



Stewardship of the University of Virginia



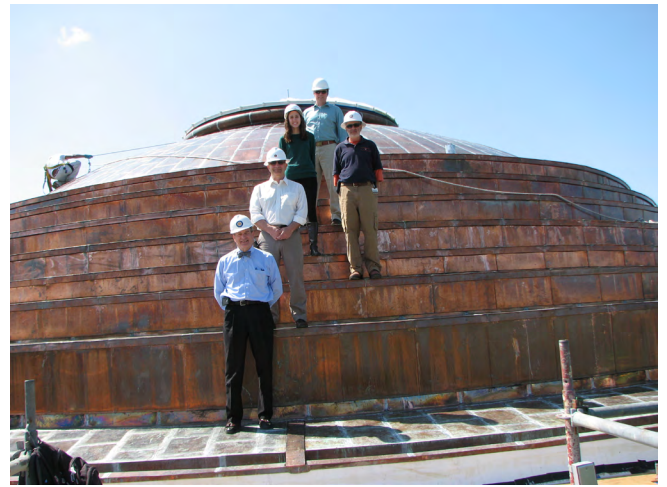
Facilities Management 2012-2013 Annual Report

Cover photo courtesy of Christman|Gilbane

On the cover: Renovations on the Rotunda and the Academical Village throughout 2012-2013 were watched by faculty, staff, visitors and prospective students in person or by video as scaffolding surrounded the Rotunda and the dome was gradually replaced. Just in time for Graduation, scaffolding was removed and the Class of 2013 proceeded down the Lawn.

After Graduation, Facilities Management crews launched their annual renovation and repair of the historic area while the residences were vacant. West Range rooms' slate roofs were replaced with Buckingham slate and the roof of Hotel C was replaced with flat lock copper pans.

This annual report includes more photographs and summaries of projects supported by our employees who are dedicating their talents and careers to stewardship of the University of Virginia.



Rotunda Dome Restoration team members (from front) Supervisory Historic Preservation Architect Jody Lahendro, Supervisory Senior Construction Administration Manager Steve Ratliff, Intern Grace Zammitti, Roof Manager/Inspector Mike Crawford and Project Manager James Zehmer met briefly in late April for a photo on the copper dome which crews have been installing over the last 12 months. This was the first phase of a large scale restoration and repair project for the Rotunda. The dome will be painted white during the next phase of construction work.



Earlier this Spring with construction well underway, Senior Project Manager Amy Eichenberger and Construction Administration Manager Charlie Durrer stand in front of the 10-lane pool in the North Grounds Recreation Center Expansion, the first of three planned projects to improve existing Intramural Recreational (IM Rec) facilities on University Grounds. The new 33,000 square foot addition, located to the west of the existing IM Rec Center building, will have an aquatics facility, a mind-body multi-purpose fitness room and two squash courts. Supervisory Senior Construction Administration Manager Steve Ratliff was unavailable for this photo. Completion of the new facility is scheduled for Fall 2013.

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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.

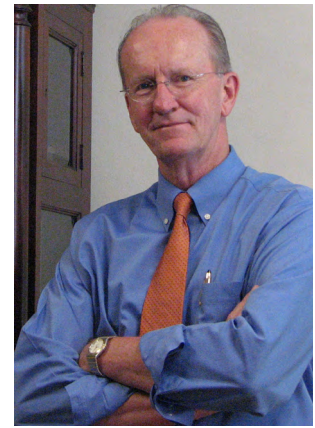
Core Values

- 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.



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Message from Don Sundgren



The initiative, professionalism and sense of ownership demonstrated by Facilities Management employees during fiscal year 2012-2013 set a new standard for a team who always strives to be the best steward of the University of Virginia.

When the State Department announced on February 14 that Secretary of State John Kerry's first foreign policy address would be delivered February 20 at University of Virginia's Old Cabell Hall, Facilities Management joined other University offices as well as the State Department to coordinate preparations for the arrival of hundreds of officials and media from throughout the U.S. and the world.

We are proud that several of our colleagues earned special individual recognition:

- Landscape Worker Senior Abdalla Mohamed was recognized for his fast response that UVA Police said saved a student's life.
- Housekeeping Zone Senior Manager Hattie Agee shared her wisdom gained over more than 35 years at the University in The UVA Magazine article *What I've Learned*.
- Sign Shop Supervisor Warren Wood was a recipient of a Leonard W. Sandridge Outstanding Contribution Award for his dedication to the University and his volunteer service to the community.
- FP&C Health System Senior Project Manager Jim Loman earned the 2012 Supplier Diversity Facilities Management Project Manager award for his efforts to support diversity in construction contracting. The award was presented by UVA Procurement & Supplier Diversity Services.
- The outstanding work of our Sustainability Program earned UVA the Crystal Award in Sustainability for Higher Education, given by the Virginia Sustainable Building Network and the James River Green Building Council.
- HR&T's development and presentation of the 2013 Leadership Forum earned a 2013 Human Resource Excellence Award from the Charlottesville Society for Human Resource Management.

We are equally pleased with the action plans our Momentum Action Teams developed and implemented to improve our resources in the four areas - diversity, communication, training and development, and technology - identified by the President's Staff Survey. Our first Town Hall Meeting in June proved to be a great step toward stronger communication.

We are proud of our employees' accomplishments in the areas of educational and professional development. As the University's stewards, Facilities Management values the initiative our employees demonstrate as they pursue professional development and life-long learning.

Facilities Management continues our long tradition of giving back to our community through many important events. In September 2012, more than 100 employees volunteered their skills at the annual Day of Caring to improve the facilities for Camp Holiday Trails, the Senior Center and the Lane Babe Ruth League Field. Soon afterwards, they donated over \$22,800 to the Commonwealth of Virginia Campaign. Our employees also generously supported collections for the Blue Ridge Food Bank, the Toy Lift, and the School Supplies Drive for underprivileged children in our area. Throughout the year, they also supported Virginia Blood Services.

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 black ink that reads "Don".

Donald E. Sundgren
Chief Facilities Officer

Stewardship in Action



Landscape Worker Senior Abdalla Mohamed was clearing leaves on a November Saturday morning when he discovered a student, injured and unresponsive, lying wedged between a fence and a generator. Abdalla's fast response in alerting emergency responders saved the student's life, a UVa police officer said.



The New Cabell Project Team - Construction Administration Manager Charlotte Dickerson, Facilities Management Project Director Craig Hilten and Senior Construction Administration Manager Randy Porter - are typical of the knowledgeable and focused professionals who ensure that renovations as well as new construction for UVa meet the high standards of this World Class University.



High Voltage Electrician Tim Gibson installs a new illuminated pedestrian crossing signal as part of the University's proactive concern for safety.



Recycling workers Nicholas Gentry and Bienvenu Bizimana collect weekend recyclables at Copeley Hill Residences.



Custodial Services Worker Lois Crenshaw demonstrates Green Cleaning standards in use throughout UVa.



Secretary of State John Kerry's first foreign policy address was delivered at UVa. Facilities Management's involvement was key to the success of the event.



When heavy winds and rain hit late on a June afternoon, Systems Control Manager Nina Green, Operator Scott Layne, and Supervisor Vince Muscarella were monitoring conditions, dispatching technicians for emergency repairs and taking actions for the safety of the University community.



HSP Plumber Steamfitter Slobodan Letic teaches Apprentices Jesse Johnson (left) and Joseph Brinson how to gauge the correct technique for soldering larger copper fittings. The fittings could leak if too much heat is added.

Major Initiatives

Facilities Planning and Construction (FP&C) is responsible for the execution of the University's Capital Project Program. We provide 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.

In 2012-2013, FP&C's accomplishments included:

- Completed and occupied several new major facilities totaling \$280,800,165. Some are highlighted in the Division sections that follow.
- Awarded 83 construction contracts totaling \$83,444,216.
- Processed 406 professional service contracts and service orders totaling \$16,873,811.
- Put in place construction with a value of \$165,800,000.
- Design and construction continues on major new facilities totalling \$605,766,701.

Academic Division

The Academic Division had a total workload of 28 capital projects. Using the HECOM threshold of \$1,000,000 for a Capital Outlay project, these active projects included:

- 4 capital projects in design for a total of \$59,900,000.
- 12 capital projects in construction for a total of \$254,810,000.
- 12 capital projects completed for a total of \$120,398,000.

Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
Cemetery Expansion	Alderman Road Residences Building 6	Alderman Road Residences Phase III
Newcomb Road Chiller Plant	Alderman Road Residences Phase IV	Academical Village Chimney Repair & Sprinkler Installation
Rotunda Renovations	FM Landscape Shop	Blandy Farm Research Building
College at Wise: Dam Restoration	New Cabell Hall Renovation	George Welsh Indoor Practice Facility
	College at Wise: Dam Restoration	New Cabell Hall Renovation
	North Grounds Recreation Center	Newcomb Hall Dining Expansion
	Rotunda Roof Replacement and Exterior Repairs	Newcomb Hall Renovations
	Ruffner Hall Renewal	Old Cabell Hall Access Ramp
	Ruth Caplin Theatre	Pavilion X
	Utility Tunnel Repairs	Track & Field Facility Improvements Phase I
	College at Wise: Health & Wellness Center	College at Wise: Accessibility
	College at Wise: Library	College at Wise: Smiddy Hall Renovation and New IT Wing

See the [Facilities Planning & Construction annual report](#), located on the FP&C web page, for more information on projects and accomplishments for fiscal year 2012-2013.

