



Facilities Management

A photograph of a building's rooftop solar array. The solar panels are dark blue with silver frames, arranged in a grid. The building has a grey metal roof and large windows. In the background, a brick building with a white arched window is visible. The sky is blue with a pattern of small orange and white dots.

# FUTURE FORWARD

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annual report  
2016-2017

## On the cover

With the assistance of multiple Facilities Management team members, the University of Virginia significantly increased renewable energy within its electricity portfolio during the 2016-2017 fiscal year. Projects included the installation of rooftop solar panels owned by UVA, roof space leased for Dominion Virginia Power-owned solar panels and off-Grounds utility scale solar fields. The annual Earth Week Expo in April 2017 brought statewide recognition for UVA's growing renewable energy portfolio, with Gov. Terry McAuliffe cutting the ribbon for UVA's largest owned and operated on-site solar array on Clemons Library.



On Grounds, solar panels have been installed on Clemons Library (126 kW) and Skipwith Hall (15 kW) as well as Dominion-owned panels on Ruffner Hall and the UVA Bookstore (394 kW). The Office for Sustainability, Geospatial Engineering Services and Power & Light have worked together to develop a comprehensive rooftop solar plan to identify the best candidates for future solar installations. In addition, the University has entered into power purchase agreements with Dominion to purchase the output of two new utility-scale solar power projects. When completed, these projects will generate enough solar power to offset 21 percent of UVA's electricity demand and significantly reduce greenhouse gas emissions.

## Photo credits

The photos in this report were provided by the following departments and organizations:

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  - Health System Physical Plant
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  - Operations
  - Programs & Informatics
  - Project Services
  - Technology & Innovation
- University Communications
- UVA Health System
- University Human Resources
- SunTribe Solar



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# CONTENTS

<b>Message from Don Sundgren</b>	<b>3</b>
<b>Major Initiatives</b>	<b>5</b>
<b>Sustainability</b>	<b>19</b>
<b>Operations</b>	<b>24</b>
<b>Programs</b>	<b>30</b>
<b>Community Involvement</b>	<b>37</b>
<b>Financials</b>	<b>39</b>

## Statement of Purpose

Creating and caring for the physical environment in which those who seek enlightenment, knowledge, health and productive lives can flourish.

## Vision

Excellence, innovation, and leadership in our support of the education, research, health care and public service mission of the University.

## Core Values

- Collaboration: Striving to work together and with others to accomplish the purpose and vision of the University by sharing knowledge, learning and building consensus.
- Respect: Sharing a common respect for ourselves, each other and our University community.
- Integrity: Striving for honesty and equity in all our endeavors.
- Excellence: Striving to be second to none in all that we do.
- Pride: Taking pride in the beauty of our grounds, the grandeur of our buildings and the quality of our work.
- Community: Making the University and our community a better place to study, work, heal and live.

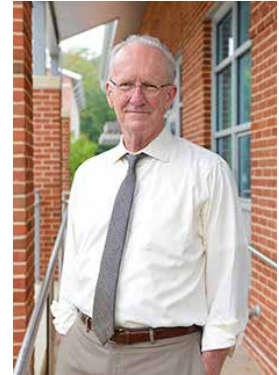


## Facilities Management

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# MESSAGE FROM DON SUNDGREN

Facilities Management employees continue to dedicate themselves to the highest standard of stewardship while demonstrating initiative, professionalism and innovation. We are proud that several of our efforts have earned special recognition over the past fiscal year:



- We supported the University's achievement of an important milestone in its support of sustainability initiatives with the expansion of renewable energy projects on Grounds, including multiple solar installations over the past year and research supporting plans for future solar installations.
- We were honored to assist with a Founder's Day dedication ceremony of Skipwith Hall, named for Peyton Skipwith, an enslaved laborer freed in 1833 who quarried stone for buildings at UVA. About 25 descendants of Skipwith's relatives joined members of the FM and UVA community at the ceremony.
- We expanded our second annual Girls Day event which aims to increase interest in construction, engineering and the building trades among young women. During the event, 50 area girls between the ages of 12-18 toured various worksites hosted by some of FM's female leaders.
- Environmental Resources Projects Manager Jess Wenger was selected as one of the 2017 recipients of the prestigious Leonard W. Sandridge Outstanding Contribution Award for her commitment to supporting environmentally-friendly projects, such as zero-waste events and implementing composting operations at the dining halls.
- We were once again honored for our landscape and architecture as one of the 10 Most Beautiful Universities in the U.S. by *Times Higher Education* in 2017. In addition to our beautiful Grounds, our commitment to stormwater best management practices was recognized with The Dell and the UVA Hospital's green roof receiving top awards from the Chesapeake Stormwater Network.
- We achieved continued reductions in the number of lost and restricted work days as well as increased outreach and training, with 916 Facilities Management employees receiving training in multiple safety topics during the past fiscal year.

As demonstrated with the above achievements, we continue to move toward excellence in our four core initiatives: sustainability, safety, diversity and respectful workplace and a new core initiative introduced in August 2017, training and development.

We continue our long tradition of giving back to our community through many important events. Our employees generously supported the Day of Caring, the Commonwealth of Virginia Campaign, the Toy Lift, Virginia Blood Services, the Ronald McDonald House and new efforts this year to support the UVA Children's Hospital, Morven Kitchen Garden and hurricane relief.

We offer our sincere gratitude for your trust and belief in us. We look forward to supporting your facilities needs and exceeding your expectations. Thank you.

A handwritten signature in blue ink, appearing to read 'D. Sundgren'.

Donald E. Sundgren  
Associate Vice President and Chief Facilities Officer



### Solar Projects

Gov. Terry McAuliffe cut a symbolic ribbon for the new solar array installed atop Clemons Library. McAuliffe joined UVA and Facilities

Management staff members to mark the official launch of the University's expansion of the use and production of solar energy.



### Skipwith Hall Dedication

Facilities Management's newest building was dedicated in honor of Peyton Skipwith, an enslaved laborer freed in 1833 who

quarried stone for buildings at UVA. During the April 13 dedication ceremony, about 25 descendants of Skipwith posed for a photo in front of the building.



### Wenger Named OCA Winner

Environmental Resources Projects Manager Jess Wenger was selected as one of the 2017 recipients of the prestigious Leonard W.

Sandridge Outstanding Contribution Award for her commitment and dedication to environmentally-friendly projects serving UVA and the Charlottesville community.



### FM Girls Day Expands

Facilities Management expanded its second annual Girls Day event to include a greater number of girls and

new activities. Participants enjoyed an afternoon exhibitor fair with hands-on activities and games provided by 20 different vendors and UVA groups and tradespeople.



### Grounds honored

UVA was once again honored for its landscape and architecture as one of the 10 Most Beautiful Universities in the U.S. by *Times Higher*

*Education* in 2017. In addition to the beauty of Grounds, FM's commitment to stormwater best management practices was recognized by the Chesapeake Stormwater Network, with The Dell and the UVA Hospital's green roof receiving first and third place awards respectively.



### Fifth Annual Town Hall

During Facilities Management's fifth annual Town Hall meeting, Associate Vice President and Chief Facilities Officer Don

Sundgren spoke to hundreds of FM employees about the department's accomplishments over this past year and upcoming focus areas, including capital expansion and a further commitment to employee growth and empowerment.

# MAJOR INITIATIVES

Facilities Planning & Construction is responsible for the execution of the University's Capital Project Program. FP&C provides management of all design and engineering services, management of all construction services and procurement for all construction contracts and design/engineering professional services contracts for the University community. The department's goals are to set the standard for excellence in higher education and healthcare project delivery.

In 2016-2017, FP&C's accomplishments included:

- Completed and occupied several new major facilities totaling \$66,767,796.
- Awarded 84 construction contracts totaling \$355,965,342.
- Processed 476 professional services contracts and service orders totaling \$37,010,355.
- Put in place construction with a value of \$165,000,000.
- Design and construction continues on major new facilities totaling \$986,079,200.

## Academic Division

The Academic Division had a total workload of 23 capital projects. Using the HECOM threshold of \$2 million for a Capital Outlay project, these active projects included:

- 7 capital projects in design for a total of \$94,872,179.
- 12 capital projects in construction for a total of \$400,710,000.
- 4 capital projects completed for a total of \$25,062,154.

Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
Brandon Ave. Greenstreet & Utilities	35 kV Ductbank Project	1515 University Ave. Student Ctr.
Brandon Ave. Upperclass Housing	Baseball Stadium Expansion	Hotel A Renovation
Contemplative Sciences Center	Gilmer Hall & Chemistry Renovation	*Leake Lower Level Renovation
East Range Stormwater Improvements	Gooch Dillard Phase III	Newcomb Road Chiller Plant
*Ivy Stacks Expansion	Gooch Dillard Phase IV	
Memorial to Enslaved Laborers	IRC Renovations Phase I	
Student Health Center	Materials Science HVAC	
	McCormick Road Houses	
	Men's Basketball Locker Room Ren.	
	Old Cabell Hall MEP Upgrades	
	Olsson Hall (Link Lab)	
	Total Advising Center	

Non-Capital Projects in Design	Non-Capital Projects in Construction	Non-Capital Projects Completed
Runk Dining Emergency Generator	AFC Pool Systems Improvements	Blandy Farm Cottages
Runk Dining HVAC Upgrade	Cauthen 1st Floor Renovations	Blandy Farm Greenhouse
	IRC Utility Upgrades	Clemons Roof and Solar PV
	Mem. Gym Slate Roof Replacement	Pavilion III Renovation
	*Pavilion VII Porch Repairs	Pavilion V to Pavilion VII Roof & Railing
	Tunnel C Repair	
	Wilson Plaza Landscape Improvements	

\*Indicates projects design by FP&C's Design Group

## Academic Major Commissions

### Baseball Stadium Expansion

Expansion of the existing baseball stadium at Davenport Field, home of the Virginia Cavaliers baseball team, began in June 2017. The expansion will enhance the game-day experience for devoted fans through the addition of permanent grandstand and field level seating, expansion of the concourse along right field and center field, new concessions and restrooms, and a new club space. Space will be created but left unfinished for a future home for the coaching staff and a future center for pitching development. The current project features extensive safety improvements including a paved lower lot near Copeley Road, a new crosswalk and sidewalk from the U-Hall parking lot to the stadium, and a paved upper lot.



The design architect is DLR Group of Omaha, Neb. Construction management services are by Martin Horn of Charlottesville. The project budget is \$16.1 million. The expansion is scheduled to be completed by the start of the baseball season in February 2018.



### 35kV Ductbank Project

The 35kV Ductbank project will install 2.75 miles of 35kV ductbank to provide a dedicated underground power feed to the University of Virginia. The new ductbank will connect the existing Sherwood, Alderman, and Cavalier substations through underground ductbanks consisting of two, four, or six eight-inch PVC conduits encased in concrete. Large concrete electrical vaults will be provided at approximately 500-foot intervals to permit Dominion Virginia Power to install new electrical cables.

Overhead distribution lines currently supply the majority of electrical power to the University grounds through the three existing substations. Over the years, the University has experienced temporary power outages caused by severe weather and short term “blips” that cause significant disruption to research, the hospital, and facilities operations. In an effort to minimize disruption to “mission critical” functions, the overhead lines within the city will be relocated into an underground concrete ductbank that will be nearly immune to weather related outages.

Engineering services are being provided by Dewberry Engineers of Richmond. The general contractor is Faulconer Construction Co. of Charlottesville. Construction began in August 2016, and will be completed in August 2017. The project budget is \$14.6 million. Under a separate project, Dominion Virginia Power will install new electric cable within the ductbank that will be energized in October 2017.

