EXECUTIVE SUMMARY

The Facilities Services Department strives to advance the University of Tennessee’s overall mission by maintaining and optimizing the physical resources and environments of the Main and Agricultural campuses.

The number one priority of Facilities Services is to create and maintain a clean, safe environment for students to learn, faculty to teach and perform research, and staff to collaborate and innovate. Our dedicated staff of 550+ achieve this goal through their 5,500 years of combined service.

Facilities Services continually improves upon top industry practices in order to support the goal of providing the best possible services while also maintaining the best cost model, with our employees’ vested loyalty and ownership in the work they provide to the state of Tennessee and to the UT Knoxville campus community.

As we look forward to the university’s continued advancement, with the constant support of our department, we have compiled a report of our achievements for the last year as we strive to exceed our goals for the 2022-2023 academic year.

This report is presented to showcase the continuing initiatives of the University of Tennessee, Knoxville Facilities Services Department in our drive to become a Top 25 Facilities Department. We are committed to establish ourselves in the forefront of achieving the university’s goal to become a Top 25 Research Institution.

It takes a team of dedicated Facilities Services employees to provide services worthy of the University of Tennessee. This is an introduction to our commitment to being that team.
LETTER FROM THE AVC

The University of Tennessee’s Facilities Services team is comprised of more than 550 skilled facilities technicians and proud professionals responsible for the design, construction, maintenance, repair, and cleaning of over 16 million square feet of space, spread over 294 buildings and across 910 acres. We are in the customer service business, with our customers being the 33,000+ students and more than 8,500 faculty and staff who call the Knoxville campus home.

Facilities Services personnel stepped up throughout the University’s COVID response and were an integral part to its ability to not only weather the storm, but to come out the other side stronger. Their work has helped establish a strong foundation of facilities that support a “University on the rise.” As stewards of the buildings and grounds, the Facilities Services team is dedicated to providing reliable, timely, and cost-effective services to the University of Tennessee.

Facilities Services is also dedicated to its own team members, looking for opportunities to develop and hone their skills so that they can advance in their respective fields and better serve the University community. As a part of that effort, we are working to expand our Apprenticeship Program and our Custodial Certification Program, maximizing the number of licensed professionals on staff.

Although this report provides a good cross section of the incredible things the Facilities Services team accomplished in FY22, it is impossible for it to adequately capture the pride and ownership each member feels for the University. They are proud to be called Volunteers and I am proud to have been given the opportunity to join this team of professionals.

Mike Brady
Associate Vice Chancellor of Facilities Services
WHO ARE WE?

The Facilities Services Department is the largest non-academic department on the University of Tennessee, Knoxville campus. Our department is responsible for the basic operation and continuous maintenance of most facilities on the Main and Agricultural campuses of the University of Tennessee.

Campus facilities include approximately 294 buildings, more than 16 million square feet of space, 14 residence halls open for fall 2022, roughly 910 acres of land, and $1 billion+ in projects under design and construction.

In addition to these facilities, we are also responsible for electrical substations that provide power to most of our campus buildings, and a central steam plant that provides heating and hot water in most campus spaces.

We currently have more than 550 employees distributed through several specialized units in our department. These units are Administration, Administrative & Support Services, Communication & Information Services, Construction Services, Design Services, Facilities Operations, Building Services, Special Projects, Utilities Services and Zone Maintenance.


Facilities Services staff members also oversee the university’s environmental projects.

Key parts of our organization are operating continuously, 24 hours a day, 365 days a year, and we are always on call.

Anyone on campus can contact Facilities Services 24 hours a day using our “One Call” program at 946-7777. Someone is always available to provide customer service and support to the campus community.

Our goal is to always enhance and maintain campus environments that are highly conducive to learning and research.
OUR VISION

Our vision is to be knowledgeable and experienced stewards who serve the university by providing a beautiful, state of the art campus in order to educate, elevate, and improve our community and world.

OUR MISSION

Facilities Services supports the University of Tennessee as responsible stewards of state resources by providing the campus with safe, clean, state of the art environments and empowering a campus community with a commitment to the tradition of excellence.

We support the University, empowering the campus community with a commitment to the tradition of excellence.

OUR VALUES

We incorporate several important values into our daily operations. By embracing and enforcing these values, our department can better support the university’s own standards in education, research and public service.

Teamwork - Internally and Externally  |  Accountability - Take Ownership  
Reliability - Follow Through  |  Commitment - Dedicated Stewards to our Community 
Continuous Improvement - Through Value & Innovation  |  Quality Services - Our Highest Priority
FPI SURVEY & IN-HOUSE REPORTING

Improving self-assessment and benchmarking measures has been a key component of the Facilities Services reorganization.

The ability to monitor current campus facilities conditions and forecast future risks is crucial to maintaining a safe and enjoyable campus environment.

The University of Tennessee Facilities Services Department has embarked on rigorous in-house benchmarking and analysis to address critical needs on campus.

Appendices of these reports can be found at tiny.utk.edu/FSannualreport

ARCHIBUS SYSTEM

A primary component of Facilities Services increased accessibility, self-assessment, and benchmarking capabilities is the implementation of a custom Integrated Workplace Management System to replace the department’s previous legacy system for requesting, tracking, and reviewing work orders. Archibus allows Facilities Services to better schedule, dispatch, manage, and report maintenance tasks efficiently using self-service capabilities to reduce operational costs and increase customer transparency and satisfaction.

The Archibus system gives our customers easier access to general work order information, broader access to more detailed reports, and real-time updates on work orders in our system. From there customers are also able to view or submit Project Requests, Key Requests, or Event Solicitations. Financial Officers are able to approve/reject work or provide substitute approvers when they know they will be out of the office.
ORG CHART

ASSOCIATE VP CHANCELLOR

SPECIAL PROJECTS
DIRECTOR

COMM & INFO
DIRECTOR

ADMIN & SUPPORT SYS
DIRECTOR

DESIGN SERVICES
DIRECTOR

CONSTRUCTION SERVICES
DIRECTOR

UTILITIES SERVICES
DIRECTOR

BUILDING SERVICES
DIRECTOR

OPERATIONS
DIRECTOR

ZONE MAINTENANCE
DIRECTOR

ENERGY MANAGEMENT
DIRECTOR

SUSTAINABILITY MANAGER

RECYCLING MANAGER

CONSTRUCTION OPERATIONS SPECIALIST

OFFICE MANAGER

LOCK & KEY SHOP

Landscape Services

ARCHITECTURAL SERVICES

TURF MANAGEMENT

HEAVY EQUIPMENT

PARKING TEAM

SAFETY

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The Business Services Office is responsible for accomplishing personnel and financial support functions such as: budget build and execution, accounts management, accounts payable and receivable, ledger reconciliations, expense reimbursements, procurement card administration, contract administration, scholarship administration, asset management and movable equipment inventories, and maintaining multiple financial and administrative databases for the Facilities Services Department.

This office is also responsible for the financial administration and execution of the annual Facilities Services Departmental Budget which encompasses over 40 E&G Cost Centers as well as A, I, and WBS restricted accounts. In addition, this office provides departmental units with information and guidance regarding university fiscal policies and procedures and serves as the central point of contact for all questions related to Facilities Services financial matters.

There are three offices within the Business Services Office: Accounts Payable, Accounts Receivable, and Personnel & Administrative Support Services with responsibilities for each identified below.
Accounts Payable operates within the Business Services Office and is the area in which Facilities Services Expenses incurred are processed for payment for items purchased, received, services rendered, etc. These payments include invoices, transfer vouchers, procurement card payments, petty cash reimbursements, and requests for special payment and special remittance.

During FY 2022, the Accounts Payable office processed the following:
- Total invoices processed: 19,572 with $21,087,237.55 paid to vendors
- Total PCard Transactions: 1,581 with $448,130.30 paid to vendors
- Total E-Invoices processed: 3,833 with $1,613,267.40 paid to vendors
- Total Goods & Services Procured Totals: 19,572 with $21,087,237.55 paid to vendors

This office also acts as a liaison between Facilities Services units and vendors for payment questions or contracts related to the procurement of goods and services needed to maintain the University of Tennessee, Knoxville campus.

In addition, Accounts Payable is responsible for the following:
- Maintaining the Facilities Services Department vendor database, including vendor contracts and contract details.
- Creating vendor requests, updating vendors remit to addresses, & obtaining W-9s for applicable vendors.
- Overseeing the Facilities Services Department procurement card purchases, distributing all of the procurement card charges to the appropriate accounts and reconciling account charges per fiscal policies.
Accounts receivable represent debts owed to Facilities Services for maintenance, repairs, rentals and services provided to auxiliaries, departments, groups or individuals surrounding the University of Tennessee’s Knoxville campus. These debts are considered short term and are normally expected to be paid to the university within 30 days after the Service Requests are completed. The Accounts Receivable Office operates within the Business Services Office and is the area that invoices and collects Facilities Services maintenance, repairs and service receivables while following set UT policies and standards for the administration and support of any and all UT Facilities Services work requests. Accounts receivable for Facilities Services can be broken down into three main categories: Auxiliary Charges, interdepartmental charges and project charges.

During FY 2022 the Accounts Receivable Office processed the following auxiliaries, interdepartmental, and project recoverable charges and non-recoverable WRs:

Total Completed Work Requests Processed: 53,751 with $9,565,850.53 billed to and recovered from campus entities.

Utilities Receivable

Another responsibility of the Facilities Services Accounts Receivable office is payment and processing of all utility charges on a monthly basis. Utility charges include the following activities: review and audit of utility bills from vendor(s), entering utility data into program for processing, review for accounting and metering accuracy, payment to vendor(s), interdepartmental and auxiliary billing.

Facilities Services Utilities Receivables Office audited, managed, and paid the following during FY 2022 (July 1, 2021 through June 30, 2022):

- Total Number of Buildings Served: 289
- Total Square Footage Served: 17.2 Million
- Total Utility invoices per fiscal year: 3,552 (campus-wide)
- Total Utility Recoveries (from Auxiliaries): $18,862,320 Million
- Total Utility payments during FY 2022 (UT campus-wide): $42,595,030 Million

Uniforms are now being picked up for cleaning/repair/replacement and delivered weekly to 42 different locker locations across campus. Billing is also done on a weekly basis. With weekly charges we are able to monitor cost trends and easily detect outliers such as lost uniform charges and size changes. We also communicate with supervisors and foremen to ensure all uniforms are returned to us when people separate from the university to avoid no-return charges for the rental of uniforms.
In addition, the Utilities Receivables Office maintains payments, charges, ledgers, and reports for all Utility Services including:

- Utility meter lists.
- Consumption and charges database and reports.
- Installation and tracking of all new campus construction needs and costs for utility applications.
- Processing of utility contracts, applications and agreements for wastewater capacity and grease control permits.
- Title V compliance certification and emissions fees records and payments.
- Backflow testing requirements.
- Monthly and yearly budgets for all utilities.
- Reconciliation of utility account ledgers.