Academic Division Major Commissions

Alderman Road Residences – Phase IV

The fourth phase of the master plan to modernize and expand first year housing facilities in the Alderman Road area, this project builds on the precedent of Kellogg House to provide a new residence hall to support increasing enrollments and rising student expectations for the first year residential experience. The new facility, Shannon House, has been constructed on the former sites of Lile House and Tuttle House, which were demolished to make way for the new construction.



Situated at the foot of a steeply sloping site, Shannon House creates a courtyard with Cauthen House and the newly completed Tuttle-Dunnington House, and will continue the use of native and adaptive plantings, further stabilizing slopes and enhancing the overall site. Accessible routes will connect Shannon House to adjacent buildings and Alderman Road. Intended primarily for pedestrian use, designated routes will be opened to vehicles for move-in days. Treehouse Drive has been realigned horizontally and vertically to improve access and connection to Alderman Road.

Ayers / Saint / Gross Architects + Planners of Baltimore, MD prepared bridging documents for the project. W.M. Jordan Company of Norfolk, VA and Clark Nexsen Architects of Charlotte, NC, the design/build team for Phase II and III, has been retained for this phase as well. The working project budget is \$28 million. The University accelerated the project schedule for this phase to take advantage of advantageous construction-market conditions, enabling Shannon House to open in time for fall semester 2013, concurrent with Tuttle-Dunnington and Lile-Maupin Houses.

Academical Village Chimney Repair & Sprinkler Installation

The Lawn and Range Rooms were designed by Thomas Jefferson as student dormitories. The University of Virginia discovered in 2010 that the flue linings within many of the student room chimneys were failing. Because of the threat of fire posed by this condition, the chimneys were taken out of service. In the summer and fall of 2012, the University repaired the chimneys, fireboxes, and hearths, removing the failed liners and installing new stainless steel liners. As part of this project, sprinklers were installed in all of the student rooms and in the attics above the rooms, in accordance with modern-day fire code requirements and to protect the occupants of these critical buildings in our World Heritage Site.



Facilities Management roofers, carpenters, masons, and fire safety personnel joined a multi-disciplinary team that also included Black Goose Chimney Sweep, Virginia Sprinkler Company, and A.G. Dillard as sub-contractors to Martin Horn. Both Sunbelt and Scaffold Solutions provided access to the attics and chimneys; more scaffolding was installed within the Academical Village during this project than in any other year in the University's history. This project represented a concentrated effort of over 200 tradespeople working together to ensure success during a tight, 5-month schedule.

Construction was completed in November 2012. This project's \$3.7 million budget was funded by The Commonwealth of Virginia, the Housing System, Alumni Association and private donors.

New Cabell Hall Renovation

Built in 1952, New Cabell Hall is the workhorse of the College of Arts and Sciences with 46 classrooms, and office space for 390 faculty and staff. The six-story, 150,000 gsf brick building is currently undergoing a multiphase modernization that includes new heating, plumbing, and electrical power distribution and lighting systems.

Classrooms in this historically significant building are receiving state of the art teaching aids equal to those installed in other new classrooms on Grounds. On the exterior, the enclosed courtyard between New and Old Cabell Hall is being terraced and fully landscaped to transform the previously under-utilized space into a vibrant new destination. The courtyard will be directly connected to the surrounding buildings to enhance and encourage use of the courtyard amenities. A new multi-story curtain wall will introduce daylight deep into the corridors of New Cabell Hall and provide an accessible connection through the building to the South Lawn plaza.



The project architect is Goody Clancy of Boston, MA, and the construction is being managed by Barton Malow of Charlottesville, VA. The project budget is \$64.5 million. Phase 1 of the two-phase renovation is complete; Phase 2 is scheduled for completion by fall semester 2014.

Newcomb Hall Dining Expansion

The Newcomb Hall Dining Expansion project addressed the increased demand for dining space at Newcomb Hall, and has enhanced the dining experience with a revitalized, more open and light facility for dining and food service functions.

The project included a new 16,000 gsf, two-story addition to the west side of Newcomb Hall, and the renovation of 32,000 gsf of existing dining spaces on the first and second floors. Approximately 500 new seats have been added altogether. Additional improvements included a lobby and information center, relocated post office and convenience store, and new restrooms. Sitework at the Newcomb plaza included new utilities, relocation of existing utilities, and restoration of portions of the plaza adjacent to the new addition and bookstore.

Construction began in March 2011 and was substantially completed in December 2012. The architect was Cole & Denny, Inc., of Alexandria, VA and the construction manager was R.E. Lee & Son, Inc. of Charlottesville, VA. The project budget was \$18 million.



North Grounds Mechanical Plant

This project will replace most of the equipment in the North Ground Mechanical Plant and also expand the plant, which currently serves the JAG School and the associated Law School Building. The new plant will be a 2,500 gsf expansion of the existing plant, for a capacity of 16,000 MBH of heating and 2,600 tons of cooling. Space and piping will be sized for additional equipment to bring the plant up to 28,200 MBH of heating and 4,100 tons of cooling in the future.

The current plant equipment is at the end of its lifecycle and the plant is near its maximum capacity. There are near term plans to build a JAG addition and possibly to serve the Darden School from this plant. Thus the initial sizing is for the current buildings and the planned addition to the JAG school, with the ability to add equipment in the future in the event the Darden School plan is approved.

The project examined several alternative heating and cooling options. After detailed investigation, the most cost-effective system was determined to be heat recovery chillers, which will use removed heat from the buildings to add heat back into the hot water system. In combination with several other technologies, this will greatly improve the efficiency of the plant.

The designer is Hammel, Green and Abrahamson, Inc. of Minneapolis, MN. Martin Horn of Charlottesville, VA has been selected as the CM at Risk Contractor. Full construction will begin by the end of September 2013, with substantial completion scheduled for November 2014. Final completion is expected by January 2015. The total project budget is \$13.1 million.

College at Wise: Library

The University of Virginia's College at Wise is constructing a new library, to support the academic mission of the College and provide a state-of-the-art facility for the College's students and faculty. The library will be the academic heart of the College, and is centrally located to provide a fully accessible 24-hour link between the upper and lower campuses.

The building will house the College's collections and will provide study, instructional, and multimedia resources to accommodate the College's present and future needs. The library's size and layout are designed to accommodate the number of students that will use the facility, the numerous functions the facility will serve, and the need for an accessible, 24-hour vertical link. Lobbies on several floors will be open late, and will feature café tables, group study rooms and informal lounge seating so that students can collaborate on projects, study, socialize, and gather informally throughout the day and evening. The lobbies will also serve as a direct point of entry to the multimedia learning labs. A café will further enhance the facility's role as a center of campus life.

Designed by Cannon Designs of Arlington, VA, the project features a five-story, 69,000 gsf brick and glass structure, destined to become the identifying, iconic building on the campus. Construction is now underway, with completion expected in summer of 2016. Quesenberry's of Big Stone Gap, VA is the Construction Manager. The project budget is \$37.17 million.



Health System

The Health System Division responded to 19 new requests for services, contributing to a total workload of 62 active projects, including projects that have reached construction completion in the last year. Using the HECOM threshold of \$2,000,000 for a Capital Outlay project, these active projects included:

- 12 projects in startup / request phase, budget / scope not yet developed.
- 29 small non-capital projects with an average size of \$185,859 for a total of \$5,389,909.
- 14 large non-capital projects with an average size of \$908,105 for a total of \$12,713,465.
- 17 small capital projects with an average size of \$2,763,701 for a total of \$46,982,931.
- 18 large capital projects with an average size of \$25,950,114 for a total of \$467,102,060.
- 6 capital projects in design for a total of \$71,421,000.
- 14 capital projects in construction for a total of \$219,635,701.
- 8 capital projects completed for a total of \$160,402,165.