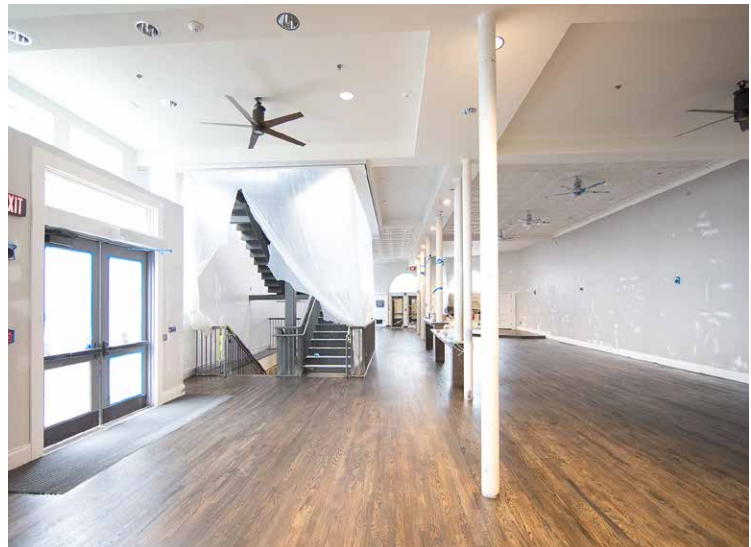


## 1515 University Avenue Student Center

The University recently completed a renovation of 1515 University Avenue as a new student center on The Corner. Guided by the design of Nalls Architecture, and with construction performed by Project Services, the project created a student-centered space with the vibrancy of a commercial environment, offering a safe and inclusive late-night atmosphere without alcohol.

The project planning committee included engaged students who helped make important decisions regarding programming, finishes, and furnishings throughout the process. The basement houses a sports lounge, with billiards, ping-pong, and arcade games as well as TV monitors for watching UVA sports events. The first floor, featuring a large open space with a 14-foot-high tin panel ceiling, provides multiple seating areas in a flexible format along with a small performance stage and a café offering bistro-quality desserts. The second floor provides meeting and rehearsal spaces of various sizes to meet the needs of student groups.

This \$4.9 million renovation project held its grand opening at the end of March 2017 and has proven to be a favorite location for students to gather.



## Gooch Dillard Phase IV

The nine buildings that comprise Gooch Dillard Residence Halls — which were designed by Edward Larrabee Barnes — were built on challenging terrain without radically altering the natural topography. The buildings, which form two arms around a gully cutting through the sloping landscape, are artfully arranged to preserve the forested terrain. Previous residents felt the woods were too dark, and that the uneven grade was not conducive to outdoor gathering.

These elements have been improved by opening up the front area and creating sight lines through the woods. In the final phase, outdoor lighting, handrails, gates and a bell tower are being painted, upgraded or replaced. Code compliant access will be ensured within the complex. Landscape enhancements will include a fire pit, hammock posts, and open lawn for gathering.

Architectural services are being provided by VMDO Architects of Charlottesville, with Rhodeside & Harwell Landscape Architects. Construction Management services are being provided by New Atlantic Contracting of Winston-Salem, N.C. The project budget for all four phases is \$26 million. The renovation of the residence halls and the landscape enhancements started in 2014 and the final phase will be completed in August 2017.



## McCormick Road Houses

The McCormick Road Houses are a first year residential complex and include ten dorms totaling nearly 400,000 square feet. The neo-colonial structures were built in the 1950s with concrete frames, brick exterior, and wood windows and trim, and have generally been well maintained. However, they are not air conditioned and lack many of the amenities now expected in newer dorms at the University. The Department of Housing and Residence Life envisions a multi-phase project to modernize the dorms by adding air conditioning, fire protection, bed capacity, new common spaces, elevators, and accessibility improvements.

All electrical, mechanical, and plumbing components will be replaced. Student rooms, common areas and bathrooms will be completely renovated. New elevators will be installed in each building, and sprinklers will be installed for fire protection. All exterior windows will be replaced with modern, aluminum-clad wood windows; doors will be upgraded in similar fashion. The Castle dining facility will be completely renovated.

The McCormick Road Houses Renovation project will be completed in three phases, each lasting 14 months. The total project duration is expected to be approximately 38 months. The entire project is expected to be completed in August 2020.

The project budget is \$104 million. The project architect is Clark Nexsen of Raleigh, N.C. Construction management services are being provided by Barton Malow of Charlottesville.

## Ivy Stacks Expansion

Ivy Stacks was built in 1994 to hold 750,000 volumes, providing off-site storage for the University of Virginia Library system. High density shelving was added in 2009 increasing capacity to 2 million volumes. Although it is only 60 percent full, the University is doubling the current capacity so that books can be stored at the Ivy Stacks during the upcoming renovation of Alderman Library with its more than 2.5 million volumes.



Other branch and specialty locations, such as the Harrison Small Special Collections Library, are beyond capacity and may need the space at Ivy Stacks during future renovations. The Ivy Stacks Expansion will include archival quality HVAC systems, supported by solar energy cells, to provide optimum humidity and temperature control for book and document storage. The book processing area will be reconstructed to create a better flow at every step, from receiving, cataloging and shelving new items, to checking out and shipping items that have been requested. The expansion will add 11,000 gross square feet of book storage, and 2,000 gross square feet to the staff work area. A scholar's reading room is also included.

Architectural services are being provided by the FP&C Design Group. Nielsen Builders, Inc. has been awarded the construction contract. Construction started in summer 2017 and will be completed in spring of 2018.

## Men's Basketball Locker Room Renovation

The Men's Varsity Basketball Locker Room renovation at John Paul Jones Arena will modernize the existing locker room in order to provide a fresh and home-like feel to attract a high-caliber recruiting class for the Virginia basketball team. The existing compartmentalized layout was re-envisioned to provide a fluid layout with updated interior finishes, including the use of reclaimed U-Hall flooring for a feature wall to showcase Coach Bennett's five pillars of leadership.

The renovation will provide a large open team lounge, a new Gatorade Fuel Station and Grab & Go Station, a new rest and recovery room with sound insulation, sleep pods and bunk beds. In addition, a tiered film room and new locker rooms for the team and coaching staff are planned. An extensive graphics package has been designed to create a cohesive, branded home for the team.

The design architect is Populous of Kansas City, Mo., with engineering services by 2rw of Charlottesville. General Contracting services are provided by Canterbury Enterprises of Chester. The project budget is \$3 million. The project is scheduled to be complete in September 2017.



## Gilmer Hall and Chemistry Renovation

Renovation is underway for Gilmer Hall and the Chemistry Building. Gilmer Hall was built in 1963 with a major addition in 1987, for a combined area of 221,980 square feet, providing research and teaching facilities for the Biology and Psychology departments.

The 208,392-square-foot Chemistry Building, completed in 1968, provides research and teaching laboratories and general-use classrooms. The Chemistry Addition was completed in 1995 and is not within the scope of this project, but will provide swing space.

Today these buildings house the majority of teaching in the sciences, and are workhorse facilities for the College of Arts and Sciences. Most of the classrooms and labs, little altered from their original designs, are inefficient and out of step with current teaching and interdisciplinary research practices. These issues will be exacerbated by the projected growth in student enrollment in the sciences and will hinder the College's efforts to attract students and faculty.

Architectural services are being provided by Perkins + Will of Washington, D.C. Construction management services are being provided by the Whiting-Turner Contracting Company of Richmond. The project budget is \$186.8 million. The phased construction began in April 2017 and will continue through 2021.



## Health System Division

The Health System Division responded to 35 new requests for services, contributing to a total workload of \$567,037,461 in active projects, including projects that have reached construction completion in the last year. Using the HECOM threshold of \$2 million for a Capital Outlay project, these active projects included:

- 27 projects in startup/request phase, budget/scope not yet developed.
- 60 small non-capital projects with an average size of \$149,796 for a total of \$8,987,738.
- 23 large non-capital projects with an average size of \$1,001,760 for a total of \$23,040,521.
- 3 small capital projects with an average size of \$3,200,000 for a total of \$9,600,000.
- 9 large capital projects with an average size of \$16,229,740 for a total of \$146,067,663.
- 1 very large capital project of \$376,500,000.
- 3 capital projects in design for a total of \$44,595,000.
- 7 capital projects in construction for a total of \$445,902,021.
- 3 capital projects completed for a total of \$41,705,642.

<b>Capital Projects In Design</b>	<b>Capital Projects In Construction</b>	<b>Capital Projects Completed</b>
Pinn Hall Center for Human Therapeutics	500 Ray C. Hunt Renovation	Education Resource Center
Pinn Hall Phased Laboratory Renovations, Phase I	Outpatient Procedure Center Renovation	Primary Care Center 4th Floor – Neurology Clinic
University Hospital Emergency Power Phase III	Pinn Hall 4th Floor Renovation	University Hospital HVAC Replacement Phase III
	University Hospital 7th and 8th Floors Renovation	
	University Hospital East Cafeteria Renovation	
	University Hospital Expansion	
	University Hospital HVAC Replacement Phase IV	

## Health System Major Commissions

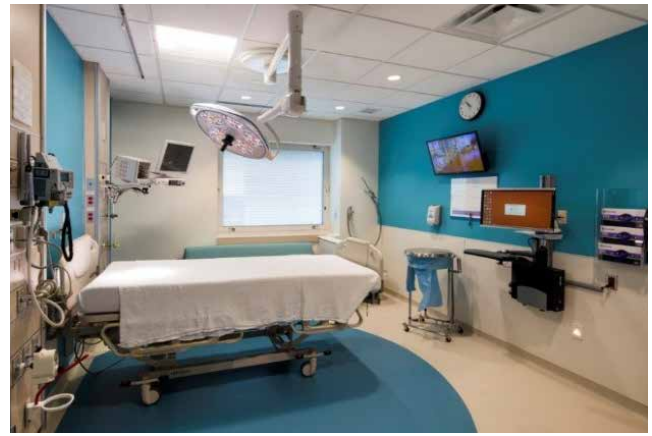
### University Hospital Seventh and Eighth Floor Renovations

The University Hospital Seventh and Eighth Floor Renovations project involves renovations to patient care units, including the 37,500-square-foot Children's Hospital on the seventh floor, and the 23,100-square-foot Women's Health area on the eighth floor.

On the seventh floor, the pediatric intensive care unit (PICU) patient rooms will be renovated, including new family-friendly and ADA compliant amenities; learning spaces for children; a new 4-bed pediatric bone marrow transplant unit; and new nurse stations.

Eighth floor renovations include conversion of some women's patient rooms to private, a new (replacement) continuing care nursery, an expanded and modernized triage area, refurbished and upgraded labor and delivery rooms including an ADA-compliant room, and new nurse-team stations. Mechanical, electrical, and plumbing systems will be upgraded throughout both floors.

The architect is HKS Architects and the construction manager is DPR Construction, both of Richmond. Construction is currently in the third of five primary phases, and is approximately 50 percent complete. The entire project is scheduled to be complete in the fourth quarter of 2018. The project budget is \$15.8 million.



### Outpatient Procedure Center Renovation

The Outpatient Procedure Center will be created in the building formerly known as the Outpatient Surgery Center, where the surgery and procedure services have been relocated to the first floor of the Battle Building at UVA Children's Hospital. This allows space for several outpatient procedure suites to be relocated from the University Hospital.

