment is ongoing. This program is increasing reliability of water service to campus buildings; to date 37 buildings are complete and 12 are in progress.



- At MOD 7: the steam chillers passed final commissioning, electric chillers overhauled and repaired, roof replacement completed.
- MOD 6 and MOD 7: cooling tower media replacement, controls upgraded.

O&M's utilities management team has been monitoring the University's LSE (load serving entity) and utility providers, and participating in strategy discussions. They continue to encourage energy conservation across campus to our schools and centers, often in collaboration with the Penn Sustainability team.

FRES continues to make strides forward in monitoring our systems, with completion this year of the integration of the SCADA system. SCADA is the centralized computer management system that monitors the operation of critical campus building infrastructure.

HOUSEKEEPING

FRES is in the third year of the Enhanced Housekeeping Program that was fully implemented in June 2017. This program was designed to assess and align how we manage the 6 million cleanable square feet in 160 buildings on Penn's campus.

Housekeeping leadership has reviewed the reports and customer satisfaction information so far and continue to strive to expand the positive results of the program including:

- Use of microfibers
- 70% reduction in the number of chemical products
- Improved equipment preventative maintenance
- Established inventory par levels (periodic automatic replenishment)
- Customer involvement in QA/QC program (quality assurance/quality control)

An independent consultant audit confirmed a high level of expressed customer satisfaction:

- Our overall quality scores since 2015 have gone up 3.8%
- The improvement on “daily serviced items only” is up 5.7% since 2015

EMERGENCY PREPAREDNESS

FRES' responsibilities stretch across Penn's urban campus. These include elements of Emergency Preparedness – so FRES participates in The Mission Continuity Program.

- This program organizes a University-wide tabletop exercise (TTX) annually.
- All University organizations use the same event scenario as the basis for their TTX. The goal is to test an organization's ability to plan, respond and recover in the event of an outage or disruption in order to continue operations and uphold the core mission of the University.

Summer Turn Around



PREVENTATIVE MAINTENANCE

In response to day-to-day situations, we have committed resources as well:

- Operations & Maintenance has increased hours spent on Preventative Maintenance (PM) by 2.5%, compared to FY18.
- O&M has implemented this year a repair program on our campus walkways, addressing the most critical tripping hazards.

FRES Snow Removal



Maintenance, Walkways and Sidewalks



FRES Housekeeping



SEASONAL RESPONSE

FRES is key to keeping campus functioning and safe no matter what the weather, so the Urban Parks team has a well-planned and organized snow and leaf removal process in place.

- There's a lot to cover: FRES is responsible for clearing sidewalks and walkways on Penn's campus which generally encompasses the areas from the Schuylkill River to 41st Street, and from the School of Medicine buildings to Chestnut Street.
- The campus has an estimated 1.3 million square feet of walkways that FRES is responsible for clearing after each snow or ice storm.
- Collected leaves in the autumn are used to make compost tea that is distributed back on campus to provide nutrients for lawns, among other purposes.

BUSY SEASON

Summer Turnaround is a fast "repair and refresh" that takes place every summer. The women and men of FRES housekeeping and trades, under the leadership of our strong trades and housekeeping managers, do some serious work cleaning, painting, and refreshing our buildings and green spaces. In a time period that is under 60 days, Housekeeping cleaned over 1.6 million additional square feet, including 3,200 rooms and suites. FRES' trades staff completed more than 7,900 work orders over the same period, ensuring that the buildings and public spaces on campus looked great by the time students returned for the fall 2018 semester. FRES hears consistently good reports from colleagues around the University on this annual stream of fast-paced work.

SAFETY IS #1

FRES' commitment to workplace safety remains a top priority for the O&M team. FRES' ongoing and continually updated programs include the SAFE card program (or, Safety Alert From Employees program) and tailored OSHA training classes relevant to different trades. The SAFE card program allows an employee to report a safety issue and that employee is then kept in the loop as it is addressed and resolved.

