







Building Maintaining Sustaining The University of Virginia

Annual Report 2009-2010 Facilities Management On the Cover:

At the May 14 Topping Off Ceremony hosted by Contractor WM Jordan, Construction Administration Manager Paige Hackler and Project Manager Craig Hilten add their signatures to the top beam before it was hoisted and placed on Rice Hall, the Information Technology and Engineering Building. Rice Hall is one of several new buildings that are part of the University's science initiative focused on sustaining the ongoing work of existing faculty and attracting new researchers. The five story, 100,000 gsf research facility will feature modern architectural features and will help to define the south entrance to the science and engineering precinct. It will be delivered on a fast-track schedule, which has been challenge, Craig noted. Completion is scheduled for summer 2011. Paige, incidentally, is a 2003 graduate of UVa's School of Engineering and Applied Science.

Before UVa's traditional Graduation Ceremony on the Lawn, Building Services Team Member Farron Gentry was washing the Rotunda steps. Building Services and their colleagues throughout Facilities Management work to have everything clean and ready for graduates, guests and the many photos that will be taken throughout Graduation weekend.

High Voltage Electrician Bucky Crickenberger installs 200-watt photovoltaic panels at the Ivy Parking Garage bus stop. The panels will collect solar energy to partially power a 1994 Honda that a UVa mechanical engineering class converted to run on electricity. The car will be used as a fleet vehicle for UVa Parking &Transportation.



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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.

Message from Don Sundgren

During fiscal 2009-2010, Facilities Management employees continued to demonstrate initiative, professionalism and a sense of ownership as we carried out our work for our University. We had several "firsts" this year and saw new records set.

We completed \$208.4 million in contract construction work in place this fiscal year, the highest ever. We dedicated the University's first Leadership in Energy and Environment Design (LEED) certified building



We have reduced the University's carbon footprint through several programs, including a new initiative we call Delta Force. This cross-functional, team-based approach assesses and retro-fits existing buildings with a focus on energy and water conservation. The estimated avoided annual cost for work done through Delta Force alone this fiscal year was over \$1.5 million.

We received almost 1,000 applications for 17 positions in our Apprenticeship Program and inducted the largest class since 1986. The new class includes five minorities and three females. This highly respected Program continues to provide the University with dedicated trades people who learn not only the trade but valuable institutional knowledge from those who mentor them.

During the record-setting 56.8 inches of snow from three blizzards in three consecutive months, many of our employees made great personal sacrifices by staying on the job to maintain services for patients, staff and students. Four months later, when the University was hit by a microburst, our employees again worked tirelessly to repair facilities' damage and reinstate services.

Our trades people have completed work on historic structures including Pavilion II, Pavilion X and the University Art Museum. Other trades teams completed over \$8 million in infrastructure and deferred general maintenance projects in addition to a number of turnkey projects for Health System facilities. Still others continue to work on long-term renovations at McLeod Hall and the Judge Advocate General's School.

Other achievements include the 2010 Safety Star Award for Innovative Safety Trainers.

As the fiscal year ended, we had over 960 salaried employees supporting our mission of building, maintaining and sustaining the University's facilities and traditions. Our total business volume reached \$390.4 million.

Facilities Management strives to be second to none in all that we do. We use information technology for a highly integrated office automation system and critical business applications throughout our organization. We encourage professional development and support our employees' use of training and educational resources. And we give back to our community.

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.

Donald E. Sundgren Chief Facilities Officer





Electrician Eddie Kidd and Apprentice Jim O'Rourke were among the trades working on the McLeod Hall renovation.



Apprentice Jennifer Maiorano worked with Carpenter Linwood Marshall in Pavilion II.



Landscaper Mike Henrietta removed packed snow from North Grounds streets in January 2010.



A Facilities Management truck appears to be half buried near Old Cabell Hall in December.



Landscaper Tsering Wangla cleared the June 24 microburst debris from Central Grounds.



Building Service team member Jessica Worley uses a microfiber brush for cleaning in Bavaro Hall.

Operations

Facilities Management has over 200 licensed mechanics in the Operations & Maintenance, Energy & Utilities, and Health System Physical Plant departments.

Facilities Maintenance includes more than 130 full-time employees representing 10 different building trades. The 13 maintenance cost centers responded to more than 30,000 work orders.

Zone Maintenance teams, which assign a group of maintenance technicians to a distinct geographic grouping of buildings, continues to be successful for North Grounds and Southwest McCormick and, now completing its first year, Newcomb Zone. Zone maintenance gives our customers the strength of both a centralized shop approach and zone maintenance organization.

The Project Services team completed a number of projects including the renovations of Pavilions II and X and the University Art Museum. The team is currently working on renovations at McLeod Hall and the Judge Advocate General's School.

The Work Management team provides support through budget management and a customer relations team. The facilities assessment program within Work Management works with building occupants and Facilities Management tradespeople to efficiently and effectively determine the maintenance needs of each building.

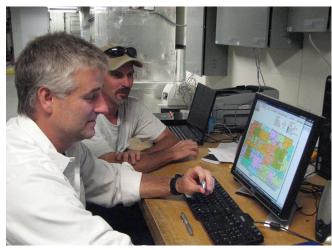
Building Services Division has expanded its expertise in sustainable business practices (i.e., purchase of micro-fiber products and lower decibel equipment). The Division also expanded its ranks this year when Newcomb Hall staff joined the Facilities Management team.

The Landscape Division continued to improve the Grounds with installation of new plantings and maintaining those already in place. Landscape has also been creative with University resources: In conjunction with the Architecture School, a mower was converted to run on vegetable oil procured from Dining Services. Landscape also collects storm water run-off in cisterns they installed behind the Amphitheater; this provides non-potable water for Central Grounds landscape work.

