



FACILITIES SERVICES ANNUAL REPORT 2019

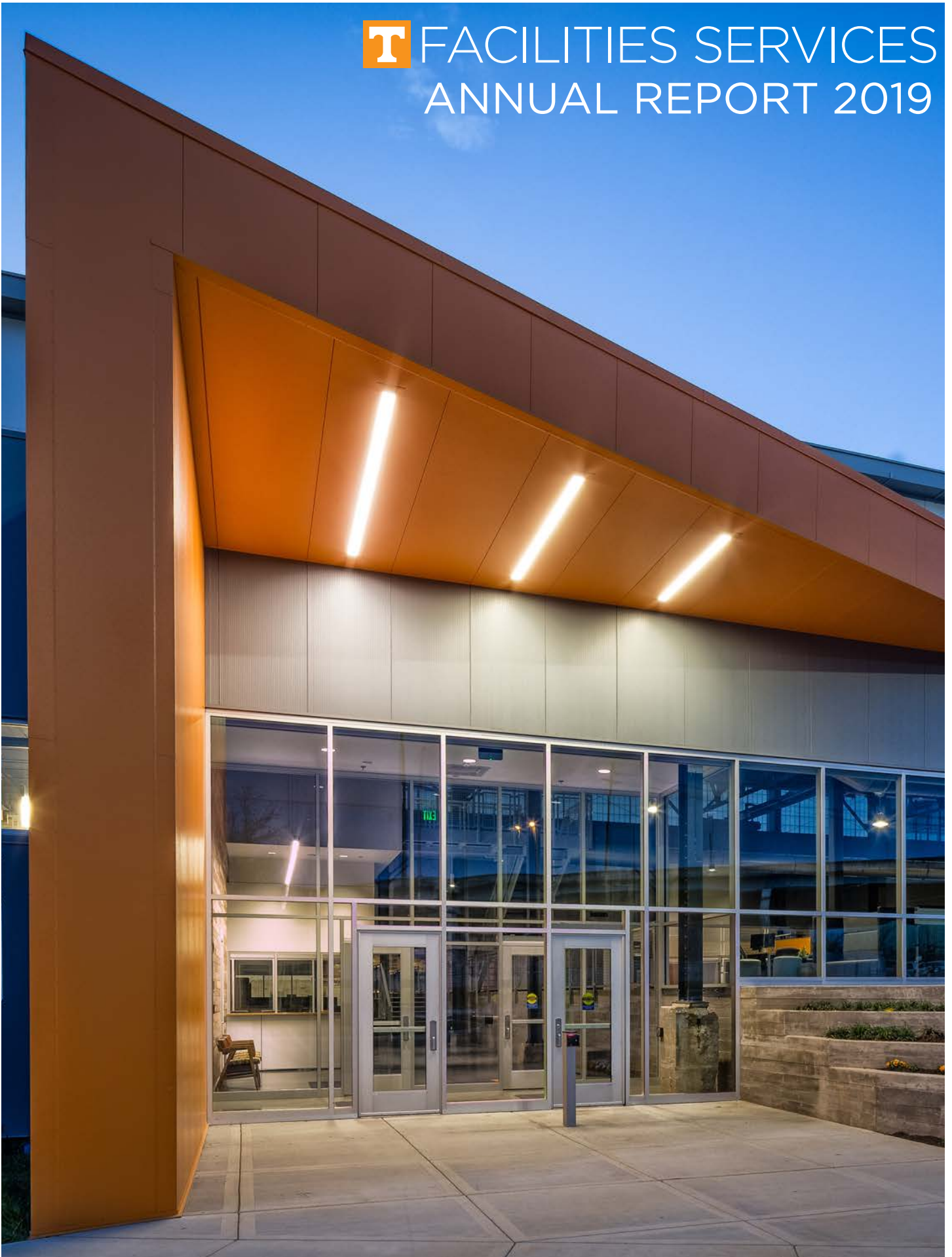


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EXECUTIVE SUMMARY

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.

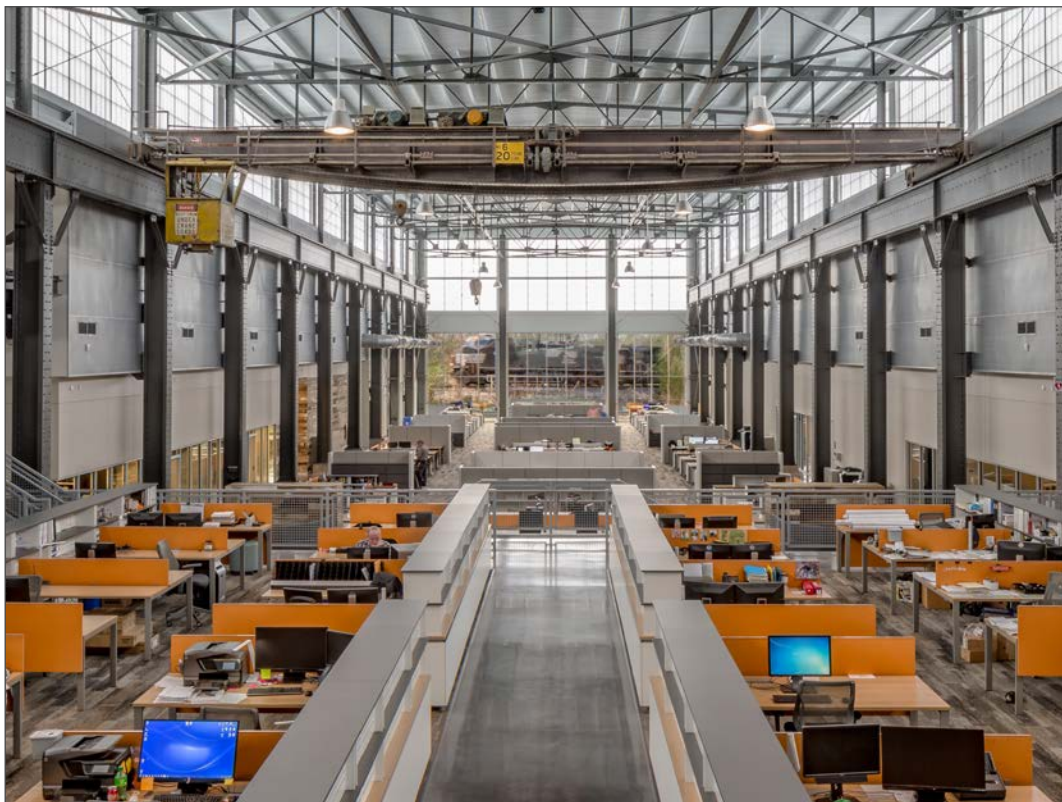
The number one priority of Facilities Services is to create and maintain a clean, safe environment for students to learn, faculty to teach and perform research, and staff to work. Our dedicated staff of 700 achieve this goal through their 5,500 years of combined service.