The Accounts Receivable Office also maintains related fiscal records for the Facilities Service Department while providing detailed information and summaries, service and support to the university community.

2022 ANNUAL REPORTS

HUMAN RESOURCES OFFICE

The Human Resources Service Office provides comprehensive Human Resource service for the Facilities Services Department. The HR office is responsible for coordinating and managing the ongoing human resource and payroll functions on behalf of the Facilities Services Department and provides critical support to the eight-unit directors and the Associate Vice Chancellor. The office accomplishes HR services including coordinating, managing and overseeing the recruiting, interviewing, and hiring of new staff, and assisting supervisors and staff with personnel and payroll issues.

The office serves as a vital centralized link between the Facilities Services Department, UT Knoxville Finance and Administration, the UT Knoxville Office of Equity and Diversity, the UT Knoxville Human Resources Office, and the UT Treasurer’s Office. The group interprets, communicates, and advises unit directors and supervisory personnel on Human Resources and payroll policies and procedures and provides direction and guidance in accomplishing human resource functions. The unit also coordinates and manages staffing services for more than 600 employees to include coordinating performance review evaluations, managing personnel and payroll changes, leave applications, promotions, and disciplinary procedures. The office prepares reports on staffing levels, career path progression and eligibility, apprenticeship eligibility and training, employee certification requirements and eligibility, employee leave balances, and payroll expenditures for the unit directors’ and employees’ planning purposes.
Additionally, the HR Office serves as the focal point for the University Apprenticeship Program. This program is the foundation of developing future leaders for Facilities Services and will ensure diversity is maintained within the facilities workforce.

**145 & 127**

Job Offers: 145  
Total New Hires: 127  
Declined Offers: 22*  
Total Terminations: 142  
Position Change Forms: 438  
Personnel Change Forms: 319  
Total Recurring Pay Forms: 108

**6**

Custodial Certification Program Graduates

Total Custodial Certification Program Grads: 6  
Total Payroll-Timesheets/Books Reviews: 11,554  
Additional Pay Forms: 24

HR Exit Forms: 110  
Job Fairs: 30 (13 public job fairs, 14 veteran job fairs and 3 TCAT job fairs)

*Applicant either No Showed on date of hire (10), called in after accepting the offer to decline (5) or took another job due to the length of hiring time and turned down the offer (10).

Job Fairs conducted in Ft. Campbell, Kentucky, also in conjunction with local TCAT, and with the American Job Centers in Knox and Blount Counties. We have established a Career Skills Program with Fort Campbell to hire veterans.

In addition, this office edited, corrected and audited 26 bi-weekly payrolls for more than 550 nonexempt employees during FY 2022 and performed 12 monthly payroll edits, corrections and audits for 58 exempt employees during FY 2022.
Economic Development – Apprentices earn a wage while they learn on the job. Every six months, as they continue to learn and perform more complex tasks proficiently, apprentices receive pay increases. With wages earned and continued pay increases, apprentices can spend their earnings in our community, stimulating the economy, and providing relief to the State’s unemployment insurance pool and social services. Apprentices also receive health and other benefits from our university and are no longer dependent on the State for those items.

Workforce Development – Apprenticeships are a cost-effective way for our department to train employees. By developing our apprenticeship program, Facilities Services makes a powerful statement...taking on apprentices and training the next generation workforce.

Apprenticeship – Upon completion of an apprenticeship program, participants have higher annual earnings than those who do not participate.

Retention – The University of Tennessee, Facilities Services and the Apprentice shares the benefit of our apprenticeship program with increased productivity, safety, worker versatility, and employee retention. Typically, apprentices remain loyal to their employer because they recognize the fact that the company has invested time and energy to help them achieve their career goals.
CENTRAL SUPPLY OFFICE

The Central Supply Office handles purchasing and warehousing, and vehicle operation functions for the Facilities Services department.

PURCHASING

The Central Supply Purchasing staff, with over 100 years of purchasing experience, placed over 6,000 orders with a purchase value of nearly $9,000,000 this past fiscal year. A new position was created 'Procurement Professional' (Contract Coordinator) which has resulted in much better, clearer coordination between Facilities Services, the Office of Procurement Services, and the Contract Office.

PARTS WAREHOUSING

The Central Supply warehouse is a consolidated, well-organized, state-of-the-art facility. Located in the Facilities Services Complex, it is the central receiving and issuing point for special order and stock replenishment purchases and maintains an inventory of commonly used stock items to support the Facilities Services units in providing maintenance and renovation services to the University of Tennessee, Knoxville campus.

The warehouse stocks nearly 2300 items at an average total value of over $600,000. The warehouse had more than 50,000 transactions (issues, receivers, rectifications, and returns) this past fiscal year. Our fiscal year-end inventory resulted with an astounding 99.997% value accuracy.

As of July 2017, all warehousing locations are clearly marked and undergo a comprehensive, hands-on physical inventory each year. The Central Supply Warehouse includes the following descriptives:

- Part Number
- Part Description(s)
- Part Type
- Part Location(s)
- Quantity on Hand
- Vendor(s)
- Cost Details
- Special Information
CENTRAL SUPPLY OFFICE  VEHICLE OPERATIONS

After the Facilities Services Department moved to the Sutherland Facilities Services Complex (FSC), we had to address the issue of not having enough parking spaces for personal vehicles. The Central Supply Office implemented a shuttle program to transport staff and student workers to and from the FSC, our Concord parking lot, and the main campus. The schedule allows van operations from 5:30am to 5:30pm, Monday through Friday.

The Central Supply Office is also responsible for the pooled vehicles in our fleet (currently 14) available to any licensed Facilities Services staff member who may need transportation for job assignments.

BUILDING SERVICES

Accomplishments

The Building Services successfully manages the cleaning maintenance of over 17,000,000 square feet of space encompassing all academic and athletic facilities. This includes spaces managed by UTK Auxiliaries, UTK Common Spaces, the Institute of Agriculture, UT System, and UT Memphis areas.

This is done by providing coverage 24 hours per day 7 days per week in order to satisfy customer needs. APPA Level 2 cleaning standards are desired. With staffing 40% below desired levels, a number of innovated ideas have been initiated to help achieve cleaning levels.

· Total Cleaning: Private offices are scheduled and cleaned one day per week.
· Tiny Trash: Employees manage their own private trash and recycling by taking it to the appropriate public container.
· The expansion of a 4am cleaning shift (4th shift) has enabled much cleaning to be done before building occupancy.
· Larger and robotic equipment has been obtained to expedite cleaning operations.
· Expansion of the cleaning contract for Neyland Stadium in order to reduce the number of Service Aides necessary for postgame cleaning.
Accomplishments (cont.)

In addition:
- Building Services led the way for COVID cleaning and microbial protection across campus.
- Building Service personnel handle all recycling in their areas.
- Building Services personnel support event, conference, camps, and athletic activities on campus.
- Personnel select all products and equipment that are used by departmental personnel; this translates into a 95% Green Cleaning profile.
- The Cleaning Certification Program is going strong as it seeks to educate and develop future leaders for Building Services.
- We are sending representatives to the International Sanitary Supply Association National Conference and Trade Show in Chicago.
- Service Aides continue to be necessary for postgame cleaning.

Finally, the unit provides timely and structured learning experiences, operational training, and career development programs to all departmental employees. All this internal support is provided through three functional offices: Communications & PR, IT Support & Maintenance, and Employee Training & Development. Together the unit supports all Facilities Services employees, being a stalwart steward of campus funds, continually finding ways to avoid extraneous costs, trimming wasteful expenses, and always working toward continual improvement.

Communications and Public Relations

FACILITIES SERVICES SCHOLARSHIP FUNDS
The Student Assistant Student Scholarship Fund was established in October 2017 by a committee that represents each Facilities unit. The scholarship was fully endowed in FY19. Our largest fundraiser for scholarship funds is the annual FS Scholarship Golf Tournament. The golf tournament was a great success with more participants than ever raising $20,000+ (specifically the Bob Evans Scholarship Fund). The 2023 tournament is scheduled for April 29, 2023 and will benefit the John C. Parker Scholarship Fund.

EMERGENCY OPERATIONS CENTER
The communications coordinator is involved with the Facilities Services portion of emergency management in various levels. The coordinator acts as the Emergency Operations Center Coordinator (EOC) for the department, as well as support for the call center. The office is also responsible for the upkeep of the department’s Emergency Response Plan that ties into campus-wide emergency response.
The coordinator also acts as the campus-wide Public Information Officer for Facilities Services related emergencies.

This year, the coordinator has spent considerable time honing in on the emergency management training she received on the fly during the pandemic. She has attended FEMA training for emergency operations in general and specific to the role of public information officer. When an emergency hits, she is ready to jump in and help wherever needed.

**APPA FPI SURVEY**
Each year, the communications coordinator is responsible for the completion of the APPA FPI Survey.

The coordinator gathers all the necessary information from Facilities, as well as other campus units. While the survey itself was changed drastically in the past year, the Communications Coordinator worked across units to gather information and submit the report.

**AMERICAN SCHOOL & UNIVERSITY**
During the course of the year the office organized, created, and submitted separate portfolios featuring campus buildings for American School & University publications. The portfolios consisted of architectural-style images, project data, site plans, and manufacturer lists.

**DEPARTMENT EVENTS**
The department’s two annual large scale events are organized by the communications coordinator. The Fourth of July Picnic and Holiday Parties are planned and executed by Special Projects with the support of Communications & PR.

**DEPARTMENT EVENTS (CONT.)**
This includes space and event rentals, food orders, soliciting prizes, transportation, and hosting. An additional holiday party has been added to accommodate third shift employees and it takes place the same day as the first shift event. FY22 saw the return of in-person gathering, and the events were well received by all in attendance.

These events give us an opportunity to spend time face-to-face with those we serve, and it was truly joyful to safely bring everyone together once again.

**FACILITIES SERVICES ANNUAL REPORT**
The Facilities Services Annual Report is one of the large-scale projects the Communications & Public Relations Office completes on an annual basis. Last year’s document details a department overview, unit summaries, and unit/office annual reports. The Communications & Public Relations Office worked with each Facilities Services office to update their summary and annual review information for the document. Each year the report is published on the department website.

**NEWSLETTERS**
The Communications & PR Office has continued to maintain and expand upon the content in both Facilities Services Weekly and Just the FACs (formerly The Facilitator.) This year, we held a renaming contest to carry The Facilitator into the future of facilities management, and Greta Buckman’s suggestion of "Just the FACs (Facilities Around Campus)" was chosen as the winning title.
Facilities Services Weekly continues to be a wealth of project information for many, both inside and outside of the department. The Weekly is consistently within the Top 10 most visited pages on the Facilities Services website, and it provides an in-depth overview of the many tasks completed by our team within any given week.