The first floor contains 25,000 square feet of procedure rooms, patient preparation and recovery bays, and ancillary support areas; the second floor includes 7,000 square feet of administrative space, for a total of 32,000 square feet. This project completely renovates the first floor to provide a five-room endoscopy suite with a 20-bed preparation and recovery unit, decontamination and sterilization room, a two-room motility suite, new waiting and registration areas and staff ancillary space. The building's infrastructure systems (HVAC, electrical, plumbing, life safety, and roof) will be replaced or upgraded. The second floor administrative offices will remain occupied and functional throughout the renovation with no architectural modifications. The existing entrance will be redesigned, including a new canopy.

The architect is Hord Coplan Macht of Alexandria. The construction manager is Whiting-Turner of Richmond. Construction is scheduled to be completed in July 2017 with the first patient scheduled for July 17. The project budget is \$12.4 million.



## University Hospital Expansion

The University Hospital Expansion Project will allow for expanded services to better serve the community. The project consists of an 11-story addition directly east of the existing hospital. The expansion includes a four-story base, a six-story tower, and a roof penthouse, with approximately 440,000 square feet of new construction and nearly 95,000 square feet of renovations to the existing hospital.

The new addition will include an expanded Emergency Department on the first floor, an interventional area on the second floor for surgery and procedures, a six-story patient bed tower, with three floors completed and three floors left unfinished, expansion of ancillary support spaces on the lower level, and a roof-top helipad. The Emergency Department will have a new entrance and will consist of 77 exam rooms and three resuscitation rooms. The interventional area will add four new operating rooms. The patient tower will consist of three finished floors, each with 28 ICU rooms, along with the three unfinished floors.

Utility projects to support the new Expansion Project were completed in late 2016. Groundbreaking for the project itself occurred in June 2016. As of summer 2017, five floors of steel were in place on the East side of the site, all foundation work was complete, and brick demolition from the façade of the existing hospital had finished, allowing for the structural connection of the new addition to the existing building.

The Hospital will take occupancy when the first phase, from the bottom level through the second floor mechanical space, is completed in May 2019. The remainder of the tower will be finished in early 2020, with the renovated areas in the existing hospital scheduled for completion in 2021. The architect is Perkins + Will of Washington, D.C. Skanska USA Building, Inc. of Durham, N.C. is the construction manager. The project budget is \$376.5 million.

## University Hospital East Cafeteria Renovation

The University Hospital East Cafeteria Renovation involves the complete renovation of the servery and grill areas, totaling just over 4,000 square feet. The renovation will provide for better customer flow, allow Dining Services to reorganize their menu, and include cosmetic upgrades to the seating area.



The first phase, which renovated the servery, was completed in March 2017. The second phase, which will renovate the grill area, is underway. The grill renovation emphasizes a healthful menu.

The architect is Baskervill of Richmond with design support from VisionBuilders of Charlotte, N.C. The general contractor is Virtexco of Norfolk. Construction will be completed in the third quarter of 2017. The project budget is \$3.1 million.

## Pinn Hall Center for Human Therapeutics

The Center for Human Therapeutics will be a place of national leadership for cellular therapy research and treatment. Portions of the second floor of Pinn Hall will be renovated to create a series of clinical and research laboratories meeting the current federal standards for Good Manufacturing Practices.



The design will provide flexibility as technology evolves and as the patient and subject populations change. The Center will encompass approximately 9,000 square feet of laboratory space containing: a six-laboratory suite with appropriate airlock separation and common corridors; clean-room support space for product handling, quality control and equipment storage; a clinical cytotherapy lab serving the Medical Center's Stem Cell Transplant department; liquid-nitrogen-based freezer storage; and shared office/administrative spaces.

The project will require a dedicated air-handling unit on the ground floor of Pinn Hall, new mechanical distribution systems with local pressurization controls and alarms, and replacement of the existing electrical distribution system within the project footprint. The project architect is Perkins + Will and the design engineer is Affiliated Engineers, Inc. Whiting Turner has been selected as the Construction Manager and will solicit mechanical and electrical trade packages, including design assistance, with the completion of schematic phase documents in July 2017. Construction will start in early Fall 2017 with substantial completion in Fall 2018, followed by commissioning and validation. The facility opening is scheduled for December 2018.

## Pinn Hall Phased Laboratory Renovations

The Pinn Hall Phased Laboratory Renovations will address the research floors (third through seventh) in the North Wing of Pinn Hall in a phased program. These projects will advance the Health System's Integrated Space Plan, which form the basis for the planning concepts of the project. Space needs were based on research growth targets for the next 10 years, with overall goals of increasing the total number of research groups within the existing building footprint; increasing the size and associated funding of each research group; and accommodating this increase in 20 percent less assignable space overall.



All the new spaces will promote cross-disciplinary collaborations while enhancing existing research synergies and shared campus resources. Each floor will include approximately 19,000 square feet of assignable space within an existing footprint of 26,000 gross square feet. Phase 1A will include the third floor of Pinn Hall and portions of the Pinn Annex (South Wing) to create a series of open layout research and support labs, as well as write-up spaces and offices, and shared conference spaces. Improved circulation between these lab components is a design goal. The project will increase the amount of daylight by replacing windows, and will explore other improvements to the exterior envelope such as upgraded thermal performance. Phase 1B will address the fifth floor in a similar manner.

The project architect is Cooper Carry Architects of Atlanta, the design engineer is Affiliated Engineers and the construction manager is Whiting-Turner, who will also assist with design. Phase 1A is expected to begin construction in Fall 2017 with completion in Fall/Winter 2018. Phase 1B design will be concurrent with Phase 1A, with construction dependent upon swing space. The project budget for these phases is \$31.95 million.



## 500 Ray C. Hunt Drive Renovation

The 500 Ray C. Hunt Drive Renovation is a 62,000-square-foot office building located in Fontaine Research Park that was purchased from the University Physician's Group. The building is being converted into an ambulatory health care facility for cardiology diagnostics, cardiology clinics, cardiology rehabilitation, and the pelvic surgery and urology clinics.

The renovation of the building, which is over 25 years old, replaces all of the building infrastructure components including the mechanical, electrical, plumbing, and fire alarm systems. The third floor is being renovated for the urology and pelvic surgery clinics which are moving from the West Complex and Northridge. The second floor is being renovated for a cardiology clinic, which is being created by moving and consolidating clinics from Northridge, Primary Care Center and University Hospital Second Floor West. The first floor will house the cardiology diagnostic functions, which are moving from University Hospital. The lower level will house the cardiology fitness and wellness clinic, which is moving from Northridge.

The architect is Hammel, Green and Abrahamson of Alexandria. The construction manager is Gilbane Building Company of Richmond. As of May 2017, the project was 80 percent complete, and construction is scheduled for completion in the third quarter of 2017. The projected project cost is under the budget of \$19.2 million.



## University Hospital HVAC Replacement

The HVAC Replacement projects represent a phased approach to replacement of air handling units (AHUs) and ancillary HVAC systems nearing the end of their projected lifespans in the main hospital. During Phase 1 the Hospital evaluated AHUs, exhaust fans and hydronic systems for criticality, condition and age and developed a program for replacements or upgrades.

This program is being carried out in five phases with Phase IV currently in progress. In addition to developing a proactive replacement program for aging HVAC systems, this project has accomplished organizational goals including a process for early engagement of the CM firm, maintenance/operations staff, and commissioning agents. This integrative approach has been the basis of improved protocols on several major projects at the University.

A contract for the contracting partner for construction for Phase IV was awarded in spring 2017. The team is currently in the planning and review period with field construction expected to begin this summer. The project contractor, Atlantic Constructors, is working hand in hand with the engineer, Leach Wallace; the commissioning agent, Burns and McDonnell; and the testing and balancing firm, Mechanical Balancing, as well as with key maintenance representatives and the project team, to optimize the construction schedule in an active hospital environment. AHUs are being provided by Air Enterprises, a company specializing in onsite fabrication.



## Project Services

Project Services offers a variety of services ranging from sign design and installation, moving/surplus support, multi-trade support for renovation projects, to full planning, design and construction support for renovations projects under \$2 million and full construction services for projects over \$2 million.

Project Services is comprised of three work groups that have an integral role in the successful completion of projects throughout Grounds including the Health System:

- Planning and Business Management
- Construction Management
- Trades Management

In FY 2016-17, Project Services completed projects in over 100 buildings around Grounds contributing to a workload of approximately \$40 million.

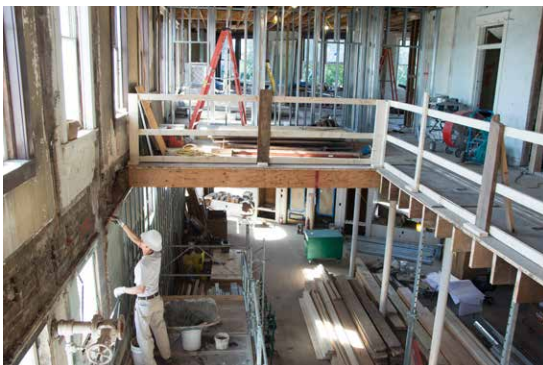
### 1515 University Avenue Student Center

The 1515 Student Center Renovation was a total renovation of a historic three story building located at 1515 University Ave performed by Project Services. This space was most recently the Student Bookstore and was used by many students and town's people for over 50 years. The first part of 1515 was built in the late 1800s and was used as a residence until the 1920s when the south end of the University Avenue side of the building was added on and it was partly used as apartments. Over the years many things have been housed at this location such as the Cavalier Diner as well as a bowling alley.



For over a year, Project Services combed through the existing structure from the basement floor to the new roof, updating all of the building mechanicals as well as floors, many walls and ceilings. This great space is the result of the long hours and hard work of many trades people such as historic mason/plasterers, electricians, carpenters, plumbers, fire and safety as well as several local contractors.

The building features several unique features including a rustic feel in the basement due to corrugated metal walls that blend seamlessly into reclaimed lumber, which was repurposed from the old kitchen floor. The first floor features a gourmet dessert and coffee bar and a performance stage, along with multiple pieces of artwork on the walls and the original metal ceiling panels from the 1920s, which were carefully removed, cleaned, painted and reinstalled. The main staircase – which appears to hang in mid-air – leads to an upper level with several spaces that groups can reserve for meetings. In addition, the second floor dance room features several large windows with padded seats.



Project Services Project Manager Adam Gragg and Project Superintendents Mathew Pannell and Jack Bryant worked closely with FP&C Project Manager James Zehmer as well as Nall's Architecture and engineering groups Keast & Hood, Lawrence Perry and Associates and Dewberry as well as a very creative and enthusiastic student group.



## Center for Membrane and Cell Physiology

The Center for Membrane and Cell Physiology project includes full renovation of fourth floor West Wing of Pinn Hall. Approximately 7,000 square feet was totally renovated from the original shell of existing space. Demolition started December 2016 with wall demolition and abatement of existing fire proofing of entire space. New work includes fire proofing of metal deck and structural steel in its entirety.

This was followed by the creation of a new layout configuration that provides four new office spaces, four pressurized Culture Rooms, one equipment room and two open lab spaces. Open Lab 1 provides four Accessible Conversion Work Stations equipped with Natural Gas, Laboratory Vacuum and Compressed air and a new five foot fume hood with fixed lab casework on either end of room. Open Lab Space 2 consists of three Accessible Conversion Work Stations equipped with Natural Gas, Laboratory Vacuum and compressed air, two new six foot fume hoods and fixed research lab casework on both end of lab space. New centrally located equipment room contains CO2 tanks that are distributed to pressurized culture rooms. The project was completed on schedule with Final Inspection obtained the first part of July 2017.