Air Handling Units



Chiller



Century Bond

The first round of Century Bond-funded projects are nearing completion in FY19.

Century Bond is a special pool of funds directed towards financing upgrades in lighting and HVAC systems that support energy efficiency and reduce deferred maintenance. The utility cost savings realized through lighting and HVAC upgrades will be used to offset debt service and the principal repayment of the HVAC projects will be used to fund future projects.

Lighting upgrades have been completed on more than 57,000 fixtures in 45 buildings at a total project cost of \$8.5M.

HVAC projects have been completed in 8 buildings and are underway in 1 building at a total project cost of \$190M.

The FRES' energy management team has been looking at the project cost and the resulting reduction in energy use in each building. Early estimates are showing an average of 28% savings. Average energy reduction is a combination of electric, chilled water, and steam weighted by square footage. Also of interest, the team has found that in buildings with completed Century Bond projects, there has been a significant reduction in work orders.

The first completed project, Chemistry 1973 – for which we have confirmed results:

- \$14.6M total project cost
- More than 151,000 sq ft
- Completed in September 2014
- 51% energy reduction

A second round of Century Bond financing was launched in June 2019.

Contributing to each Century Bond project from concept to construction are FRES staff in the Office of the University Architect, the Department of Operations & Maintenance, and teams in the Design & Construction Department. Progress on these projects would not be possible without many cooperative efforts of individuals across FRES.

REAL ESTATE

Shop Penn Day



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 Leasing, Warehouse, and Third Party Leasing. 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.

RETAIL

Both the Shop Penn retail district brand, as well as Franklin's Table Food Hall, turned one year old in March 2019. In its first year, the Shop Penn district welcomed nearly a dozen new retailers, including Pitruco Pizza, Goldie Falafel, High Street Provisions, DK Sushi, and KQ Burger (all located within Franklin's Table) as well as lululemon, Just Salad, Louie Louie, Panera Bread, and SoBol Philly. Franklin's Table has become a popular gathering place for the Penn community to connect over fresh and innovative food, and has been featured in dozens of local and national news outlets, including *Food & Wine*, the *Philadelphia Inquirer*, and *Philadelphia Magazine*. Awareness of the Shop Penn district continues to grow via social media, which highlights the array of restaurants, retail, and cultural events in a thriving University City.

Louie Louie Bistro and Bar



University City gained another exciting dining destination with the opening of Louie Louie Bistro and Bar in August 2018. Located on the ground floor of the Hilton Inn at Penn, Louie Louie is an American bistro with French flair, influenced by the cafes of Europe. The restaurant features an exciting menu and craft beer and cocktail list, and a whimsical, vintage-inspired décor.

Lululemon



Lululemon, the national chain popular for its yoga and athletic clothing, opened a pop up store on Penn's campus in August 2018. Located at 3661 Walnut Street, the seasonal store offers the Penn community free in-store yoga and organized group athletic events in addition to a wide selection of apparel.

The campus welcomed a **Panera Bread** to 40th and Walnut in June 2019. This bakery café became instantly popular among the student population in the West Philadelphia neighborhood, with its proximity to the Penn Dental school.

SoBol



SoBol Philly, a fast-casual option serving açaí bowls and smoothies, opened their second Philadelphia location at 38th and Spruce in August 2018. The centerpiece of the menu is the customizable açaí bowl; layered with homemade granola, bananas, strawberries, and blueberries, and topped with coconut flakes and a honey drizzle. The bowls and smoothies at SoBol are all customizable and made-to-order using produce delivered daily.

BRANDING

The Shop Penn retail brand was advertised in a number of print and online publications in FY19, as well as featured in advertisements on KYW 1060. Some of the top performing ad pieces were placed in the *Philadelphia Inquirer*, *WHERE* publications, and the *Discover PHL* visitors guide.