EMPLOYEE RECOGNITION PROGRAMS
The communications coordinator organizes and promotes departmental recognition programs. These programs include Employee of the Month and Exceptional Team.

Gift cards are given to Employee of the Month and Exceptional Team members each month and the coordinator organizing all details associated with the programs.

SOCIAL MEDIA OUTREACH
The Communications &PR Office is responsible for the management of the department’s five different social media platforms – Twitter, Instagram, Facebook, YouTube, and Pinterest. The reach of the department’s existing social media accounts expanded considerably during the past 12 months. The FS Twitter account now has 1,661 followers compared to 1,575 in August 2021, the Instagram account now has 1,149 followers compared to 1,095 in August 2021, and Facebook likes have increased to 1,178 from 900. These platforms are used to promote department events, announcements, notices, and accomplishments. Each month the office produces analytics of each of the social media sites to track the department’s progress and reach.

Big Orange Flush event with the purpose of simulating game day usage of the stadium’s plumbing.

Communications and Public Relations

BUILDING REPRESENTATIVE LIST
The office continues to update the campus-wide Building Representative List three times annually. This affords Facilities Services the ability to keep a more accurate list for both maintenance and emergency preparedness.

The office also maintains an emergency contact list for the use of the Office of Emergency Management and UTPD. Once the list is updated it is posted to the Facilities Services website.

BIG ORANGE FAMILY CAMPAIGN
The communications coordinator serves on the executive committee for the UT Knoxville Big Orange Family Campaign. The coordinator organizes all team leads and materials, promotes the campaign, and provides assistance however necessary. In 2022, Facilities Services reached a nearly 81% participation rate during this year’s campaign which is an increase of 6% over the previous year. Facilities Services was honored as a Top Division for 2022.

PUBLIC RELATIONS CAMPAIGNS
The Communications & PR Office has implemented multiple PR campaigns in FY 22, specifically within the realm of Facilities Services’ involvement in daily campus life.

We’ve profiled our teams and spotlighted specific individuals who go above and beyond to make sure all students, staff and faculty have the best on-campus experience possible.

As Neyland Stadium was prepped for a full schedule of home games, Zone Maintenance held their annual Big Orange Flush event with the purpose of simulating game day usage of the stadium’s plumbing.
While that test is not new, local media outlets have responded to our social media content and have chosen to run multiple stories on this annual tradition. The response has been incredibly positive as this office works to creatively shed light on the many ways we work behind the scenes to prepare campus for students, staff, faculty, and visitors.

Volunteers First Impressions Contest
Year 4 started with a slightly different approach to the Volunteer First Impressions contest. While past submissions could not exceed $10,000 in scope, we were granted the ability to select projects up to $20,000 in scope in an effort to have a bigger impact on chosen spaces. After announcing the winners, our teams went to work to bring the vision of each winner to life. While Construction, Utilities, and Design take the lead on completing the projects that make a great first impression, the communications coordinator promotes the contests, gathers all submissions, coordinates announcements of the winners, and takes before, in-progress, and after photographs of each project to share once these projects are complete. This year, 5 projects were selected from students, staff and faculty submissions.

Information Technology (Cont.)
The FS IT (Facilities Services Information Technology) made strides forward in several areas during the past year. The shift towards mobile/remote work methodologies continued to increase the number of devices that the unit supports and increased the number of support contacts/requests to the unit. The unit has continued to work diligently to keep the department on the front edge of the rapidly developing technology sector. Some of this year’s accomplishments include:

- Coordinated a major upgrade of the Audio/Visual equipment in Conference Rooms 101 and 102 to bolster their usefulness for UTK meetings and the Emergency Operations Center.
- Hired and onboarded new personnel to fully-staff the FS IT unit.
- Developed a parallel document to the Sightlines report to analyze Facilities Services data and provide useful insight about performance metrics.
- Completed the roll-out of 2021 CUP computers.
- Installed a Command Center for the Building Automation Controls group.
- Completed the startup of OnBase as a document management system for the FS department.
- Authored security plans for servers operated by the department.
- Took over Continual Improvement Committee and established a new direction for the group.

Much like all of the Facilities Services department, the COVID crisis presented an opportunity for the FS IT (Facilities Services Information Technology) team to shine.
Began installing Microsoft Endpoint Manager on Facilities Services computers
Replaced 102 computers with new models using the centrally funded CUP (Computer Upgrade Program). Placed emphasis on providing laptops to support the Work from Anywhere model.
Inventoried radios and upgraded to latest patches.
Completed the evaluation process for the selection of a new CMMS system (Oracle) as a future system upgrade.
Assisted the Design Department with the search and implementation of a new document management software (OnBase)
Completed user requested enhancements of the Archibus system.
Began to migrate users to One Drive away from H: drives
Continue the shift towards mobile-enabled work by procuring more mobile devices, evaluating our current Mobile Device Management software, and familiarizing users with mobile hardware.
Supported GIS, BIM, and TCO initiatives
Began upgrading some computers to Windows 11
Assisted with the update of the equipment inventory database
Hired a Graduate Assistant to provide additional IT support to the department
Attended the Mid-Atlantic Regional SCUP Conference

Employee Training and Development

PARTNERSHIPS

Environmental Health & Safety (UT System)
In FY2022, we continued our partnership with Environmental Health & Safety (EHS). EHS conducts respirator fit testing for all Facilities Services (FS) employees required to wear a respirator. Over the course of the year, many changes were made to the EHS team and we have spent the majority of this fiscal year bringing both the new FS Training Specialist, Troy Soumeillan, and the EHS Program Lead, Ricky Rutherford, up to speed on our partnership.

Employee and Organizational Development (UT System)
We worked closely with Employee and Organizational Development (EOD) to create our annual OSHA training courses within the KêTE system so our employees can maintain their compliance for safety training.
Employee Training and Development

EOD offered a new conference, the NEXT Conference, for non-exempt staff that we strongly encouraged FS employees to attend. EOD also hosted the annual Conference for Women’s Leadership (CWL). The Training Coordinator, Rebecca Alcorn, was a room host at the NEXT Conference and a speaker at the CWL.

Human Resources (UT Knoxville)

We participated in the STRIDE for Staff events created for Finance & Administration employees and encouraged individual units and sub-units to participate in facilitated CliftonStrengths sessions with Learning & Organizational Development (LOD). We also hosted a benefits roundtable event during open enrollment.

COLLABORATIONS

In addition to external partnerships in fiscal year 2022, Training & Development effectively collaborated with internal Facilities Services units to provide training and services to our employees. Highlights of this collaboration include:

Human Resources - Continual offering of bi-weekly new employee orientation sessions for a total of 126 employees.

Building Services - With the hire of Tyler Vandel as the Training and Inventory Specialist for Building Services, we worked to refine and enhance the Unit Level Orientation program to offer new employees.

Construction Services - Worked closely to retrain staff on electrical safety procedures, lockout/tagout procedures, and ladder safety.

Trained 30 Construction Services staff on forklift safety.

ACCOMPLISHMENTS

In addition to external partnerships and collaborations in fiscal year 2022, Training & Development effectively accomplished many additional tasks. Highlights of these tasks include:

New Employee Orientation (NEO) – Facilities Services takes pride in its attentive process of welcoming and orienting new employees. As the largest non-academic department on campus, we hire a significant number of people every year. In fiscal year 2022, the Training & Development team conducted 23 NEO sessions for a total of 126 new employees. This is a decrease of six (6) NEO sessions from the previous fiscal year with an increase of 55 total employees.

This reduction in the number of sessions held results from decreasing our NEO offerings when UTK had it’s return to work for fiscal year 22.

Fiscal year 2022 Respiratory Protection Program – Specific work tasks require employees from Utilities Services, Zone Maintenance, Paint & Sign Services, and Sanitation Safety to use a respirator for protection from exposure to hazardous atmospheres. Training & Development schedules medical evaluations, provides fit testing (in partnership with EHS), and PPE and respiratory protection training for affected employees. Fit testing was offered monthly to medically-approved employees. Data was collected from fit-tested employees on the frequency of respirator use and tasks performed while working.
Employee Training and Development (cont.)

Accomplishments (cont.)

46 employees were scheduled to attend breathing tests at Occupational Health Services. Of those, 45 were approved for fit testing. From those 45 employees that were approved for fit testing, 29 employees passed their respirator fit test. In February 2022, the requirement that the Steam Plant employees participate in the Respiratory Protection Program was removed after a job hazard analysis was conducted by EHS.

Training & Development strives to implement several different safety training events throughout the year. This year we were able to reinstitute in-person training after the university eased pandemic social distancing requirement. We offered arc flash training, electrical safety training, forklift assessments, lockout/tagout training, and others.

OSHA Compliance Training – We reported a compliance rate of 95.34% among full time employees for calendar year 2021. This is a decrease of 3.86% from calendar year 2020.

Leadership Training – We collaborated with speakers across the campus to host a one-day leadership training event for all Facilities leaders at the Manager level and above. Training was held on Thursday, March 3 for 31 staff.

FS Management Training – Utilizing results from a needs assessment conducted in fiscal year 2020, a two-day management training program was put together. Topics covered in this course include communication and leadership styles, active listening, delegation, conflict management, and more.

In addition to those topics just mentioned, campus partners including Employee Relations, FS Human Resources, Office of Title IX, Office of Equity and Diversity, and Risk Management speak to session participants. In fiscal year 2022 we held 3 sessions for the Building Services unit.

MiniTrain – Beth O’Neill continued to implement MiniTrain videos over the course of fiscal year 2022. Six (6) videos were published on topics ranging from stormwater and compost to email etiquette.

Employee Changes - Troy Soumeillan was hired in October 2021 to replace Rob Moyer as the second Training Specialist on the Training team. In January 2022, Anna Best left the Training Admin role to pursue other endeavors. In March 2022, Michelle Rios was hired to replace Anna as the Training Admin.

The Employee Training & Development team remains focused on implementing new training programs for the department and ensuring those training programs can be offered in a format that proves to be accessible by the vast majority of employees. Going forward, Employee Training & Development will be able to focus more on safety training measures and will continue to search for vendor and job specific training that will enhance the skills of all Facilities Services employees.
The Facilities Services Construction Unit is a team of 51 full-time employees that consists of Projects, Building Finishes/STAR Team, and Paint & Sign Services. In 2022, this team completed 2,643 work request and/or projects. Within the completed work requests, 770 were addressed by Building Finishes, 894 were submitted to FS Construction, 792 were submitted to Paint & Sign Services and 187 were submitted to the STAR Team. This equals $4,475,406.34 in chargeable work orders as a whole.

