

# GEORGE MASON UNIVERSITY FACILITIES



ANNUAL REPORT  
FISCAL YEAR 2018-2019

# CONTENTS

Photos by Creative Services

Strategic Plan Update	2
Planning, Design, and Construction	3
<i>Core Campus Project</i>	
Facilities Management	7
<i>Employee Development</i>	
Buisness Services	11



## THE STRIKE ZONE

### Vice President, Facilites, Frank Strike

During the 2018-19 fiscal year, Facilities continued to improve the vast array of services we provide to Mason in support of the university’s mission. This dedication to service is having a meaningful impact in the way our facilities and grounds are planned, built, and maintained.

I am very proud to work alongside such a dedicated, skilled, and talented workforce. Our employees accomplished a lot this past year and have much to be proud of.

Facilities by its very nature is a challenging environment to work in; our students, employees, and visitors expect 24/7 access to campus roads, sidewalks and parking, and to arrive in buildings that are safe, comfortable, and conducive to learning. Unfortunately, systems malfunction, parts break, pipes burst, and Mother Nature attacks with wind, heavy rain, snow, and sleet. Our organization is one of the most proactive I have ever seen in the areas of preventative maintenance, building and land use planning, and developing detailed response plans.



It would be impossible to capture everything we did over the past year but this annual report is intended to highlight some of the amazing work performed by our employees. I hope you enjoy reading through the facts, figures, and short stories of our successes over this past year.

# STRATEGIC PLAN UPDATE

This spring members of the facilities staff participated in a series of strategic planning sessions to update the mission, visions, and values and develop division-wide goals.



## Mission

George Mason University Facilities ensures a quality physical environment supporting the mission of the University.

## Vision

We will be the technical and business experts of choice with the total trust and confidence of our students, faculty and staff.

## Values

- Our students come first.
- Diversity is our strength.
- Innovation in all we do.
- We honor freedom of thought and expression.
- We are careful stewards.
- We act with integrity.
- We thrive together.



30

Employees  
with 20+ Years  
of Service

## FY20 Goals

- **Process:** Facilities will identify, document, and improve major division processes to increase efficiencies and eliminate gaps.
- **Finance:** Facilities will strategically plan and execute budgets by revamping our budget development, monitoring, and execution processes.
- **Communication:** Facilities will develop a communication plan to address the needs of both internal and external stakeholders.
- **Employee Development:** Facilities will continue to develop a work environment that offers an equitable salary structure and provides development opportunities that align with the employees' needs and the department's requirements.
- **Customer Relations:** Facilities will work to understand our current customer service levels in order to identify areas where improvements are needed.

# PLANNING, DESIGN AND CONSTRUCTION

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## WHO WE ARE

- Planning, Design, and Construction is a team of architects, engineers, project managers, and inspectors. We manage the full life-cycle of a variety of projects ranging from wayfinding signage to new buildings. In addition, we oversee campus master planning, long range utility planning, architectural standards, space standards and management guidelines, and campus art standards.

## WHAT WE DO

- Campus Planning
- Code Compliance
- Environmental Engineering
- Interior Design
- Move Coordination
- Project Inspections
- Project Management
- Signage and Graphics
- Space Management

31  
Full-Time Staff



"MY PROJECT MANAGER... CONSISTENTLY DEMONSTRATES ATTENTION TO DETAIL, THOROUGHNESS, COLLABORATION, CREATIVITY, FRUGALITY, **RESOURCEFULNESS**, AND COLLEGIALITY WHEN WORKING ON A PROJECT."

- MASON CUSTOMER



# CORE CAMPUS PROJECT

The Core Campus Project is an ambitious and transforming construction project, with a total budget of \$171m, which will create a vibrant, globally connected hub in the center of Mason's Fairfax Campus.

The showcase will be a state-of-the-art, six-story, 218,000-square-foot building with classrooms, workplaces, meeting rooms, community space and the **Mason Innovation Exchange**. The building, which will be erected on the site of the existing Robinson Hall, will serve as the defining center of academic life, both esthetically and practically, and offer maximum teaching and learning flexibility.

Improvements to Mason's utility infrastructure might not get as much attention as a new building, but it is just as vital. Underground utility improvements include replacing and/or installing 16,255 linear feet of chilled water piping within the campus thermal infrastructure loop system to provide improved reliability and flow. Hot water piping and chilled water building feeds will be upgraded or replaced in several buildings.

## MASON POND RETROFIT



Design work will begin soon on a retrofitting of Mason Pond. The primary purpose of this work is to improve the water quality and quantity (capacity) in the pond as well as reduce the long term maintenance needs. In addition, aesthetic improvements such as enhanced lighting, an improved fountain, and better landscaping are expected to be completed with the project.