Capital Projects In Design	Capital Projects In Construction	Capital Projects Completed
Culpeper Regional Hospital Emergency Department Expansion and Renovations	1003 West Main Street Renovations	McLeod Hall Phase II
University Hospital 7th and 8th Floors Renovation	Battle Building at Children's Hospital	Old Jordan Hall HVAC Infrastructure Replacement
University Hospital Emergency Power Phase III	CRU & Neurosurgery Renovations Davis / Barringer / McIntire	South Chiller Plant Expansion, Chiller 3
University Hospital – Vegetative Roof	Demolition of 1224 JPA – Battle Building	University Hospital Bed Expansion
University Hospital HVAC Replacement Phase II	East Chiller Plant and Lee Street Realignment	University Hospital Helipad Rooftop Expansion
University Hospital Vascular Hybrid Operating Room	ERCP Expansion	University Hospital HVAC Replacement Phase 1 / Level 2M
	Lee Street Entry and Connective Elements	University Hospital Radiology Master Level Plan Remaining Phases / Level 1
	Old Jordan Hall Microbiology Central Corridor Lab Renovations / 7th Floor	University Hospital Roof Replacement Project Phase I
	Outpatient Surgery Modular Unit Improvements	
	University Hospital Fire Alarm Replacement	
	University Hospital NICU Renovation / Level 7	
	University Hospital Roof Replacement Project Phase II	
	West Complex – Blake Relocation	
	X-Ray Wing Renovation – Blake Relocation	

Health System Division Major Commissions

Lee Street Entry and Connective Elements

This project includes an expanded front entry to University Hospital, a new plaza/traffic oval centered on the hospital entrance, a new bridge over Lee Street between the hospital and the Lee Street Parking Garage, and a new vertical circulation tower that joins the Lee Street Garage with the bridge to the 11th Street Garage. The Lee Street Connective Elements project ties together the Emily Couric Clinical Cancer Center and the Hospital Bed Expansion, allowing a unified sense of place and a new point of arrival.



The second and most prominent phase of construction – the expansion of the Hospital Lobby, the new curved glass front of the Hospital, and the bridge over Lee Street – opened in early July. Additional work in the Hospital Lobby includes new information desks, a gift shop and a renovated space for patient discharge. The final phase of the project has new sidewalks and landscaping, creating visual continuity from the plaza to Jefferson Park Avenue.

To ensure design continuity, this project uses the same architect that designed the cancer center, Zimmer-Gunsul-Frasca Partnership. All three projects share patterned glass curtainwall modulated by the rhythm of vertical mullions and columns. Construction management services are by Gilbane Building Company of Laurel, MD. The total project budget is \$30.1 million; construction began in May 2010.



McLeod Hall Phase II

McLeod Hall was the central facility for the School of Nursing until the opening of the Claude Moore Nursing Education Building (CMNEB) in 2008. McLeod is over forty years old and had not had a building-wide renovation or infrastructure upgrade until now. Beyond the bare facility needs, the School also wished for McLeod to approach the aesthetic quality of CMNEB.

McLeod consists of five core floors of offices and classrooms, two underground parking levels, and an auditorium. (Each core floor is 10,000 gsf.) Phase I of work renovated the first, fourth, and fifth floors. The first floor was completed in August 2010; the fourth floor in February 2011; and the fifth floor in August 2011. Phase II of work renovated the third floor and was completed in December 2012.

The total project budget for Phase II was \$1.5 million. The project architect for Phases I and II was Bowie Gridley Architects of Washington, DC. Construction was completed by in-house forces from the Project Services group of Facilities Management.



Old Jordan Hall HVAC Infrastructure Replacement

The original portion of Jordan Hall (Old Jordan Hall) is a seven story building that opened in 1971. A new addition providing laboratory, office, and classroom space was opened in December 1995.

This project is for the original building and does not include the new addition. The first floor of Jordan Hall contains two lecture halls, as well as a small seminar room and anatomy laboratories. The majority of the first and second year lectures are given here. The second floor houses additional student laboratories, as well as basic science research laboratories.

The academic offices and research laboratories of the Departments of Anatomy, Physiology, Cell Biology, Pharmacology, Biochemistry, and Microbiology occupy floors three through seven. The intent of this project was to bring the entirety of the HVAC infrastructure up to the standards required for a modern research laboratory building. The project achieved final completion in January 2013.



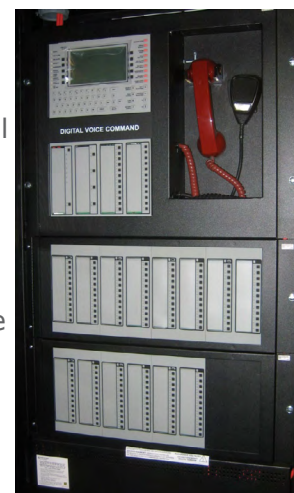
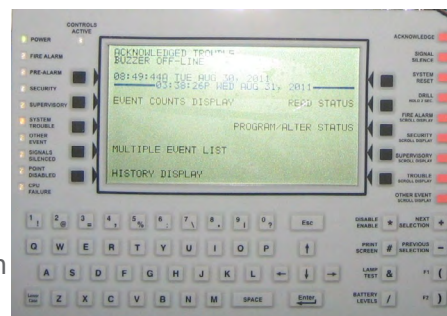
RMF Engineering, Inc. of Charlottesville, VA was the engineer for this project. DPR Construction, Inc. of Falls Church, VA was the construction manager. Construction began in August 2010 and was completed in January 2013. The total project budget was \$33.4 million.

University Hospital Fire Alarm Replacement

The hospital fire alarm replacement will provide a completely supervised and addressable fire detection system throughout the facility. This upgrade will include the infrastructure to support expansion of the system as required for future hospital renovations and additions.

The project scope includes construction of a new fire control room for system monitoring that will also serve as a base of operations for the Charlottesville Fire Department and University fire protection personnel during emergency situations. Throughout the hospital, the new infrastructure will connect to new initiating and existing alarm devices. This new addressable system will identify the specific locations of devices in alarm. The entire system will be monitored by Systems Control through new radio transceiver equipment. A digital voice alarm capability will also be provided throughout the entire hospital.

Additional life safety emergency power distribution within the hospital will also be constructed under this project. Emergency power circuits dedicated to life safety functions are currently at their limit. This project will add enough circuits to not only supply the new fire alarm system, but also create spare circuits for future projects that require dedicated life safety power. The project was designed under contract with Smith Group. Protective Engineering Group, Inc. was the Fire Alarm design consultant. The construction contract was awarded to Communications Specialists, Inc. in January 2011. The new system was commissioned by zones with the entire system operational in January 2013. The total project budget was \$6.4 million.



University Hospital West Complex – X-Ray Wing Renovation

The X-Ray Wing was the old 10,000 square foot oncology x-ray equipment site, originally constructed in 1957 and renovated as equipment was upgraded over the years.

When Oncology moved to the Emily Couric Cancer Center, the entire wing was vacated for the first time since it was originally constructed.

At this point the entire wing was gutted, including approximately 70 tons of original lead bricks used for radiation protection. The space was renovated for office use, with all new mechanical, electrical, and plumbing systems and new building finishes. Because of the prime location, three functions that require public and UVa employee access were moved in: Human Resources, Employee Assistance and Medical Center Procurement.



The project cost \$2.45 million, was designed by Train Architects and constructed by UVa Project Services. The project was fast-tracked because the new occupants were moving from the Blake Center, the building being demolished to make way for the new entrance to the Battle Building. Design started in October 2012, the Building Permit was issued in February 2013, and substantial completion was achieved in June 2013.

University Hospital NICU Renovation / Level 7

The Neonatal Intensive Care Unit (NICU) Expansion is an eight bed expansion of the existing Neonatal Unit located in the SE corner of East Wing on the 7th floor of the University Hospital. The expansion consists of neonatal bed areas and support facilities for neonates requiring the most critical intensive care. The project will take existing support spaces within the unit and renovate the area to become an eight bed, enclosed expansion of the NICU.



The surrounding support facilities will be renovated or reconfigured to become more efficient and effective. Support spaces include clean and soiled utilities, equipment room, overnight sleeping rooms for families, staff offices, and ancillary patient support areas such as lactation, education, and counseling.

Nalls Architecture Inc. of Philadelphia, PA provided design services and Crenshaw Construction Inc. of Culpeper, VA is the General Contractor.

Construction began in November 2012 and is scheduled to be complete in November 2013. The project is being constructed in three phases to minimize disruption to the operation of the unit. Phase 1 was completed in March 2013 and Phase 2 was completed in September 2013. The total project cost is \$2.7 million.

University Hospital Vascular Hybrid OR-29

Vascular Hybrid OR-29 will be a state-of-the-art operating room that includes a robotic x-ray system. This enables vascular surgeons to perform multiple operations at once; what normally would take two operations performed over two days can now be combined into one procedure.

The project includes renovating existing office space and a satellite OR pharmacy into a new pharmacy, a 180 square foot OR control room, and an 800 square foot operating room. Construction documents were started August 2012 and construction is projected to start January 2014 with occupancy in mid-to-late June, 2014. The project budget, excluding equipment, is \$2.7 million.



University Hospital Roof Replacement Project

The University Hospital, a 608-bed facility with a Level 1 Trauma Center, was completed in 1989. Due to the age of the existing roof, and the costs of maintaining it, a thermoplastic polyolefin (TPO) roof is being installed. The work began in late 2011 and 95% of the roofs are now complete. The remaining roof areas will be completed this year and a green roof consisting of vegetation planted in a growing medium over a waterproof membrane will be installed over the lobby area next year.