2022 Construction Project Team Highlights

- **Campus Hosted Classroom Upgrades**
  - Perkins Hall B60, B61, 102, 108, 212,216, 217, 218,319, & 324
  - Dougherty Engineering 416
  - Jessie Harris Building 104, 114, 243, 244, 413, 414, 424, & 425
  - Nursing Education Building 400
  - Nielsen Physics 415 & 608
  - Music Center 7, 9, 10, 18, 22, 25, & 68

- **Volunteer First Impressions Projects**
  - Bailey Education- 2nd floor reception area, and Center for Children and Young Adult Literature
  - Blount Hall- exterior and lobby enhancements
  - Business Incubator/ Ag Campus- outdoor furniture and landscape improvements
  - Caledonia/ Volunteer Blvd- drainage and landscape improvements
  - Hodges/ Hess- improved landscaping
  - HPER- new student seating with power
  - Humanities and Social Sciences- new mural and seating on 2nd floor
  - Mossman Building- mural with pinup boards and new seating
  - Vol Hall Garage- White Avenue improvements and pressure washing

- **POCA repairs in multiple buildings:**
  - Alumni Memorial Building, College of Nursing, Nielsen Physics, & UT Warehouse
  - Alpha Delta Pi Sorority
    - Restroom Remodel
  - Austin Peay Building
    - Abatement, new paint and carpet in 225C, 301E, and 312D
  - Art + Architecture
    - Ewing Gallery remodel
    - Laser cutter lab
    - Virtual reality and broadcast studio in 341
  - Allen Jones Aquatic Center
    - Score board hanging for SEC championships
  - Anderson Training
    - Cryotherm Tubs renovation
    - New power for Smokey's Grill area
  - Ayres Hall
    - Soundproof doors
  - Bailey Education
    - Renovate office 305
  - Baker Center for Public Policy
    - Create new offices and renovate 2nd and 3rd floor
  - Bass Anthropology
    - Install a fence around the new property
  - Black Cultural Center
    - Install new roller blinds and resurface countertops
  - Blount Hall
    - Renovate offices 104 & 105
    - Build permanent wall for safe room
  - Brown Residence Hall
    - Install underground conduit for fiber optic cabling
  - Claxton Education
    - Renovate office 203
    - Install new cubicles in 344
    - Created new interview room and corrects AC issues in 407
2022 Construction Project Team Highlights

- Communications Building
  - Replace the #5 HVAC unit
- Conference Center
  - Remove old dish machine and install a new leased dish machine
- Dabney Buehler
  - Installation of 7 PTAC units
- Dougherty Engineering
  - Patch, prime, paint and install new carpeting in 2 classrooms and 7 offices
  - Abatement, new carpet and paint in 423
  - Increase insulation on chilled water system
- ETREC Johnson Animal Research
  - Install new surgical lights and surgical sinks
- Equity and Diversity
  - Awning and storm door
  - Interior upgrades
- Facilities Services Complex
  - Central Supply Awning
  - Security glass film
  - New security cameras
- Fibers and Composites Manufacturing
  - Remove service from the sonic bath and the gas furnace and install power and vent fans for new Wabash press.
- Fleet Management
  - Car chargers
- Food Science
  - Ice Cream Production Facility
- G7 parking garage
  - Fence in closer add power for cameras
  - Redo lights, added transformer and electrical panels
- G16 parking garage
  - Install count system, including power
- Greve Hall
  - Key Shop epoxy floor
  - G005 - renovated old POD market flooring, paint, ceiling and lights
  - 207,211,212 rebuild shelving, paint rooms.
  - 514,518,522,523,524, & 525 mold removal replace flooring
- Haslam Business Building
  - Paint of all common areas
- Hodges Library
  - UT Press Suite construction
- HPER
  - Change 360A in two offices
- Kingston Pike Building
  - Electrical and Chilled Water for the new Opticool servers
  - 131 Rework landscape furniture, lights, clean carpet.
  - 135 Renovate space to Online Studio, HEERF funded
- Law Complex
  - Replace 1st floor classroom acoustic panels
  - Replace 2nd floor classroom acoustic panels
  - Renovation of library offices and study rooms
- McClung Tower
  - Renovate office 521
  - Renovate office 609
  - Renovate office 716
- McCord Hall
  - Renovate Suite 201
  - Install new roller blinds
- Morgan Hall
  - Paint and carpet in 308
  - Repair and paint several offices, furniture install
- On Campus
  - Pressure washing in multiple locations
  - Replace University seal in pedestrian mall and repair Torchbearer seal
  - Classroom & Conference room upgrades, HEERF funded
- SERF
  - New door access controls
  - Renovate to create 3 rooms in 231
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CONSTRUCTION SERVICES

2022 Construction Project Team Highlights

- Sigma Kappa
  - Replace flooring and paint 22 rooms and corridor on 2nd floor
  - Demo 40ft wall to open area up on 1st floor
- Student Health
  - Install new storefront/doors and ADA openers
- Student Union
  - Updates to ballroom signage
- South College
  - Office redesign, new paint and carpet in suite 101
  - Abatement, paint, flooring, and furniture in 201
- Stokely Management Center
  - 2nd floor remodel
- Temple Hall
  - New blinds in multiple areas
  - Add compactor storage cabinets
- Tickle Engineering
  - Concrete wash station and trap
  - New electrical, water, and air lines for 204
- Tyson Alumni Center
  - New flooring
  - Roof repairs
- UT Culinary Institute and Creamery
  - Renovate the Visitor Center and build the UT Creamery
- UT Institute for Advanced Materials & Manufacturing
  - 158B- Install electric and chilled water for the new microscope
  - G004 – Create the AT&T 5G Lab
  - 158C - Install electric and chilled water for new equipment.
- UT Drive Services Building A
  - Resurface countertops
- Vol Hall
  - Interior building painting

Estimate Highlights of 460 Completed Projects

- Andy Holt Tower 7th and 8th floors
- Aramark Renovations in multiple buildings
- Blount Hall Student Disability Services moving
- Classroom Estimates in multiple building
- Conference Center Building renovations
- Equity and Diversity renovations
- Greve Hall Bredesen Center upgrades
- Hesler Biology Anechoic Chamber labs
- Hoskins Library ROTC
- Intramural Fields improvements
- Kingston Pike Building–multiple estimates
- Nielsen Physics office renovation
- University Printing and Mail (Auxiliary Services Building) New equipment
- Zeanah Engineering Finishing building and building out the flex spaces
It was an exciting, challenging and successful year across all teams in Design Services. Our goal is to translate the broad concepts of the Administration’s strategic vision into physical environment. Capital projects have rebounded from pandemic year, burgeoning to records in both numbers and dollars of projects. A campus changing stormwater reclamation park is underway which will impact the micro climate and culture of our campus, as well as the environment of East Tennessee. Digital Assets has made significant strides in the document management of our assets for record retrieval and facilities management. Interior Environments accomplished a number of high-profile programs, brand refreshes, and rejuvenation of damaged spaces. Each group supported the effort in its unique way. Similarly, we encourage our team members to share their time, talent and treasure by serving in organizations and on committees. The following is a summary of these accomplishments.

· Completed Projects
  o Neyland Stadium – New LED lighting, West Lower Bowl and North Videoboard
  o HVAC Improvements (Taylor Law Chillers)
  o ADA Improvements – Perkins and Nielsen Stairs
  o Andy Holt Tower Chiller Building Roof Replacement
  o Hodges Library Renovation for UT Press
  o Athletics Cryotubs – a joint project with UT Construction Services
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DESIGN SERVICES (CONT.)

· Capital Projects in Progress
  o Zeanah Engineering Complex
  o Vet Med Teaching and Learning Center
  o Energy and Environmental Science Research Building (EESRB)
  o Science & Engineering Infrastructure Upgrades
  o Haslam Field Expansion – Anderson Training Center
  o Nursing Building Replacement
  o Multiple Building Fire Safety Upgrades 19/20
  o TRECS Pool Project – Phase 2
  o Walters Academic Building Improvements – Phase 2
  o ADA Elevator Improvements (Communications and Morgan Hall)
  o Window Replacements and Masonry Repairs

· Capital Projects in Design
  o Lindsey Nelson Baseball Stadium Renovation
  o Haslam Business New Building
  o Melrose Hall Demolition/Student Success Bldg
  o New Chemistry Building
  o Residence Hall #4
  o Residence Hall #5
  o White Ave. Parking Garage Extension
  o Presidential Court Building Renovation
  o New Data Center
  o TRECS Renovations/Upgrades
  o Neyland Thompson Sports Center Renovation
  o Goodfriend Tennis Center Improvements
  o Sherri Parker Lee Softball Renovation
  o Track Renovations
  o Cultural Interpretive Center
  o Thompson Boling Arena Renovations
  o Walters Academic Building Renovation
Landscape and Natural Resources Team

The Landscape and Natural Resources Team goal is to create a landscape that reinforces a sense of community for learning and living; that conveys a sense of place, history and character unique to the University of Tennessee; and conserves and protects natural resources through functional design and responsible stewardship. To achieve our team vision and support the primary mission of Facilities Services, this team develops and maintains the Campus Landscape Vision and Site Standards document. The team prepares site construction documents and specifications for projects to be executed by the Facilities Services Department and plays a vital role in site design review and construction administration for projects executed by the Office of Capital Projects. This year’s accomplishments include:

Landscape
- 21st Mortgage Plaza Signs (at Student Union) – In design
- ADA Nielson Hall Exterior Staircase – Complete
- ADA Perkins Hall Exterior Staircase – Complete
- Andy Holt Tower Garage Structural Repairs – In design
- Annual Summer Projects Coordination
- Armed Forces Memorial – Construction in progress
- Athletics Baseball Stadium Seating Upgrades – In construction
- Athletics Cryotherm Tubs – Complete
- Athletics Golf Weight Training Facility – Ready for construction
- Athletics Soccer Field Renovation – Construction in progress
- Athletics Stephenson Drive Screening Project – In design
DESIGN SERVICES (CONT.)