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 compiled a report of our achievements for the last year in this annual report as we strive to exceed our goals for the 2019-2020 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 be 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 the services worthy of the University of Tennessee. This is an introduction to our commitment to being that team.



FACILITIES SERVICES DEPARTMENT

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 15 million square feet of space, 14 residence halls open for fall 2019, 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 660 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, Special Projects, Utilities Services, and Zone Maintenance.

Our specialized offices include the STAR Team, Business Services, Central Supply, Plumbing & Heating Services, Electrical Services, Air Conditioning Services, Steam Plant, Landscape Services, Building Services, Building Finishes, Lock & Key Services, Sanitation Safety, Rapid Response Team, Communications & Public Relations, Employee Training & Development, IT Support & Maintenance, Project Coordination, Construction Team, Estimating Services, Stormwater Management, Landscape Response, Interior Design, GIS Projects, Archive & Space, Codes Enforcement, and Project Management.

Facilities Services staff members also oversee the university's environmental projects through the management of UT Recycling and the Office of Sustainability.

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.

FACILITIES 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.

FACILITIES 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.

FACILITIES 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 - By Taking Ownership

Reliability - Follow Through

Commitment - Dedicated Stewards (To Our Community)

Continuous Improvement - With Pride Through Value and Innovation

Quality Services - Our Highest Priority

TAGLINE:

Support. Empower. Tradition.

SELF-ASSESSMENT & BENCHMARKING

SIGHTLINES & FPI SURVEY

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.

Engaging with Sightlines Facilities Asset Advisors, the University of Tennessee Facilities Services Department has embarked on rigorous benchmarking and analysis, ensuring that reorganization efforts address critical needs on campus.

See Appendix A for more detailed Sightlines information and Appendix B for detailed APPA FPI Report information.



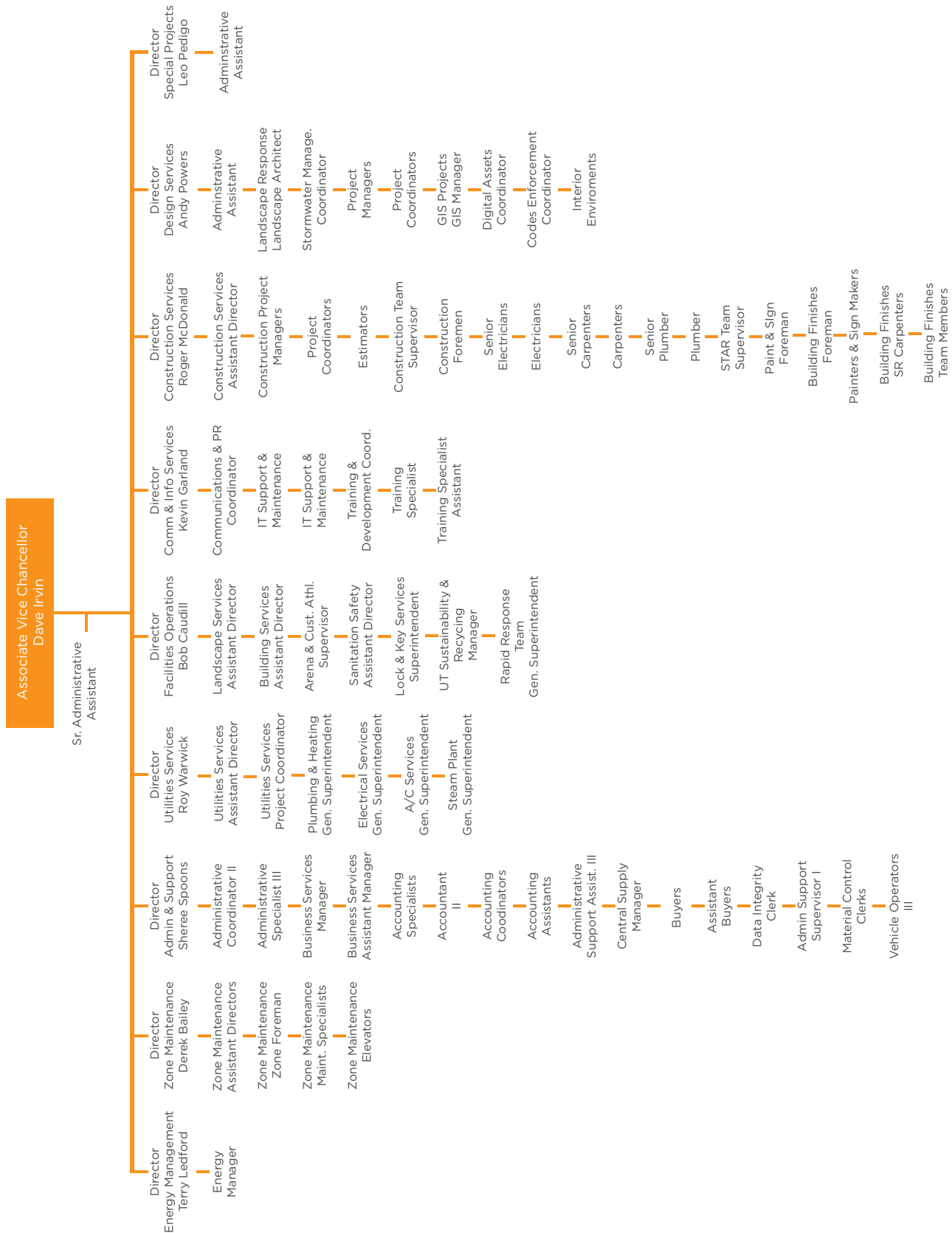
ARCHIBUS SYSTEM



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.

Department Organizational Chart



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THE UNIVERSITY OF
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KNOXVILLE

FACILITIES SERVICES

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ADMINISTRATION

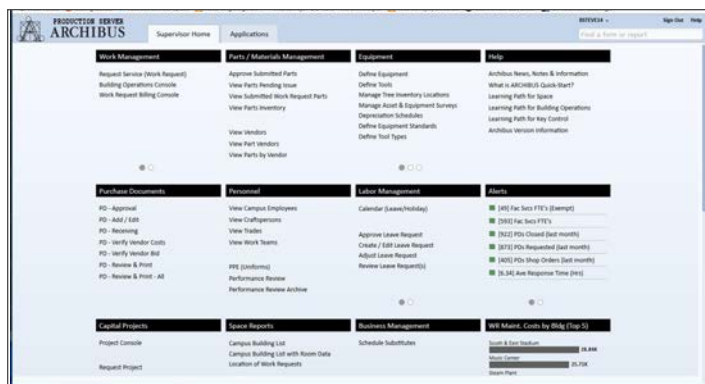
Special Projects

The office of Special Projects (SP) operates within FS Administration and is tasked with the execution and completion of all special projects assigned by the Associate Vice Chancellor. In addition, SP also performs ongoing research regarding innovations and best business practices within the facilities management industry and analyzes the results to identify those innovations most applicable to Facilities Services and the University of Tennessee, Knoxville. Consults with FS Senior Management on selecting innovations to become special projects as well as taking the lead in working with FS personnel to develop, test and implement those projects.