## WILKINS PLAZA MEMORIAL

The Enslaved People of George Mason memorial, part of the Core Campus Project in Fairfax, and designed by Perkins + Will, will provide a more complete account of the complicated legacy of George Mason IV, a founding father who championed individual freedom but who also owned slaves.

The memorial, scheduled to be completed in 2021, will honor two of the more than 100 people enslaved at Gunston Hall—a 10-year-old girl named Penny and James, Mason's manservant. The memorial on Wilkins Plaza will be designed to convey the hidden voices of the enslaved, the traditional voice of George Mason, and a space designed for students and others to reflect and share their own voices.



# PLANNING FOR THE FUTURE

An exciting project on the horizon is a new 400,000 square-foot structure on the Arlington campus to support Mason's **Institute for Digital Innovation** in support of the Commonwealth's recruitment of Amazon to Northern Virginia. This building will accommodate Mason's growing computer programs as they advance research in high-tech fields and increase the number of highly skilled technical graduates. The first phases of the project will include demolition of the original department store building and relocation of a major underground storm water culvert system.



Another project under design is a 100,000 square-foot science and engineering building at the Science and Technology campus in Prince William County. The project will add much needed specialized instructional labs and classrooms for STEM fields. The new space will support the growth at the Sci-Tech campus and will be built to at least LEED Silver standards.



# DESIGNING FOR THE PRESENT

The overall appearance of campus, the ability for people to find their way around, and the functionality and comfort of our furniture all contribute to a positive experience for our students, employees, and visitors.

Projects in this area can be as small as office furniture for a new professor or as large as planning the interior design for a new building. Signage projects are similarly wide-ranging and include everything from a new directory sign in a lobby to the renaming of an entire building (we did two of these last year). This group manages design standards on campus, ensuring aesthetic consistency and cohesion university-wide.

# PROJECT HIGHLIGHTS



## SCALIA STATUE INSTALL

This past fall Facilities Project Management completed a major installation of the Antonin Scalia statue by sculptor Greg Wyatt at the Hazel Hall lobby. The statue's weight, height, and base width all presented challenges.

GMU engaged an AE firm to determine the appropriate maximum statue weight based on the building's structure and to produce the installation drawings. To prevent potential cracking of the terrazzo floor finish at the final statue location, a portion of the terrazzo floor was removed and replaced with a cementitious leveling material.

On the day of the installation, the statue was crane lifted from its transporting vehicle to the Hazel Hall Plaza, rolled onto a flat cart through temporarily removed storefront doors and transom, and lifted to its final location using a small crane.



**53**  
Permits  
Issued in-House



  
**359**  
Active  
Projects

## INNOVATION PARK RESEARCH LAB



The Volgenau School of Engineering Labs at Innovation Park is a 11,000 sf. complex of seven research labs, two student shops, a conference room and a kitchen/lounge room located in a commercial lease building two blocks from Mason's Sci-Tech campus. Laboratories include the research of tribology, lithium battery testing, robotics, and nano/micro-scale transport engineering.

This project had several challenges. Major modifications to the original design prior to the start of construction required an aggressive construction schedule to meet department commitments. A custom designed walk-in fume hood and 3,000 gallon fiberglass robotics tank also required modification to existing walls and windows before installation. The power capacity for the lease space limited the type and amount of power for certain equipment.

# FACILITIES MANAGEMENT

## WHO WE ARE

- The mission of Facilities Management is to efficiently and economically maintain and repair all Mason's buildings, grounds, infrastructure and energy management systems. We believe in proactive maintenance to minimize disruptions felt by the University community. Our team consists of experienced tradespeople, contract administrators and general service providers all working toward the same goal.

## WHAT WE DO

- Auto Shop
- Building and Grounds Maintenance
- Building Automation
- Central Heating & Cooling Plant
- Customer Service
- Energy Management
- Facilities Condition Assessment
- Inclement Weather Response
- System Control Commissioning
- Warehouse & Central Receiving
- Waste & Recycling

202 |   
Full-Time Staff



"THANKS FOR ALL YOUR HELP IN MAKING SOME OF THESE NON-GLAMOROUS BUT **CRITICAL LOGISTICS FUNCTIONS** WORK - IT WAS A LOT MORE FUN HAVING MADE THE CONNECTION WITH YOU AND YOUR TEAM THIS YEAR."