Landscape (cont.)
- Athletics Tennessee "First" Sculptures at Gate 21 - Complete
- Athletics Tennis Center Lighting Upgrades - Ready for Construction
- Campus Master Plan - In design
- Campus Master Plan Amendments - Housing and Concord Property - Complete
- Color-coded Floor Plans for Research -IIAM and SERF inventory and planning for Pls
- Coordination of pavement/crosswalk restoration at Phillip Fulmer/Cumberland Ave. following KUB water line break
- Cultural & Recreational Center (aka Boathouse) Feasibility Study - In progress
- Diversity, Equity & Inclusion Campus Survey and SCUP Presentation
- Facilities Services First Impressions Contest 2021 & 2022 - Design Support
- Improvements to reverse flow of traffic in front of Walters Academic - Complete
- Johnson-Ward Pedestrian Mall - Phase 2 Construction in progress
- Liaison role with all academic units
- Melrose Park Gazebo Replacement
- McClung Tower 12th floor Renovation Africana Studies - In design
- National Pan-Hellenic Council Plaza - Complete
- Summer paving - Complete
- Renewable Energy Garden - In programming
- Signage, to include: General campus exterior signage, donor signage, egress signage, means restriction (suicide prevention), TN Forestry, and Cherokee Farm/University Orthopedic Surgeons
- Sorority Village Housing Expansion Study - Complete

- Student Recreation Facility Space Evaluation - In process
- Smokey XI Plaza - Construction in progress
- TREC Pool Project - Phase 1 - Complete
- TREC Pool Project - Phase 2 - Construction in progress
- UT Culinary Institute and Creamery Front Plaza Entry Design - Complete
- UT Research Park at Cherokee Farm Food Truck Plaza Design - Complete
- Volunteer Blvd. Pedestrian Mall Crossing Renovation - Complete
- Walters Sub-Project 2 - In Construction
- Walters Ceramics - In design
- Walters Cinema Studies - In design
- West Volunteer Streetscape - In design
- White Ave. Garage Expansion - In programming

Natural Resources
- Boathouse Bridge & Ramp Removal - In design
- Award a grant to study the effectiveness of shoreline satiation methods on the Tennessee River
- Completed 52 Stormwater Compliance Inspections on active construction projects
- Conducted dry weather screening on all 74 of UTK's outfalls
- Converted approximately 88,000 square feet of impervious surface to drain to green infrastructure
- Hosted "Paddle-Off" event with the Water Quality Forum to raise funds and awareness for local water quality
- Hosted and coordinated 7 Adopt-A-Stream clean-ups
- Regional Stormwater Storage Facility - In design
- Second Creek Rehabilitation Project - Construction in progress
Digital Assets Team

The Digital Assets team provides ongoing support to Facilities Services and the University in creating, collecting, updating, managing, and maintaining all digital information relating to the University’s physical environments, assets, and archived documentation. During FY2022, our team has accomplished the following tasks in the following four disciplines:

- Completed the Annual Space Survey of all rooms maintained by Facilities Services.
- Trained and assisted space managers throughout campus in auditing rooms.
- Completed 39 building space audits and updating small-scale floorplans.
- Assisted in completing space building audit drawing changes.
- Ongoing effort in updating campus-wide building evacuation plans.
- Assisted in completing the campus annual Schedule D report to THEC.
- Collaborating with OIT to implement OnBase as a document management system for Facilities Services.
- Continued updating existing GIS campus base data.
- Worked with Utilities Services to update all utility information into GIS format.
- Developed a web map application for Landscape Services to view their irrigation data.
- Created a web map application to be used for updating the status of building entrances, sidewalks and roads during a snow event on campus.
- Currently working with Zone Maintenance and FS Comm & Info to complete an inventory of equipment for TCO purposes.
- Collaborating with EHS to develop a database and field data collection process to simplify and expedite several of their regular monthly and yearly inspections.
- Maintaining a field form in GIS format to support weekly field inspections of Capital Projects.
- Participated in the process to identify a replacement for ARCHIBUS as a new work order management system for Facilities Services.
- Provided GIS and cartographic support services to Facilities Services and several departments on campus such as Global Engagement, Parking Services, OIT, Housing, UTPD and Athletics.
- Continued working on GPS and inventory of outdoor assets across campus.
The Interior Environments Team supports the University’s mission in a number of ways. We provide leadership and oversight in the creation and development of interior spaces, provide validation of User project request, Programming, space planning, product evaluation, FFE selections and procurement. We also partner with other University groups to better our designs and strengthen our Campus Standards.

- Provided space planning, finish selections and FFE procurement for First Impressions, Classroom Upgrades, Lindsey Nelson MVP Room, Psychology’s move to Mossman, Raising Canes, and the Haslam College of Business Analytics and Sales Lab
- Provided pre-design programming and/or schematic design packages for Haslam College of Business Analytics Sales Lab and MILC projects, Stokely Management Center 7th floor GA Lab, College of Communications, Food Services graphics and wayfinding, and University Skybox
- Provided FFE budgeting for the new Department of Africana Studies in McClung Tower and Zeanah additional services areas
- Developed a package of finish selections for Athletics
- Collaborated with Zone Maintenance on numerous projects, providing guidance and specifications for finishes following building damage, finish selections for elevator upgrades and LED lighting fixtures for use with our older Lutron systems
- Provided review, comment and approval of interior packages including finish selections, FFE, graphics and signage for all capital projects. Reviewed design proposals for capital and in-house projects

Successfully partnered with Creative Communications on numerous branding and graphics projects and continues to work with Ag and Vet to incorporate Campus Signage Standards on their campuses. Established a collaborative relationship with the Office of FERPA to accurately respond to design requests where adherence is a concern.

- Worked with Creative Communications to complete signage for the UT Conference Center
- Successfully partnered with Donor Relations on numerous donor recognitions plaques and signage
- Participated in facilities tours at the University of Alabama’s football facilities and Bryant-Denny Stadium as well as Mississippi State’s baseball facilities and Davis Wade Stadium

Committees Served

- 2022 Cohort of the University of Tennessee Inclusive Leadership Academy (Maria Martinez)
- Bicycle Advisory Committee - committee member/advisor on Bike Friendly Campus Application (Bethany Morris)
- Campus Planning & Design Committee - Ex Officio Member (GF, BM, TM, AP)
- Campus Traffic Safety Committee (Ted Murphy)
- CFTA, Inc - Board of Directors in 2021 and recently appointed Vice President (Maria Martinez)
- Commission for Women at the University of Tennessee, Knoxville (Maria Martinez)
- Electric Vehicle Charger Strategic Planning Core Team (Bethany Morris)
- Environmental Compliance Team (Garrett Ferry)
- Facilities Fee Oversight Committee (Ted Murphy)
- Member of the Diversity Professional Development Fund for Staff (Maria Martinez)
DESIGN SERVICES (CONT.)

Committees Served (cont.)
- Presented at the 2022 UT Conference for Women’s Leadership Symposium (Maria Martinez)
- Stormwater Advisory Committee (Bethany Morris and Garrett Ferry)
- Temporary Signage Request – review authority, on-going (Bethany Morris)
- Tennessee Stormwater Association (Garrett Ferry)
- University of Tennessee Diversity Action Plan Implementation Committee (Maria Martinez)
- Water Quality Forum (Garrett Ferry)

ENERGY MANAGEMENT

The Energy Management (EM) Section of Zone Maintenance was created in 2019 to help the campus use utilities more efficiently, reducing costs where possible, while maintaining acceptable indoor air quality and other health and safety considerations. A list of their projects can be found below:

- Continuing to develop projects for utility savings.
- Looking at projects at the Steam Plant to recover waste energy from blowdown and vent steam
- Investigating improvements to the Process Chilled Water system at Science/Engineering to possible save energy and improve system resilience
- Looking at cost/benefit for several photovoltaic systems
- Tracking economics of operating turbine-generator at the Steam Plant in response to volatile natural gas prices
- Assisting Zone Maintenance and Utilities Units with several technical issues
- Updated Facilities Services Complex Building Emergency Action Plan
- Working with Director of Zone Maintenance in updating Facilities Services Emergency Response Plan.

EM applies funds from the Student Environmental Initiatives Fee Revolving Fund to reduce utility use across campus. Most of the work to-date has been in retrofitting of lighting systems to LED. Savings from Revolving Fund projects are reinvested into the Revolving Fund from the corresponding utility account that benefits from the savings. Savings will reimburse the Revolving Fund for the cost of the project, plus the next five years of savings. This allows the fund to increase as projects are completed.
Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs.

The Office of Sustainability (OoS) works to meet that goal through educating, supporting, and innovating throughout the university. From big goals like obtaining carbon neutrality by 2061 to everyday accomplishments of our zero waste events, OoS highlights the importance of work efficiency and cost savings in order to create the biggest impact possible. As with most units on campus, COVID-19 had major impacts on the Sustainability Unit within the Facilities Services Department. For the 2021 Fiscal Year, the Sustainability Unit had 4 full-time employees including the Sustainability Manager (Jay Price), Recycling Supervisor (Brad Moats), Compost Operations Specialist (Wayne Mason), and Recycling Truck Driver II (Dave Byrne).

Sustainability also had a part-time post-retiree Recycling Truck Driver (David Brown). Additionally, Sustainability has a team of 6 full-time AmeriCorps members: in the Academic Engagement Specialist position (Hayes Anderson), the Zero Waste Operations Coordinator position (Max Hastings), the Compost Logistics Coordinator (Ella Dohrmann), Data Analyst and Office Administrator (Jessica GerberDolan), Social Impact Coordinator (Deb Bethel), and the Outreach Coordinator position (Aoife Whitaker).
SUSTAINABILITY (CONT.)

Free Store/Donations:
- Facilitated record-setting student move-out donations totaling over 32,000 lbs of clothing and household items and over 2,400 lbs of non-perishable food
- Successfully opened the Free Store’s permanent location, and served 781 visitors from its opening on 2/28 to 6/30.
- Took in 2393 lbs of donations from opening date to end of spring semester, and visitors took 2117 lbs of items.
- Hosted 4 on-campus pop-ups during the 2021-22 school year
- Hosted the Tower of Cans event with Greek Life which resulted in collection and donation of over 60,000 lbs of non-perishable foods to local food pantries.
- Donated over 20,500 lbs of food to campus and local partners
- Hosted 2 anti fast fashion shows with dozens of models showcasing upcycled used clothing to over 100 attendees.

Grow Lab:
- Rejuvenated the hillside with native pollinator friendly and erosion control plants
- Implemented irrigation system
- Hosted 125 volunteers during fall 2021 semester, and hosted weekly volunteer days during spring 2022 semester.
- Donated 224 lbs of fresh produce to Big Orange Pantry

Alternative Energy & Transportation:
- Converted the first pick-up truck on campus to bi-fuel propane/gasoline which now utilizes 50% renewable propane
- Installed a new solar PV umbrella on a picnic table for charging phones and laptops funded by the “Green Fee”
- Oversaw the installation of bike racks inside the Stokely garage with capacity for 20 bikes which were also funded by the “Green Fee.”