Landscape team members were joined by co-workers from throughout Operations & Maintenance, Energy & Utilities, and Health System Physical Plant during three major snowstorms during the winter and a microburst in June to clear roads, parking lots, walks, and restore services for the University.

More information on the specific projects and accomplishments of Operations & Maintenance is available in the <u>2009-2010 Operations & Maintenance Annual Report</u>

Health System Physical Plant (HSPP) has over 190 employees among whom are there are over 100 licensed journeymen and licensed Master Mechanics and three registered professional engineers, with an average length of 11 years of service to UVa. They completed over 33,000 work order requests, over 30,000 preventative maintenance work orders and over 90,000 hours in preventative maintenance during the fiscal year.



HSPP Zone 4 team members Mark Conner and Scott Martin review HVAC maintenance schedules.



Bernard Curry poses by the new Transitional Care Hospital (TCH) served by HSPP Zone 4.



Electrician Richard Good checks a transfer switch for the generator at TCH.

The HSPP Project Management team completed many projects in addition to over \$8 million dollars of infrastructure and deferred general maintenance projects. The Elevator Shop maintained 133 elevators/lifting devices throughout the Health System facilities and responded to 1104 calls. The HSPP Renovations Division and its six trades shops – plumbing, electrical carpentry, painting, masonry/ plastering and welding – completed a number of turnkey projects for Health System facilities.

Technical support for maintenance staff and construction project was provided by HSPP Engineering. HSPP Engineering support is integral to obtaining and maintaining the University's accreditation from Association for Assessment and Accreditation of Laboratory Animal Care, Centers for Medicare & Medicaid Services (CMS), and the Joint Commission on the Accreditation of Healthcare Organizations.

The Fire and Life Safety Inspection Services Division provides onsite fire and safety inspection services. Continuous compliance inspections as well as bi-annual Statement of Conditions inspections for all patient care areas are completed each year and are instrumental in maintaining Joint Commission and CMS accreditation.

More information on the specific projects and accomplishments of HSPP Operations is available in the <u>2009-2010 HSPP Annual Report</u>.

The Safety Committee supports all divisions within Facilities Management. Representatives from HSPP, Operations & Maintenance and Building Services meet monthly for vital information exchange and procedure reviews. Their collaboration and input from the Office of Environmental Safety resulted in the in-house production of four new DVDs teaching safety procedures for graduation preparation, snow removal, electrical arc and lock-out/tag-out.

The Safety Committee was awarded the Commonwealth of Virginia Workers' Compensation Services Division 2010 Safety Star Award for Innovative Safety Trainers. The award recognized their production of four DVDs that featured our employees demonstrating safety practices specifically for University events and surroundings. The DVDs addressed snow removal, electrical arc, graduation and lock-out/ tag-out.



Lead Carpenter Walter Harris cuts the crosspieces to ensure a firm fit for the flat roof deck system over Lawn rooms 35-51.



Roger Smith was among the Newcomb Hall housekeepers who joined Facilities Management Building Services.



Sheet metal crew Robert Zakaib, Darrell Carr and Marcellus Dent complete ductwork for a new, more energy efficient HVAC system in Clark Hall.



HVAC Mechanics Tom Garrison and Cindy Campbell complete maintenance on a unit below Jefferson Hall.



Electronics Apprentice Bobby Stanley makes adjustments for a fire panel installation.



Plumbers Paul Johnson, Apprentice Brian Curry and Vern Lamb resolve a piping issue in the JAG School renovation.



Landscaper Bobby Breckenridge trims a hillside near Lambeth Field in time for Graduation visitors.



The Ipe wood that Carpenters Matt Pannell and Travis Sly are installing for the Colonnade roof replacement was chosen for it strength and resistance to weather and pests.



Electrician Apprentice Howie Brown assists with scheduled maintenance in various buildings throughout Grounds.



Ronnie Herrion and Matt Robinson review the graduation setup at Darden.



Locksmiths Sonny Dudley and Jayson Clark replace equipment for a door in a high traffic area.



Plumber Chris Turner at the McLeod renovation.



HSPP Supervisor Jake Bajs and Superintendent Joe Carpenter discuss a recent maintenance challenge.



Felix Crawford and Corey Harmon of HVAC check a compressor.



Piping Distribution Supervisor Bo Roberts works on a broken water main.

Sustainability



UVa's First LEED Silver Certified Project, Printing & Copying Services' 15,000 sq ft addition, was completed in May 2009 and dedicated March 15, 2010.



Following the dedication of the new Hand Clinic, Project Manager Kristine Vey (L) points out the custom designed cabinets to an occupational therapist.

Facilities Management has increased its support for the University's sustainability goals through initiatives in Facilities Planning and Construction (FP&C), Operations & Maintenance and Energy & Utilities.

Facilities Planning and Construction governs the University's compliance with the Leadership in Energy and Environmental Design (LEED) standards. Administered by the U.S. Green Building Council, the LEED Green Building Rating System documents specific environmental, economic, and health and safety standards for new construction and major renovations.

Eleven FP&C project managers, senior project manager, construction managers and senior construction managers have earned Leadership in Energy and Environmental Design Accredited Professional (LEED AP) from the U.S. Green Building Council (USGBC).

UVa's First LEED Silver Certification, Printing & Copying Services' 15,000 sq ft addition, was recognized at a dedication event March 15, 2010. The \$3.3 million addition was completed in May 2009 and had been in use since that time. The extensive documentation for LEED certification typically requires about nine months between the building's completion and confirmation of the certification.