– BRIAN JACOBY, NOVA LABS



# SNOW RESPONSE PROGRAM

Facilities Management had a very successful 2018/2019 snow season. This was the second year of operating under the new snow response program and it was tested successfully during several events this year.

In addition to the snow response program, the pre-planning and communications with stakeholders were expanded greatly. Frequent updates from the 'Snow Commander' inform all parties of plan changes, report times, and events on campus. Our customers are actively involved in this process.

Facilities Management has had a very positive response to these actions and feel much better prepared to respond to any snow and ice storms.



## WINTER ROAD MAINTENANCE & SNOW OPERATIONS TRAINING



While the maintenance of wintry streets and highways is critical to the quality of life for all Virginians, the unique challenges of clearing and maintaining public facilities during winter weather should not be overlooked.

In October several members of the Facilities Management team attended a full-day class presented by the Virginia Transportation Training Academy. The course was designed to help facilities managers and maintenance personnel to provide safe public access to parking lots and sidewalks in winter conditions and focused on the special snow removal needs of college campuses and other public facilities. Our team left with a full understanding of the core topics of winter road maintenance and operations including snow and ice control techniques, best practices, and the latest snow fighting strategies.

**8,552**  
Hours Worked  
During  
Inclement  
Weather Events



**40k**  
Total FY19  
Work  
Orders

# PROJECT HIGHLIGHTS



## CHILLER TUBE CLEANING SYSTEMS



Automatic chiller tube cleaning systems are now installed on six air conditioning chillers that cool the entire Fairfax Campus. These sophisticated systems operate continuously to improve the energy efficiency of the air conditioning systems, reduce electricity costs, and reduce greenhouse gas emissions.



## WI-FI UPGRADE IN PRESIDENT'S PARK

The fire alarm shop accepted an unusual request from ITS to install conduit and provide firewall penetrations to receive new IT cabling throughout President's Park. The project was inspected by the State Fire Marshal and not one punch-list item was noted for correction. The project passed on its first inspection. The fire alarm shop saved the University well over \$100,000 by accepting and completing this project.



## SPORTS FLOORING

Facilities Management oversaw refinishing of RAC Gym floor, Eagle Bank Arena floor, and the Cage Gym floor. This included multiple site visits and group meetings to ensure standards of quality were met and clients approved of final product.

## HAZARDOUS PAVER REPAIR



Facilities Management instituted a major paver program to address large sidewalk areas with tripping hazards at Founders Hall and repaired cracked/raised pavers at 17 different locations at Fairfax campus.



## MATHY HOUSE CULVERTS

Facilities Management initiated, coordinated and managed a mid-winter project to replace all three culverts crossing under the Mathy properties driveway; one of which was failing and in imminent danger of collapse.

## LED LIGHTING CONVERSIONS



Facilities Management continued to retrofit indoor and outdoor lighting to energy efficient LED technology reducing electricity use and greenhouse gas emissions. Over 20 projects were completed in FY19.

# EMPLOYEE DEVELOPMENT

Facilities Management and Executive and Professional Education collaborated to develop a customized 18 month program based on International Facility Management Association's existing program. Applications were accepted from all eligible staff and 12 were selected.

The cohort, which formed in March 2019, will receive training on all aspects of facility management as well as a certificate of completion. Participants will be prepared to test for a **Facilities Management Professional (FMP)** designation at the end of the cohort.



248

Employees received some form of training



## APPRENTICESHIP PROGRAM

The new Facilities Management Apprentice Program is designed to establish and maintain high standards of work performance through the development of skilled employees using on-the-job training supplemented by technical and theoretical classroom instruction.

**In the Spring of 2019 Facilities Management added four new apprentices. They will begin their coursework in the Fall.**

Program Overview:

- 8,000 hours of on-the-job training
- 576 hours of classroom instruction
- Annual Zone rotation
- Mentored by a seasoned tradesperson

Apprenticeship Trades:

- Electric
- General Maintenance
- HVAC
- Plumbing

Those apprentices who complete their academic work, job related training and (when applicable) pass the state licensure certification exam, will be awarded apprentice diplomas from Facilities Management and will be promoted to Trades Tech Level II.

"I WANT TO LET YOU KNOW THAT I LOVE THE **ZONE SYSTEM** YOU HAVE GONE TO. IT IS WORKING FANTASTICALLY.... IT IS REASSURING KNOWING THAT THE FACILITIES STAFF WORKING ON MASON REC FACILITIES WILL REALLY KNOW THE BUILDINGS."