The TPO roof was designed by Heyward Boyd Architects, PC. Lynch Roofing was the contractor for the work. The total project budget for all phases of the work is \$6.4 million.



Engineering and Design

Engineering and Design is composed of two work centers, the Design Group and the Project Management Group. Engineering and Design was active in the design and/or execution of over 140 individual projects and other activities in support of University facilities throughout fiscal year 2012-2013 and executed approximately \$10,000,000 in project and technical support activities.

Project Management Group

In Design	In Construction	Completed
Aerospace Research Roof Replacement	Alderman Library Built-In Gutters & Low-Slope Roof Replacement	Aquatics and Fitness Center (AFC) HVAC System Upgrades
Alden House Roof Replacement	Alderman Road Dorms Concrete Inspections 2013	Baseball and Field Hockey Video Board Replacement
Bavaro Hall Roof Hatch Installation	Brown College Slate and Flashing Repairs – Phase 1	Baseball Seating Expansion
Chemical Engineering Roof Replacement	Brown College Waterproofing	Batten Incubator Renovations
Clinical Department Wing Subterranean Roof Replacement	Child Development Center Emerg. Power Generator Replacement	Bookstore Roof Replacement
Dawson’s Row Roof Replacements	Darden Terrace Waterproofing and Repairs	Clay Hall Pavilion Roof Coatings
Gilmer Hall Auditorium Roof Replacement	Drama Building Roof Replacement	Dorm Waterproofing – McCormick Road, Copeley, UGardens
Halsey Hall Built-In Gutter and Ridge Cap Replacement	JPJ Arena Building Envelope Repairs	East Range Roof Replacement
Kerchof Hall Built-In Gutter and Low-Slope Roof Replacement	Law School Window Replacement	Fire Alarm Upgrades – McCormick Road Dorms
Kluge-Rue Cottage Renovation	McCormick Observatory SW Low-Slope Roof Replacement	Gilmer Hall Additional Elevator
Lorna Sundberg House Roof Replacement	O’Hill Emergency Power Generator Replacement	Lambeth Apartments Renovations Phase 5
Materials Science Building Roof Replacement	Stacey Hall Roof Replacement	Lambeth Colonnades Restoration and Repairs
McIntire Wing Roof Replacement	TJAGLCS Site Security Upgrades	Lambeth Field Residences Roof Replacement
Memorial Gym Window Repairs	Withers Brown AHU Replacement	Law Library Entry Upgrades
Michie Building Roof Replacement		Memorial Gymnasium Volleyball Locker Room Renovation
Old Cabell Hall Built-In Gutter and Low-Slope Roof Repl.		Olsson Hall Low-Slope Roof Replacements
Special Materials North Addition Roof Replacement		Olsson Hall Renovations
Thornton Hall C-Wing Supp. Sprinkler Water Line Study		Slaughter Hall Renovations
Withers Brown Hall North Section Roof Replacement		Student Activities Roof Replacement

Design Group

In Design	In Construction	Completed
3rd Floor Lab Renovations MR-4	Brown College Slate Roof & Flashing Repairs	1003 West Main Street Renovations
Athletics Storage Facility Indoor Practice	Elevator #6 Cab Refurbishment Slaughter Hall	Batten Incubator Renovations Sponsors Hall
BIMS Education Center McKim Hall	Elevator Replacement Monroe Hill	Cobb Hall Renovations for Department of Medicine
Drama Shop Paint Frame Replacement	Freight Elevator Modernization Mechanical Engineering (Construction Procurement)	Culbreth Theater Renovations
Elevator #5 Modernization Slaughter Hall	Lorna Sundberg House Roof Replacement	Drama School Sprinkler & Fire Alarm
FM Shop Renovations for Project Services	Replace Elevators #1 & #2 Memorial Gymnasium	Harmon, Grainger/Keller, & Kucenas Lab Renovations
Gala Lift Replacement, Culbreth Theater	Ruffner Hall Renovations	Helms Theater Traps Replacement
Install Handrails, Scott Stadium East & West	Ticket Booth & Associated Renovations, Old Cabell Hall	Lambeth Residences Roof Replacement
Landers Lab Renovation Chemistry		Lawn/Range Bathroom Renovations (Phase 4)
Relocate Conservator's Lab to Alderman Library		ME Classroom 339 Renovations
Replace AHU's & FCU's Physics Building		Old Medical School 4th Floor Renovations for Neurosurgery
Replace Elevator Doors, Alderman Library		Olsson Hall Renovation for SIE
Thornton Stacks Renovation SEAS		Rare Book School, Alderman Library, Phase 2
		Surgery & Transplant Renovations, 4th Floor MSB
		University Bookstore Roof Replacement

(continued on next page)

Engineering & Design Division Major Commissions

Batten Incubator Renovations

The W.L. Lyons Brown Innovation Laboratory (i.Lab) located in Sponsor's Hall offers the Darden School of Business a facility that promotes and encourages the incubation of business ideas and creates opportunities for students interested in starting their own ventures.

The Batten Incubator provides collaborative space to support prospective students interested in entrepreneurship. The scope of this project included the renovation of the existing lobby, the addition of a coffee bar, the addition of new meeting rooms, and the incubator, as well as various mechanical and electrical upgrades.

Conceptual design was by SMBW. The architect of record was the UVA FP&C Design Group. The engineer of record was Dewberry. Construction was implemented through Facilities Management Project Services Group. The project budget was \$1.6 million. Construction was completed April 2013.



School of Law - Karsh Student Services Center

The University of Virginia's School of Law began planning efforts for the renovation of the south end of Slaughter Hall in the summer of 2011. Slaughter Hall was constructed in 1974 and had major renovations that were completed in 1980 and 1997. Primary goals for the latest renovation sought to resolve inadequate office and work areas for admissions and other administrative and student groups in order to improve the student and visitor experience. The scope of the 33,000 square foot renovation included the demolition and reconfiguration of the 1st and 2nd floors and the repurposing of offices on the 3rd floor.

The addition of a new two-story lobby pavilion serves as an extension of student services offices located on the 1st and 2nd floors, with a connecting interior stair and a roof terrace accessible from the 3rd floor Alumni Lounge. The lobby pavilion expands into Purcell Garden, an existing interior courtyard that was rehabilitated during the fall of 2012. The project also included the replacement of some exterior windows in the renovated areas of the 1st, 2nd, and 3rd floors as well as a new storefront system at the Purcell Reading Room.

The architect of record was Train & Partners Architects and the engineer of record was Obenchain, Linkous, Daniels, and Sowick. The landscape architect was Michael Vergason Landscape Architects. Construction Manager was Martin Horn Inc. The project budget was \$9.2 million and the project was completed in November 2012.



Project Services

The Project Services Division completed \$31 million in construction and renovation projects in the 2012-2013 fiscal year, an increase from \$27 million the previous year. Projects included renovations at McLeod Hall 3rd Floor, Old Med School 4th Floor, 1003 West Main Street, Student Rooms on the Range, Darden Batten Incubator, The Judge Advocate General's Legal Center and School Security Upgrade, X-Ray Wing Renovation and Gilmer Hall Exterior.

Gilmer Hall Exterior



Masonry teams removed block from the east section of Gilmer Hall on both the north and south sides to make extensive stabilization improvements. Scaffolding covered the area to allow access for the work. Among those working on the project were L-R clockwise: Mason Apprentice Daisy Dejesus, Historic Masons Tim Proffitt, Dennis Edwards and (3rd photo) Glenn Tolbert, Plasterer Apprentice Les Givens, Mason Assistant Matt Proffitt and Historic Mason Robby Kolb.



X-Ray Wing Renovation

Photos L-R: In the old X-Ray Wing of the Multistory Building, Plumber Apprentices Mariah Kurlpel and Shane Black and Plumber Paul Johnson install lines. Historic Mason Glenn Tolbert and Matt Proffitt remove lead bricks from the wall. As the project progresses, Electricians Buddy Davis and Carol Larocco install lights, Electrical Apprentice Nicola Lemmer checks receptacles, and Cabinet Builder Senior Merle Dabney inspects the custom cabinetry made by the FM Cabinet Shop.



1003 West Main Street

Project Services tackled another unique challenge in April and May as they converted a former furniture store and restaurant at 1003 West Main Street into offices for Facilities Planning & Construction Health System Division.



L-R above: Project Services Carpenters Robbie Kincaid (on scaffolding) and Glen Marshall install wall frame over the cinderblock to transform the space from warehouse-like to well-insulated, efficient office space. On the roof, Construction Project Manager Jerry Craig and FP&C Design Manager/Project Manager David Villiott inspect the skylight created for the 9000 sq. ft. space. In the background, the new Battle Children's Hospital is under construction further down the street. Electrician Robert Bower listens as David suggests a solution for an issue with ductwork in place and a drop ceiling to be installed.