Additionally, Special Projects manages and coordinates departmental special events from inception to completion. Collaborates with other Facilities Services units on needs for events as well as support needed before, during and after events. Departmental events include student assistant and employee appreciation, bake sales, food drives, annual golf tournament as well as departmental picnics and holiday celebrations.

Archibus

Special Projects continues to work with Archibus (our Integrated Workplace Management System) to maximize the capabilities of the system for use in capturing data, key performance indicators and maintain efficiency of responding to work requests. Field questions regarding Archibus from units and the campus community, work in partnership with FS Employee Training & Development to provide Archibus training, and troubleshooting any issues with Archibus. In addition, a rep from Special Projects continuously serves on a committee to enhance Archibus and suggest changes and/or modifications needed to enhance the system.



Preventive Maintenance Tasks (PMs) and Equipment: This unit works to verify equipment on campus with records currently in Archibus while collaborating with other FS offices for the writing and assigning of preventive maintenance tasks for equipment and/or location PMs. The preventive maintenance tasks then generate work requests

to the respective units to perform interval maintenance to maximize the useful life of campus equipment.

Projects: Special Projects utilized student assistant to complete a major Archibus data entry project for the FS Sanitation Safety office.

Upgrade: This unit is currently working with the Director of Communications & Information Services, along with OIT, concerning the upgrade of Archibus and will assist with the testing of the upgraded modules to determine what, if any, changes/modifications are needed. Special Projects will work with our Employee Training & Development team to train employees on any changes/modifications that may take place with the upgrade.

In the near future, we will be introducing an enhanced key module, upgraded equipment module, as well as, the mobile platform for access to Archibus. The mobile platform will allow access to Archibus from the field for our front line employees. Additionally, we will roll out our new Building Information Modeling (BIM) module. The BIM module will include enhanced GIS and a 3D viewer. The new applications will provide our department with additional tools to use in our goal to expand our best practices.

Best Practices

In order to grow and learn, Special Projects works to schedule and coordinate meetings with other Tennessee higher education facilities professionals to share best practices and innovative ideas.

Research

This unit is constantly conducting research regarding innovations and best business practices within the facilities management industry. Analyze the research results to identify those items most applicable to improvements here at the University of Tennessee, Knoxville. The goal is to stay on the cutting edge of best industry 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: Archibus, Communications, Chuck Thompson Award and Student Assistant Scholarship.

Departmental Events

Facilities Services is like a family, and we want to celebrate our employees as such. That's why this unit coordinated and collaborated with FS Communications & Public Relations office in organizing various events hosted by the department, including, but not limited to:

SEC Chief Facilities Officers Conference: The communications coordinator teamed up with FS Special Projects to plan and execute the two-day conference. This event incorporated the Facilities Officers from our peer

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universities in the SEC. The two departments collaborated on the event to plan various activities, dinners and seminars for the participants. This includes space and event rentals, food orders, gift bags, transportation, and hosting. The event was a huge success with UT emeritus professor Dr. William Bass being the highlight of the conference. We received positive remarks from numerous participants about the conference as well as our campus.



Student Assistant Appreciation Week: This team created gift bags for more than 50 student assistants working across the department. In addition, meals and snacks were made available to students throughout the week. Plans are to continue celebrating this week each year to promote the Student Assistant Scholarship and to show appreciation to our student assistants.



Annual Golf Tournament: With the assistance of committee member and the FS Communications & Public Relations office, we hosted the 2nd annual Facilities Services Student Assistant Golf Tournament at Three Ridges Golf Course in May 2019. This event raised the remainder of the funds needed to fully endow the scholarship and allowed us to award scholarships to three Facilities Services student assistants. We are looking forward to our tournament in May 2020.

Pink Day: Every October, employees are encouraged to wear pink in support of Breast Cancer Awareness Month. This event hosts a sale of Breast Cancer Awareness items as well as a bake sale with all proceeds going to the Susan G. Komen Foundation.



Employee Appreciation: Special Projects coordinated and assisted in the organization and execution of the department's two annual large scale employee appreciation events, the Fourth of July Picnics and Holiday Celebrations. Planning for these events includes space and event rentals, food orders, soliciting prizes, transportation, and hosting. Additional picnics and celebrations are scheduled to accommodate third shift employees. FS Employee Training & Development provided assistance in the set up and teardown of these events.

ADMINISTRATIVE & SUPPORT SERVICES

The responsibilities of the Administrative & Support Services unit can be categorized into three primary areas: Financial Support Services, Material Procurement/Receiving, and Warehousing Services, and Personnel and Administrative Support Services. These primary areas of responsibilities are conducted within the Business Services Office and the Central Supply Office.

Business Services Office (BSO)

The Business Services Office is responsible for accomplishing personnel and financial support functions such as: comprehensive human resource and payroll functions, budget build and execution, accounts management, accounts payable and receivable, ledger reconciliations, travel requests and 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.

The Business Services Office is 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 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.

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Work Requests

During FY 2019 the Business Services Office processed the following work requests:

Total Non Chargeable Work Requests: 26,172 at the amount of \$11,457,455

Total Chargeable Work Requests: 18,478 at the amount of \$19,352,575

Total Work Requests for FY 2019: 44,650 at the amount of \$30,810,030.36



Accounts Payable

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, travel reimbursements, and requests for special payment and special remittance.

During FY 2019 the Accounts Payable office processed the following:

Total invoices processed: 14,571 with \$21,989,152.31 paid to vendors.

Total PCard Transactions: 1,692 with \$337,097.11 paid to vendors.

Total Goods & Services Procured Totals: 16,263 with \$22,326,249.42 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, and 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.
- Preparing travel documents such as Travel Requests, Travel Expense Statements, Conference and Seminar Registration Prepayment requests, Travel Advance Requests, and Direct Bill of Airfare and Car Rental applications.

Accounts Receivable

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 2019 the Accounts Receivable Office processed the following auxiliaries, interdepartmental, and project recoverable charges and non-recoverable WRs:

Total Work Requests Processed: 18,478 with \$19,352,575 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 Business Services Office audited, managed, and paid the following during FY 2019 (July 1, 2018 through June 30, 2019):

Total Number of Buildings Served: 289

Total Square Footage Served: 15.36 Million

Total Utility invoices per fiscal year: 3,132 (campus-wide)

Total Utility Recoveries (from Auxiliaries): \$16.9 Million

Total Utility payments during FY 2019 (UT campus-wide): \$37.6 Million

In addition, the Business Services 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

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records for the Facilities Service Department while providing detailed information and summaries, service and support to the university community.

During FY 2019 the Utilities Receivable office processed the following:

Utilities E&G Payments: \$20,728,427.00

Utilities Recoveries (Auxiliaries):
\$16,916,922.00

Total KUB Invoices Paid: 3,132 at the
amount of \$37,645,349.00

Personnel & Administrative Support Services

The Personnel & Administrative Support Services Office is where comprehensive HR and payroll functions for the Facilities Services Department are centralized. This 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 in performing these functions.