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UT Compost Facility:
- Hosted Congressman Tim Burchett at the UT Compost Facility for a tour
- Completed our first set of composting research trials with Eastman Chemical Company
- Went from processing 748 tons in FY ’21 to 1377 tons of material in FY ‘22
- Started collecting brush from UT Gardens (UTK) and Organic Crops Unit (UTIA)
- Started collecting record amount of food waste from new Rocky Top Dining Facility
- Hosted 3 interns to explore compost research opportunities
- Recovered a broken down office trailer to expand the footprint of the UT Compost Facility Office
- Lectured in 4 classes about composting and the dangers of “Greenwashing”
- Hosted 196 students in 15 class tours of composting efforts on campus
- Hosted tours for UT Gardens staff, UT Arboretum Society Staff, and other campus research faculty (Soil Sciences)
- Hosted 183 volunteers for a total of 511 man-hours of service at the Compost Facility
- Secured rain-water capture for new office setup to allow for use of “off-grid” water at the Compost Facility (currently no other plumbing infrastructure on site)
- Began using biodiesel (B15) to fuel heavy equipment, generators, and Office of Sustainability fleet
- Hosted campus-wide Compost Stakeholder meeting, received excellent feedback, and created the Compost Stakeholder Report to report out on ways to improve composting on campus

Recycling Operations:
- Hosted Melissa Callahan & Dr. Raguaskas with Green Chemistry & BioFuels
- Recycled 783 tons of material in FY 22’, waste diversion ratio is up to 31%
- Upgraded pallet recycling agent to remove the requirement to sort the types and volume of the pallets that we get in.
- Created schedule for pallet pick-up to alleviate large volume spikes
- Completed 293 work requests since 03/28/22 with 1 full time staff, 1 Americorps, and 1-3 student workers.
Annual Diversion Totals:
- Diverted 2,109 tons of material from the landfill through recycling, composting, and donations.
- Income from sale of recycled material totaled $77,261.53.
- The campus-wide waste diversion ratio was estimated to be 31.7%, a 5.3% increase from the previous fiscal year.
**Accomplishments**

- Completed over 1700 work requests.
- Apprenticeship program development.
- Introduced our first fully electric commercial zero-turn mower to the equipment fleet.
- National Panhellenic Monument: Installation of landscape improvements.
- Morgan Hall: Prep lawn and landscape for 100th Anniversary celebration and time capsule event.
- Pediatric Language Clinic: Prep landscape for visit by TN Secretary of the Education.
- Hoskins Library: Install Veterans’ memorial monument in landscape bed at ROTC flagpole.
- Provide landscape renovation for First Impressions Projects (Robinson Hall, Melrose Hall, Third Creek Bldg.)
- Pedestrian Mall Expansion Phase II: Participate in weekly progress meetings
- Finalized draft of UT Facilities Arboriculture Internship program.
- Campus wide asphalt pothole repair.

- Volunteer Blvd. Streetscape Phase IV & V: Participated in design phases.
- Student Services/Communications: Removal of old satellite dish and landscape enhancements.
- A&A: Install landscape improvements along the south side of the building.
- NOAC Conference Support at Circle Park and other locations as needed.
- Repaired lawn areas following removal of covid tent outdoor study spaces.
- Seasonal flowers: Installation of 16,000 seasonal flowers and 10,000 tulip bulbs.
- 900 cubic yards of hardwood bark mulch and 7500 bales of pine needles applied to campus landscapes.
- Campus wide turf fertilization, weed control, aeration, and over-seeding program.
- Continued infrastructure improvements for central control capabilities of campus irrigation systems.
- Retained campus certification for both Bee Campus and Tree Campus designations.
- Campus wide snow/ice treatment and removal.
- New Construction Progress Review: Plant Sciences Building, Vet School Extension, Andy Holt Mall project, Zeanah Engineering
- Sorority Village: Assist with excavation and landscape repairs associated with geo-thermal system repairs.
- Sorority Village & Fraternity Park: Prep and event support for sorority recruitment events.
- Housing: Spruce-up landscape and coordinate staging tents at residence halls prior to student move-in.
• Support for Student Life Welcome Back outdoor events.
• Support for Chancellor’s Faculty/Staff Picnic and West Campus Celebration event.
• Provide excavation and site restoration for ongoing campus-wide underground utility repairs (high voltage, steam, water, telephone).
• Provide excavation and site restoration for ADA ramp installation on campus walks.
• Cherokee Farm: Provided year-round landscape property maintenance to include the Knoxville city greenway expansion.
• Prep for Board of Trustees visits.
• Emerald Ash Borer: Treatment of ash trees throughout campus for protection against EAB.
• Powdery mildew treatment to dogwoods and crape myrtle.
• Sorority Village: Provided landscape and irrigation maintenance to common areas and 13 sorority houses.
• Hazardous tree removal across campus.
• Tree pruning as needed throughout campus to provide clearance around security cameras, campus lighting, signage, and bus stops. Approximately 250 trees.
• Inventory and develop a plan for street tree replacements during winter months.
• Plant and inventory new trees throughout campus.
• Performed structural and maintenance pruning of over 800 trees.
• Performed 65 tree removals and cleanup associated with mortality, construction and storm events.
• Systemic insecticide treatment of hackberry and river birch for aphids over parking/seating areas
• The University Tree inventory database (ArborPro) continued to be updated.

• Bush hog mowing along non-UT properties adjacent to campus.
• Campus wide construction: Provided daily support to contractors and Facilities Services to ensure construction quality.
• Pre/Post football game preparation and cleanup throughout campus.
• Prep and Clean-up associated with Homecoming bonfire, parade, and events.
• Campus-wide street sweeping.
• Landscape Irrigation Systems: Monitor, repair, adjust, and winterize campus-wide. Upgrade irrigation controllers and connect to central control management system.
• Leaf removal: 300 tons of leaves campus-wide taken to compost site.
• Monitor rose population throughout campus to control Rose Rosette virus management.
• Sod repairs throughout campus.
• Emergency drop-out repair campus wide.
• North Concord property: Cut grass around parking lot and spray weeds in pavement cracks.
• New building construction: Transplant shrubs and trees from the site prior to site demolition
• Grounds equipment maintenance and repair for all units with Landscape Services
• Performed cultural practice on all event lawns throughout the year including - Aeration, verticutting, and topdressing.
• Updated and maintained equipment inventory.

Heavy Equipment

• Alumni Memorial/Gate 21 Plaza: Provide excavation for support of new steam and condensate infrastructure in Phillip Fulmer Way
• Buehler/SERF staircase: Backfill excavation from sanitary sewer repair.
• Caledonia Avenue: Emergency water main repair behind Reese Hall.
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OPERATIONS - HEAVY EQUIPMENT (CONT.)

- Tom Black Track: Begin excavation support for storm water infrastructure repairs.
- Fleming Warehouse: Clean-up of vegetation and prep for life safety improvements.
- Golf Facility: Install erosion remediation materials along bank of creek flowing through the course.
- Clarence Brown Theater: Provide excavation for water line repair.
- Burchfiel Geography: Response to fire supply water main break and support with installation of new supply.
- Concord Property: Raze 12 structures (recycle metals, haul-off waste, grade and gravel for parking lot).
- Sorority Village: Assist with excavation and landscape repairs associated with geo-thermal system repairs.
- Provide excavation and site restoration for ongoing campus-wide underground utility repairs (high voltage, steam, water, telephone, and irrigation).
- Campus wide snow/ice treatment and removal.
- Install new pedestrian crosswalk signs across campus.
- Football home games: Preparation and clean-up, assist with set-up of restroom trailers and setting out barricades for homeland security.
- Campus wide asphalt pothole repair.
- Cherokee Farms, Concord Street and Stevenson Drive: Bush hog and boom mow.
- Assist with tree cleanup associated with storm events.
- Clarence Brown Theater: Assist with transport of production scenery storage trailer.
- Service and repair equipment for Heavy Equipment shop and High Voltage shop.
- Transport semi-trailers used for storage to Athletics and Recycle as needed.
- UT Gardens: Assist with removal/installation of garden sculptures.
- Pat Summitt Street: Excavate to repair dropout in road.

Academic Research & Support

- Cherokee Farm: Prep various locations for numerous special events.
- McClung Museum: Move stone bench inside lobby to the landscape outside the main entrance.
- Tickle Engineering: Provide excavation for drain pipe replacement at washout station.
- Bass Anthropology Center: Remove old storage shed, grade and gravel for new shed.
- Haslam College of Business: Spruce up landscape for AACSB accreditation
- UTIA Greenhouse 14: Assisted with moving research plants to another greenhouse due to wind damages to GH 14.
- Assist UT Gardens with mowing until they can fill vacant positions
- Continued on-going support of solar powered robotic mowers.
- Dr. Bass Anthropology Facility: Provide removal of fallen trees, fence repair, road maintenance, and equipment repair.
- Assist Urban Forestry class with basic rope setup for climbing instruction.
- Hosted 6th Annual Campus Arbor Day celebration at the Humanities lawn on Tennessee Arbor Day.
Overview

Sanitation Safety is responsible for Pest Control, Wildlife Management Control, Asbestos & Lead, Restoration Coordination for Floods & Fire, and Mold Remediation for each of the 250+ buildings on and off campus. This year we have worked alongside the University of Tennessee – Martin to develop a Pest Control unit for their campus. This unit will serve under the Assistant Director’s state license for the two years required or until they are able to obtain their own license. Each member of the office holds multiple State and/or Federal Licenses and Certifications, which requires personnel to complete multiple hours of refresher training every year. Employees also take the opportunity to seek out additional training via workshops and seminars to better their understanding of their own work and to learn how to communicate more effectively with customers.

The office is headed by an Assistant Director licensed by the State of Tennessee in Commercial Pest Control Operations, Asbestos Operations and conducts Property Restoration for the University. Each of the technicians are Certified Basic Wildlife Control Operators and Certified Applicators. Services provided include insect, rodent, feral cats and dogs, termite, bird, odor, and biological control. Sanitation Safety has managed these services on and off campus for more than 40 years. The ARCHIBUS system enables prompt response to trouble calls. Each year employees process and complete scores of work requests, the large majority of which are self-generated, Preventative maintenance work requests.

During the last fiscal year, the unit processed and completed approximately 3,300 work requests.

In each building, the team is responsible for either a weekly, monthly, quarterly, or annual treatment, in addition to the on-demand work requests submitted by our customers. While the Pest Control portion of the office’s staffing numbers have dwindled due to retirement and other attrition, the service level provided to our customers has not diminished, in spite of the fact that the square footage we manage has greatly increased.

We partnered with Bayer to install a remote monitoring system for rodents at our large animal hospital, becoming the first university in the nation to install this type of system in a veterinary clinic.

Water intrusion and floods have seen a marked increase in the last year, resulting in an exponential growth in remediation work, all of which is managed and coordinated by Sanitation Safety. In the last year we have coordinated nearly seventy individual floods, fires, water intrusion instances, and mold projects, totaling over two million dollars in expenditures.

Training

- SEC Landscape Conference: Two managers attended this year’s conference at Ole Miss.
- CDL training for job-specific staff members.
- Supervisors attended mentor training.
- Landscape Academy: Refresh training material and expand the program to incorporate leadership and career paths.
- Landscape staff holding a Tennessee Department of Agriculture Pesticide Certification attended the Ag Extension Turf and Ornamental Field Day and Knox County Extension Grounds Management Short Courses.
- Heavy equipment staff attended OSHA training to include Trench Safety, Trench/Excavation Competent Person, and construction site safety.
- Conduct departmental snow removal training and SOP review.
- Aerial lift training (Arboriculture)
- Completed required safety and continuing education training.