L-R: Carpenter David Simpson cuts steel framing for the new offices. Carpenters Ned Rosson and Bill Hodges install framing as Carpenter Quentin Walker and Apprentice Nestor Jara install a floor plate, the first step for converting open space into offices. Work was initiated in April and the completion date was June 1, a very short time frame for the extensive scope of work.



Cobb Hall



HSPZ Zone Support assisted Project Services during the complete renovation of approximately 4,000 sf of unused lab space in Cobb Hall. The space was totally cleared for new installations to create office space. Photos L-R: Electrician Greg Wood installs a receptacle on a data line. Project Services Electrician Mike Flowers prepares an LB box after adjusting conduit to run correctly above the drop ceiling called for in the drawings. Trades Utility Senior Worker Jesus Gaona installed conduit for electrical and computer lines.

Sustainability

Facilities Management continues its support for the University's sustainability goals through initiatives in Facilities Planning & Construction, Operations & Maintenance and Energy & Utilities.

In the 2012-13 fiscal year, seven additional facilities earned Leadership in Energy and Environmental Design (LEED) certification. Administered by the U.S. Green Building Council (USGBC), the LEED Green Building Rating System documents specific environmental, economic, and health and safety standards for new construction and major renovations.

Our project managers, senior project managers and senior construction managers continue to earn LEED Accredited Professional endorsements.

Energy & Utilities provides sustainable, economic, and reliable energy, utilities, and recycling services to facilities in support of the educational, research, health care and public service mission of the University. This mission is accomplished with appreciation for renewable and recoverable resources, dedication to environmental stewardship, and pride in the historical and cultural legacy of the facilities and Grounds.

In calendar year 2012, UVa reduced its carbon emissions by more than 5% from its 2009 baseline despite an increase in space of more than 9%. The primary drivers for the carbon reduction in the face of significant growth included behavioral changes of building occupants, the Delta Force retro-commissioning efforts, maximizing the use of natural gas at the main heat plant, implementation of initiatives from UVa's Transportation Demand Management plan, plant optimization projects that improve energy efficiency, LEED certification or higher of new and renovated facilities, and related initiatives.



UVa won the Crystal Award in Sustainability for Higher Education. Accepting the award at the Energy and Sustainability Conference held January 30 at Virginia Commonwealth University were (L-R) Sustainability Program Manager Armando de Leon, Health System Engineer Bill Rockwell and Sustainability Outreach Coordinator Nina Morris. The award was given by the Virginia Sustainable Building Network and the James River Green Building Council.



The Ophthalmology Clinic Expansion project team members – Carpenter Supervisor Todd Stroupe, Trades Supervisor Senior Jack Bryant, Project Manager Kristine Vey (LEED AP ID+C) and Senior Project Services Manager Kemper Tomlin - introduce the plaque awarded for the project's LEED Silver certification as established by the U.S. Green Building Council and verified by the Green Building Certification Institute (GBCI). The project, located in the Old Med School, was the first Health System LEED certified project completed with Project Services acting as the General Contractor.



Landscape and Central Grounds Zone's Greg Rogers, Scott Burns, Donald Tooley and Chris Herndon joined forces to install a trash composter (BigBelly) and recycling unit (SmartBelly) outside Alderman Library in April. These two units, funded by Energy & Utilities and Operations & Maintenance, are part of a pilot project initiated by the University Committee on Sustainability to install solar powered trash composters and recycling containers which send real-time data to alert the Landscape Division office when collection is needed. The project addresses students' requests for more opportunities to recycle outdoors. The value proposition was that UVa could introduce more exterior recycling while requiring no additional effort from Landscape. A grant from Student Council's Green Initiatives Funding Tomorrow (GIFT) funded the first BigBelly/SmartBelly at Clark Hall.



During Earth Week 2013, Sustainability Outreach Coordinator Nina Morris, Sustainability students Jonathan Torre and Haleigh Harper and Sustainability Planner Andrew Greene introduced a display on the solar powered Big Belly trash compactor and Smart Belly recycling units being installed on Grounds as shown in the photo at the top of this column.

Energy & Utilities' (E&U) teams and programs made additional progress as they focused on reducing costs, enhancing system reliability, and gaining on sustainability goals. Accomplishments included:

- Avoided a calculated \$9 million in expenses through halting the rate of electricity growth from that of the 1980's. This also yielded environmental benefits by avoiding the consumption of over 149 million kWh of electricity which would have produced over 85,000 metric tons of carbon emissions.
- Avoided at least \$3.9 million in expense by using central chiller plants to produce chilled water instead of stand-alone building systems.
- Based on the actual average cost of fuel at the main heat plant versus building boilers, avoided more than \$3.8 million in fuel costs through the use of a central heating plant.
- Avoided almost \$3.4 million in costs through aggregating our power supply through substations rather than having direct drops from Dominion Virginia Power.
- Achieved a recycling rate of 49.8% of the municipal solid waste stream and a diversion rate of 72.4% when non-MSW materials such as tires, lamps, ash, electronics, batteries, and oil, which get recycled or reused, are included in the total recycling numbers.
- Earned over \$220,000 from the sale of recyclables, which also avoided a cost of almost \$478,000 if this same material had gone to the material recovery facility in Zion Crossroads or to a landfill.
- Received over \$767,000 in sewer credit refunds from the City of Charlottesville for metering water used in irrigation or lost through evaporation in cooling towers.
- Avoided \$1.5 million in water and sewer costs due to water consumption being 25% below the 1999 peak.
- Avoided a cost of almost \$4.5 million in fiscal year 2012 through Delta Force retro-commissioning work that began in fiscal year 2008.
- Completed numerous other energy efficiency projects yielding an estimated \$400,000 in additional avoided expense.
- Received a \$192,000 payment for participating in the interruptible load response program.
- Reduced electricity consumption by over 9 percent in three facilities participating in the Shared Electricity Savings program, which avoided over \$38,000 in total combined electricity costs.

Building on the previous years' successes, E&U has built numerous partnerships across Grounds through communication and outreach on sustainability goals.

To demonstrate that UVa can achieve its Emergency Load Response goal, this year's annual load reduction test was branded *UVA Saves Hour* (see poster on right). Facilities Management led an organized effort to turn off equipment and switch several operations to emergency generators. In addition, *UVA Today*, local news, social media and flyers helped spread the word to students, faculty and staff throughout Grounds. The effort resulted in unprecedented success. UVa reduced its electrical demand by 15 megawatts, surpassing its goal by 4 megawatts.

USA Today published a national feature on higher education's participation in the program and Nina Morris was quoted on UVa's effective use of social media. "Social media is helping to get the word out about UVa's sustainability programs," she noted.

UVa Green Challenge encourages students to engage with the Charlottesville community by rewarding students for participating in local events such as the Vegetarian Festival, Charlottesville's Eco-Fair and Farmer's Market. The Green Challenge also encourages students to purchase locally-made products when possible and to give back by volunteering with local charities.

Duplex Derby, a new pilot paper conservation program, was created to help UVa departments make the switch to double-sided printing. The Weldon Cooper Center placed first with a 90% double sided printing rate.

UVa Sustainability's social media presence grew significantly this year to reach a larger and more engaged audience. Facebook and Twitter increased posts to include an Instagram account to visually document sustainability actions on Grounds.

World Water Day, an international day to bring attention to water conservation, focuses on global, local, and personal aspects of various water issues to educate participants at UVa on everything from what watersheds are to ways we can reduce water consumption.



UVA Saves Hour
Can you use less power for one hour?

Turn off unnecessary lights and electronics to help prepare for peak energy use this summer.

The goal: Reduce 11 megawatts for one hour!

Power down!
Help UVA reach the goal! **June 20 from 3 – 4pm**

Share your tip to reduce power for one hour and get a free water bottle!
Post your tip on UVA Sustainability's Facebook page or email us. sustainability@virginia.edu

Printed on recycled paper

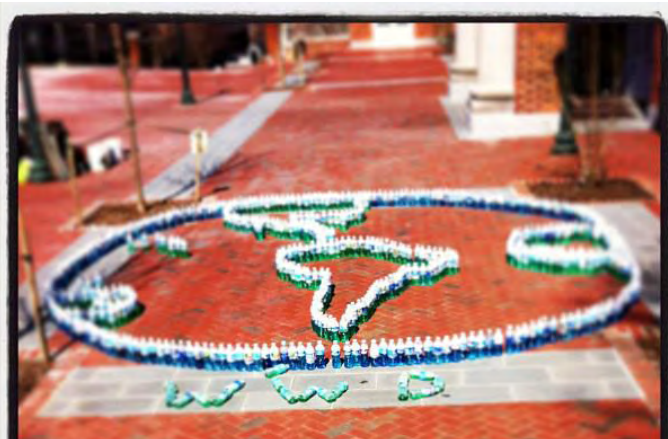
SUSTAINABILITY · UVA

Share how you plan to save energy now.