– CONNIE BENSON, RECREATION

# BUSINESS SERVICES

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## WHO WE ARE

- The business services team provides leadership and support to internal and external clients in a wide variety of business functions. The team is charged with helping Facilities operate in a highly efficient and effective manner by managing and innovating our business and administrative operations. In addition, university-wide services provided include parking, transportation, and environmental sustainability.

## WHAT WE DO

- Accounts Payable
- Budget Management
- Capital Finance
- Contracts
- Information Technology
- Human Resources
- Parking & Transportaion
- Sustainability

32 |   
Full-Time Staff



“YOUR TEAM HAS BECOME LEGENDARY AT HQ FOR YOUR AWESOME STAKEHOLDER ENGAGEMENT, INVENTIVE IMPLEMENTATION, AND CREATIVE USAGE OF E-BUILDER.”

- JAMIE LYNN COOKE, E-BUILDER





# E-BUILDER CELEBRATES ONE YEAR

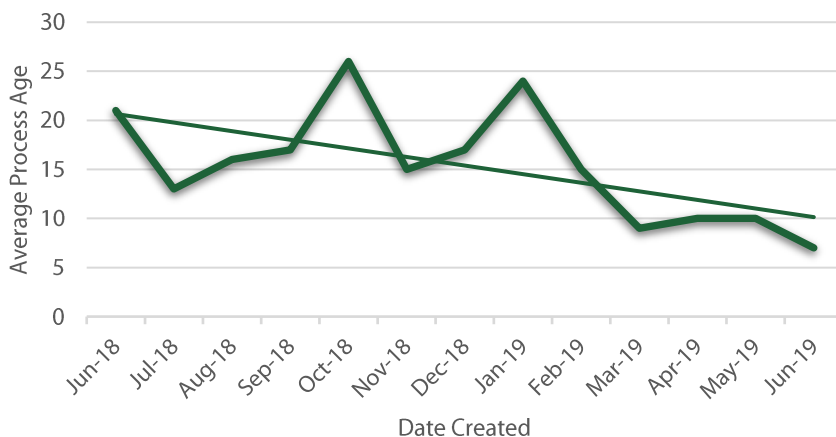
e-Builder is a cloud-based solution that manages the entire life-cycle of construction projects. Each line item and detail of a project is tracked and managed from the planning phase to completion/delivery. This ensures all projects follow set policies and procedures and allow for full visibility by all stakeholders.

In April 2019, Facilities celebrated one year since implementing e-Builder. This was a collaborative effort between IT, Contracts and Capital Finance, and Project Management. We continue to see increases in usage and acceptance of the system by Mason staff and external architects, engineers, and general contractors.

## Key Highlights

- 260 users from 60 companies including various architects/engineers and general contractors.
- 359 projects managed with budgets totaling over \$400 million dollars.
- 361 contracts approved worth over \$327 million dollars.
- 40 new processes created which include inspection reports, invoices, change orders, etc. to streamline workflows.
- Over 10,000 documents uploaded.

**Budget and Contract Approvals**  
Average Process Age by Month



## BUSINESS SERVICES FAST FACTS

**15**  
Employees recruited and on-boarded

**\$62m**  
Total Operating Budget Managed

**\$61.5m**  
Capital Spend

**361**  
Contracts Approved in e-Builder

**2k**  
Pounds of food from the Greenhouse

**566k**  
Shuttle Rides

**9,464**  
Invoices Processed



# CAMPUS CLEANUP 2019

Every year, Mason Facilities hosts a campus wide cleanup to promote public awareness of the need to protect and clean our streams through positive actions and advocacy.

The Facilities Land Development Team, in conjunction with Facilities Management and Sustainability at Mason, seek to alert people to the impacts of stormwater runoff on water quality and provide guidance on how the community can help in minimizing adverse impacts of urban runoff in waterways.

The Spring 2019 Mason Campus cleanup was part of the larger Potomac River Watershed Cleanup and Earth Day events in the DMV area. Faculty and staff members from various departments helped remove trash from streams, parking lots, sidewalks and wooded areas.

**765lb**

Total Trash  
collected during  
Campus Cleanup



## DOCKLESS MOBILITY

In 2018 Mason Parking & Transportation and surrounding city and county governments commissioned a study on dockless mobility and station-based bikeshare and in the summer of 2019 the City of Fairfax launched a one-year e-scooter pilot program.

Mason has plans to join the pilot once some key tools are in place including a personal vehicle transportation policy, detailed parking locations and geofenced areas where the e-scooter will not be operable. The overarching driver is community safety. E-scooters and other personal mobility devices have the potential to add important first/last mile transportation options and Mason looks forward to collaborating with our regional partners on these exciting opportunities.

 **148**  
Registered  
Bikes