This project was led by Project Services Construction Project Superintendent Richard Burgess, Project Manager Hans McInturff, FP&C Project Manager Brenda Lowen with Design by Nalls Architecture.



## TJAG Project Portfolio

Project Services continues to support a healthy project portfolio at The Judge Advocate General (TJAG) School on North Grounds, working in partnership with the FP&C Design Group.

Accomplishments last year include:

- Completion of the TJAG Legal Center Library.
- Construction of the TJAG Pavilion to provide personnel a place to eat outside.
- Construction of the new guardhouse at the entry to the TJAG parking lot.
- Construction coordination with the Army Corps of Engineers for the new pop-up style entrance gates.
- Renovations of the NCOA offices and hallway on the basement floor.
- Renovation of the ladies restroom and lounge on the main floor.
- Replacement of the HVAC system in the Tudor Suite.



These projects were led by various members of Project Services including: Amanda Farmer, Todd Russell, Jon Bruneau, Brett Gentry, Tony Santana and Brian Pinkston. The FP&C design team included Joe Phillips and Ben Trudel.

## Carruthers Hall Upper Level Renovation

The Carruthers Hall Upper Level Renovation project consisted of renovations of approximately 8,000 square feet of the second floor, reworking private offices, conference rooms, adding collab space and improving the front entry to welcome visitors into the building.

The renovation added all new infrastructure to the renovated space and cleaned up years of old and abandoned mechanicals and electrical wiring. Storefront glass was installed in the offices and conference rooms, bringing natural sunlight to the entry and common areas. The architectural finishes installed give the new space a clean and modern feel.

The project was completed by Project Service trades and contractors, under the direction of Project Manager Nate Wilson and Superintendent Todd Russell. Train Architects and Dewberry (engineer), worked collaboratively with the Project Services team to create a product that enhanced the environment of Carruthers Hall for years to come.



## Grounds Improvement Fund Projects

The University Hall bus stop improvements project improved bus patron and pedestrian amenities by providing a sidewalk to replace a muddy path and a heaved asphalt waiting area. The project also installed new seating and relocated the bus shelter farther from the curb to allow the new sidewalk to continue to Massie Road.



The Scott Stadium commuter bus stop improvements project introduces bus patron amenities where there were none by installation of a paved surface and bus shelter. Currently, patrons must wait in, and traverse through, a mulch bed for the bus and it is often muddy.



The Crispell Drive motorcycle parking and landscape improvements project renovated an existing, trampled planting bed to accommodate much needed motorcycle parking along Crispell. Parking had been removed to make way for the Emergency Department Expansion and this project afforded an opportunity to replace these spaces.



The John Paul Jones Arena Parking Garage pedestrian safety improvements project, which was proposed by JPJ, provided a sidewalk from the north side of the garage to Copeley Road, where a new crosswalk was installed to allow pedestrians leaving an event from the north side of the garage to walk on a sidewalk as opposed to a service drive and to cross Copeley Road safely.

The McCormick Road crosswalk at O-Hill Dining project, which was proposed by FM, provided a crosswalk and code compliant curb cuts across McCormick Road at O-Hill Dining, where pedestrians traveling to/from the sidewalk and steps between the Astronomy building and adjacent garages can cross safely.

## Project Services Employees at Work

Project Services is comprised of over 100 highly-trained trades people responsible for performing renovations and improvements to Grounds. Services that the group performs include environmental remediation, carpentry, masonry, plaster repair, sheet metal, plumbing, electrical, cabinetry, sign design/fabrication and moving/general services.



*Project Services Cabinet Shop Supervisor Stu Fontaine (far left) reads blueprints for the casework/trim at the Darden Camp Library; Project Services Senior Cabinet Builder Brett Bryant (center) works on trimming panels for rails for the Pavilion V step repair project.*



*Project Services Masons (left photo from left) Lance Rothgeb and Timmy Proffitt prepare historic fabric for the new porch at the Colonnade Club as part of the Pavilion VII Porch Renovation project; Project Services staff (right photo from left) Mason Daisy Maine and Mason Apprentice Shane Harris carefully patch a brick section of a serpentine wall.*



*Project Services Trades Utility Worker Avery Wood (left) engraves signage for the Gooch Dillard Dorm Renovation; Project Services Sheet Metal Technician Kevin Houchens (center) creates duct work for the Campbell Hall Restrooms; Project Services General Services Technician Martin Rush (right) moves file cabinets to Carruthers Hall Cage during the building's renovation.*

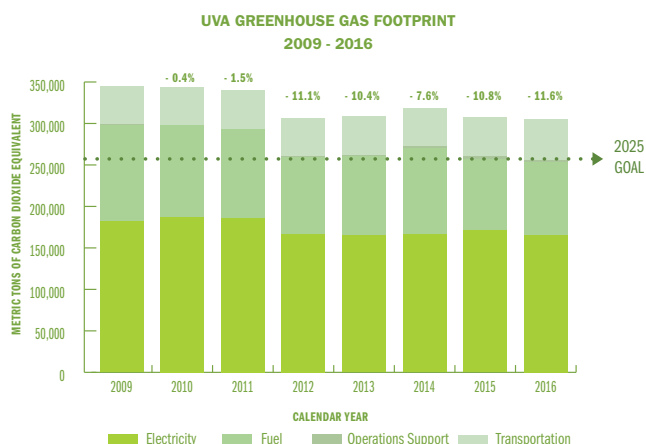
# SUSTAINABILITY

Facilities Management continues its support of the University's sustainability goals through numerous initiatives under the leadership provided by the Office for Sustainability (OFS). The team works to facilitate and implement programs and projects towards achievement of the goals outlined in UVA's Sustainability Plan, encompassing greenhouse gas, energy, water, materials and waste, food, engagement, curriculum, research, and using the Grounds as a learning tool.

UVA continues to work toward the Board of Visitors-approved goal to reduce greenhouse gas emissions 25 percent below 2009 levels by 2025. To date, an 11.6 percent reduction has been achieved, despite significant growth. In 2017, UVA published an updated Greenhouse Gas Action Plan to outline a path to meet the greenhouse gas goal.

UVA requires Leadership in Energy and Environmental Design (LEED) certification for all new construction and major renovation projects, and currently has 47 LEED certified buildings, with an additional 22 currently in progress. Green building standards were developed under the University's Facility Design Guidelines that prescribe minimum requirements for all new construction and major renovation projects. The most significant element is a requirement to achieve a minimum 25 percent reduction in energy use intensity, a measure of total energy use divided by the gross square feet of the building, from that of a similar building. Projects will also be required to evaluate the feasibility of deeper energy reductions and demonstrate that the project optimized decisions using energy modeling and life cycle costing.

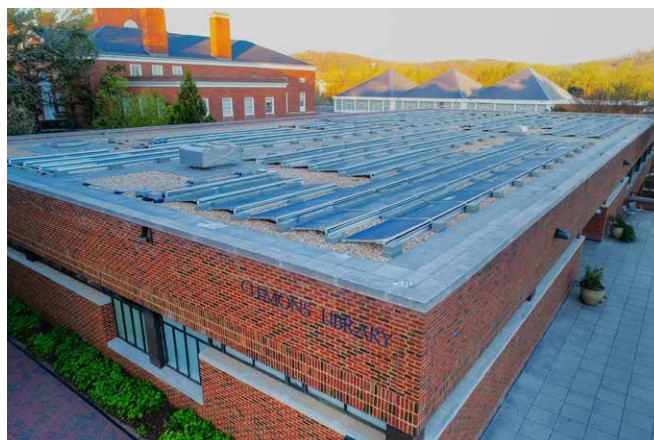
UVA has significantly increased renewable energy within its electricity portfolio, including installation of rooftop solar panels owned by UVA, roof space leased for Dominion Virginia Power-owned solar panels, and off-Grounds utility scale solar fields. The annual Earth Week Expo in April 2017 brought statewide recognition for UVA's growing renewable energy portfolio, with Gov. Terry McAuliffe cutting the ribbon for UVA's largest owned and operated on-site solar array on Clemons Library.



Greenhouse gas emissions have been reduced 11.6 percent since 2009, despite 2.4 million square feet in growth and a 5.2 percent increase in population. UVA's goal is to reduce emissions 25 percent below 2009 levels by 2025.



Skipwith Hall – home to many Facilities Management work groups – received Leadership in Energy and Environmental Design (LEED) Gold certification, recognizing its many sustainable features.



This 126 kW-AC solar array atop Clemons Library is expected to generate enough power to meet 15 percent of the building's annual electricity use.



Associate Director of Power and Light Sathish Anabathula managed the project to install solar panels on the UVA Bookstore pictured at right during installation in late 2016.



On Grounds, solar panels have been installed on Clemons Library (126 kW) and Skipwith Hall (15 kW) as well as Dominion-owned panels on Ruffner Hall and the UVA Bookstore (394 kW). OFS, Geospatial Engineering Services and Power & Light have worked together to develop a comprehensive rooftop solar plan to identify the best candidates for future solar installations.

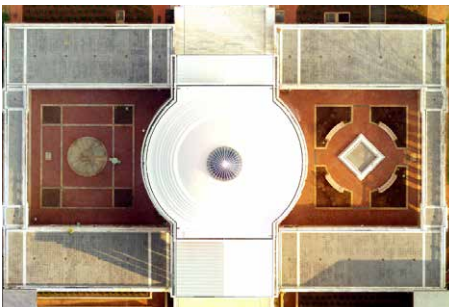
In 2016-17, UVA entered into power purchase agreements with Dominion to purchase 100 percent of the output of two new utility-scale solar power projects, the 17 MW Hollyfield project in King William County and the 15 MW Puller project in Middlesex County. When completed in late 2018, these projects will generate enough solar power to offset 21 percent of UVA's electricity demand and reduce greenhouse gas emissions by 32,000 MTCDE annually.



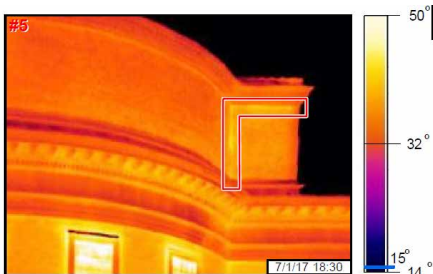
Delta Force has completed multiple projects to reduce energy use in buildings, including Newcomb Hall. Automation Services HVAC Apprentice Casey Morris removes old pneumatic controls which were replaced by new electronic controls in the building.

Since fiscal year 2007-08, conservation activities at the University have presented over \$32 million in avoided utility costs, including \$5 million in avoided costs in 2016 alone. UVA has reduced its energy use intensity by 9.2 percent between 2010 and 2016. This is a result of extensive retro-commissioning work in buildings plus initiatives in the heating and chiller plants to improve the efficiency of energy generation.

The Delta Force retro-commissioning program focuses on energy reductions in UVA's most energy-intensive buildings. Since FY07-08, \$10.3 million has been invested in this initiative with an avoided cost to date of nearly \$24.9 million. The simple return on investment has been approximately 2.4:1 since the program's inception. Delta Force utilizes staff from across FM to perform the recommended upgrades, including Automation Services' Building Optimization Team, Utilities and Maintenance Zones. Recent projects include Clark Hall, Newcomb Hall and the Aquatic Fitness Center. Upgrades included conversion of lamps to LED and installation of low-flow water closets/valves and new electronic controls.



This year, FM commissioned the use of drone technology to capture infrared and high-res images of buildings, including the Rotunda, to help identify thermal and weather proofing anomalies in facades and roofs.