The office accomplishes comprehensive HR duties 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 concerning personnel and payroll matters.

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 personnel or payroll functions.

The unit also coordinates and manages staffing services for more than 700 employees to include coordinating performance review evaluations, managing personnel or payroll changes, leave applications, promotions, and disciplinary procedures. The office prepares reports on staffing levels, career path progression and eligibility, employee certification requirements and eligibility, employee leave balances, and payroll expenditures for the unit directors' and employees' planning purposes.

During FY 2019 this office processed the following HR transactions:

Total New Hires: 156

Total Terminations: 175

Position Change Forms: 344

Personnel Change Forms: 89

Total Recurring Pay: Forms 24

Total Custodial Certification Increases: 20

Total Career Path Increases: 16

Total Payroll-Timesheets/Books Reviews: 6,136

Total Actions Processed: 7,723

Additional Pay Forms: 78

HR Exit Forms: 132

Job Offers: 207

Travel Expense Approvals: 262

Job Fairs: 2



In addition, this office edited, corrected and audited 26 bi-weekly payrolls for more than 570 nonexempt employees during FY 2019 and performed 12 monthly payroll edits, corrections and audits for 46 exempt employees during FY 2019.

Central Supply Office

The Central Supply Office handles purchasing and warehousing functions for the Facilities Services Department. The Central Supply Warehouse is a consolidated, well-organized, state-of-the-art warehousing 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.

Parts Warehousing

Around the year 2010, UT Knoxville campus administration recognized the need and importance of maintaining the campus assets (buildings, grounds, research labs and equipment, etc.). As part of the Top 25 goal-setting initiative, the Facilities Services administration began a department-wide overhaul and reorganization which included the push for an up-to-date, organized and maintained MRO Storeroom.



As of July 2017, all warehousing locations are clearly marked and have undergone a comprehensive, hands-on physical

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inventory. 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



Facilities Services Maintenance Supply is consolidated into three main parts and SKU locations for ease of service to the UT Knoxville campus. The FY 2019 Central Supply Warehouse Activity and Office Buyer Activity is detailed below.

Central Supply Warehouse Activity Totals: 76,344 transactions issued, received and replenished with an inventory value of \$608,255.

Parts Accuracy: 99.22%

Center Supply Office Buyers Purchase Document Total Orders: 6,438 orders placed with a purchase value of \$10,617,217.26.

Central Supply Office Vehicle Operations

After the Facilities Services Department moved to the Sutherland Avenue Facilities Services Complex, the Central Supply Office implemented a transportation program to deliver parts, SKUs and personnel from the off-site Sutherland Avenue location to the UT Knoxville campus.

Central Supply Office Vehicle Operations has implemented a schedule that allows van operations from 5:30 a.m. to 6 p.m. on a daily basis to best serve the Facilities Services shops maintenance and support program, and campus community.



On April 16, 2019, Central Supply, in partnership with Wallace Hardware, hosted a Lunch and Learn Vendor Fair at the Facilities Services Complex. It was considered a huge

success with Wallace Hardware providing more than a dozen vendors to display and educate our staff on some of their wares and well over 200 Facilities Services employees attending.

COMMUNICATIONS & INFORMATION SERVICES

Communication and Information Services provides support for Facilities Services in areas of Communications and Public Relations, Information Technology, Sustainability, and Training and Employee Development. The CIS unit's commission is to support the core business of FS by setting and guiding strategy for all communications, directing the use of technology and implementation within the department and creating and developing a more highly skilled workforce.

CIS is continually improving to reduce costs, eliminate wasteful expenses, and become operationally more efficient. In FY 19, CIS under spent the budget by 12.5% saving \$64,370.

CIS has worked to facilitate positive, mutually beneficial relationships with all FS associates and team members through open, two-way communication. The efforts of the CIS unit have been to promote and market FS to the campus, faculty, staff, and students, as well as the greater Knoxville community. Provide timely structured learning experiences and operational and career development programs resulting in a rich and accessible career path for all FS employees. Lastly, the CIS unit provides reliable/sustainable infrastructures, IT products and services, and overall tech innovation to empower our employees to become as agile and efficient as possible.

Moving forward, CIS will promote the "We Working" model, similar to a style implemented by Scrum Masters. "We Working" ensembles are self-guided, quickly reconfigured, fluid, distributed; and, fueled by a combination of autonomy, alignment and trust. The model is about deliberately designing small and flexible teams as the predominant approach toward fluctuating workloads, shrinking time frames, and intense flurries of information exchange and coordination. "We Working" will elevate teaming from art to science, from haphazard to systematic, and encourage people to gravitate toward small teams that form, converge, act, and then dismantle as work and assignments change. The "We Working" model will enable employees to reach their goals and overcome obstacles.

In 2019, Communications and Information Services participated in the FS 2.0 Reorganization. Employees sent communiques, created informational documents, participated in hiring committees, and hired on two new employees for FY20.

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Communications & Public Relations

Facilities Services Student Assistant Scholarship Fund

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. Several fundraising efforts were planned by Communications & PR and Special Projects, with assistance from committee members. Bake sales and a golf tournament were all developed by key members in the committee. In its second year, the scholarship was awarded to three students.



Office of Emergency Management

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 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.

Q&A Sessions/SWOT Analysis

The communications coordinator met with Sally Broyles to discuss Facilities Services and the steps that could benefit the department. Sally made her recommendations in regards to Facilities Services. Multiple task forces were then formed to look at how to address/resolve some of the issues from the SWOT analysis.

APPA FPI Survey

Each year, the communications coordinator is responsible for the completion of the 450-question APPA FPI Survey. The coordinator gathers all the necessary information from Facilities, as well as other campus units.

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 the office. 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. This year's attendance of both the Fourth of July Picnic and Holiday Party were slightly higher than previous years.



In March, UT Knoxville hosted the Sightlines SEC Chief Facilities Officers Annual Conference. More than 25 individuals from various SEC schools participated in the week long event at UT Knoxville. The communications coordinator organized the logistics of the event, creating location information sheets for participants, ordering all meals, and assisting the organizers with all other needed items during the week.

In conjunction with the new FS Student Assistant Scholarship, Facilities Services hosted its second Student Assistant Appreciation Week in 2019. The communications coordinator teamed up with FS Special Projects to create gift bags for more than 40 student assistants working in the department. The coordinator also ordered meals and snacks that were available to students throughout the week. This event was used to promote the new scholarship and there are plans to continue celebrating the week each year.

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

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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 the Facilitator. The bi-monthly

newsletter has consistently been more than 10 pages, and Facilities Weekly has steady participation from all of the Facilities offices. Distribution lists for both newsletters continue to grow.

Employee Recognition Programs

The communications coordinator organizes and promotes departmental recognition programs. These programs include Employee of the Month, Chuck Thompson Outstanding Employees Award, 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. The coordinator also organizes the annual Chuck Thompson Awards by chairing the selection committee, compiling all nominations, ordering awards and scheduling the event.