OPERATIONS - SANITATION SAFETY

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CDL training for job-specific staff members.
Supervisors attended mentor training.
Landscape Academy: Refresh training material and expand the program to incorporate leadership and career paths.
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Heavy equipment staff attended OSHA training to include Trench Safety, Trench/Excavation Competent Person, and construction site safety.
Conduct departmental snow removal training and SOP review.
Aerial lift training (Arboriculture)
Completed required safety and continuing education training.
Overview

The office of Special Projects operates within FS Administration and is tasked with the execution and completion of all special projects assigned by the Associate Vice Chancellor. In addition, Special Projects also performs ongoing research regarding innovations and best business practices within the facilities services industry.

Research

Special Projects is continuously researching innovations and best business practices within the facilities management industry, analyzing the research results to identify those innovations most applicable to Facilities Services and The University of Tennessee, Knoxville. Consult with FS senior leadership on selecting items to become special projects. Take the lead working with FS personnel in developing and implementing those projects. Our goal is to stay on the cutting edge of best business practices.

Service

Special Projects gladly serves on multiple committees throughout the year to support the department and the University in its ongoing commitment to our students, faculty and staff. Some of those include: Student Assistant Scholarship, Culture, Chuck Thompson Award and the EOD Event Planning Team.
Pink Day in October is a small way we honor those whose lives have been impacted by breast cancer. We encourage our employees to wear pink in support of Breast Cancer awareness Month.

We continue to coordinate and collaborate with FS Communications & Public Relations office in organizing various events hosted by the department. 2022 saw the beginning of a new initiative within Facilities Services, Coffee and Conversation. A fun way for our employees to come together and get to know their fellow coworkers. We also support the Big Orange Pantry (BOP) by participating in the SEC Food Fight each year. All donations go to the BOP to help provide food assistance for students, faculty and staff.
Overview

The Utilities Services unit is responsible for the operation, installation, and maintenance of all Utility systems on campus. The unit is comprised of four distinct offices including Electrical Services, Heating Ventilation and Air Conditioning Services (HVAC), Plumbing and Heating Services, and the Steam Plant. The unit has approximately 100 full time positions consisting of various skills and trades. We operate and maintain large, university owned, utility systems including electrical, sewer, storm sewer, gas, water, cooling water, air, and steam.

The acquisition of many streets by the university has greatly expanded these responsibilities by adding miles of storm water piping, many additional street lights, and other facilities previously owned by the city. We work very closely with the local public utility providers. We are by far the largest user and place a high demand on their systems, therefore, maintaining a close professional relationship is a necessity.

Our Senior Accountant receives, audits and records for payment, all utility bills from utility providers, calculates cost of service, and bills auxiliary operations such as Student Life, Athletic Facilities and Food Service for budgetary recovery as these entities are not funded by the university. This position is also responsible for monitoring the utility budgets, record keeping for all utility consumption for management, audit and reporting purposes, and many other utility operation accounting responsibilities. For perspective the 2018-2019 utility commodity cost is approximately $38 million for the campus. This includes electricity, water, sewer, and gas and steam production but not the operational costs of the Department.

Electrical Services

The Electrical Services unit operates and maintains the electrical distribution systems and equipment on campus. This is primarily comprised of two main substations which distribute 13,200-volt power to all campus buildings. This power is distributed through 18 separate high voltage circuits originating from the respective main substations to various areas of campus. This unit also operates and maintains all related equipment such as building transformers, system switches, underground high voltage cables, and building switchboards. They maintain and repair building electrical systems, fire alarm, and access security systems, provide electrical power for special events and fire watch coordination. They also check, maintain, and repair all outdoor lights on campus.

FY22 Projects for High and Low Voltage:

- Neyland Stadium
  - Assisted Electrical contractor with installing H.V. cables, transformer and terminations in the lower bowl.
  - Assisted in outage on North transformer to install new chiller.
  - Assisted in outage for North 2nd transformer for TV trucks.
  - Worked with Electrical contractor to perform 2 scheduled outages for installing new breakers.
  - Turned power off in East Sky Box for contractor to run new wires from switchboard in steel to the switchboard in the penthouse.
  - Performed an outage to conduct the yearly Emergency System Test.
  - Performed Lutron control maintenance.
  - Installed a new pump controller for the West Side.
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UTILITIES SERVICES (CONT)

FY22 Projects

- New EESRB Building - Electrical Support for Construction.
- UTK Outdoor Pool Renovation – TRECS – Electrical support.
- Connected HV Circuit 2 to Vista at Min Kao and Dabney Buehler.
- Automatic transfer switch maintenance and repair at Geier and Hesler.
- Worked multiple scheduled and unscheduled H.V. electrical outages across campus.
- Made repairs to manhole #14 due to outage on circuits 3 & 4.
- Responded to KUB outage on circuit’s 1-4 due to an issue with the transformers. Worked with KUB to move our circuits around and tied to others.
- Bio-Systems Engineering and Soil Science - Replaced the PMH-9 H.V during KUB outage.
- Dougherty Engineering- Removed HV cables from MH #93. Removed 1 old PMH switch and used it to replace an older one at Ferris.
- Replaced 10 campus standard lights with new LED bulbs on Highland Ave from Laurel Apartments.
- Install LA8 to the PMH for back up at Laurel Apartments.
- Performed an outage to replace insulator on crossarm going across Alcoa Highway at Cherokee Farms.
- Changed old metal halide fixtures to new LED fixtures in back lot at Communications.
- Andy Holt Tower- 8th floor transformer repairs.
- Water outage for life safety sprinkler system to perform repairs at Dabney Buehler and Rocky Top Dining.
- Emergency Power Recertification at Student Health.
- SERF- Finished up H.V. new pit area with a new trough. H.V. cables were moved into the trough and terminations were made to the 4 transformers. New access lid and platform were installed at Vista. Scheduled maintenance of 3000A main-tie-main 480V circuit breakers.
- Performed an outage to run new wires from building transformer to new disconnect for the temporary chiller at Natalie Haslam Music.
- Transformer evaluation at UT Space Institute.
- Maintenance on Siemens GIS SF6 at Laurel Substation.
- Physics- aiming the lights at Neyland Stadium to avoid interfering with Astronomy equipment on roof.
- Installed temporary meters for an energy evaluation for air compressors at the Hill.
- Assisted contractors with emergency repairs of fire damaged busway at South Carrick.
- Old Facilities Services Building A- Electrical support for new Nursing area.
- Performed emergency lighting testing in various building on campus for UTK Fire Safety Upgrades.
- Campus Wide Steam Outage- H.V. worked with Eaton to do PM on the H.V. switch gear and transformers at the plant. Installed lighting in the steam tunnels.
- Took inventory on all manholes with LA circuits in them across Campus.
- Worked on chlorine alarm at Stephenson Drive.
- Campus Electrical Distribution-moved residence halls on circuit LA4 to alternate circuit.
- Performed metering for circuit LA2.
- Assisted with submittals and onsite meetings for projects.
UTILITIES SERVICES (CONT)

FY22 Projects for Fire Alarm & Security:
- Yearly Fire Alarm testing in Residence Halls, Neyland Stadium, Vet School, Hodges, Fraternities, Sororities, and TBA.
- Fire Alarm upgrades at Hodges, HPER, Communications and Student Services
- Door upgrades at Hodges Library.

This system provides the data needed to confirm efficient operation and allows for such operational procedures as setback of temperatures during low occupation periods, use of outside air in lieu of mechanical cooling when temperatures allow, and monitoring of air flow and temperature for comfort and research requirements. They operate underground chilled water distribution equipment and piping from central plants, monitor, and chemically treat and maintain cooling towers and cooling water.

FY22 Projects:
- Purchase and install replacement for obsolete chemical controllers on campus.
- Install inhibitor feeders in WSHP loops on campus.
- Repair cooling tower gear drive and propeller at SERF chiller house.
- Replace tube bundle in HX at Food Tech.
- Change obsolete controls on VAV boxes at Food Safety.
- Replace door on blast freezer at Food Safety.
- Replace coils in AHU’s at Hoskins Library.
- Replace leaking re-heat coils in VAV boxes at Dabney-Buhler.
- Replace evaporator unit on VRF system at Fred Brown dormitory.
- Install cooling tower by-pass valve at ETREC.
- Install VFD’s for cooling towers at Humanities.
- Install ION generators in AHU units at the Steam Plant.
- Replace re-heat coil in AHU serving the wood shop at CBT.
- Replace controls on AHU 1&2 at the Conference Center.
- Replace coil in AHU 2 at Blount Hall.
- Install new air compressor in Hesler machine room.
- Installing temporary chiller at Natalie Haslam Music.
- Installing replacement air handler in Communications.
- Replacing steam coil in penthouse fresh air make-up unit at Clement.
Plumbing & Heating Services

The Plumbing and Heating unit is responsible for maintaining all plumbing systems on campus including air, water, sewer, storm, and steam. This includes the high-pressure steam distribution system piping across campus and all other utility piping that does not belong to a public utility.

This unit also constructs new and renovates existing systems, test and maintain fire hydrants, maintains both storm and sanitary sewers, performs various construction projects, and works special events as necessary. They construct and maintain handrails and perform many other welding and fabrication projects that require welding or plumbing skills. They are responsible for inspection and maintenance of metering, locating and repairing leaks, and emergency repairs.

FY22 Projects:

- Repair Steam leak in front sidewalk at CRC.
- Repair water leak in steam vault at TREC.
- Repair leak on condensate line from vault to building at Burchfiel.
- Repair Geothermal at Sorority Village.
- Repair wash out box at Tickle.
- Water line repair inside Tom Black Track.
- Performed Campus wide steam outage June 4-12, 2022.
- Walter valve maintenance across Camps-intermittent outages needed.
- Temporary water line replaced at UT Conference Center.
- Installed storm drain on Chamique Holdsclaw.
- Repaired main fire water line at Burchfiel.
- Repaired HDPR water line replacement at the Steam Plant.
- Tank installation at Tickle Engineering.
- Installing Pizza Kitchen at Neyland Stadium.
- Installing temporary toilets at Neyland Stadium.
Steam Plant

The Steam Plant produces all steam for distribution to campus; this is accomplished by the five, water-tube boilers that are capable of producing over 400,000 pounds of steam per hour. Four of the units are stand-alone boilers and the additional unit is a waste heat recovery boiler. In addition to the boilers there is a 4.5-megawatt generator. The waste heat is recovered from the generator then used to produce steam in conjunction with the fifth boiler. The generated electricity produced is then used to supplement campus electrical needs.