October 2018 featured the first ever **Shop Penn Day**, a single-day event introducing Penn's newly united retail brand to the University City audience. Our Shop, Dine and Play partners featured giveaways, free tastings, and bargains as part of the celebratory day, and helped further position the compact, dynamic retail district as a premier destination for food, fashion, art, culture, and more.

Shop Penn Day



ARTS AND CULTURE, COMMUNITY

The 40th Street Summer Series—co-produced by University City District, Penn, and The Rotunda—continues to be one of the most popular events in University City. This free outdoor concert series features talented performers throughout the summer, including a performance by the Sun Ra Arkestra at Pennovation Works. In 2019, the series moved to a new location at 39th and Walnut streets, adjacent to Locust Walk.

40th Street Summer Series



Luna on Pine



REAL ESTATE DEVELOPMENT

In mid-2019 construction wrapped up on **Luna on Pine**, a 70,000 SF, five-story apartment located at 40th and Pine with 119 individual units. Designed for graduate and professional students, the \$17.2M building is close enough to campus that those with non-traditional work and study schedules can get to and from their laboratories, hospitals, and research spaces safely and easily.

Tangen Hall



The new seven-story, 68,000 sq. ft. **Tangen Hall** will house both the Penn Wharton Entrepreneurship and Wharton Small Business Development staff. Supporting student entrepreneurship and innovation, the building will include incubator spaces to pilot student-led ventures such as a Makerspace, Test Kitchen, and Integrated Product Design (IPD) space in partnership with the School of Engineering and Applied Science and Penn Design. This \$46.5M project is anticipated to be completed in fall 2020.

Pennovation Lab Building



In June, Penn announced plans to move forward with the **development of a Lab Building on the Pennovation Works site**, a four-story, 73,400-square-foot structure with 35,000 square feet of wet lab, office and flex space. It will cater to growing and next stage companies with 10 to 25 employees that need from 2,000 square feet to 10,000 square feet. Work on the building began in summer 2019 and will be completed by August 2020.

PENNOVATION WORKS

In FY19, two cohorts passed through the **Penn LPS Coding Bootcamp** at the Pennovation Center. In July, and again in October, members of the graduating cohort presented their projects from the 6-month-long bootcamp to members of the public and industry experts.

Penn LPS Coding Bootcamp



JPOD @ Philadelphia



Johnson & Johnson Innovation, JLABS launched **JPOD @ Philadelphia** in collaboration with Penn to accelerate healthcare innovation and commercialization in Philadelphia and beyond.

JPOD @ Philadelphia, located within the Pennovation Center, is a networking hub which includes a secure telecommunications conferencing system to connect regional innovators to the Johnson & Johnson Innovation network.

The Pennovation Accelerator



The Pennovation Accelerator invites a cohort of local startups to engage in a six-week program to develop their business strategy and cultivate their network. Cohort companies are hosted at the Pennovation Center and participate in weekly educational sessions presented by subject matter experts.

The **Pennovation 2018 Year in Review** takes a look back at the stats, stories, and snapshots that shaped an extraordinary year in this ecosystem of innovation, where ideas go to work. **View the full Year in Review** on the Pennovation Works website.

Philly Tech Week



In May, the Pennovation Center hosted four events for **Philly Tech Week 2019**. These events were excellent opportunities to introduce a large section of the Philly tech community to the resources and talent at Pennovation Works.

ADMINISTRATION

Employee Recognition



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. The Department also supports the Division's technology needs, employment, and human resource functions.

In July 2019, Penn Central Human Resources Division rolled out Workday@Penn, a cloud-based human capital management-related system for staff recruitment, benefits administration, payroll, and time management. Simple and efficient, as well as accessible from a smartphone, Workday@Penn enables staff to manage personal information, view compensation, request time off, view benefits, and more. Housekeeping, trades, and all administrative staff attended training sessions for the new system before the rollout began in summer 2019.

FRES recently implemented a **new recruiting process**. The goal is to create efficiencies by having FRES HR act consultatively with Hiring Managers, utilizing a streamlined process to enhance consistency in recruiting new employees.