Social Media Outreach



The Communications & PR Office is responsible for the management of the department's six different social media platforms – Twitter, Instagram, Facebook, YouTube, Pinterest, and Google+.

The reach of the department's existing social media accounts expanded during the past 12 months. The FS Twitter account now has 1,309 followers compared to 1,237 in

August 2018, the Instagram account now has 711 followers compared to 589 in August 2018, and Facebook likes have increased to 707 from 548. 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.

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 wherever necessary. In 2019, Facilities Services reached over 65 percent participation rate during this year's campaign.



Employee Comment Boxes

In fiscal year 2019, the Communications & PR Office provided anonymous comment boxes in various locations across campus and online for the use of Facilities Services employees. Comments are collected weekly and answered by the Associate Vice Chancellor. The comments and their answers are then placed in the Facilities Services Weekly newsletter.

Public Relations Campaigns

The Communications & PR Office has implemented multiple PR campaigns in FY 19. The office conducted a Tiny Trash PR campaign to encourage employees to use their tiny trash cans to reduce waste. A PR campaign was also conducted to encourage the adaptation to and use of the new hand dryers installed throughout campus. The implementation of the dryers was beneficial in cutting paper product costs drastically.

Volunteers First Impressions Contest

FY 2019 marked the inaugural year for the Volunteers First Impressions Contest. The communications coordinator created media content to inform the campus of the contest, worked alongside Construction and Design Services to organize the contest and select winners, coordinated announcements of the winners, and took before, in-progress, and after photographs of each project. This contest will again

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be offered in FY20.

TNAPPA Conference in Memphis

The TNAPPA Conference was held in May at the University of Memphis. The communications coordinator assisted in updating the website and gave guidance, as needed, to the University of Memphis for the conference.

Employee Training & Development

Partnerships

Environmental Health & Safety (UT System)

In fiscal year 2019 we continued our partnership with Environmental Health & Safety (EHS). We worked with EHS to deliver confined space training, alternative vehicle training, forklift training, and aerial work platform training. In addition to the training that we have worked jointly to offer, we meet periodically to ensure that the safety needs of Facilities Services are being addressed, and the initiatives for campus by EHS are being supported.

Employee and Organizational Development (UT System)

During fiscal year 2019, we continued our partnership with Employee and Organizational Development (EOD) by offering Customer Service Training to our Zone Maintenance team. We also worked closely with EOD to create our annual OSHA training courses within the K@TE system so all our departmental staff can maintain their compliance for safety training.

Human Resources (UT System)

We partnered with Human Resources (HR) in fiscal year 2019 to host benefits chats for all shifts within our department. Rebecca served on the hiring committee for the new Learning & Organizational Development Manager. We partnered with HR to conduct a training session on appropriate questions to ask in an interview in preparation for the job fairs that we hosted.

Risk Management (UT System)

We worked with Risk Management to conduct multiple training sessions for all supervisors, on all shifts, explaining the process to follow when an employee is injured at work. Angie Robinette, the Workers' Compensation Coordinator, conducted the training sessions for Facilities Services' staff. In addition to these training sessions, Angie and Pam Jeffreys, the Director of Risk Management, spoke to our staff at the 2019 4th of July Picnic about the changes to Workers' Compensation and auto accident reporting.

Office of Information Technology (UT Knoxville)

Throughout the spring and

summer of 2019, Facilities Services worked with the Office of Information Technology (OIT) to see 97% of enrollment for Two Factor Authentication. Only 12 employees in the department were not enrolled by the deadline.

Pellissippi State Community College

In the spring of 2018 we began enrolling Facilities Services employees from the Zone Maintenance, Utilities Services, and Construction Services Units in an online training program to increase their base-level knowledge in 5 specific work areas. Those areas are Electrical, Mechanical, Plumbing, Refrigeration, and Reading Blueprints. This program has continued throughout FY19. 53 employees have completed the program.

Collaborations

In addition to external partnerships in fiscal year 2019, Training & Development effectively collaborated with internal Facilities Services units to provide training and services to our employees. Highlights of this collaboration include:

Construction Services – Completed Needs Assessment in order to develop Unit Level Orientation.

Landscape Services – Completed Needs Assessment in order to develop Unit Level Orientation.

Utilities Services – Completed Needs Assessment in order to develop Unit Level Orientation.

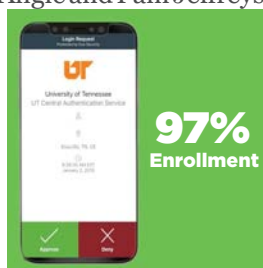
Admin Services – Coordinated Archibus training for 109 FS staff.

Accomplishments

In addition to external partnerships in fiscal year 2019, Training & Development effectively collaborated with internal Facilities Services units to provide training and services to our employees. Highlights of this collaboration include:

Building Services – Coordinated two CCP courses over the course of the fiscal year. Training & Development saw 22 Building Service Aids graduate from the CCP program and become Certified Custodial Technicians. 11 graduates completed the program in December 2018, and eight completed the program in June 2019.

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



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of people every year. In fiscal year 2019, the Training & Development team conducted 24 NEO sessions for 130 new employees.

2018 -2019 Respiratory Protection Program – Specific work tasks require 160 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, and PPE and respiratory protection training for affected employees. Fit testing was offered bi-monthly to medically-approved employees. Data was collected from fit-tested employees on the frequency of respirator use and tasks performed while working.

Safety – Several initiatives aimed at reducing the risk of injury to Facilities Services personnel were undertaken in fiscal year 19, including:

CPR/AED/First Aid Training completed by 50 employees.

Emergency Response Courses: The Training group completed several Emergency Management Training courses, both online and in-person, in FY 19.

Arc Flash Training offered bi-monthly; conducted by Cesar Penalba.

Alternative Vehicle Trainings conducted by EHS for all employees that require the training.

K@TE RFQ: Rebecca contributed to the evaluation of the SkillSoft RFQ for Employee and Organizational Development.



OSHA Compliance Training – We reported a compliance rate of 90% among full time employees for calendar year 2018. This is an increase of 3% from 2017.

Career Paths: Career Path development was put on hold for FY 2019 until the HR Job Family process was completed.

Landscape Academy: Landscape Academy was offered intermittently over the course of FY 2019. Work on completing level 600 courses was discussed as was a method for ensuring all Landscape Services employees are offered training at regular intervals.

Hosting two APPA events: APPA Supervisor's Toolkit and a Drive-in Workshop

New Employees – Beth O'Neill was promoted to Training Specialist in November, and we hired a new Training Specialist Assistant, Anna Best, in February. Her focus has been to maintain the majority of the office's spreadsheets, as well as complete the weekly publication "FS Weekly" and the bi-monthly publication "The Facilitator".