As the fiscal year closed, the University's second LEED Silver certification was pending. The 415 Ray C. Hunt Dr Third Floor Build Out Project opened in February, providing two new Patient Care Centers - Spine and Hand - each with multidisciplinary services and access to X-rays on site

Documentation for LEED certification is underway for the recently completed Bavaro Hall, MR-6, Claude Moore Education Center and will be pursued for all future projects. More information on these projects is available on page 16 and following in the 2009-2010 FP&C Annual Report.

Once projects are complete and LEED certified, established Green Cleaning practices by our Building Services Division also contribute to points to the building's continued LEED certification and supports the University's sustainability goals. New equipment such as lower decibel vacuum cleaners, HEPA filter and dust control systems will also be required.

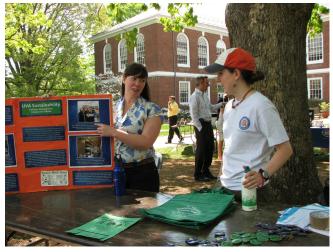
Going green requires a specific cleaning plan for each building. Building Services is developing a green procedure manual to ensure that plan. A second vital phase of "going green" is establishing communication goals and stewardship among the



Building Services team member John Briggs uses green cleaning techniques in the newly renovated McLeod Hall first floor.



Delta Force Leader Ed Brooks and Director of Energy & Utilities Cheryl Gomez addressed the February 2010 Board of Visitors meeting to outline the challenges and efforts underway to achieve the University's goal of reducing its carbon footprint.



Sustainability Coordinator Nina Morris talks with a student at Earth Day exhibits in April.

building occupants, the HVAC staff, Landscape, and Building Services. More information on Building Services' initiatives is available at <u>Green Cleaning</u>.

Energy & Utilities' has reduced the University's carbon footprint through energy conservation and efficiency programs. A new focus of those is Delta Force, a cross-functional teambased approach to retro-commissioning existing buildings with a focus on energy and water conservation. For most buildings, the majority of the Delta Force process requires 12-15 months and focuses on a five items for assessment and retrofit. The estimated avoided annual cost for work done in Fiscal Year 2009-2010 was \$1,535,000.

Other energy conservation projects in more than 10 buildings and parking garages had an annual cost avoidance of almost \$372,000.

Energy & Utilities has a key role in the University's sustainability effort and has responsibility for initiatives relating to communication and outreach, energy conservation and efficiency, water conservation, recycling and the environment.

Energy & Utilities' Sustainability Team has developed communication and outreach initiatives that focus on recruiting students, faculty and staff to be active partners on sustainability efforts. Outreach efforts target increasing recycling, reducing waste, conserving energy and water, and providing education on how everyone can make a difference.

Outreach programs this past year included the Dorm Energy Challenge which reduced energy use by 20% compared to the prior year and American Recycles Day which features the brand-new "Tap Water Challenge" - consumers tasted unmarked water samples and tried to identify their source as bottled, filtered or tap. Only one in ten participants could match all the water sources correctly.

The Earth Day Extravaganza provided numerous activities for participants, including the famous Dumpster Dive. Nearly 150 people participated in the "CAN You Guess?" Contest, which related energy conservation and recycling by asking how long you can run a mini-fridge on the energy saved by recycling 400 pounds of aluminum cans. The answer: more than 18 years!



Other student activities included the Taste of Dining event, promoting locally grown and organic foods.



Sustainability received much attention at the annual Student Activities Fair.

For UVa's first annual "Unity" Earth Week, E&U Outreach worked closely with Community Relations and Student Council's Unity Project to coordinate and promote over 40 sustainability events on Grounds and in the community. Bringing together for the first time a cohesive representation of students, faculty and staff around sustainability, Earth Week proved to be a great success. The events ranged from panel discussions on water conservation to outdoor hiking trips to community service days and Eco-markets to promote local businesses. E&U hosted many events, such as Energy Day, Earth Day Extravaganza as well as UVa Saves Hour.

Other traditions included Recyclemania, a venue for UVA students to compete against other universities across the United States to recycle the most. In our third year as participants, UVA placed 9th among more than 200 schools in our division. Chuck it for Charity 2010 collected more than 26,750 pounds of donated materials from on-Grounds students leaving for the summer. Fourteen charities collected and redistributed the goods to the needy.

More information on these events and other programs involving and supported by students, faculty and staff are described in the Energy & Utilities Annual Report.

Other achievements by Energy & Utilities staff included preparation of reports on the Main Heat Plant's air permit and the UVawide Title V air permit for submittal to the U.S. Environmental Protection Agency and Virginia Department of Environmental Quality. Certified E&U staff administered the University's erosion and sediment control program because the Viriginia Department of Conservation & Recreaton ceased providing these services to state colleges and universities as of July 1, 2009. Geographical information systems and mapping worked with project managers and staff to improve collection efforts and quality of GIS data.

More details in those areas and the many accomplishments by the staffs of the Heating Plants, Chiller Plants, Power and Utility Distribution Systems, the Systems Control Center and Instrumentation and Metering are available in the 2009-2010 Energy & Utilities Annual Report.

Major Initiatives

Facilities Planning and Construction (FP&C) is responsible for the execution of the University's Capital Project Program. The work is accomplished through three production units: Academic, Health System and Engineering and Design. Support is provided by the Contract Administration Division and the Administration Division.

Academic Division

The Academic Division had a total workload of 33 Capital projects, including projects that have reached Construction Completion in the last year. Using the HECOM threshold of \$1,000,000 for a Capital Outlay project, these active projects included:

- 6 capital projects in design for a total of \$219,217,000.
- 15 capital projects in construction for a total of \$478,196,000.
- 12 capital projects completed for a total of \$78,560,000.

Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
Alderman Road Residences Phase III	Alderman Phase III Utilities	Aquatic and Fitness Center Chiller Plant Upgrade
Alderman Road Residences Phase IV	Alderman Road Residences Phase II	Baseball Stadium Expansion
New Cabell Hall Renovation	Bavaro Hall	Central Grounds Chiller Plant Upgrade
Newcomb Hall Dining Expansion	CAS: Physical and Life Sciences Research Building	Medium Temperature Hot Water System Upgrade Phase I – Central Grounds
Ruffner Hall Renewal	Garrett Hall Renovation	Pavilion II Renovation
Thrust Theatre	Information Technology and Communication Data Center	Pavilion X Exterior Restoration
	Marching Band Rehearsal Hall	College at Wise: Gilliam Arts Center
	Medium Temperature Hot Water System Upgrade Phase 2	College at Wise: Hunter J. Smith Dining Commons
	New Cabell Hall South Entrance	College at Wise: Residence Hall
	Newcomb Hall Renovation	College at Wise: Science Renovation
	Rice Hall – Information Technology and Engineering Building	Southwest Virginia Higher Education Center Addition
	South Lawn	Mountain Lake: New Cabin Construction and Renovations
	University Bookstore Addition	
	College at Wise: Multi-Purpose Facility	
	College at Wise: Smiddy Hall Renovation / IT Wing	

More information on these and other projects is available in the <u>2009-2010 Facilities Planning &</u> <u>Construction Annual Report.</u>

Academic Division Major Commissions

Bavaro Hall

Bavaro Hall was designed to provide the Curry School of Education with approximately 65,000 gsf of office and clinical spaces. It is a four-story building with the west side connected to Ruffner Hall by way of two arcades and a courtyard central to both buildings. The building is bounded by McCormick Road to the south, the Dell area to the north, and Emmet Street to the east.





Bavaro Hall is targeting LEED certification through its sustainable building and landscape design and construction. The building is a steel frame system with masonry exterior walls. The exterior façade consists of brick, stone and glass to resemble and respect the general characteristics of the surrounding buildings. The greenscape provides a pleasant pedestrian experience around the building. Plant materials were selected as sustainable design elements and are intended to visually enhance the structure naturally.





College of Arts and Sciences Physical and Life Sciences Research Building



The College of Arts and Sciences (CAS) Physical and Life Sciences Research Building will provide additional space required to support research in physical and life sciences, primarily in chemistry and biology. The CAS Research Building is also intended to provide modern research laboratory facilities that will attract and retain faculty and students and to relieve the increasing shortage of reliable laboratory space on grounds. The project consists of a fivestory, 105,000 gsf building, plus an accompanying mechanical penthouse. This new research facility will feature modern looking architecture and finishes. The building will be connected to the existing Chemistry and Chemistry Addition buildings with

pedestrian traffic among the three buildings on all floors, except on the basement level of the Chemistry building. The \$88,900,000 project is scheduled for completion summer 2011.

South Lawn

The South Lawn Project, the most ambitious undertaking on the University of Virginia's Central Grounds in a century, is designed to accommodate the contemporary program requirements of the College and Graduate School of Arts & Sciences while paying respect to the Jeffersonian architecture in the nearby Academical Village. 12,000 students will visit every day. It features a 95-foot-wide terrace across Jefferson Park Avenue that connects the South Lawn Project with the Central Grounds. The South Lawn project is composed of two 4 and 5 story buildings and a Commons Building, totaling 114,000 gsf. The budget for this project is \$102,500,000 and is scheduled for "Phased Completion".



Gilliam Arts Center at the College at Wise

The Gilliam Arts Center consists of two components: 1) the renovation of the existing 10,000 gsf Drama Building and 2) the addition of almost 29,000 gsf of new space. The project was completed for occupancy in the fall of 2009. The \$14,400,000 Arts Center houses the College's Drama, Music, and Student Art departments. A new "black box" theater was constructed for multi-use drama and

music performance, with accessory spaces providing storage, dressing rooms, a lobby, and public restrooms. A scene shop, a costume shop, and computer and drafting labs will support the theater activities. The building will house rehearsal space for drama, band, and chorus activities.



University of Virginia Facilities Management

Health System Division Major Commissions

The Health System Division responded to 14 new requests for services, contributing to a total workload of 86 active projects, including projects that have reached Construction Completion in the last year. Using the HECOM threshold of \$1,000,000 for a Capital Outlay project, these active projects included:

21 projects in startup / request phase, budget / scope not yet developed.

25 small non-capital projects with an average size of \$150,225 for a total of \$3,755,627. 7 large non-capital projects with an average size of \$741,989 for a total of \$5,193,926. 14 small capital projects with an average size of \$2,954,141 for a total of \$41,357,980. 19 large capital projects with an average size of \$36,179,805 for a total of \$687,416,296.

8 capital projects in design for a total of \$273,704,656.

14 capital projects in construction for a total of \$269,918,892.

8 capital projects completed for a total of \$145,150,728.