In these before (above) and after (below) infrared photos of the insulated steam piping and valves at the Kellogg House, the numbers on the photos indicate the surface temperature in degrees Fahrenheit. Traditionally, steam valves and pipe specialties that require periodic maintenance have been left uninsulated for easy access. Insulating jackets were fabricated and installed for \$5,500. The custom fitted insulating material is easily removed and replaced during maintenance. The jackets reduce the heat loss from the piping, protect personnel from a burn hazard and, every year, will save \$10,170 in energy costs and 43.3 tons of emitted CO₂.





Water Day at UVa focuses on global, local, and personal aspects of various water issues.



The aerial photo of the recycling sign around Homer statue made of the new multi-recycler bins went viral on social media.



At the 2012 Sustainability Day Forum discussion of key issues, Chief Facilities Officer Don Sundgren (right) shared a light moment with Campus Sustainability Day Forum panelists David Neuman, Architect for the University, and Phoebe Chrisman, Associate Dean for Research and Associate Professor in the UVa School of Architecture.

Chuck it for Charity, a collaborative effort between UVa and local charities for the past 12 years, collected 10,351 pounds of donated materials from on-Grounds students leaving for the summer. Nine charities redistributed the goods to local non-profit groups.

America Recycles Day, a national annual event, draws hundreds of UVa attendees interested in learning more about recycling. The event raises awareness about the benefits of recycling, buying products made with recycled materials and how to re-use items that normally would be thrown away. America Recycles Day offers creative crafts, recycled art, recycling games, and local green groups to engage participants and increase awareness of recycling opportunities in our community. This year, the Sustainability Student Employees and Sustainability Advocates created a large recycling sign around Homer statue on the South Lawn out of the new multi-recycler bins that are now available to all on-Grounds residents. The aerial photo was featured on UVa's homepage and went viral on social media.

UVa competed once again in Game Day Challenge, a national higher education competition to see which institutions can recycle the most materials at one home football game. A collaborative effort between Sustainability Outreach Programs and Athletics, UVa placed 5th in the Recycling Per Capita and 3rd in Greenhouse Gas Reduction categories. Over 60 volunteers collected recyclables from tailgaters and educated fans on UVa's recycling practices.

For Campus Sustainability Day, Sustainability Outreach collaborated with Green Grounds to develop a dialogue of UVa experts to discuss UVa's carbon footprint and UVa's plan to reduce its impact on the environment. The discussion was followed up with a breakout session to identify potential initiatives to help meet UVa's sustainability goals. This event brought together members of the community with students, faculty, and staff and raised awareness of UVa's impact on the local environment.

More information is available in the [Energy & Utilities Annual Report](#).

Operations

The Facilities Maintenance division provides corrective and preventative maintenance services for over 13 million gross square feet of Academic and Housing facilities.

Seven Zone Maintenance teams are committed to serving customers in specific geographic areas: Central Grounds, Newcomb, North Grounds, Southwest McCormick, Housing, Art Grounds and Central Shops.

Facilities Maintenance provided support for University Academic and Housing facilities improvements that included:

- Participation with the Rotunda dome roof replacement and the planning for a total Rotunda restoration
- Commissioning support for Phase 1 of New Cabell Hall classrooms and offices
- Staffing up for three new high-rise dorms on Alderman Road
- Commissioning of the Ruth Caplin Theatre, centerpiece of the new Arts Grounds
- Logistical support for the Newcomb Hall renovation
- Support for the Slaughter Hall renovation in the Law School

Facilities Maintenance demonstrated its resourcefulness by reaching out to the University community and obtaining new business which included:

- Elevator and Fire Systems PM and service work for the University Physicians Group
- HVAC PM and service at Intramural-Recreational Sports Aquatics & Fitness Center
- HVAC PM and service at Athletics facilities (Scott Stadium, Davenport Field, McCue Center, and the George Welch Indoor Practice Facility)
- HVAC and backflow preventer PM at John Paul Jones Arena

The Deferred Maintenance (DM) program continues to show improvement in achieving a Facility Condition Index (FCI) of 5.0% or less by fiscal year 2015, a goal established by the Board of Visitors beginning in 2005.



Members of the Arts Grounds team joined the Zone Maintenance group this fiscal year to serve facilities including the new Ruth Caplin Theatre (shown here), Madison, Campbell and Ruffin halls, Carr's Hill and Culbreth Theatre.



Building Services' goal was to earn Green Seal GS-42 certification before the end of 2013. Here, frontline Bavaro team member Jessica Worley begins her work at the helm of a cart outfitted to meet GS-42 procedures.



A full turf restoration of the South Lawn was the final phase of Landscape Division's unprecedented renovation of the Lawn.

The progressive decrease in maintenance backlog is largely due to increases in deferred maintenance budgets and significant capital renewal projects.

Projects supported by the Deferred Maintenance Program in fiscal year 2013 included:

- Madison Hall Elevator replacement
- Dawson's Row #1 Renovation
- Lambeth Colonnade Renovation
- Gilmer Hall Façade Repair
- East Range Roof Replacement
- Jordan Hall HVAC Renovation
- Olsson Hall Roof Replacement
- Rotunda Exterior brick repair

Building Services set a goal in late 2012 to gain Green Seal GS-42 certification, a cleaning program established by the Green Seal Institute. As they worked to earn certification before December 31, 2013, the Building Services team used the process to achieve additional benefits including strengthening supervisors' ability to manage large projects, improve inventory control measures, enhance the perception of team members' value, and establish first time standards for areas such as custodial carts and closets.

Other goals Building Services achieved included:

- Custom design and implementation of an automated quality inspection tool
- Professional development for front-line Top Performers
- Merger of the Housing team to operate more consistently and cost effectively

Landscape Division continued to blend advanced technology and environmentally conscious practices as it maintained the University's Grounds. This year the division completed an unprecedented total renovation of the Lawn. The final phase, during the winter break, included full turf restoration on the South Lawn and installation of irrigation systems in front of Rouss, Cocke and Old Cabell halls.

Other major landscape projects were completed for Rouss Robertson, Ruth Caplin Theatre, the Emmet Street/University Avenue Green Space improvement and the Law School's Purcell Garden renovation.

Sign Shop Supervisor Warren (Hubba) Wood is a 2013 recipient of a Leonard W. Sandridge Outstanding Contribution Award. Selected from nominations from the Academic Division, Medical Center and UVA's College at Wise, the 11 winners attended a luncheon with the University Board of Visitors on May 21. "Since Warren joined the Sign Shop in 1998, he has raised the Shop's standards and services for the University," a letter of nomination noted. He and his colleagues have produced signs for guests including the Dalai Lama, Nobel Laureates, and Secretary of State Kerry. At the request of UVA alumnus and NASA Astronaut Patrick Forrester, Warren also made a custom 4-ounce Honor Code plaque that Forrester took on the Space Shuttle Discovery in 2009 to the International Space Station.

Warren has been a member of the Crozet Volunteer Fire Department for 30 years. He has also battled cancer. After being out for cancer treatments, he raised over \$6000 for the Charlottesville Women's 4 Miler; he promised to dye his hair pink if friends would donate to this event which benefits breast cancer research. "I did this to give back to the community, family and friends who supported me throughout my cancer treatments," the two-time cancer survivor said.



Part of Facilities Management's work in preparation for Secretary of State John Kerry's February 20 address was providing a taller podium with custom signage. To accommodate other speakers, the Cabinet Shop designed, built and installed a custom moveable step. Here, shop staff Brett Bryant and Kevin Campbell and Supervisor Mike Gibson inspect the final placement.

The completion of a new 10,000 gsf steel Landscape Building in June provided a greatly improved space with more work areas including a 2nd level that overlooks the workshop and engine repair area, and better facilities for the 80 members of the Division.

The Facilities Management Safety team works to create a safe work environment for over 1,200 FM employees. Focus is on communication and education of staff on current safety codes and procedures as well as compliance measures.

The Health System Physical Plant (HSPP) Fire and Safety Division provides continuous on-site inspections, including inspections for ongoing major renovations throughout the Medical Center, to assure that all Health System facilities meet required Life Safety and Fire Safety codes. Those, in addition to continuous compliance inspections and biannual Statement of Conditions inspections for all patient care areas, are completed each year and are instrumental in maintaining Joint Commission and Centers for Medicare and Medicaid Services (CMS) accreditation. In fiscal year 2012-2013, this team supported an unannounced week long CMS Life Safety validation survey. Minor deficiencies were noted and resolved.

The HSPP engineering office provides technical assistance throughout Health System including inspections, drawing reviews, ICRA training, and engineering support for major renovation efforts. The engineering office's work is integral to obtaining and maintaining the University's accreditation from AALAC, and CMS/Joint Commission.