In early 2017, FM commissioned a groundbreaking use of drone technology to support its stewardship of buildings by collecting thousands of high-resolution images of the physical characteristics of five historic and significant buildings, the Rotunda, Clark Hall, Rouss-Roberston, Wilsdorf Hall and Ruffin Hall.

An outside contractor worked with OFS, Maintenance Zones and Programs & Informatics building inspectors to collect infrared and high-resolution images of these buildings. Nearly 200 thermal and weatherproofing anomalies in the facades and roofs of these buildings were identified. These anomalies are being reviewed so that repairs can be made that will lead to longer lifespan of building materials, significant energy benefits and a promising return on investment.

The OFS Green Labs program formally launched in late 2016, with the addition of a full-time Green Labs Specialist, to optimize and reduce environmental impacts of energy-intensive lab spaces at UVA. The Green Labs Program brings together strategic building system improvements with engagement with lab occupants to achieve the highest reductions in energy, water and waste.

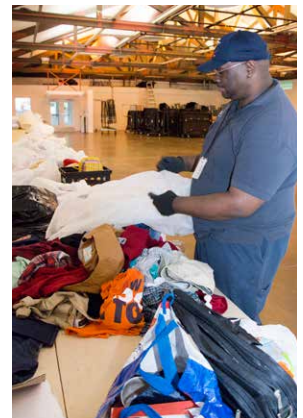
This year, the Green Labs Program facilitated 15 labs participating in the North American Freezer Challenge to minimize energy consumption of cold storage. UVA received an Honorable Mention in the competition. The program also worked with labs to decommission eight cold storage freezers, host a Green Labs Resource Fair to highlight sustainable lab products, and initiated a Green Labs Pilot Program in two labs.

In 2016, UVA generated 5.3 percent less waste compared to 2014 numbers. UVA diverted 45.7 percent of all waste from the landfill by recycling 6,917 tons of material. This included containers, organic materials (landscape, food waste), paper, cardboard, metals, surplus materials, ash, e-waste (batteries, electronics), and wood. The installation of centralized recycling and landfill containers continued this year including new systems implemented in the AFC, Slaughter Recreation, Brooks Hall, Rotunda, and 1515 University Avenue.

A major milestone was reached during the 2017 Game Day Challenge Basketball game, which achieved a 93.4 percent diversion rate (zero waste is considered above 90 percent) at the sold-out men's basketball game against UNC. This achievement was the result of OFS, UVA Dining, UVA Recycling, JPJ staff and UVA Athletics' strategic coordination and the dedication of 75 student volunteers minimizing materials sent to the landfill.



The UVA Biology Department's Genomics Core Lab Research Specialist AnhThu Nguyen (left) prepares to defrost her -20° C freezer as part of the North American Laboratory Freezer Challenge supported by the OFS Green Labs Program, which aims to reduce the environmental impact of energy-intensive labs and cold storage.



Recycling staff assist with special events throughout the year, including Recycling Workers Terence Ragland and Ronnie Herring (left) collecting items during Final Exercises. The team, including Recycling Worker Germain Finch (right), also assisted Hoos ReUse which collects donated goods during student move-out in May. The campaign increased its collection total by 40 percent to almost 37,000 pounds of donated goods compared to 2016.



With the aid of student volunteers, UVA basketball fans diverted more than 93 percent of their game-day waste from the landfill during the 2017 Game Day Challenge Basketball game.



The Sustainability-focused event “Stirring Up Food Justice” with Bryant Terry, a James Beard Award-winning chef and food justice advocate, discussed the historical and social barriers to healthy food.

Sustainability events bring the UVA community together to build community and raise awareness. With over 85 events throughout the year and over 3,000 event attendees, sustainability topics seem to be important to the UVA community. Highlights from the year included events focused on renewable energy, experiential sustainability, and exploring sustainability across diverse disciplines.

Now in its third year, the Green Workplace Program has over 23 workplaces, comprised of over 1,000 UVA employees working to embed sustainable practices into their places of work. New Green Teams have found innovative ways to reduce environmental impacts, including IM-Rec’s powerless treadmills pilot and the Weldon Cooper Center’s single-serve coffee maker compostable coffee pod program.



The FM Sustainability Council promotes sustainability awareness through various initiatives. Fiscal Technician Aurora Crane (left) gardens during a monthly volunteer service opportunity at Morven Kitchen Garden organized by the council. Instrumentation & Controls Technician AJ Conner (right) showcases his pledge to print less paper at the council’s table at the annual FM Ice Cream Social.

The 14-member Facilities Management Sustainability Council continues to promote sustainability practices across FM, including zero waste departmental events and identifying and implementing department-wide changes, including paper use reduction, waste management and increasing volunteer service opportunities. In the spring of 2017, the council launched a monthly volunteer service opportunity at the Morven Kitchen Garden throughout the summer.

Total water usage in 2016 was down more than 23.4 percent from its peak in 1999 despite growth in population and area served. Since 2010, total water use is down 10.4 percent due to water efficiency and conservation work in buildings plus water recovery projects such as collecting air conditioning condensate for use in the chiller plants.



The Chiller Plants support sustainability goals with several projects, including a new medium temperature hot water converter in the Chemistry building (left); and the use of condenser tube cleaning systems (right).

The Chiller Plants team continues to explore ways to reduce environmental impact, boost efficiency and increase cost effectiveness. Improvements include removing older chillers that used ozone-depleting refrigerant at the North Chiller Plant and removing the existing steam-powered domestic hot water tanks in the Chemistry Building addition and replacing them with a semi-instantaneous medium temperature hot water converter. Over the past five years, the team has implemented condenser tube cleaning systems in several of the plants. The automated system continuously cleans the tubes to ensure they are operating at peak efficiency.

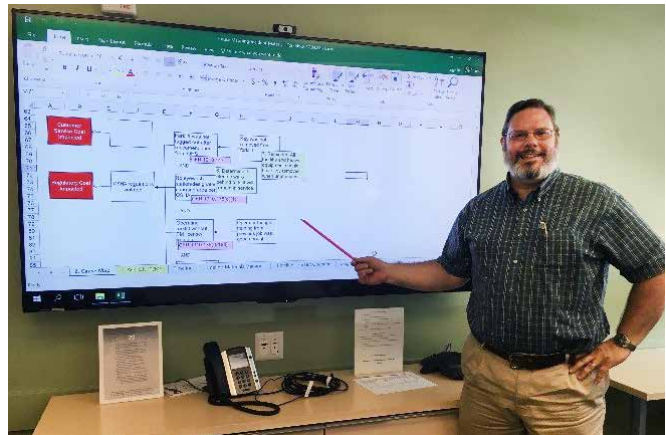


Chiller Plant Supervisor Senior Skip Simpson has led the team's efforts to implement Lean Management practices to eliminate waste within its inventory and materials management. The team has audited its plants to identify true storage needs and reduce and combine inventory and materials.

The Heat Plants were able to cut lime costs in half for this heating season by purchasing coal with a lower sulfur content and through improving processes at the plant. An Operations-led Continuous Improvement program included increasing the steam generating capacity of 3R and 4R boiler. Through troubleshooting and subsequent design improvements, the program resulted in an additional 20,000 pounds per hour of steam capacity. The full load steam flow of 90,000 pph is now simultaneously achievable from each boiler.

The Power & Light team worked on the extension of the Davenport Stadium ductbank, which allows the stadium to be added to UVA's power distribution system. The scope of work included approximately 900 feet of four-way concrete encased ductbank, medium-voltage switch and a transformer. The ductbank installation was complete during February and March, and the service was energized in May. The team shifted work hours to accommodate customer needs and completed the project in March, well in advance of the project timeline. The team saved \$180,000 by self-performing this work.

The Systems Engineering Metering & Billing and Information Systems teams focused on three areas this past year including data integrity, data reconciliation, and data visualization. This year, over 200 meters were newly installed, upgraded, or connected via automation systems for the first time and there are currently almost 2,700 active University physical and virtual meters in metering and billing information systems. The teams continue to leverage the ICONICS platform to develop and enhance information, trending, and visualization for buildings, plants, and distribution systems. Visualizations and associated trends and calculations were added this year for solar array information on Grounds. This data will be used on a Renewable Energy website highlighting the energy generated by University's solar projects.



Heat Plants Plant Engineer Pete Kowalzik facilitated safety incident investigations using the Cause Mapping root cause analysis method. In addition, he trained other FM employees as facilitators in this technique.



The Power & Light team self-performed the extension of the Davenport Stadium ductbank (left) in early 2017. The team continues to support and project manage the ongoing 35kV electrical ductbank project (right) which will construct an almost three mile underground power feed to UVA connecting three existing substations (Sherwood, Alderman and Cavalier).



The Systems Engineering team uses the ICONICS platform to track the energy used by different buildings on Grounds. This year, the team started tracking solar array information to be used on a new Renewable Energy Tracker website.

# OPERATIONS



In addition to the regular maintenance of the University's Grounds — including Landscape & Grounds Worker Shannon Adams (right) caring for the Pavilion VI Garden — the team installed new stormwater management projects — including on Engineer's Way (top) — which help to slow the rate of rainwater leaving the University, and improve its quality.



The appearance of the University of Virginia — both the exterior landscape and interior spaces — plays a strategic role in building the institution's image. Therefore, it is not only the responsibility of Facilities Management to maintain a safe and functional campus landscape, but to impart a national image of excellence. UVA regularly receives accolades for both its landscape and architecture, including being named one of the 10 Most Beautiful Universities in the U.S. by *Times Higher Education* in 2017.

This past year, the Landscape department continued to build on the momentum from the previous year's efforts to create the Landscape Management Plan for the University's Grounds. Implementation of the plan started with a focus on achieving the plan's turf care standards. New staffing efficiencies helped the team decrease the number of service calls for un-mowed turf down to near zero this past year. The team also started testing a process to identify the current condition of the Grounds and locations in need of rejuvenation. This Planned Renewal Program has identified multiple locations in need of improving and the department plans to have the program implemented during the coming year.



Utilities team members (above) work to break up built-up sediment in the Dell forebay in order to pipe the water through a filtration system. FM staff from Landscape and Environmental Resources also assisted with this project to clean the Dell, which received first place in the 2017 Best Maintained BMP category by the Chesapeake Stormwater Network.



Stormwater management was prevalent in multiple landscape projects on Grounds, including the Rotunda north patio, the Clark Hall east courtyard basin and the Engineer's Way stormwater BMP, demonstrating how the University Grounds can both be one of the most beautiful in the country and also perform a critical environmental task.

FM was recognized for its stormwater best management practices this year, receiving two awards from the Chesapeake Stormwater Network. The Dell received first place in the 2017 Best Maintained BMP category and the UVA Hospital's green roof received third place in the 2017 Best Ultra-Urban BMP category. The Dell's award was due to the efforts of multiple FM departments — including Environmental Resources, Utilities and Landscape — who worked together to remove built-up sediment and debris in late 2016. During the recent clean-up, the Landscape team removed some overgrown

plantings and the Utilities team piped out and filtered the water, removing 58 cubic yards or roughly 145,000 pounds of sediment.

Custodial Services focused on continued improvements in 2016-17 to processes and efficiencies, customer satisfaction and relationships as well as workplace satisfaction and employee engagement. Through competitive procurement processes, the department now has one vendor for products, supplies and equipment and a second for services in certain buildings. Both contracts have resulted in numerous benefits such as increased flexibility to meet needs, expansion of a vendor-managed inventory program into 90 percent of buildings, specialized individual and group trainings, as well as savings in labor and product costs.