Various FRES departments, including Operations & Maintenance, Office of the University Architect, and Real Estate established **economic inclusion goals**. Similar to those established by Design & Construction annually, but specific to each department, these goals are intended to increase diverse spending across all FRES divisions. As of fall 2019, each department has exceeded its spending goals.

New Employee Orientation



During 2019, FRES began holding **New Employee Orientation** training on a quarterly basis. These training sessions, which feature short presentations from the executive directors of each department, as well as a welcome video from Penn's leadership, and special welcome by Anne Papageorge, allow new employees to ask questions, meet other new employees, and understand the many benefits of being part of the Penn community.

Throughout FY19, many FRES staff took advantage of valuable **Professional Development and Training** opportunities offered by the University. These include STEP UP, a presupervisory training with Central Human Resources program for motivated individuals who want to lead themselves and others more effectively, Essentials of Management, which helps new managers learn about effective



communication and performance management, the Advanced Management Program (AMP UP), an advanced leadership skills course for mid-level managers, and Leadership at Penn, a program for senior leaders. Additionally, managers and staff participated in training for Kronos, the FRES time management system, and attended a presentation from Penn's Department of Public Safety about emergency procedures and resources. Finally, author and motivational speaker Steve McClatchy delivered staff training on Time Management and Personal Leadership.

Trades Training



In addition, 231 trades personnel received vendor-developed **safety training** that aligned with their specific job duties and tasks, such as electrical, fall protection, confined space, and work place hazard awareness. 486 Housekeeping staff completed job-specific standard operating procedures training over the same period, including waste collection, blackboard/whiteboard training, restroom/locker room cleaning, and floor care.

In July, FRES employees came together for our **Annual Update** meeting, where VP Anne Papageorge spoke about the "Power of Penn—The Power of FRES." The annual meeting celebrated our accomplishments over the past year and outlined our major contributions to campus development planned for the next few years.

Joe Barclay, 40 years of service at FRES



A number of FRES staff gathered for a festive brunch in Houston Hall's Hall of Flags on March 13 to celebrate their coworkers' individual achievements. This was the 12th annual **Employee Recognition Ceremony**, and awards were presented for years of service, earning STEP UP over the past year, and volunteering on FRES' Engagement Committee. Joe Barclay received special recognition for his 40 years of service as a steamfitter at FRES (and in his speech, thanked Penn and FRES for making it a "great ride!"). Darryll Norwood was recognized for his 45 years as a FRES housekeeper. FRES VP Anne Papageorge spoke about the high standards FRES staff display in their daily work, evidenced by feedback from colleagues across the university, and FRES HR Director Chereese Martin spoke about the "attitude of gratitude" she feels every day working with her colleagues.

In April, FRES team members were recognized at the **2019 Models of Excellence Awards**, one of the University's highest honors for staff. The Perelman Center for Political Science and Economics (PCPSE) team received a Models of Excellence Honorable Mention, as did the Houston Market Renovation Team. Housekeeper Lorenzo Jackson won a Pillar of Excellence award, and Jose Colon, a member of the Urban Parks Team, received an honorable mention in the same category. Since 2014, this award has recognized weekly-paid staff member accomplishments that reflect initiative, leadership, increased efficiency, and a deep commitment to service.

Lorenzo Jackson, Pillar of Excellence Award



Holiday Party



On December 19, FRES staff gathered to celebrate the season with a *Winter in Our Campus Arboretum* holiday party. The delicious food options included our Shop Penn brand partners Hip City Veg, Federal Donuts, and the Greek Lady, and this year's celebration featured some brand new "reindeer games," including a snow ball and reindeer toss and a snowman building contest. Staff also enjoyed the photo booth (and the props!) and a good time was had by all.