IT Support & Maintenance

The IT Support & Maintenance Office handles day to day operations of technology within the department. This

office provides technical support for around 600 users and additional support for all individual shop technology needs. Maintenance and support is also provided for satellite Zone Maintenance, Utilities, and Building Services offices scattered across campus. This office also provides technical maintenance and administration of Archibus (the FS IWMS), the FS website, streaming video of various campus webcams, FS listservs, email, office applications, tablets, phones, and radios. IT manages all departmental device identification and registration for any network attached equipment installed in FS. The department currently has over 1,200 devices on the network, including computers, printers, mobile devices, building automation services and life safety systems (fire alarms, building access, etc.). Finally, IT acts as a liaison between FS and other departments when projects or maintenance issues affect network infrastructure, server support, or other campus-provided network services.



Major Projects

Assist Design Services with Cone Zone Website.

Purchase 42 new computer and SSD/RAM upgrades to extend the life of 57 current machines.

Manage over 1,400 online devices, 111 Tablets/Mobile Devices, 261 2-Way Radios. This includes 178 user assigned desktop workstations and multiple FS Staff shared workstations.

Digital signage is now available using Hypersign to integrate with Campus Wide System or simple slideshow for Facilities Services specific presentations.

We assisted with Lutron Lighting upgrade at Neyland Stadium, Thompson-Boling Arena and New Lutron installation at Ken & Blaire Mossman Building.

3D printed parts are still being tested.

Drone Pilot practice continues.

We are currently heavily involved with new office setups and multiple office relocations as part of the Facilities Services NextGen 2.0 initiative and new building construction on campus.

Began a 2-year Archibus upgrade, in conjunction with OIT, from version 21.2 to version 24.1, encompassing three user environments and six virtual servers. A new mobile framework and app



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will be implemented with the upgrade, along with a new 3D Building Information Model viewer, a new Estimating module, 2-factor SSO authentication; and, various upgrades, enhancements, and patches to the Archibus system.

Ported Uniform, Utility Billing, Estimates, and Capital Project legacy systems over to Archibus, with a plan to retire the legacy system completely at the end of 2019.

Office of Sustainability

The Office of Sustainability (OoS) aims to foster and promote environmental operations, education, and living on a campus, with a focus on work efficiency and cost savings. More specifically, the OoS is tasked with reducing the annual GHG emissions to zero (carbon neutral) by the year 2061. We utilize a multi-faceted approach to this, as it requires both a cultural appreciation and an infusion of sustainability as a core mission of the university.

Energy Projects



Peak Energy Use Campaign: A marketing campaign to inform the campus of higher energy rates during certain times of the day and seasons throughout the year.

POWER Challenge: A dorm energy, water and recycling competition held annually.

Greenhouse Gas Emission Reductions

We saw a 43 percent reduction in greenhouse gas emissions since baseline 2008.

Awards

Tree Campus USA designation continued.

Bee Campus USA designation.

Partnerships

The office partnered with 14 specific courses/programs, providing real world experiences for 80 undergraduate students, 3 graduate students, and 14 doctoral students.

Infrastructure/Equipment

Purchased six new electric vehicles for campus.

Experience Learning/Academic Partnerships

Our office partnered with 14 specific courses/programs, providing real world experiences for 80 undergraduate students, three graduate students and 14 doctoral students.

Non-Categorical Facts

Drone Program Development for Facilities Services. Designed to avoid high cost from outside vendors, provide a faster response time to data request and begin offering service to campus partners.

Complete redesign of www.environment.utk.edu.



As of FY 2019, the Office of Sustainability and UT Recycling consolidated to become the Office of Sustainability with Jay Price as Sustainability Manager.

CONSTRUCTION SERVICES



Construction Services completed over 600 projects.

Completed 45 classroom projects over the summer and winter breaks.

Coordinated 23 buildings for pressure washing.

Coordinated building window replacements in 3 buildings.

Coordinated tuckpointing on 4 buildings.

Coordinated voice notifications in 15 buildings.

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Major SBC approved renovation to Student Services.
Completed work in over 120 buildings across campus.

Construction Paint & Sign

Paint shop completed over 416 work requests.
Maintenance painting in Walters Life and Hoskins Library.
Worked on 50+ paint projects for Construction.
Worked on paint projects in over 80 buildings across UTK campus.
ADA signage in four buildings.
Building and campus wayfinding signage.
Worked on 30+ sign projects for Construction.
Worked on over 50+ buildings across UTK campus.

Construction Building Finishes

Completed over 190 work requests.
ADA sidewalk repairs.
Digging and pouring foundations for new building and wayfinding signage.
Prepared over 40 offices for new faculty/staff by assembling furniture.
Worked on 20+ projects for Construction.

STAR Team

Completed 130 work requests.
Worked on LED light change in buildings and garages.
Coordinated and worked Mossman move.
Worked on Mossman Vivarium issues.
SERF nitrogen system.

DESIGN SERVICES

Design Services was restructured into four teams to better reflect and serve the campus in the primary areas of its mission. The four groups work collaboratively together in the areas of Capital Projects, Landscape and Natural Resources, Digital Assets and Interior Environments. The leaders of the teams are Helen Hennon, Ted Murphy, Maria Martinez, and Barbara Tallent, respectively. The Capital Projects Team assists the campus with master planning, programming, and capital project management. The Landscape and Natural Resources Team is involved with exterior environments, campus beautification and stormwater. Digital Assets organizes and creates data for the campus space and archives, maintains the Graphic Information System, and Building Information Modeling. Interior Environments contributes to space planning, branding and graphics, and wayfinding. A new component of Design Services this year is the Field Administration team. The team is comprised of two registered architects, one of whom was hired directly for the role. Their function is to observe construction and

work with project teams to help ensure our renovation and construction is implemented correctly and in accordance with campus standards. This function was added in response to incidents of poor construction that impacted the University. Our field administration team works with the architects and contractors on campus to catch mistakes before they happen, and ensure that the project teams deliver what the University is paying for and needs.

Capital Projects Team

The Capital Projects Team manages UTK's capital building projects. We work in concert with Facilities Planning, and manage the projects from the campus representation side. Our work involves extensive organization and involvement with user groups, facilities services departments such as utilities, zone maintenance, construction and commissioning. The work includes conceptual development of projects and cost estimating, programming activities, design phases, value engineering, and construction administration and closeout. During FY 2018-2019, the team accomplished the following:

Conceptual Development and Estimating -

- Andy Holt Garage renovation.
- Bass Building Forensic Anthropology
- Research/Storage Building
- Haslam College of Business expansions
- Carousel theatre replacement
- Clarence Brown theatre addition
- Concord Campus site
- HVAC Improvements for Dougherty, Art & Architecture, and Hodges Library
- College of Nursing Addition & Renovation
- UTK Surge Facility
- Reese Hall Improvements
- Thompson-Boling Arena Renovation
- Strong Hall Ultra Clean Room
- Rocky Top Creamery
- Library Storage Facility
- Presidential Court Building Renovation
- Perkins Hall Addition
- Panhellenic Renovation
- University Commons Walmart Study
- Eugenia Williams Residence Renovation
- Marching Band Tower and Pavilion
- Student Union Shell Space
- Vet Med Addition
- Melrose Academic Building