Capital Projects In Design	Capital Projects In Construction	Capital Projects Completed
Battle Building at Children's Hospital	Emily Couric Clinical Cancer Center	415 R. C. Hunt Spine, Head & Radiology Renovation / 3 rd Floor
Old Jordan Hall 4 th Floor Rooms 4067-4084 Refurbishment	Lee Street Entry and Connective Elements	Claude Moore Medical Education Building
Old Medical School Ophthalmology Renovation	McLeod Hall Renovation Phase I	Main Heat Environmental Compliance Upgrade
School of Medicine Cyclotron Project	Old Jordan Hall HVAC Infrastructure Replacement	Old Jordan Hall Department of Medicine Refurbishment / 4 th Floor
South Chiller Plan Expansion Chiller #3	University Hospital Radiology Master Plan, Phase 3A Ultrasound Suite / Level 1	Old Medical School Laboratory Renovations / 3 rd Floor
University Hospital Radiology Master Plan – Remaining Phases / Level 1	University Hospital Heart Center Renovation / Level 2	Primary Care Center Annex Modular Office Building
University Hospital Fire Alarm Replacement	University Hospital Intra – Operative MRI ORS (27 & 28) Level 2	Primary Care Center Masonry Repair and Roof Replacement
Yeager Electron Microscopes Renovation	University Hospital Ancillary Projects / Level 0	University Hospital 9 Bed Acuity Adaptable Unit / Level 8 West
	University Hospital Bed Expansion	
	University Hospital Emergency Power Upgrade Phase II	
	University Hospital HVAC Upgrades	
	University Hospital On-Call Suite Consolidation	
	University Hospital Radiology Master Plan, Phase ID: Patient Prep & Hold Unit & Waiting Room	
	University Hospital Surgical Pathology Renovation / Relocations/ Simulation Center / Level 2	

Carter-Harrison Research Building

The completed Carter-Harrison Research Building (MR-6) provides additional research space necessary for the University to maintain a leadership role in biomedical research. The project consists of a five story, 170,000 gsf main building with an attached one story, 28,000 gsf underground annex. The main building has a total of sixty three BioSafety Level Two (BSL2) laboratories on five floors, along with equipment rooms, administrative office space, and conference rooms to support research in cancer, immunology, and infectious diseases.



Construction began in April 2006, with construction management services provided by the Barton Malow Company of Charlottesville, Virginia. Researchers began moving into the main building laboratories during June 2009, while the vivarium was occupied in December 2009. The total project budget was \$84,100,000.

University Hospital Bed Expansion

The Hospital Bed Expansion (HBE) will add 72 acuity adaptable patient rooms to University Hospital. The project consists of 12 private room nursing units located on each of floors 3 through 8. The patient rooms are designed with a full bathroom, allowing them to be used for critical care, step-down care, or acute care. This project will provide much needed bed capacity to the hospital while providing maximum flexibility.

The design of the exterior of the HBE was influenced, in large part, by the design of the Emily Couric Clinical Cancer Center (ECCCC). The HBE towers are oriented to face the ECCCC building site. The HBE facade is a unitized factory-glazed curtainwall system. On the interior, the patient rooms are oriented to fully utilize this system to



provide wall-to-wall and floor-to-ceiling glass. This maximizes the use of natural light in the patient rooms while taking advantage of the northern exposure.

The project is a six story, 61,000 gsf addition to the north facade of the Hospital's Central bed tower. The project also involves 62,000 gsf of renovation to create the adjacent nursing units on each of the six patient care floors.

The HBE began construction in October 2008 with completion scheduled for the early 2012. By combining several trade packages with the ECCCC project, high trade interest in this project, and a favorable bidding climate, excellent construction pricing was achieved, resulting in a buyout savings of \$13,000,000 from the original project budget. The total project budget is now \$77,772,000.

Claude Moore Medical Education Building

The Medical Education Building consolidates medical education programs currently scattered across Grounds in outdated facilities and creates a central entrance to the School of Medicine - the only school at UVa that did not have a dedicated teaching facility. The five story structure is located at the corner of Lane Road and Lancaster Way and is connected to Medical Research Building Five, facilitating access to School of Medicine facilities in Jordan Hall and the Health Sciences Library.

The new facility is a 58,000 gsf steel framed structure with glass and brick exterior. The basement level contains a clinical skills center, which

to

uses standardized patients to teach students examination and diagnostic skills. The ground level is a high-tech Medical Simulation Training Center which provides for teaching complex procedures and honing vital skills in a safe, virtual environment used by students, residents, and emergency medical technicians. A 162-person learning studio is located on the first floor near the main entrance to the facility on Lancaster Way. This round space is a predominate feature of the facility and offers a technology-enabled active learning (TEAL) environment which facilitates image-based or data-based problem solving in small groups. The second floor has a student lounge and administrative offices. The third level houses a 171- person auditorium, as well as additional administrative space.

Construction on the \$40,700,000 project began in January 2008. The building obtained occupancy May 28, 2010

Emily Couric Clinical Cancer Center

The new clinical cancer center building will be a full service ambulatory care facility for the

diagnosis and treatment of cancer in all of its forms. The special nature of the center and its programs includes the detection and prevention of cancer in the population. Professionals in training will play an important role in the care of patients and in applying the results of the latest research.

The Clinical Cancer Center building will consolidate oncology treatment and diagnostic services currently located on various floors and buildings in the West Complex and University Hospital. The consolidation of services includes radiology oncology treatment, diagnostic imaging, clinics, infusion center, clinical labs, and pharmacy. In addition to treatment services, it will include



family/patient amenities, clinical trials, and a public space front door with a central access hub. The new building will bring these services closer to the University Hospital with a link connection to the hospital. The new structure will be approximately 150,000 gsf, including a shelled, 5th floor for future expansion. The project site is located at the corner of Lee Street and Jefferson Park Avenue.

The construction of the new building began in June 2008 and is scheduled to open for patients in spring 2011. The total project budget is \$74,000,000.