The **FRES Women's Group** was expanded in winter 2019. Now managed by Landscape Planner Chloe Cerwinka and Sustainability Analyst Madeline Schuh, it serves as an inclusive and diverse network that supports personal and professional development at FRES, and seeks to empower and connect a community of women who advocate for each other. Their monthly meetings feature speakers and wellness activities, as well as table discussions of relevant issues like stress management and work/life balance. The ultimate goal of the group is to promote growth and strengthen the relationships and voices of women in FRES.

FRES Women's Group



Go Red for Women



On March 29, FRES offered a healthy luncheon to all staff in conjunction with **Go Red for Women**, the American Heart Association's national movement to end heart disease and stroke in women. The luncheon included a presentation by an AHA representative about how the campaign brings awareness to women's heart health, as well as information and handouts about Penn-specific health initiatives like Penn Sustainability's 30x30 Challenge and University-sponsored programs to quit smoking.

On April 25, FRES participated in the national **Take Our Daughters and Sons to Work** campaign, with 65 FRES staff children in attendance. This year's activities kicked off with a continental breakfast at FRES, followed by sessions around campus including a demonstration from the Penn Working Dog Center, a kite flying demonstration from the ISC Office of Information Security, and an Art & Architecture program from the School of Design.

FRES Summer Picnic



This past July, FRES Staff once again gathered for an afternoon of food and socializing at the annual **FRES Summer Picnic**. Due to a forecast of thunderstorms, the picnic was relocated to the lobby of the Left Bank, where the afternoon's festivities included a delicious lunch buffet, games and music, and fun with colleagues and friends.



STOP | THINK | CONNECT

INFORMATION TECHNOLOGY

AiM, the work order tracking system used by Operations & Maintenance, was upgraded in FY19. As part of the project, we incorporated the University's new authentication protocol in our customer web form and provisioned and distributed over 200 new iPhones to mechanics who use the system.

AiM



The **SCADA** project was completed in FY19. FRES IT worked side by side with Engineering and ISC team members to ensure that the technical infrastructure was implemented as designed and all testing and quality assurance performed to meet established security standards.

In FY19, we upgraded the technology in our six small conference rooms at the Left Bank, installing large HD monitors and wireless keyboards. These devices incorporate computer

IT Team



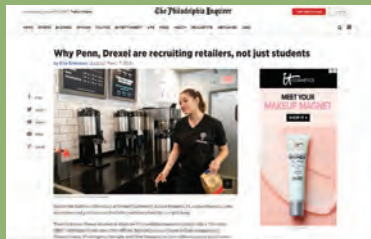
and white board functionality. This has eliminated the need for any external projection equipment and simplified and enhanced document review, collaboration and presentations by FRES and vendor partners.

Cyber Security remains a priority for the University, and in FY19, FRES IT completed a training program for all 835 Trades mechanics, enrolling them in two-step verification. Working in conjunction with the PennKey, this program secures both Penn and user data by requiring the individual to provide two pieces of information in order to access systems that contain sensitive data.

During FY19, FRES IT worked with the Human Capital Management (HCM) team and the time clock application Kronos to develop interface programs that would send data to Workday and receive data back from it. These integrations went into production on July 1 during the transition to Workday.

Human Resource Team





IN THE HEADLINES

JULY 3, 2019
Penn Today
[A culture and ecosystem of innovation](#)

JUNE 18, 2019
Philadelphia Business Journal
[Pennovation Works to enter next phase with \\$35 million project](#)

JUNE 11, 2019
Technical.ly Philly
[Here's all the tech involved as Penn Museum prepares to move its 25,000-pound Sphinx](#)

MAY 10, 2019
Technical.ly Philly
[Leggy bots, flying bots, building bots: Here's what Penn's robotics hub is up to](#)

APRIL 18, 2019
Yahoo Finance
[Penn's first dedicated building for cross-campus student entrepreneurship will provide space for product development and business incubation](#)

MARCH 13, 2019
Penn Today
[Green labs group strives to make science more sustainable](#)

MARCH 7, 2019
The Philadelphia Inquirer
[Why Penn, Drexel, are recruiting retailers, not just students](#)