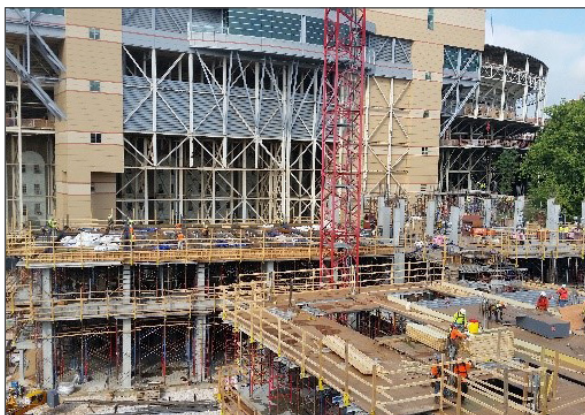
Programming -

- College of Nursing Addition & Renovation
- Strong Hall Ultra Clean Room
- Rocky Top Creamery
- Library Storage Facility

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- Panhellenic Renovation
- Marching Band Tower and Pavilion
- Vet Med Addition
- Carousel theatre Replacement
- Ellington (EESRB) Program Update
- Eugenia Williams Residence Renovation
- Student Union Shell Space
- Bass Building Forensic Anthropology
- Research/Storage Building
- Thompson-Boling Arena Renovation
- Neyland Stadium South Renovation
- MS4 Regional Stormwater Bank
- Haslam College of Business Expansion
- Melrose Academic Building
- POD Market Refresh
- Reese Hall Improvements
- Andy Holt Pedestrian Mall

Design Phases and Value Engineering -



- Engineering Services Facility
- Neyland Stadium South Renovation
- Ellington (EESRB) building
- Fire Safety Upgrades
- Pride of the Southland band tower and building
- Vet Med Addition
- Thompson-Boling Arena Renovation
- Conference Center Renovation for A&SP
- Conference Center Renovation for RMC
- Window Replacement and Masonry Repairs
- Neyland Stadium Painting
- Neyland Stadium East Press Boxes
- Thornton Athletics
- Magnolia Hall
- Dogwood Hall
- McKenzie Lawson Addition
- Golf Team Facility

Construction Administration and Closeout -

- Golf Team Facility
- Lake Avenue Parking Garage



- Engineering Services Facility
- Fire Safety Upgrades
- Student Union Phase II
- Marching Band Tower
- Neyland Stadium Painting
- Thornton Athletics
- Magnolia Hall
- Dogwood Hall
- Window Replacement/Masonry Repairs
- Neyland Stadium East Press Boxes
- Thompson-Boling Arena Renovation
- McKenzie Lawson Addition (Haslam Field)
- Plant Biotech Cooling Towers
- HVAC Improvements for Dougherty, Art & Architecture
- HVAC Improvements for SERF
- Clarence Brown Theatre lobby restrooms
- Mossman

Additionally, the Capital Projects Team worked with UT Athletics to develop Master Plans for athletic venues and with other departments of Facilities Services for the Concord Campus Master Plan. The team maintained and updated Campus Standards, and provided ongoing support to other buildings such as JIAM or the UT Space Institute.

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; 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

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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 Facilities Planning Department. This year's accomplishments include:

Landscape -



- Tickle College of Engineering District Gateway
- Accessibility Improvements and Melrose Steps
- AHT Garage Feasibility Study
- White Ave Garage Feasibility Study
- Stormwater Management Project Program
- Doug Dickey Plaza
- Volunteer Blvd. Streetscape – Phase II
- Volunteer Blvd. West Development
- Andy Holt Mall – West Extension

Natural Resources -

- Bob Mashburn Honorary Garden at Clarence Brown Theatre
- Bee Campus USA – Pollinator Garden at Fred Brown
- NPHC Plot - Design
- Melrose Courtyard Design (First Impressions Concept Winner)
- 2019-2020 Seasonal Color Selections
- Stokely Residence Hall Rain Garden
- Circle Park Accessibility Walk
- Developed a Shoreline Erosion Assessment Protocol
- Assessed 6 miles of Shoreline
- Conducted Dry Weather Screening
- Conducted 107 Stormwater Compliance Inspections on Active Construction Sites
- Completed Outfall Marking Program by installing 39 Outfall Markers on Campus Stormwater Discharge Points
- Hosted 2 Public Stormwater Awareness Events
- TN River Runoff 5K
- TN River Paddle-off Boat Race & Celebration

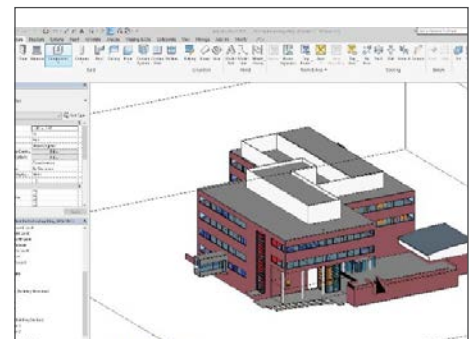
- The Stormwater Program interacted with 1863 students and other members of the Campus Community.
- Hosted 9 Adopt-a-Stream Clean-up and 2 River Rescue Programs
- Coordinated All New Exterior Cellular Service Antennas (oDAS) to meet Campus Standards
- Tickle College of Engineering and College of Arts & Sciences Liaison Program
- Review and Approve Stormwater Pollution Prevention Plans and Erosion and Sediment Control Plans
- Review and Revise Stormwater Planning and Design Manual for Stormwater Management Practices
- Continue Stormwater Compliance Inspections on Construction Sites
- Monitor Stormwater TMSP for Steam Plant for US EPA Requirements
- Conduct Sidewalk and Road Assessments to Recommend Maintenance and Stormwater Compliance
- Landscape Vision & Site Standards Updates
- ROTC Memorial Design and Coordination
- City of Knoxville Coordination
- UTIA Liaison Program
- Temporary Signage Review & Approval
- Paving Program Assessment

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 FY 2018-19, our team has accomplished the following tasks in the following four disciplines:

Space -

- Completed the Annual Space Survey of all rooms maintained by Facilities Services.
- Trained and assisted space managers throughout campus in auditing rooms.
- Completed technology classroom survey FY2019.
- **C o n t i n u e d**
c o m p l e t i n g
b u i l d i n g **s p a c e**
a u d i t s **a n d**
u p d a t i n g **s m a l l -**
s c a l e **f l o o r p l a n s .**
- Assisted project managers in the design process for Student Enrollment.



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Archives -

- Continued organization of archives room.
- Implemented a new naming convention and organization system of the Scans drive.

BIM -

- Ongoing efforts to model the architectural components of our existing buildings.
- Inventoried and added to BIM assets maintained by our Zone Maintenance Unit.
- Finalized the first version of our BIM Standards.
- Ongoing BIM professional development.
- Reviewed BIM of newly constructed buildings to bring models into our standards.