Engineering and Design Major Commissions

Engineering and Design is composed of two work centers, the Design Group (CC 07) and the Project Management Group (CC 78). The Engineering & Design was active in the design and/ or execution of over 100 individual projects or other activities in support of University facilities, throughout fiscal year 2009-2010 and executed approximately \$12,000,000 in project and technical support activities. Some of those projects are listed below:

In Design	In Construction	Completed
Aquatics and Fitness Center (AFC) HVAC System Upgrades	Alderman Road Dorms Concrete Repairs	AFC 5 Meter Dive Platform
Bayly Terrace Modifications	Carruthers Hall ITC Server Room Cooling	Bayly Museum Renovation / HVAC Upgrades
Brooks Hall Fire Escape Repair	Chemistry Elevator Modernization	Campbell Hall – West Masonry Replacement
Carr's Hill Chilled Water Optimization	Chemistry Exhaust Infrastructure Upgrades	Campbell Hall CNC Router & Dust Collection System Install
Clemons Library Elevator Modernization	Fire Alarm Monitoring (Grounds-wide)	Campbell Hall Complex Brick Tie Survey
Darden Terrace Expansion Joint Corrections	McCormick Observatory Fire Alarm System	CW Thermal Storage Tank Repairs/Upgrades
Gilmer Hall – Main Steam Service Equipment Upgrade	Sand Volleyball Courts	Gilmer Hall – PVC Chilled Water Piping Replacement
Gilmer Hall Addition Elevator Modernization	Chemistry Building Condensate Drain System	Gilmer Hall High Voltage Fire Alarm Replacement
Gilmer Hall West Section Roof Replacement	Lambeth Field Apartments – Interior Renovation Phase 3	JPJ Arena Exhaust Fans / HVAC Upgrades
Gooch-Dillard Exterior Repairs Study		JPJ Arena Leak Repairs

Project Management Group

Design Group

In Design	Construction	Completed
JAG Lodging Rooms Fan Coil Replacement	Campbell Hall /Fiske Library Roof Replacement	Astronomy Building Partial Roof Replacement
JAG Lodging Rooms Renovations	Clinical Department Wing Roof Replacement	Chemical Engineering Fume Hood Install
Lambeth Commons Interior Renovation	Clark Hall 107 HVAC Replacement	Withers Brown Hall Two Elevators Modernization
Lambeth Commons Roof Replacement & Exterior Upgrade	Darden - Learning Team Rooms Renovation Phase II	Darden - Learning Team Rooms Renovation Phase I
Mechanical Engineering Prototyping Lab	Darden - CDC/Admissions Bathroom Renovations	I-Lab Renovation Sponsor's Hall
Replace Low Slope Roofs Sponsors Hall	ABCRC Dock Improvements	JAG Admin & Civil Law Office Renovation
Ruffner Hall Renovations	Hoxton-Lewis Gutter and Fascia Replacement	Mechanical Engineering 205 Classroom Renovation

Batten I-Lab, Sponsor's Hall Dining

The project consists of the renovation of approximately 3,415 gsf of interior space in Sponsors' Hall Dining, for use by the Batten Institute of the Darden School of Business. The space will be used for classroom and workspaces that will support teaching programs that focused on the development of innovation and entrepreneurship.

The project was designed by the Facilities Management Design Group, with SmithGroup, Inc. of Charlottesville, Virginia providing consulting engineering services for mechanical and electrical work. Construction was procured by on-demand invitation for bids, Artisan Construction, Inc. of Charlottesville, Virginia was the general contractor for the project. Construction began July 2009, with substantial completion on November 13, 2009.

The project was officially opened at a ribbon-cutting on March 19, 2010 at an event featuring an open house and a speech by Daniel Pink, a *New York Times* best-selling author. The I-Lab has been described by the Batten Institute as "a state-ofthe-art learning environment that inspires a new approach to teaching innovation and entrepreneurship." The project budget was \$679,000.



Bayly Museum Renovation

The Thomas H. Bayly building, built in 1935, is home to the University of Virginia Art Museum. The building is considered essential to the University's history and present character within the historic preservation framework plan. The interior renovation focused on architectural enhancements including new lighting to adequately light gallery walls and objects on display mechanical upgrades to condition all gallery and office space and electrical and fire detection

modifications to comply with code and University requirements. All of these enhancements enabled the museum to retain its program accreditation through the American Association of Museums. The architect of record is Arch Et Al of Chevy Chase, MD. Construction was managed by Facilities Management, Project Services. The project was completed in August 2009. The project budget was \$2,000,000.





Construction Project Manager Bruce Jackson and Project Services Manager Spike Weeks discuss the progress of the new volleyball court under construction at Nameless Field.



Construction Coordinator Keith Payne and Project Manager Taryn Harrison review the progress of the Chemistry Building's new exhaust system



Carpenter Robbie Kincaid and Project Manager Bret Gentry review drawings for The Judge Advocate General's School renovations.





A section of Alderman Road was closed May 24-August 21 for installation of a large utility tunnel that will provide new utilities for current dorms and future dorm expansion. Project team members were (L-R) Project Coordinator Charlotte Philen, Construction Administration Manager Charles Durrer, Project Manager Ryan Taylor and Utility Distribution Manager Mark Roach.

(Left photo) Even with winds and 30 degree temperatures the first week of January, installation of the Jeffersonian parapet on Pavilion X went perfectly. Here, Project Services Carpenter Darren Wilkins (left) and Kevin Bittenbender of Bensonwood, the Walpole, NH company that built the parapet sections, guide a cornice into place.

Financials

The Finance Department completed its second year of operation in 2009-10, providing accounting, budgeting, financial reporting, accounts payable, and payroll support for Facilities Management's total business volume of \$390.4 million and 966.4 salaried employees.