The department continues to serve as leaders in the industry, with APPA's *Facilities Manager* magazine featuring the department's work to gauge customer satisfaction through electronic surveys and increase workplace happiness, one of Custodial Services' primary development goals for the fiscal year. The department worked to help employees feel more included and less stressed on-the-job and helped managers build more positive and engaging workplaces through new interactive programs, such as the Good Progress! class where supervisors and front line staff join together in role-play activities that help improve workplace openness, comfort and productive dialogues.

Housing Facilities continued to make progress toward goals developed in early 2016 to increase operational performance as well as customer satisfaction. The HF maintenance and custodial organizations worked closely together to handle the summer 2016 turnover and conference operations, and utilization of new scheduling and staffing patterns led to significant operating efficiencies. The HF maintenance group also added capabilities in order to be more self-sufficient and handle routine needs more effectively.

Another major focus was to continue to build a strong relationship between Facilities Management and Housing & Residential Life. Considerable progress was made between the two departments toward aligning services with needs and expectations,



*Custodial Services focused on improving workplace satisfaction this past fiscal year through team building exercises (top) and manager trainings (left) focused on introducing fun in the workday.*



*Custodial Services introduced a new P.U.L.S.E. survey process (left) using five simple questions to help understand customers' perceptions and needs. The team also used a Walks & Talks tool (right) which helps managers improve workplace satisfaction, eliminate process waste and improve overall quality.*



*Housing Facilities custodial team assists with the annual summer turnover and conference operations, including Custodial Services Worker Eliza Kingston (left) cleaning Metcalf House; the team also takes time to add fun into their days, including the Alderman Road Residence team dressing up for St. Patrick's Day (right).*



Maintenance Zone staff serve more than 10 million square feet, including Newcomb Zone HVAC Supervisor Shawn Ragland (left) who displays lockout/tagout procedures he created for Newcomb Hall; and Plumber Apprentice Drew Jordan (right) installing new low-flow water valves.

and a number of information sharing and decision-making processes were developed to create a stronger partnership. At the same time, Operations supported condition assessment processes and reinvestment in facilities at higher levels in order to lay the groundwork for future success.

FM's Operations Maintenance Zones provide planned, routine and reactive facilities services in over 10 million square feet of academic and auxiliary buildings. More than 100 building trades professionals are organized into five geographical zones to meet the exact needs of the customers in their area. This organizational approach has proven to be the most effective method of delivering comprehensive facilities stewardship.



In support of Lean Management practices, Maintenance Zone managers, Programs & Informatics staff and the newly hired Zone Maintenance Coordinators participated in a planning and scheduling training with Doc Palmer (right), author of the Maintenance Planning and Scheduling Handbook.

To further FM's commitment to Lean Management practices this year, each zone added a Maintenance Coordinator position that will focus on work flow improvement. In addition to planning and scheduling all routine work, coordinators assist the supervisory staff with work order processes, materials acquisition, and outage coordination. The goal is to increase the "wrench time" for frontline staff, making them as productive as possible.

Some of the accomplishments of the maintenance zones include the pursuit of energy improvement opportunities; the support of large scale capital projects, including the Gilmer Hall/Chemistry renovation; inventory reduction; condensate and rain water capture and reuse; improvements to aesthetics including pressure washing outdoor seating areas; as well as support of major University events by helping to plan and execute various ceremonies and events during Final Exercises, Reunions weekends, Opening Convocation and Lighting of the Lawn.



The Maintenance department supports several major University events, including Final Exercises, Reunions and Lighting of the Lawn. Central Grounds Zone staff (left) work with students to install the 12,000 lights along the Lawn; the Roofing team works to hang seven 150-foot rope lights from the roof of the Rotunda.

The Maintenance department also includes several specialty shops which support all of the zones. Accomplishments over the past fiscal year include the Fire and Life safety team implementing asset barcoding and data collection along with geo-locating each fire extinguisher and fire damper asset during annual compliance testing processes; the merging of the Academic and Health System Elevator teams and the consolidation of its approximately 350-unit equipment inventory into five distinct maintenance

routes; the Roofing team supporting the University's rooftop solar ambitions, as well as new technologies which can be installed in-house and allow life extension of certain roof systems; the Lock Shop rolling out a phased transition of enhanced key control and leveraging new industry technology such as electronic key vaults, remote key tracking devices and enterprise data management tools.

The Geospatial Engineering Services team is currently in the process of implementing a new space management system and over the past fiscal year made significant progress, including migrating over 1,800 floors, and approximately 60,000 rooms of data representing over 17 million gross square feet to the new designed data schema and processes in FMInteract. The team has also been preparing for an Enterprise Document Management System. The document and business process discovery phase is currently underway. Individual team interviews across FM are occurring and project plans continue to be developed. The GES team continued to expand its damage prevention outreach to teams in FM and contractors performing excavation on Grounds. Staff from Project Services, Energy & Utilities, Occupational Health & Safety, Landscape and outside contractors totaling over 300 people were trained this year.

The Systems Control Center (SCC) serves a multifunctional purpose within Facilities Management, operating around the clock throughout the year, providing real-time monitoring of utility and building systems, while serving as the after-hours emergency call center for utility interruptions and facility emergencies. In addition to the 13,179 work orders dispatched, SCC coordinated recovery of more than 70 significant utility outages and other facility events affecting the University and Medical Center.

A main focus of the SCC this year was the continued training and development of its team. This year, all staff received advanced level building automation training (BAS) on at least one of two systems. This training is crucial to Systems Control for achieving the continuous improvement and optimization of the building automation systems. The SCC staff has also created multiple workflows used in the turnover process of freezers and building systems, assuring proper alarming and trending for critical systems.



*UVA hosted the 2017 Elevator U conference in June 2017. This annual nationwide event was made possible in part through Elevator Program Manager Eddie Morris' (right) affiliation with the higher-ed elevator trade association and his newly appointed position as the president of Elevator U.*



*The GES team continues to expand its damage prevention outreach through excavation safety trainings (top left); the team also provides mapping and data analysis support to a variety of customers, including a map showcasing the locations of landscape vegetation and trees all over Grounds (right).*



*This year, all Systems Control Center staff received advanced level building automation training on at least one of two systems, a crucial component to the continuous improvement and optimization of these systems.*



Re-roofing projects over the past fiscal year included the replacement of an underground roof for the Urology Department which was started in October 2015 and completed in November 2016. The underground roof, located off Hospital Drive, is covered with plantings and bench seating.



The re-roofing of McKim Hall's slate roof started in March 2017 with completion date scheduled for July 2017.



The Digestive Health Endoscopy renovation included new walls, monolithic poured floors and cabinets.

The Health System Physical Plant (HSPP) provides engineering and maintenance support to the University Health System buildings and the University Hospital. HSPP support is organizationally comprised of several groups featured below.

The HSPP Engineering Office provides technical assistance including inspections, drawing reviews, ICRA/ILSM training, and engineering support for major renovation efforts. The Engineering Office's work is integral to obtaining and maintaining the University's accreditation from a number of regulatory agencies, including:

- CDC: Recertification of BSL-3/ABSL-3 facilities, requiring an annual shutdown/recommissioning of all systems and extensive documentation as part of an 18-month review cycle.
- CMS/The Joint Commission: Re-accreditation of patient care facilities on a three year cycle; HSPP efforts are critical for maintaining institutional compliance for Life Safety and EOC performance measures.

The HSPP Fire and Life Safety Compliance Group provides inspections for ongoing renovations and maintenance activities throughout the Medical Center and Health System buildings to ensure that all facilities meet required Life Safety and State Fire codes. Continuous compliance inspections for all patient care and support areas are conducted throughout the year.

HSPP Zone Maintenance teams continue to support Health System operations through well-established maintenance programs, including corrective and deferred maintenance. HSPP maintenance crews completed over 68,000 work orders for the Health System this year.

HSPP Zone Support Groups consist of six trade shops — plumbing, electrical, carpentry, painting, masonry/plastering and welding — completing turnkey projects for Health System facilities. Several Maintenance intensive projects of note were completed this year as well as continued cycle maintenance efforts that are ongoing.

Projects for the 2016-17 fiscal year included:

- Ongoing University Hospital Room refurbishment project cycles through two to three patient rooms per week. These rooms get a complete patch and paint face lift as well as improved cabinetry and fixtures. The features of this current \$750,000 effort were developed in collaboration with a Medical Center Occupational Therapy team studying environmental modifications to reduce patient fall risk. High toilets, improved lighting and elimination of threshold barriers were all components of the refurbishment.

- Multiple roofing projects were managed by HSPM totaling \$2.3 million of re-roofing put in place over this past year. Major replacements included slate roofs for McKim and Clinical Department Wings, the Pinn Hall auditorium roof and parapet repair as well as an underground roof for the Urology Department.

- New air handler unit replacements were completed in Cobb Hall and the West Complex.

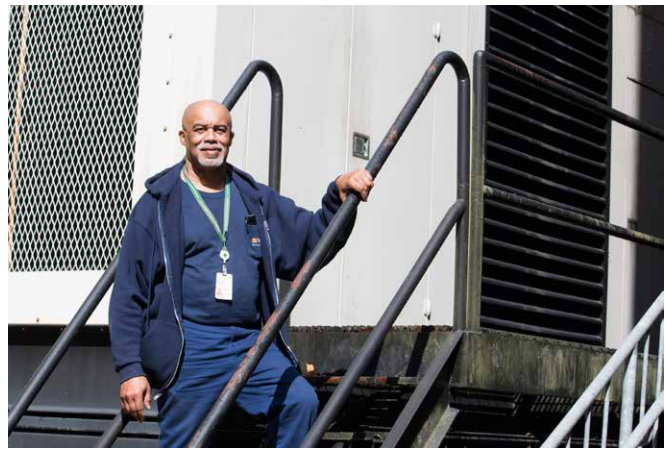
- HSPM zone maintenance worked closely with Project Services to provide support for the major renovations of the historic Corner Building.

- Piping modification and installation of instantaneous heaters for the Domestic Hot Water system serving the West Complex.

- A complex renovation of the University Hospital Digestive Health Endoscopy scope cleaning and disinfection area was completed by working around the clock for six days to accommodate the Clinical procedure's available timeslot.

- HSPM zone maintenance worked closely with FP&C to deliver the new Outpatient Procedure Center and the Educational Resource Center. Maintenance was heavily involved in the building systems' design and review providing operational perspective and support.

- HSPM staff completed an overhaul of the entire domestic water pumping station for the Aurbach building at Fontaine Research Park and facilitated relocation of the Gait lab from KCRC to the Kirtley building. This zone also worked closely with FP&C to complete an MRI replacement in Snyder building.



*HSPM Zone 4 Electrician Senior Bernard Curry was recognized for his work to ensure safe access to this generator near the Aurbach building, he also works to inspect emergency generators in various areas, including at the Orange Dialysis Clinic.*



*HSPM Zone 2 Superintendent Gary Allen and Zone Maintenance Supervisor Jake Bajs helped develop an innovative way to repair an exhaust fan in Pinn Hall by using a pulley system instead of installing scaffolding.*

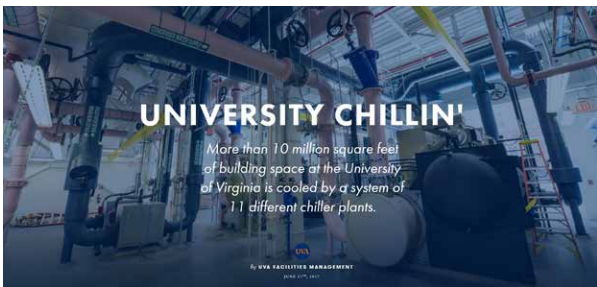


*HSPM Zone 2 Zone Maintenance Supervisor Brian Gibson (pictured) and HVAC Installation and Repair Technician Senior Zeke Matic replaced an 800-pound exhaust fan motor on the rooftop of Pinn Hall.*

# PROGRAMS



T&I Enterprise Architect Joey Tombs reviews data visualizations using the program Tableau, which better facilitates analytics and reporting by operational units.