Maintenance and repairs for the plant are done internally by Steam Plant personnel. This includes repair or replacement of piping, boiler repairs and operation, water treatment, pump repairs, operation of the natural gas turbine for the production of electricity and keeping of records for environmental and regulatory purposes. Steam is a very versatile commodity and has many uses including, but not limited to, the heating of buildings, sterilization of laboratory equipment or vessels, domestic hot water production, cooking, humidification, and de-humidification. The plant operates 24/7/365 and is only out of service for scheduled major maintenance activities that cannot be performed under operational conditions.

FY22 Projects:

- Repack valves as system allows.
- Repair gas leak on turbine.
- Rebuild feed water pumps.
- Continue to work on area lighting.
- Install new chemical pump controller.
- Replace valve on auxiliary softener brine draw.
- Added crossover pipe to feed water line.
- Repacked valves
- Worked in continuous blow down piping.
- Worked on #3 boiler.
- Replaced a gasket on #2 DA tank.
- Replaced positioner on #2 steam control valve.
- Replaced conductivity controller on #3 boiler.
UTILITIES SERVICES (CONT)

Steam Plant FY22 Projects (cont.)
- Replaced all valves and piping on dealkalizers.
- Replaced brine level controls on dealkalizers.
- Rebuilt steam driven feed water pumps.
- Replace gas flow meter on # 5 Boiler.
- Repaired battery charger on Solar Turbine.
- Added flow meter on blow down piping.
- Repaired controller on condensate polisher.
- Replaced man hole gaskets on Dealkalizer.
- Plumbing shop and Steam Plant replaced water line with HDPE to Aux. softener
- Installed Chemical injection quills I DA tank

Wrap Up
In addition to these responsibilities, the Utility Services unit participates in the design and planning of major building and construction projects on campus. The institutional knowledge of the unit is unequalled and invaluable for these activities and helps to control the overall cost of such projects by providing capacity and historical information to the design team thereby avoiding many conflicts during construction.

Utilities Services works to support all other Facilities units and provides services for all special events.

ZONE MAINTENANCE

Zone Maintenance is the primary contact for all facilities maintenance requests for campus. During normal business hours we take all requests, make repairs, or call on other Facilities Services shops for assistance. In addition to taking service calls, we perform an array of daily and monthly building inspections and preventive maintenance for HVAC and food service equipment. Outside normal business hours our One Call Team responds to all calls and operates 24/7/365 to meet our customers’ needs. The One Call Team has a support list from all departments to handle any problem that may arise.

During fiscal year 2022, Zone Maintenance responded to and completed 13,630 on-demand work requests (service calls) and 19,400 preventive maintenance work requests (routine maintenance).

Zone 1:
- Had one cooling tower motor replaced at Dogwood.
- Had heat exchanger replaced at Geier Hall cooling tower.
- Housing had old beds at the Carrick’s replaced.
- Got leak at Kappa Delta bathroom stopped.
- In the process of getting UT Drive building A ready for nursing.
- Got two new maintenance men. One is at Geier and the other at Stokely Hall.
- Turned buildings several time this summer for conferences and move in.
- Changed filters in all the buildings every two months.
- Have had multiple roof and wall penetration and leaks repaired.
ZONE MAINTENANCE (CONT.)

Zone 2

- Cleaned, filled, and maintained bull fountain at McClung Plaza.
- Repaired water jets on Bull fountain on McClung Plaza.
- Cleaned, filled, and maintained fountain at Clarence Brown.
- Re-sealed a portion of expansion joints at the plaza area at HPER.
- Repaired broken tile at HPER pool area.
- Sealed roof area above window wall at Temple Hall.
- Sealed ductwork from condensate leak in Temple Hall.
- Installed a new motor for the herbarium air handler at Temple Hall.
- Changed all lighting to Led in dressing room and costume room in Clarence Brown.
- Repaired underground water pipe leak at Clarence Brown.
- Corrected all barricade switch covers and stickers in Humanities.
- Repaired fume hood fan in 241 of A & A
- Installed battery power auto flush valves across Zone 2.
- Installed low flow no touch faucets across Zone 2.
- Cleaned cooling towers across Zone 2.

Zone 3

- Hoskins Library got new AHU and two new heat converters.
- Upgrade lighting at Hoskins Library.
- Installed new alarm panels in Hodges Library.
- Upgraded WI-FI and fire alarm system at Hodges Library.
- Completed ground floor remodel at the Conference Center.
- Installed a new boiler in the Conference Center.
- Installed two new chillers, new pumps and new atrium lighting in Taylor Law.
- completed second floor remodel in SMC.
- Upgrade SMC lighting to LED.

Zone 4

- Converted Cumberland over to LED lighting.
- Converted Arena Dining to LED lighting.
- Disconnected old equipment at PCB for surplus.
- Installed touch free faucets and flush valves various buildings.
- Added PM equipment to all units.
- Removed ceiling tile for Aramark to clean at Cumberland.
- Cleaned coils on all units of mobile equipment.
- Repaired leaking duct work at Student Union
ZONE MAINTENANCE (CONT.)

Zone 5
- Emptied pools and did tile work to replace damaged tiles at Allan Jones.
- Converted some old wall packs over to LED on concourse 2 and 3 at Neyland Stadium
- Converted LED T8's on concourse at Sherri Lee Stadium.
- Worked on converting Brenda Lawson, Neyland Thompson, and Smokie's grill light fixtures to LED.

Zone 6
- Repaired Mossman air handler supply leaks.
- Completed LED lighting project.
- Inspected, evaluated, and repaired classrooms, laboratories, and auditoriums.
- Inspected and evaluated deferred piping and steam condensate equipment.
- Researched and evaluated conditions for other departments as assigned.
- Replaced Hesler Greenhouse exhaust fans.

Zone 7
- Changed to touchless faucets and flush valves throughout the zone.
- Took over the Zeanah building.
- Changed air filters in Zeanah Engineering building.
- Cleaned inside air plenums on all air handlers and changed filters at SERF.
- Fixed water intrusion from machine room in Senter Hall.
- Figured out why the door alarms would not go off at Fiber & Composite and got it fixed.
- Working to get all water leaks through the walls gone at Jessie Harris building.
- Working with contractors at SERF on the new HRU change out.
- Working with and assisting Stowers to get all engineering buildings generators on a yearly routine load testing schedule.
- Helping get Dougherty room 101 fixed up.
- Working on changing lights in 101, and 102 over to LED lighting in Dougherty.
- Changing out and cleaning window a/c units in the Nursing building.
- Helping get the Nursing department settled in NEB.
- Working on changing Senter Hall greenhouse to LED lights.

Zone 8
- Chill water loop on the AG campus is somehow being contaminated requiring for installation of many sock filter stations and frequent back flushing of chill water coils.
- Chilled water plant and the supply loop to most of the AG campus is a constant challenge to maintain peak operation.
- Upgraded Animal Science Laboratory (Bee House) exterior.
- Installed new LED lighting and gutter guards on Animal Science Laboratory (Bee House).
- Working on roof top units and back flushing all of units in BESS Labs.
- Back flushing most VAV units because of contamination of chill water loop at Brehm Animal Science.
- Upgraded high bay and foyer lights to LED in Business Incubator.
- Making sure drains remain clear in Ceramics Annex Building.
- Working with the AC shop on repairs to main AH unit for the building and continue to monitor all building systems in CRC Bioenergy.
- Cleaned all the HVAC units in CRC Material Science.
Zone 8 (cont.)

- Having to constantly keep a close eye on our HVAC units at Crop Genetics as problems arise in a very old building.
- Cleaned all of our HVAC systems for Environment & Landscape.
- Working to support changes with the soon to open UT Creamery for Food Science.
- Changing numerous louver motors and keeping a diligent eye on ventilation systems within the North, Central, and South greenhouse bays.
- Recently upgraded and sanitized of the DI system at North, Central, and South greenhouses.
- Working with the building manager of JARTU to support all of the research activities and work through the constant challenges HVAC system presents.
- Working through several issues with our Process Chill Water system at JIAM.
- Dealing with humidity issues and recently did a major cleaning of chillers at Kingston Pike Building.
- Installed new wall units to replace very old central air handlers in the attic of McCord Hall.
- Working on HVAC units by cleaning and making sure that they are operating at peak performance at Morgan Hall.
- Performed routine cooling tower cleaning at Plant Biotech.
- Upgraded our HVAC units to higher efficiency rated filters for better air quality for Publication and Services.
- Installed new heaters in the main part of Racheff Greenhouse.

Zone 9

- Monitor to make sure that all of our building systems at 1525 University Avenue are operating at peak efficiency.
- Recently serviced all of rooftop units at 1610 University Avenue for peak operating performance.
- Servicing exhaust fans in the Facility Services Complex warehouse area is an area of priority.
- Making sure that all of Facility Services Complex building systems are operating normally.
- Dealing with several issues pertaining to water intrusion in the envelope of Glazer Building.
- Made several repairs and upgrades to the roof and exterior of Middlebrook Building.
- Worked to have CSX repair drains on the track side of Middlebrook Building.
- Recently had a new awning installed on Middlebrook Building.

Specialties

- Repaired expansion joints on Pedestrian Bridge at Student Union
- Installed 36 handicap operators at Rocky Top Dining Hall
- Replaced 100 pieces of glass at Clement Hall
- Collaborated with the high voltage, A/C shop, digital assets teams to geo-locate outdoor HVAC assets (air cooled chillers, cooling towers) and outdoor electrical distribution assets (transformers, and switchgear) in ArcGIS, and update those assets in the Archibus system for the TCO project
Lock & Key Services

Lock & Key Services oversees the General Locksmithing and Maintenance of door locks, exit devices, safes & office furniture to include keying/rekeying of buildings and key duplications. Our front office is responsible for processing all key request for offices, labs and classrooms for distribution and returns for the campus. This is to include maintaining books and data from lock changes, new buildings and renovations.

- Completed 1,645 work requests
- Completed 69 projects
- Issued 155 Purchase Documents
- Issued 4,464 keys
- 7,557 keys returned/lost

Specialties (cont.)

- Corrected and updated air handler equipment data and PM procedures for Haslam Business, Student Health Center, UTIAMM, Haslam Music Center, Claxton and Bailey Education, Tyson Alumni, Temple Hall, Morgan Hall, BESS Labs, Brenda Lawson, Neyland Thompson, Pratt Pavilion, Sherri Parker Lee Softball Team Facility, Thornton Athletics, Joan Cronan Volleyball, Nielsen Physics
- Created and scheduled Barricade lock inspection PM procedure
- Created new zone 10 and 11 work teams, and created and scheduled all new PM procedures for these work teams

Major Projects for the Year:

- Zeanah Engineering - New building request and installations
- Nursing Education Building and UT Drive Building A - Nursing move keying, installations and key distributions
- University Housing - Conferences support