JANUARY 9, 2019
Penn Today
[By the Numbers: Pennovation Works' ascendant 2018](#)

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Visit Philadelphia
[25 Things To Know: Philly's Food Scene](#)

DECEMBER 20, 2018
Pennsylvania Gazette
[We're the Stewards of This Wonderful Collection](#)

OCTOBER 29, 2018
Curbed Philadelphia
[An adaptive reuse project wraps up at UPenn](#)

SEPTEMBER 19, 2018
Penn Today
[Growing a 'culture of cultivation' on campus](#)

AUGUST 8, 2018
The Chronicle of Higher Education
[How Colleges Are Sparing Birds' Lives and Conserving Energy](#)

JULY 26, 2018
Philadelphia Magazine
[Best of Philly: Franklin's Table](#)

JULY 18, 2018
Philadelphia Business Journal
[Penn, Johnson & Johnson Team Up to Accelerate Innovation](#)

AWARDS

A number of Penn building projects and sustainability initiatives received honors and recognition between June 2018 and July 2019. FRES proudly shares these with the University community on facilities.upenn.edu.

Larry Robbins House

American Institute of Architects (AIA), New York Chapter
Honor Award, Adaptive Reuse/Historic Preservation—
August 2018

Architecture Press Release

Certificate of First Award

February 2019

Richards Medical Research Labs

Preservation Alliance of Greater Philadelphia

Grand Jury Award

March 2019

Houston Market

National Association of College and University Food Services
(NACUFS)

Gold Loyal E. Horton Dining Award

April 2019

Penn Dental Robert Schattner Pavilion and Clinic

American School & University Magazine

Special citation for renovation and modernization

December 2018

Stephen A. Levin Building

American Institute of Architects (AIA),
Virginia Chapter

Architecture Award of Merit

November 2018

Moelis Grand Reading Room in Van Pelt— Dietrich Library

Collaboration of Design and Art (CODA)

Merit Award

September 2018

Environmental Sustainability Awards

Environmental Protection Agency

Green Power Partnership Top 30 College & University List

April 2019

Arbor Day Foundation

Tree Campus USA

April 2019

Partnership for a Healthier America

Healthy Campus Initiative Partner

February 2019

Second Nature

Climate Leadership Award

November 2018

League of American Bicyclists

Silver Bicycle Friendly University Award

November 2018

Association for the Advancement of
Sustainability in Higher Education

Top-performing University

September 2018

Other Recognition

Preservation Alliance of Greater Philadelphia

Lifetime Achievement Award to former University Architect David Hollenberg

March 2019

LEADERSHIP

Division Leadership

Anne Papageorge
Vice President

Office of the University Architect

Mark Kocent
University Architect

David Hollenberg
University Architect, Special Projects

Daniel Garofalo
Environmental Sustainability Director

Chris Hanson
Data and Document Manager

Robert Lundgren
University Landscape Architect

Design & Construction

Michael Dausch
Executive Director

Mariette Buchmann
Director

Chris Kern
Director

Jennifer Wetzel
Director

George Zafiropoulos
Director

John Zurn
Director

Sudha Menon
Senior Capital Account Manager

Real Estate

Ed Datz
Executive Director

Steve Becker
Director, Project Management

Dennis Flannery
Operations Manager

Laura Park-Smith
Director, Portfolio Management

Operations & Maintenance

Famararz Vakilzadeh
Executive Director

James Bean
Director, Labor Relations

John Hopley
Woodland Director

HarveenKaur Kothari
Locust Director

Betsy Robinson
Special Projects

Ben Suplick
Director, Engineering & Energy
Planning

Finance & Administration

Elizabeth Hansen
Executive Director

Marilyn Jost
Executive Director,
FRES Special Projects

Karen DiMaria
Controller

Anita Hall
Financial Manager

Victoria Iannotta
Director, Information Technology

Chereese Martin
Director, Human Resources

William McKeaney
Director, Finance and Accounting

Mike Stack
Director, Facilities Administration

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