T&I staff incorporated digital storytelling websites seen top and right to highlight staff and services in a more compelling way.

## STAFFING AND AUTOMATION

The 11 plants are staffed by 14 employees and one led by Associate Director of Chiller Plants Justin Callison. Although each plant operates 24/7/365, they are only staffed Monday-Friday 8 am-4:30 pm. An on-call schedule is in place for emergencies, which typically "take over calls from here" says Callison pulling out his iPhone.

The chiller plants are connected to UVA's building automation system, which electronically controls all of the critical cooling equipment. The system is easily monitored on computers and mobile devices, which is how staff from the Chiller Plants team and the Systems Control Center monitor plant operations from afar.



FM Help Desk staff members — including Mi Whang (right) assisting Locksmith Senior Scott Johnson — provide comprehensive technical support for FM.

## Technology & Innovation

Facilities Management's Technology & Innovation team provides and supports the necessary information technology (IT) for a highly integrated, state-of-the-art office automation system and critical business applications in the Facilities Management organization.

Technology & Innovation services include: a full-service computer help desk, web & application development, maintenance and support of FM business systems & databases, servers & IT infrastructure and IT security.

Significant accomplishments for 2016-2017 included:

- Identified opportunities to migrate legacy applications to existing FM enterprise applications, including time tracking.
- Established the FM Data Warehouse to better facilitate analytics and reporting by operational units. T&I worked closely with these units to define and create data visualizations utilizing this new program and Tableau.
- Started development of an FM Customer Portal that will provide FM customers a single access point to their facility information.
- Participated in the UVA University Business Intelligence (UBI) Managerial Reporting Project.
- Collaborated with Materials Division staff to develop new branding logos for FM apparel.
- Incorporated digital storytelling websites to highlight staff and services in a more compelling way.
- Focused on securing the University's building automation systems by working with Automation Services and the Systems Control Center to perform an in-depth self-assessment and comprehensive inventory of FM's many devices using the U.S. Dept. of Homeland Security's CSET Cyber Security Evaluation Tool.
- In collaboration with ITS, T&I used third party vendors to test its building automation systems and industrial controls, in addition to partaking in a network penetration test of FM security measures and procedures.
- Implemented a new password policy for FM employees and customers with access to our networks, requiring password changes once a year.
- The help desk installed more than 700 computers, tablets and smartphones and responded to more than 4,000 calls for assistance in the 2016-17 fiscal year.



## Programs & Informatics

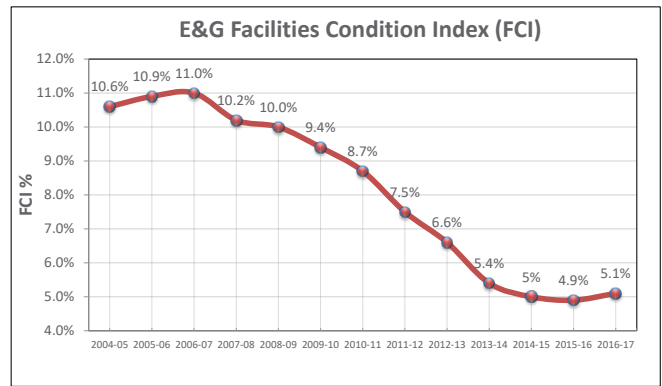
The Programs & Informatics team shared a goal of improving workflow by expanding the use of the resources already available to their respective departments.

Numerous staff members participated in Lean Management kickoff sessions, where they learned to apply the Lean 5S tool (Sort, Set in order, Shine, Standardize, and Sustain) to eliminate waste within their areas. The Newcomb Zone was able to reduce the number of storage spaces throughout their zone and make better use of a more centralized storage area. Several groups began using Kanban boards to help visually track the status and flow of projects. Additionally, FM has been able to identify underutilized vehicles and incrementally reduce the number of vehicles in their fleet. A new Fleet Manager position was filled by Mike Duffy, who brings over 20 years of experience in the fleet industry. Mike has devoted himself to identifying and improving the safety and condition of nearly 250 FM vehicles.

PI Maintenance Systems Engineer Shaun Farrell and Facilities Informatics Analyst Everleigh Stokes trained nearly 150 supervisors and 520 technicians to use a new time entry management system with the AiM FiRE app. The newly implemented app allows FM staff to receive work orders, gather data about assignments, and record their work hours using an iOS device, rather than paper. "We want to fully utilize the AiM platform for all of the functions it provides," said Shaun, adding that the goal is to centralize FM processes within the enterprise system and move away from separate in-house built applications.

Maintenance staff completed an asset inventory and barcoding program in two of the maintenance zones and will continue to expand these efforts in the coming year. This improves data quality and allows the capture of critical service call information.

The Customer Service Desk team, which relocated to the lower level of the Leake building following the completion of renovations, has also been working closely with each zone to ensure AiM work orders are cleared out of the system once the work has been completed.



The program continues to strive to maintain the University's facilities' good condition through the combination of maintenance reinvestment and whole building capital renewals. This year, the Facilities Condition Index rose slightly due to known deficiencies within the building portfolio being elevated in priority, as well as new deficiencies being discovered and added to the overall back log.

Programs & Informatics staff trained hundreds of FM employees on AiM's new time entry system and the AiM Fire app, including (from left) Recycling Supervisors Victor Martin and Jason Snow and Recycling Program Superintendent Sonny Beale.



Transportation Operations and Fleet Manager Mike Duffy (right) and Colonial Auto Center Service Director Tom Sojka measure the brake pads of an FM truck as part of the department's effort to perform random, unplanned inspections of vehicles to ensure the entire fleet is in top condition and adhering to all safety standards.

## Human Resources, Training & Development Programs

This fiscal year, HR&T pursued growing through change by helping the larger human resources community put into place work processes through Ufirst while supporting changes required to grow the Facilities Management customer departments.

Facilities Management New Employee Orientation was introduced in August 2016. In working to develop FM's supervisory group, 53 managers/supervisors participated in one or more of the "How To" training sessions within this fiscal year with five of them earning their FM "How To" Certificate.

Based on employee participation and feedback from the 2016 Management Performance Survey, employees were again given the opportunity to rate their supervisor's performance in March 2017. A total of 391 employees (31 percent of all FM staff) participated in the 2017 Management Performance Survey. Overall survey results indicated largely favorable satisfaction regarding the performance of the rated management team member with 84 percent of rated supervisors receiving effective or higher ratings in the seven key competency areas.

This past fiscal year, HR&T collaborated with UVA groups to support two annual training events. The 2016 Leadership Forum was a collaboration with the Office of Safety and Emergency Preparedness designed to better prepare FM supervisors and managers to respond in a variety of emergencies.



*Julie Bird, Change Management Lead of the Ufirst project, describes the three key communities of expertise within the new HR service-delivery model: Talent, Service, and Decision Support, during the 2017 Manager Enrichment.*

The 2017 Manager Enrichment focused on the University's Ufirst project, which will transform Human Resources across the University and implement a new best-in-class HR technology.

English as a Second Language (ESL) and General Educational Development (GED) classes continued to be offered on Grounds through a partnership with the Charlottesville City Schools Adult Education Program. This year, six FM employees participated in GED classes and five attended ESL classes. HR&T continued to support participation in the National External Diploma Program, which allows individuals to earn a high school diploma instead of a GED certificate. One employee completed the NEDP this year, earning her high school diploma from Charlottesville City Schools.

HR&T and University Human Resources were honored in November 2016 by the Virginia Association for Adult and Continuing Education (VAACE) as the winners of the Outstanding Workplace Education Partnership Award for offering GED/ESL classes to employees. Since 2003, FM and UHR have partnered with the Charlottesville City Schools Adult Education Program to offer free, on-site GED and ESL classes for employees during work hours. More than 250 employees have benefited from these classes over the years, improving their communication skills and expanding their opportunities for professional and educational growth. The award – which was presented to FM and UHR during the November 2016 VAACE Awards Ceremony – recognizes UVA's commitment to the educational advancement of its employees and the pursuit of lifelong learning.



*UVA staff accepting the VAACE's Outstanding Workplace Education Partnership Award included (from left) HR&T's Sarah McComb and Adettra Thomas and UHR's Diane Ober.*

HR&T continues to support three important UHR training courses by recruiting employees for Leadership Essentials and Essential WorkSkills, and registering all new employees for Respectful Workplace training. During the fiscal year, eight FM employees completed Leadership Essentials and 20 completed Essential WorkSkills.

FM's on-site Trades Recertification training continued as a service to employees who are licensed in the construction trades. This past fiscal year, 171 employees participated in trades recertification classes.

As of June 2017, Facilities Management had 38 apprentices across the various trades. During the 2017 application period, more than 550 applications were received for the four postings in the trades of electrical, HVAC, plumbing and carpentry. Out of those applicants, 15 new apprentices were hired. In addition to those apprentices who were inducted into the program, FM also had the honor of graduating seven apprentices. For the second year, one graduating apprentice was honored with the Ed Ford Outstanding Graduate award, which was created in 2016. Kristina Williams was chosen as the recipient of the award and honored for excellence in her career and study achievements, job performance, competencies, as well as other pursuits in her life.

As HR&T worked to engage with FM apprentices over the past year, the department gained a great deal of information resulting in a number of initiatives

to improve overall program communication, on-the-job training and rotations, as well as mentor/apprentice relationships. This active involvement has also positively affected rapport with apprentices and increased feedback.

New initiatives included Apprentice Onboarding launched in August 2016, which includes bringing together all current and new apprentices for networking and introducing them to the new Apprentice Guide Book. In addition, an online version of the Apprentice Monthly Assessment went live in August 2016 contributing to FM's core initiative of sustainability and eliminating the tedious routing of paper assessments.

In an effort to ensure all requirements of apprentices are met prior to graduation with a satisfactory level of proficiency in each area, a Six-Month Proficiency Evaluation was also launched, first on paper in August 2016 and then online in February 2017.

## Compensation, Classification & Career Paths

The University implemented a merit pool (3 percent) to enable schools and units to recognize the performance of University Staff and A&P Faculty. Planning for these increases took place during the latter part of the fiscal year and are effective July 10, 2017.

For Classified Staff, the legislature approved a 3 percent, across the board, increase.



For the second year, an annual Apprentice Onboarding meeting gathered together all current and new apprentices for networking at the beginning of the apprentice year cycle in August 2017.



Plumber Apprentice Kristina Williams (left) receives the second annual Ed Ford Outstanding Graduate award, presented by Richard Bonnie and Kathleen Ford.

Across the three Career Paths of Housekeeping, Landscape and Recycling, FM has nearly 200 employee participants. Supervisors in each of these areas completed two separate assessments for their staff, one in the fall and one in the spring, coinciding with the performance management cycle. In the fall there were 29 total advancements; 19 in Housekeeping, seven in Landscape and three in Recycling. In the spring assessment, there were 11 advancements in Housekeeping, nine in Landscape and one in Recycling.

The SharePoint system that was introduced by FM's Technology & Innovation team to complete the career path assessments has proven to be a success with only a few minor kinks.