HSPP Zone Maintenance teams continue to support the Health System's expansion and upgrades through a well-established program for preventive maintenance, corrective maintenance, major maintenance and deferred maintenance. Accomplishments included:

- Zone 1 completed its first full year maintaining the new Emily Couric Clinical Cancer Center and is integrating the Hospital Bed Expansion into the existing facility.
- Zone 2 supported domestic water heater replacement for MR-4 and the Annex; installed bypasses on lab air handlers and replaced condensate lines from water heaters in MR-5.
- Zone 3 supported routine maintenance requests, utility outages and replaced a number of fire panel locations including Barringer, Davis and McIntire wings.
- Zone 4 continued maintenance of outlying Health System facilities including the newly added clinical building in Augusta Professional Park, supported the closing of KCRC's inpatient wing and installed a new fire alarm system at Northridge.

The HSPP Zone Support Group's six trades shops – plumbing, electrical, carpentry, painting, masonry/plastering and welding – completed turnkey projects for Health System facilities. Projects included ICU renovations, Emergency Room and Medical Center painting projects, and replacement of sprinkler heads in the Multistory Building.

See departmental annual reports on-line for more on the accomplishments [Health System Physical Plant](#) and [Operations & Maintenance](#).



Renovations projects in the Multistory Hospital required the work of many shops and trades such as Project Services Plasterer Dominic Wells (left) and Carpentry Apprentice Matt Herndon.



Sheet Metal Technician Robbie Zakaib installed custom designed ductwork made by the Facilities Management Sheet Metal Shop for the Dawson's Row renovation.

Financials

The Finance Department provides accounting, budgeting, financial reporting, accounts payable, and payroll support for Facilities Management's total business volume of \$367.9 million and 1,127 filled full-time employees in fiscal year 2012-2013. The department is comprised of Fiscal Operations, Facilities Planning & Construction Financial Services and Energy & Utilities Finance.

In addition to accomplishments made by these three units, the Finance Department accomplished a number of major projects in 2012-13: Those included:

- Preparation for implementation of the New Institutional Financial Model, including the development of utilities memo bills.
- Planning and implementation of a new Facilities Management enterprise system.
- Accounting and reporting for Housing Operations & Maintenance work.
- Coordination of overtime audit analysis and responses.
- Coordination of JLARC facilities expenditures survey responses.

University of Virginia Facilities Management Financial Summary 2013	
Salaries and Benefits:	\$ 72,726,314
Utilities:	\$ 47,172,219
Planning and Construction:	
Construction	\$ 168,558,391
Architectural & Engineering	\$ 20,929,106
Total	\$ 189,487,497
Maintenance and Operations:	
Materials and Contracts	\$ 50,211,949
Travel and Training	\$ 503,711
Information Systems	\$ 2,283,062
Other	\$ 5,473,492
Total	\$ 58,472,214
Total Expenses	\$ 367,858,244

Further details on the accomplishments of the Finance Department and its three entities are available in the [2012-2013 Finance Annual Report](#) on the Facilities Management website.

Programs

Information Systems

Facilities Management Information Systems (FMIS) 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 (FM) organization.

The major focus of FMIS for 2012-2013 continued to be the implementation of the AiM Work Order Management system.

Other significant accomplishments included:

- Continued transitioning FM systems to the UVa Data Center in order to provide off-site redundancy for critical systems.
- Continued work with Energy & Utilities and ITS to create a new UVa VLAN to isolate network traffic for building automation system and infrastructure devices. This new network improves security for these infrastructure devices.
- Continued to expand the use of SharePoint as a workgroup and team collaboration tool, including work with Building Services, the Safety Committee, and Project services.
- Began work with FP&C on replacement of Project Information Management System. A project team was formed and the project scope was defined. A Request for Proposal for a replacement system has been issued.
- Formed an FM Analytics and Reporting work group to assess FM's use of analytics and recommend strategies for improving the utilization of data and reporting within the organization.
- The help desk installed 160 computers and tablets and responded to more than 2600 calls for assistance in the 2012-2013 fiscal year.



The Information Systems team introduces their new location in the recently completed Lacy Hall.



At our Computer Help Desk, IT Specialist Michael Gray assists a caller through our centralized remote administration capability.



Information Technology Analyst Wei Sun develops new software to complement IS services for Facilities Management

Resources, Training and Development Programs

Facilities Management's Office of Human Resources & Training (HR&T) continues to provide support and resources for our more than 1,200 full-time and wage employees.

In November 2012, HR&T sponsored the second Manager Enrichment session which gave 57 senior level managers and directors opportunities for networking and leadership development. Participants explored Strength Deployment Inventory (SDI) designed to help managers learn to use their individual strengths to achieve goals and manage their teams. In addition, the participants were briefed on key elements from the Vice President for Management & Budget Customer Satisfaction Survey, major accomplishments and future goals of the much-in-demand Project Services Group, the impact of a diverse workforce, and an overview of the wide range of responsibility of the Systems Control Department and their role in weather related and other emergencies.

Following in the direction started at the 2012 Leadership Forum, four Momentum Action Teams (MAT) were created from 45 volunteers across business units to develop action plans to improve workplace environment in the four areas brought out by the results of the President's Staff Survey: diversity, communication, technology, and training and development. The teams presented their action plans to Facilities Management directors in December 2012. Some of the plans developed included a Diversity Calendar, FM Town Hall Meetings, SkillSoft Training, and technology privacy upgrades. Implementation of action plans began in 2013 and is ongoing. Fast Facts, a one-page bimonthly newsletter, was created to publicize MAT accomplishments and bring employees timely communication on a variety of topics.

Facilities Management's eighth annual Leadership Forum - HR Boot Camp: Back to Basics brought 200 directors, managers, superintendents and front line supervisors together in April 2013 for training in certain essential and rapidly changing human resources procedures. The opening address on leadership was given by Captain Mike



At the November 13 Manager Enrichment session, Tamara Sole, Learning & Development Manager with University Human Resources, introduced Strength Deployment Inventory (SDI) to help supervisors make the best use of their skills.



At the first meeting to establish Momentum Action Teams (MATs), volunteers learned the importance of clear communications. Here, Communication MAT members Priscilla Beamer, Teresa Dillard, Greg Rogers, A.J. Conner and Sharon Eldridge discuss the challenge.



HR&T Director Rebecca Leinen introduced Captain Mike Cashman to the 2013 Leadership Forum audience.

Cashman, UVa Navy ROTC Commanding Officer and Professor of Naval Science. The four Boot Camp Breakout sessions – employee relations, hiring process, UHR web site navigation and the Respectful Workplace program – gave attendees tools to be better equipped to handle the HR aspects of their jobs. The Leadership Forum received a 98% score in Overall Usefulness from its participants and also won a 2013 Charlottesville Society for Human Resource Management Human Resource Excellence Award.

English as a Second Language (ESL) and General Educational Development (GED) classes offered on Grounds remain vital and well-attended because of continued employee interest, strong support from supervisors, and our partnership with the Charlottesville City Schools Adult Education Program. This year 17 Facilities Management employees participated in GED classes and 15 employees attended English as a Second Language (ESL) classes. We had one winner and three honorable mentions for their essays entered in the Festival of the Book’s annual Voices of Adult Learners essay contest. They were also recognized at our Apprentice & Education Recognition Ceremony.

At that same ceremony, Facilities Management celebrated the educational achievements of seven employees. Those included three Associate’s Degree and another four who earned Master’s Degrees. Dr. Frank Friedman, President of Piedmont Virginia Community College, gave the keynote address on the commitment to lifelong learning.

Human Resources & Training continued to support two important UHR training courses by recruiting employees for Supervisory Essentials and Essential WorkSkills. Twelve Facilities Management employees completed Supervisory Essentials and 32 employees completed Essential WorkSkills.

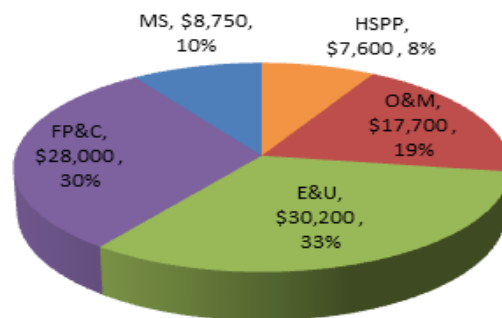
On-site Trades Recertification training for 135 Facilities Management employees was arranged by HR&T again this year as a service to our employees who are licensed in the construction trades. These training classes provide the required training for State license renewal.

Facilities Management recognizes and acknowledges the efforts of our employees through the use of Promotions, Role Changes, and Reward & Recognition awards.

This past year, FM had 62 Promotions/Role Changes, a 39% increase over last year, and 38 Apprentice In-band Adjustments (IBAs) for 2012 plus 5 IBAs for other individuals.

The chart below displays the percentage of Reward & Recognition awards issued by Business Unit. During the fiscal year, Reward & Recognition Awards totaled \$92,250.

FY '12-'13 Rewards & Recognition Awards



Total=\$92,250



In May and June, 93 Facilities Management employees were recognized at University service award ceremonies for 10 or more years. At the June ceremony, 47 employees were recognized for their 25-60 years of service to UVa. Among the honorees were our colleagues (L-R) David Bishop for 55 years of service, Betsy Daniel for 45 years of service, and Lindsay Baker for 60 years of service. The average length of service for all current salaried FM employees is 12.2 years.