Among the Department's many accomplishments were accounting and documentation of microburst and major snow events for reimbursement request submissions to the Federal Emergency Management Agency and the Virginia Department of Emergency Management. The Finance Department provided analytical support for the development of the Energy & Utilities "Delta Force" cost recovery model and development of grant submissions for the Mid-Atlantic Alliance Smart Grid Project and the Biomass Energy Grants Program. The Department also developed and implemented the state budget cuts enacted during Fall 2009.

University of Virginia Facilities Management Financial Summary						
Salaries and Benefits:	FY 2009/10 \$ 59,436,574	FY 2008/09 \$ 55,240,194	FY 2007/08 \$ 50,086,419			
Utilities:	\$ 47,044,267	\$ 55,487,051	\$ 50,346,741			
Planning and Construction:						
Construction Architectural	\$ 207,075,319	\$ 193,948,369	\$ 195,427,739			
& Engineering	\$ 32,650,532	\$ 38,153,517	\$ 24,282,380			
Total	\$ 239,725,851	\$ 232,101,886	\$ 220,575,542			
Maintenance and Op	perations:					
Materials and Contracts Travel	\$ 34,572,985	\$ 29,323,757	\$ 26,427,610			
and Training	\$ 328,052	\$ 365,248	\$ 447,205			
Information Systems	\$ 2,506,600	\$ 1,557,427	\$ 1,412,519			
Other Expenses Total	\$ 6,804,972 \$ 44,212,608	\$ 3,773,883 \$ 35,020,315	\$ 2,487,368 \$ 30,774,702			
Total Expenses	\$ 390,419,301	\$ 377,849,447	\$ 351,783,404			

Further details on the accomplishments of the Finance Department and its three entities - Fiscal Operation, Facilities Planning & Construction Financial Services, and Energy & Utilities - are available in the <u>2009-2010 Finance Annual Report</u>

Programs

Information Systems

Facilities Management's Information Systems has continued to maintain state of the art technology security, develop use of new technology and applications to improve operations, and provide seamless interfaces with University information systems. As part of ITC's rollout of enhanced NetBadge, the Information System's helpdesk worked with ITC to conduct Identification Verification clinics for all Facilities Management employees. The helpdesk's installation of MalwareBytes anti-malware software to Facilities Management computers has helped reduce the number of malware infestations. Information System's Network and Security staff assisted with the deployment of the fire monitoring system for Energy & Utilities. More details are available in the 2009-2010 Information Systems Annual Report

UVa's Apprenticeship Program

In January 2010, the Human Resources & Training (HR&T) Office began work on a new Apprenticeship Program recruitment season. Acceptance into the Program is always highly competitive but this year we had nearly 1000 applications for the 17 positions posted. This was the largest class since 1986 when we also inducted 17 new apprentices. The only class that was larger was the first in 1982 with 22 new inductees. More information on UVa's Apprenticeship Program is available at <u>Apprenticeship</u>.

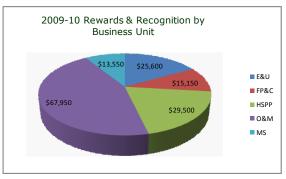
Training

In coordination with Piedmont Virginia Community College, HR&T arranged Trades Recertification training required for approximately 140 employees to renew their State licenses. In conjunction with Charlottesville Schools Adult Education Program, Facilities Management had 11 employees participate in GED classes and 14 participate in English as a Second Language (ESL) classes. Our annual Leadership Forum addressed "The Whole Leader," demonstrating that various aspects of supervisors' lives impact how they approach their jobs. The HR&T staff coordinated training in Workplace Violence and Progressive Discipline, participated in Housekeeping Supervisors' retreat, developed and conducted Jobs@ update training for users and Lead@UVa introductory training to supervisors in addition to offering dozens of computer work sessions to help employees navigate the system. More details on HR&T accomplishments is in the 2009-2010 Human Resources & Training Annual Report.

Employee Reward & Recognition Program

This fiscal year was especially challenging for the many Facilities Management employees who were called on to respond to an unexpected storm December 18, resulting in over 20 inches

of snow just before the Christmas holiday. Because of the many sacrifices those employees made, they received special recognition. That recognition resulted in 445 awards amounting to \$80,750 and is reflected in the chart below with total awards equaling \$151,750. Comparing year-over-year without the impact of the snow storm, awards remained consistent (FY'08 = \$76,894 - 236 awards; FY'09 = \$71,000 - 230 awards).



Community Involvement



During Day of Caring, Greg Streit and Aaron Morris make repairs to a cabin at Camp Holiday Trails.



Gary Bickers and Shirley Bennington (in orange shirts) installed new plants at the Camp pediatrician's cabin.

Facilities Management is well known for the community support our employees generously offer throughout the year to nonprofit service organizations.

During the annual Day of Caring, 150 Facilities Management employees used their skills and energy to improve facilities at Camp Holiday Trails, the Senior Center and the 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 almost \$20,700.

As the economy dipped and the holiday season approached, Facilities Management employees generously donated new bikes and toys to the Toy Lift.



Mary Mitchell worked with another team to clean the offices and administrative areas at Camp Holiday Trails.



Brenda Buttner, Tim Gilmer and Martin Rush place up the toys to be delivered to Toy Lift just in time for the holidays.



Thanks to Facilities Management employees' early response to December 2009 Hoo's for the Hungry Food Drive, Employee Council representatives Joyce Chewning and Betty Bowman had a filled barrel ready for pickup by the Blue Ridge Food Bank Drive.