During the fiscal year, Reward & Recognition Awards totaled \$190,700 for 480 employees, a 24 percent increase over the prior year which is credited to the program redesign, which provided clarity around the type of rewards recognized and the ease of the online nomination along with timeliness of issuing awards.

This year, 117 FM employees were recognized at the University's service award ceremonies for serving for 10 or more years. Of those employees, 18 were honored as having achieved 25 or more years of service. In response to feedback that the service awards ceremonies had grown too large, last year Vice Presidents took over responsibility for hosting



The HR&T team had two honorees celebrating 10 years of service this year, HR&T Director Rebecca Leinen (pictured center) and HR Assistant & Event Coordinator Adettra Thomas (not pictured).

their own, more personalized recognition events to celebrate employees with 10, 15 and 20 years of service. Since FM represented nearly 80 percent of the honorees under the Sr. Vice President for Operations, HR&T took an active role in planning the event that hosted close to 120 honorees, guests and members of management in June 2017 at Alumni Hall.

## Communications & Outreach

HR&T continued its improvement of the FM newsletter, *On Grounds*, and flyer, *Fast Facts*, publishing each on a bimonthly schedule. Early in 2017, the publications' logos, colors and fonts were updated in order to incorporate the University's new brand standards. The introduction of an e-newsletter version of both *On Grounds* and *Fast Facts* allows for tracking of readership numbers.

HR&T also assisted FM Technology & Innovation to provide content for the FM website, including a new photo essay section of the website that was launched in late 2016. Recent collaborative photo features include a feature highlighting the University's first large scale solar installation project on Ruffner Hall and the UVA Bookstore and an inside look at UVA's Chiller Plants.

During the spring Apprenticeship Program recruitment window in April 2017, both current and former apprentices, HR&T staff and FM leadership appeared on television and radio programs promoting the program and the Apprentice Job Fair, which took place on April 4, 2017 and attracted close to 80 prospective applicants. Plumber Apprentice Kristina Williams, Electrical Apprentice Peter Chege and HR&T Employee Relations and Training Manager Sarah McComb were featured in stories by various media outlets, including Newsplex, NBC29, The Daily Progress and the WCHV 107.5 Joe Thomas radio show.

New this year, the Training & Development Specialist and a selection of current apprentices visited six area schools where they spoke about the program with high school students, teachers and career counselors.

## Occupational Health & Safety

Facilities Management has decades of experience serving the University and the community. During this time, priorities have shifted and expectations have grown and become more complex. Safety and health challenges have also grown, requiring efficient and flexible systems to respond effectively.

The Occupational Health & Safety department has used Lean Management to leverage resources, and increased focus on engagement and education, allowing us to accelerate cultural change, and maximize organizational potential. Operating performance shows how our focus is pivoting to include more leading indicators, as we seek to highlight proactive measures significantly impacting worker health and safety.

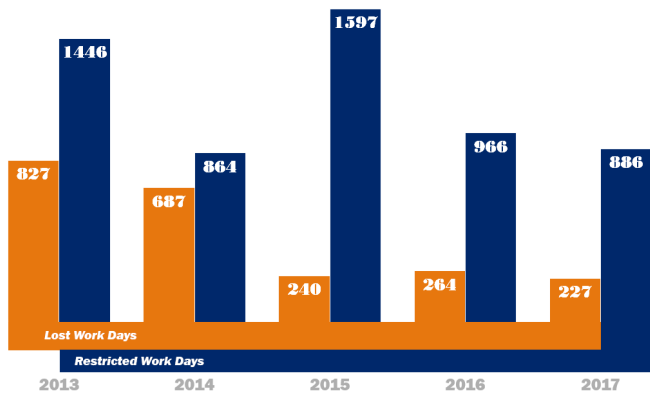
## Engagement

OHS is proud to continue growing and partnering with employees, and increasing engagement and ownership of safety and health. Employees have continued to generate great ideas for increasing awareness for safety.

Each month, a different committee is challenged to come up with a poster idea to be displayed across Grounds in areas visible to FM employees. Some of the creative ideas have included, housekeeping, covering the load in your vehicle, job hazard analysis, personal protective equipment assessments and the introduction of “Bernie” the Safety Bee, reminding everyone to “bee” safe and respectful. Focus teams continue to work together to develop and implement health and safety programs, and bring their technical expertise to many other activities.



LOST AND RESTRICTED WORK DAYS BY FISCAL YEAR



This graph shows the reduction in the number of lost and restricted work days over the last five fiscal years. The decrease in lost work time has been accomplished by working with physicians as well as the FM department to accommodate any required work restrictions.

TOTAL RECORDABLE AND LOST TIME INCIDENT RATE BY FISCAL YEAR



This chart shows both the Lost Time Incident Rate (LTIR) and Total Recordable Incident Rate (TRIR) over the past three fiscal years, along with the goals set for each.



Safety Champions from the first quarter of 2017 were recognized by the FM Safety Committee chairs and their departmental directors in March 2017.



Dr. Michael Behm, CSP, a professor of Occupational Safety at East Carolina University, presents at the fall 2016 Safety Summit at Zehmer Hall on “Safety Through Design.”

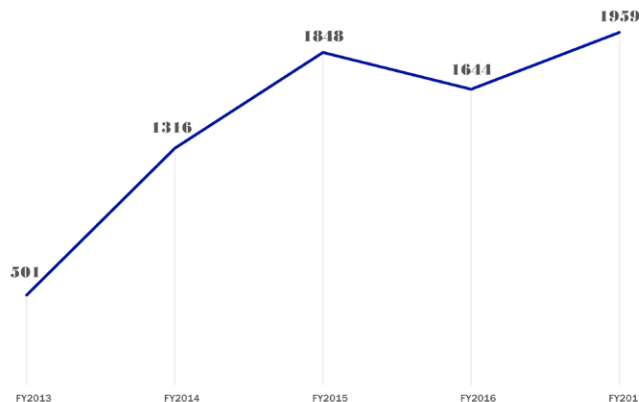


The Health and Safety Fair, a partnership between multiple construction firms supported by OHS, took place in May 2017 and provided free training to sub-contractors.

**TRAINED**  
**916** Facilities Management  
**&**  
**41** non-Facilities Management employees

*Background text includes: Bloodborne Pathogens, Confined Space, First Aid/CPR/AED, Fall Protection, New Employee Safety Training, Scaffold Safety, Tagout, Forklift, Fire Extinguisher Inspection, Resistor, CHAINSAW, OSHA 30, ASBESTOS, Aerial Lift, HAZWOPER, VDOT 16 Hour Flag*

TRAINING SEATS FILLED BY FISCAL YEAR



This chart shows the number of seats filled by employees trained in each fiscal year. In FY 2017, 916 Facilities Management employees were trained in multiple topics.

## Outreach

OHS continues to hold Safety Summits encouraging networking and engaging in conversations and education regarding safety in construction and facility design. In FY 2017, three Safety Summits were hosted on Grounds focusing on a variety of safety topics.

OHS invited representatives from architectural and engineering firms, subcontractors and construction management firms to these events to join Facilities Management employees to discuss safety on Grounds. Themes included Safety by Design, Safety & Health Expectations when Working on Grounds and Enhancing Safety through Design.

The contractor safety focus team continues to collaborate on new and innovative ways to share best practices. One of the highlights of this collaboration was the Health and Safety Fair, a partnership between multiple construction firms supported by OHS that was open to anyone that wanted to attend. The firms reached out to local safety and health training providers, who donated their time and talents to training sub-contractors in some of the most hazardous areas.

## Training

During FY 2017, OHS continued to emphasize the importance of health and safety training. Building upon the success of focus teams, employees are now both contributing their expertise to the content of training and also teaching classes. Additionally, training reports are being generated for supervisors so that they are more informed and can better identify additional training needs for employees.

OHS will continue to engage and collaborate, constantly seeking better ways to address the challenges that the future holds, and always driving toward the goal of providing FM employees with the safest place to work.

# COMMUNITY INVOLVEMENT



During the April 13 Skipwith Hall dedication ceremony, about 25 descendants of Peyton Skipwith, an enslaved laborer freed in 1833, posed in front of the building (top left); the ceremony concluded with the unveiling of a new plaque (top right) summarizing Skipwith's life that is now installed at the entrance to the building.

Facilities Management employees continue to generously support the University and Charlottesville communities through special events and volunteer service aiding nonprofit organizations.

This year, FM assisted with the dedication ceremony of Skipwith Hall, hosted its second annual Girls Day event and helped raise money and provide time and skills to support numerous organizations and events, including the United Way Day of Caring, the Commonwealth of Virginia Campaign, quarterly Virginia Blood Services blood drives, the annual Toy Lift as well as hurricane relief.



Participants of FM's second annual Girls Day event gathered at the start of the event in front of John Paul Jones Arena (bottom right); Electrician Cheryl LaRocco (top left) chats about electricity with a participant who builds an electrical circuit to power a flashlight; Girls Day attendees (top center) take a break during a tour of the McCormick Road Residence Area Renovation; Girls Day participants are guided through the East Chiller Plant by Chiller Plant Zone Supervisor Fred Reese and Director of Operations Cheryl Gomez.





In 2017, FM staff volunteers — including (left) Fiscal Technician Aurora Crane and FM Student Workers Freda Assuah and Kyle Canady — participated in a monthly volunteer service opportunity at Morven Kitchen Garden organized by the FM Sustainability Council. In the late summer of 2017, employees — including (right) Specialty Trades Supervisor Sr. Warren Wood and Jessie McGann of Procurement & Supplier Diversity Services — collected a trailer full of donations for victims of Hurricanes Harvey and Irma.



In early 2017, AVP/CFO Don Sundgren (left) posed in his office with the FM Pink Flamingos, which made its way around FM in an effort to raise money for the UVA Children’s Hospital. Based on a nationwide fundraising trend known as “flocking,” an employee’s office or workspace is covered in plastic flamingos and the employee is asked to make a donation to the UVA Children’s Hospital in order for the flock to be removed and passed on to the next person. At the 2016 FM Fall BBQ, Sustainability Outreach and Engagement Coordinator Dana Schroeder (center) served as the referee of a cornhole tournament (right) which included 32 participants and raised \$331 for the Commonwealth of Virginia Campaign. FM staff raised a total of \$27,000 toward the CVC throughout its fall 2016 campaign.



FM employees are reliable supporters of the quarterly blood drives sponsored by Facilities Management to benefit Virginia Blood Services, including, Document Management Specialist/Archivist Juliana Millbern (left) and HVAC Engineering Technician Larry Dorrier (center). FM employees generously supported multiple fundraisers during the 2016 holiday season, including the annual Toy Lift. Customer Service Manager Brenda Buttner (right) displays the 133 toys, two bicycles, two book bags and \$820 donated to Charlottesville’s annual Toy Lift by FM staff in conjunction with the Cardiovascular Research Center.



# FINANCIALS

The Finance Department provides accounting, budgeting, financial reporting, accounts payable, and payroll support for Facilities Management's total business volume of \$398 million and 1,156 filled full-time employees in fiscal year 2016-2017.

## University of Virginia Facilities Management Financial Summary 2017

<b>Salaries and Benefits</b>	<b>\$ 86,000,000</b>
<b>Utilities</b>	<b>\$ 46,000,000</b>
<b>Planning and Construction</b>	<b>\$ 192,000,000</b>
<b>Maintenance and Operations</b>	<b>\$ 66,000,000</b>
<b>Other</b>	<b>\$ 8,000,000</b>
<b>Total</b>	<b>\$ 398,000,000</b>



## Facilities Management