As of June 30, 2013, Facilities Management had 39 apprentices across the various trades of Carpentry, HVAC, Electrical, Plumbing, Masonry, Plastering, and Electronic Technicians specializing in Fire Systems, Elevator and Instrumentation and Metering. Human Resources & Training works closely with FM departments and State program liaisons to ensure apprentices receive the necessary on-the-job training and classroom instruction to be successful in their chosen trade.

After 31 years, the Program continues to be highly sought after and utilizes a competitive recruitment and selection process. During the 2013 application period, more than 500 applications were received for the four postings in Electrical, HVAC, Plumbing, and Carpentry. Nine apprentices were hired - two into Electrical, three into Plumbing, two into the Carpentry, and two into HVAC positions.

As the fiscal year closed, HR&T prepared to host the annual Apprentice & Training Recognition Program which recognized those Apprentice inductees as well as six new graduates of our Apprenticeship Program.

Compensation, Classification and Career Paths

Compensation initiatives moved to the forefront for HR&T as a result of the State's attention to the greater revenue savings and University Staff policies greater flexibility.

In fall, 2012, a 3% bonus was implemented for employees.

HR&T worked to implement an initiative approved by the Board of Visitors to provide salary adjustments for high performing University Staff who were in the lower third of their market range and whose base salary was less than \$50,000.

HR&T's most challenging compensation initiative this fiscal year was the 2013 merit adjustments. As the state awarded its first base salary adjustment for Classified Staff since 2008, the University implemented a 3% merit pool to enable schools and units to recognize the performance of University Staff. With approximately 600 eligible University Staff, this project spread over 4 months to

implement, trickling into fiscal year 2013-14. Utilizing the compensation module through Lead@UVa, FM-HR&T worked with senior leadership to execute the salary adjustments in keeping with the established guidelines.

Work began in January on the newest UHR initiative, the Job Families Project. This project is designed to help align the University Staff positions across Grounds, decrease the number of individual job titles, and to allow for market ranges to be updated.

HR&T worked to create and implement the Recycling Career Path, our third career path launch following our Housekeeping and Landscaping career paths.

Communications

The Facilities Management Annual Report, designed and produced in HR&T, won a first place award from the Virginia Press Women's annual contest and went to national competition. Our newest brochure, designed for recruiting and featuring diversity in our workforce, won a second place award.

For more information on Human Resources & Training's 2012-2013 accomplishments, view the [HR&T annual report](#) on-line.

Community Involvement



At the Lane Babe Ruth League Field, Landscape's Nathan Skelton and (not pictured) Chris Ward aerated the turf for a better environment.

Facilities Management employees continue to generously support nonprofit service organizations through several traditional events and individual community work.

During the annual Day of Caring, more than 100 Facilities Management employees used their skills and energy to improve facilities at Camp Holiday Trails, the Senior Center and the Lane Babe Ruth League Field.

When the Commonwealth of Virginia Campaign held its annual fund-raising event for more than 1,000 non-profit organizations in our region, Facilities Management employees donated over \$22,800.



Arborists Jerry Brown (shown here) and Don Goebel pruned trees over buildings at Camp Holiday Trails.



Back at Camp Holiday Trails, extensive weeding was the focus for HSP's Shirley Bennington and (in background) Landscape's Josh Seiler and Hunter Bolen.



Building Services' David Peterson, Jesse Johnson, Sandy Payne and Idris Hassan were on the 11-member team that had every window at Senior Center gleaming in record time. Sandy said she enjoys volunteering at the Senior Center each year because seeing the smiles on the faces of the people at the Center reminds her of how much volunteering is appreciated.



Jayson Woods, Hunter Bolen and Bobby Breckenridge cut back bamboo at the Camp Holiday Trails dam.

Day of Caring photos by Jennifer Watson, Facilities Management



Left: In the Camp Dining Hall, a fleet of talented Facilities Management tradespeople built a new storage closet. Shown here are Kyle McCauley, Chad Simpson, Dillon Dean, Robbie Kincaid, Todd Stevens, Glen Marshall and Tommy Benson.

Right: A perfectly synchronized brigade including Jacob Lane, Charlie Durrer, Westley Chesser and Tyler Mitchell piled leaves for the Camp groundskeeper (on tractor) to haul away. Nearby, 80 more Facilities Management employees cleaned and repaired cabins and offices, completed extensive landscaping, and in all buildings, checked for plumbing problems and performed annual HVAC inspection, cleaned units and changed filters.



Left: Libba Williams of Energy & Utilities and Val Knapp of Operations & Maintenance handled hillside vine management. Center: HSPP's Larry Bebout did careful weeding among the perennials. Right: Landscape's Mike Henrietta worked carefully and efficiently, cutting back weeds and trees near the dam.

Historic Preservation Architect Jody Lahendro (yellow shirt in back row) and former FP&C HS Construction Administration Manager David Booth (far right in white shirt) served with a local team from Building Goodness Foundation (BGF) in Haiti in early March. The team formed and poured concrete walls for reconstruction of St. Pierre Catholic Church and School after the original church was destroyed in an earthquake. "Everyone in the photo - women, children, old and young - participated in the construction work," Jody noted.





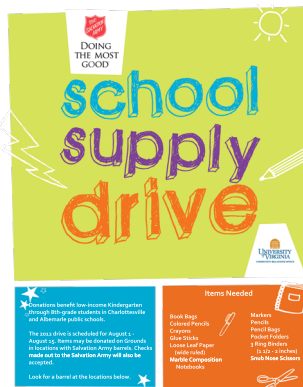
Our employees are enthusiastic and reliable supporters of the quarterly blood drives sponsored by Facilities Management to benefit Virginia Blood Services. L-R: Frequent donors Tom McRay and Bernard Curry were supported the February 14 drive. First-time donor Erik Duke donated blood to help others in his community. Project Services Mechanical Trades Superintendent Henry Garrison supports the blood drive because "...it helps everyone; we learned that when a family member was hospitalized and needed blood."



(L-R) Frequent donor J.R. Richardson donates blood "so I can help someone... And if I need blood someday, I hope someone will do the same for me." Thomas Cromwell is comfortably settled and clearly enthusiastic about donating. Eddie Morris and Edie Taylor know their donations help their community. James O'Rourke, apheresis donor and father of a young cancer survivor, shows off his pink bandage complete with a bow in honor of his daughters.



During the 9th Annual Hoos for the Hungry Food Drive throughout October and November, Facilities Management pitched in to help the Blue Ridge Area Food Bank keep up with increased demand. (L-R) Molly Shifflett, Shaun Farrell and Anita Hasbury-Snogles consolidated employees' generous donations.



FM employees donated more than 300 pounds of markers, crayons, binders, book bags and other school supplies to the 2012 Salvation Army School Supply Drive in August. Donations benefit low-income kindergarten through 8th grade students in Charlottesville and Albemarle public schools.



As the 2012 holiday season approached, Facilities Management employees again generously donated new toys, bikes and money to the annual Toy Lift. Just before they packed the colorful gifts for delivery to the local Kids Lift Foundation, Operations & Maintenance's Ernestine Burruss, Teresa Dillard, Anita Hasbury-Snogles, Deneen Morris, Joyce Chewing and Brenda Buttner took a few minutes to show off some of the toys. Donations go to families in Albemarle, Buckingham, Charlottesville, Fluvanna, Greene, Nelson and Orange.



**Organization
Facilities Management
University of Virginia**

Chief Facilities Officer
Donald E. Sundgren

Deputy Chief Facilities Officer
Richard H. Rice, Jr.

Administrative Assistant
G. Maxine Maupin

**Human Resources & Training
Director**
Rebecca R. Leinen

**Information Systems
Technology Officer**
Chris Smeds

**Finance
Director**
Michael Cline

**Director
Energy & Utilities**
Cheryl L. Gomez

**Director
Facilities Planning & Construction**
Annette Cyphers

**Director
Health System Physical Plant**
John R. Rainey

**Director
Operations & Maintenance**
Jay Klingel

Systems Development
and Integration

Geospatial
Resource Center

Instrumentation &
Metering

Systems
Control Center

Sustainability Programs

Delta Force

Recycling

Sustainability
Outreach

Chiller Plants

Heat Plants

Utilities

Power & Light

Environmental
Compliance

Engineering & Design

Academic Division

Health Systems Division

Construction Services &
Contract Administration

Operations

Hospital
Zone 1 Maintenance

Research
Zone 2 Maintenance

West Complex
Zone 3 Maintenance

KCRC, Fontaine, Off- Grounds
Zone 4 Maintenance

Health Systems Engineering

Facilities Maintenance

HVAC, Fire
Systems, Elevators

Maintenance
Services

Arts Zone

Central Grounds
Zone

Housing Zone

Newcomb Zone

North Grounds
Zone

Southwest
McCormick Zone

Building Services

Landscape

Project Services

Safety Program

Work Management