June Jones sports the special "Pink Badge of Courage" donors can choose.

But they did not stop there: Facilities Management employees also donated 1,110 lbs. of non-perishable food - over half of the 2,082 lbs. University departments collected for Hoo's for the Hungry, benefitting the Blue Ridge Area Food Bank.

Throughout the year, often on their own time, they volunteered their skills and time to Building Goodness Foundation, Youth Learning Academy and many other community services.

Blood drives for Virginia Blood Services as well as the American Red Cross were generously supported by Facilities Management employees.

Our support for the annual Move Out "Chuck It for Charity" served a double benefit:

Our recycling division collected non-perishable foods, and unwanted clothes, household good and gave them to local non-profit organizations. Hundreds of tons of household and electronic items were diverted from the landfill.

We are committed to sustainability and to our community.

Right photo: Recycling Division staff and Sustainability Outreach Coordinator Nina Morris pose amid some of the items "Chuck It for Charity" gathered.





Blood donor Christine Eppard (right) is among the Facilities Management employees who can be depended upon to support our quarterly blood drives.

Right photo: Another traditional Day of Caring project is window cleaning at the Charlottesville Senior Center. Reggie McGhee (in the bucket) and David Gentry at the controls took care of the high exterior windows while more teams worked inside and on the ground level.



Organization Facilities Management University of Virginia		Director Derations & Maintenance Jay Klingel 982-5883 or jwk8w	Project Services Associate Director Mark Stanis 982-2827 or ms55s	Business Management & Estimating Doug Morris 982-5888 or dwm5f Construction Project Management	Leonard T. Weeks 982-5891 or Inv Construction Services Joe Lane 982-660 or j112b	Producton Engineering Sally Fields 982-5365 or sef9m Facilities Maintenance Associate Director Mike Merriam 982-4665 or mbm2h	HVAC, Fire Systems, Elevators Paul Zmick, P.E. 982-5876 or pg=55 Maintenance Services Richard Critzer 982-4779 or rlc8a Newcomb Zone Tomy Santana	924-8809 or als North Grounds Zone Gary Wood 924-3752, 981-3546, or gww Southwest McCorrnick Zone Clarence Wells 924-4044 or cew5z August 2010
Orgar Facilities I University		1 Operation <i>Ja</i> 982-58	Building Services Bob Carman 982-4870 or rrhc	Landscape Richard Hopkins 982-4668 or rmh3f Work Management	Associate Director Mark Webb 982-5814 or dmw3e Customer Relations	Manda Hedges 19.2451 or wsc8r Customer Relations Reggie Steppe 243-2442 or rs9x Maintenance Programs Shaun Farrell 982-5051 or sf5d	Maintenance Programs Will Shaw 982-3246 or wfs.22 Maintenance Systems Greg Strett 982-4672 or gbs.3f Strvice Desk Brenda Buttner 924-1777 or bdb/s	
Administrative Assistant G. Maxine Maupin 982-5834 or gmw	ger in Systems smeds or cjs2m	Director Health System Physical Plant John R. Rainey 982-8593 or jr5h	Deputy Director of Operations Mark Utz, P. E. 982-3818 or mbu5c Hospital Zone 1 Maintenance	Richard Barbour 924-1951 or rlb4d Research Zone 2 Maintenance Joe Carpenter 982-2535 or jbc8u	West Complex West Complex Zone 3 Maintenance David Tyyree 924-8005 or dh7k KCRC, Foutance,	Off-Grounds Zone 4 Maintenance Larry Shackeford 982-3690 or h8g Engineering Manager Derek Wilson 982-3571 or ddw4m Health System Engineer Bill Rockwell, P.E.	982-0242 or whr7g Administration Vimie Vawter 924-8595 or wm2s	ginia.edu
Chief Facilities Officer Donald E. Sundgren 982-5834 Deputy Chief Facilities Officer Richard H. Rice, Jr., P.E. 982-5836	Training Manager Information Systems Chris Smeds en 982-4796 or cjs2m	Director Facilities Planning & Construction C.A. Johannesmeyer, P.E. 982-4371 or caj5m	Engineering & Design Ernest H. Barber, P. E. 982-4621 or eth5d Academic	Amette Cyphers 243-1132 or amo2b Health System George Southwell 982-2097 or gss6d	Construction Services & Contract Administration Jeff Moore, P.E. 982-5318 or hjm 7m Administration	Kenneth K. McDermou, CM 982-4609 or kenn Resource Center Garth Anderson 982-5367 or ga9p		www.fm.virginia.edu
1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Human Resources & Training Director Refecca R. Leinen 982-5896 or 118n		Sustainability Programs Armando de Leon, P.E. 982-4526 or ajd9c	Recycling Bruce "Sonmy" Beale 982-5876 or pg252 Sustainability Outreach Nina Morris	982-5592 or mmn3a Utility Systems Mark Roach 243-1704 or msr3w	Power Systems Mark Roach, acting 243-1704 or msr3w Environmental Compliance Kristin Carter 982-5034 or kma4z		virginia.edu
Finance Michael Cline 982-3075 or micro		Director Energy & Utilities Cheryl L. Gomez, P.E., MBA 982-5414 or clgby	Systems Development and Integration <i>Scott Martin</i> 982-5048 or scm3e	Systems Control Center Justin Callihan 982-5907 or jhc4h Instrumentation & Metering	Bill Elliot 982-0219 or whe2n GIS:Mapping Artie McDonough 982-4691 or atm&e	Chilter Plants Gordon Durham 243-5148 or gtd Heat Plants Kent Knicely 924-3090 or klk&x		e-mail addresses followed by @virginia.edu