GIS -

- Created construction field reports accessible through mobile devices for weekly field inspections.
- Continued GIS support for roadway paving study program as well as a new sidewalk survey.
- Assisted the Office of Communications for Campus online web map application.
- Continued updating existing GIS campus data.
- Developed a workflow to update utilities information in the GIS System.
- Mapped outdoor wireless access points, cameras and copper and fiber assets for OIT.
- Developed webmap application to show Sustainability efforts on campus.
- Provided GIS support services to several departments on campus.

In addition, our staff assisted in the following efforts:

- Migrated and restructured all files from the Design Unit into a new "Design" network drive.
- Assisted in creating templates, updating and editing documentation on design standards.
- Worked with OIT on Archibus upgrade for space.
- Worked with OIT and UTPD on clean-up for card reader access.

Interior Environments Team

The Interior Environments Team strives to create and enhance environments for learning. The team stays knowledgeable of current design research in order to provide students great interiors for learning and living. We also provide design services to UTFS Construction Services, Users and the Classroom Committee. Another facet of our team is maintaining the Campus's signage standards and collaborating with Creative Communications to assure the University's brand is upheld. Lastly, we review and assist in

the direction of interior design on capital projects. During FY2018-19, the team accomplished the following:

Classrooms -

- Conducted in-depth research on millennials & centennials as related to higher education design.
- Presented the findings to the Classroom Committee.
- Presented recommendations for the 2019 Upgrades, including a change in color implementation and FFE, completely changing the former approach.
- Successfully completed the above upgrades. The following images show some of the results:



Jessie Harris Classroom.



Ferris Hall Classroom.



BEFORE & AFTER

Signage -

- Implemented new standards with the UTFS Sign Shop, Construction Services & Consultants.
- Launched "All Gender Restroom" initiative.
- Completed Strong Hall donor recognition package, installing fall of 2019.

Facilities Management through Interior Design -

- Orchestrated the efforts of Construction Services and Maintenance Painting to unify building interiors by re-implementing color and finish protocols.
- Prevented User initiated work which would have degraded our 50+ year building interiors.
- Worked with Users to educate about UTFS Interior Design policies and standards.

Partnering -

- Created successful partnership with Creative Communications to ensure branding is compliant and celebrated in building interiors.
- Strengthened relationship with Stewardship and Donor

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Relations to ensure donor recognition adheres to signage standards, honors donors and compliments building interiors.

- Collaborated on First Impressions awards, worked to implement solutions.

FF & E and Finish Selections -

- Provided in-house Programming, Interior Design and FF&E selections for numerous projects, omitting the need for consultants.

Capital Projects -

- Reviewed RMC, ESF, CVM TLC and EESRB finish presentations to assure adherence to UTFS interior initiatives and maintenance standards.
- Collaborated on branding and graphics programming for ESF.

FACILITIES OPERATIONS

Building Services

Accomplishments

The Building Services Office maintains more than 16,000,000 square feet of academic and athletic space for the University of Tennessee, Knoxville and University of Tennessee facilities around or on the Knoxville campus. Building Services provides 24 hour per day, 7 day a week service when and where it is needed.

>16M Sq Ft



This includes all athletic events, concerts, and university functions. With the Ken and Blaire Mossman Science Building and Student Union Phase II building being open, we have expanded our 4th shift coverage.

Building Services holds a Cleaning Certification Program for employees which is a 22-week education program on professional custodial techniques. Employees who complete both sections of the program successfully are submitted for a 9% pay increase.

93% of Building Services chemicals are categorized as "Green" Cleaning Products. The 7% which are not considered "Green" are hospital grade disinfectants which Building Services uses for all restroom area type cleaning. The hand soap on campus was designed by the University of Tennessee School of Public Health's Clean Hands Graduate Committee. Building Services, also, uses Clorox T-360 hydro static disinfection system to routinely disinfect areas of campus.

Building Services has added Mossman Building to its cleaning portfolio. In addition, Building Services provides set ups for our multi-use buildings.



The office has 13 supervisors and 260 service aides. Building Services is led by an Assistant Director, two Building Superintendents, and one Coordinator. Building Services employees service all academic and athletic facilities, including the Student Union, in four shifts, seven days a week.

Building Services has successfully standardized cleaning products used by the office, resulting in reduced inventory levels.

Building Services is committed to keeping the University safe from disease and viruses. We use hospital grade disinfectants



and have begun pro actively treating heavily occupied areas for germs.

Recycling is an important part of what Building Services employees participate in. During the past year, recycling numbers have grown and solid waste numbers have dropped in spite of the university's continued growth.



Landscape Services

The Landscape Services Office maintains 900 acres of campus grounds. The team is responsible for daily and seasonal landscape bed maintenance, general property grooming, turf maintenance, arboriculture, irrigation maintenance and upgrades, landscape renovations, project design review and construction oversight, heavy equipment operations, inclement weather response, and equipment maintenance.

Landscape Services has developed Landscape Academy. This curriculum is a campus SOP training format for new member on-boarding and on-going horticultural training for a team of 50 members. One component of the upper level training curriculum requires earning a TN Pesticide Applicators Certification from the TN Department of Agriculture. Three team members earned the certification during FY18-19.

Accomplishments

TN Dept. of Forestry on Arbor Day.

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Volunteer Blvd. Streetscape Phase II: Assume maintenance of new landscape improvements.

Seasonal flowers: Installation of 20,000 seasonal flowers and 12,000 tulip bulbs.

1500 cubic yards of hardwood bark mulch and 3000 bales of pine needles applied to campus landscapes.

Campus wide turf fertilization, weed control, aeration, and over-seeding program.

Install infrastructure for central control capabilities of campus irrigation systems.

Successfully completed requirements to become a Bee Campus Certified University. Designation awarded by the Bee Campus Organization on Arbor Day.

Campus wide snow/ice treatment and removal.

New Construction Document Reviews: Engineering, Dining, Tickle Engineering Wall, Dickey Plaza, Kefauver wing of Hoskins, Ag Surge, Plant Sciences Buildings.

Humanities Event Lawn: Humanities Lawn (northeast corner): Complete event lawn renovation to include grading, irrigation and Bermuda sod installation.

2111 Terrace Avenue: Complete building demolition, haul-off and site remediation. Assist with installation of Neyland/Briscoe historical marker.

Plant Norway Maple tree for 2018 UTK Memorial Service on the Ayres Hall south lawn.

Campus wide fungicide treatments to turf areas for control of brown patch disease.

Sorority Village: Assist with excavation and landscape repairs associated with geo-thermal system repairs.

Sorority Village: Prep and event support for sorority recruitment events.

Housing: Spruce-up landscape at dormitories prior to student move-in.

Support for Student Life Welcome Back outdoor events.

Support for Chancellor's Picnic.

Removal and disposal of all cigarette urns due to implementation of Smoke-Free Campus policy.

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.

Ag Equestrian Farm: Complete parking lot and road installation through farm to give access at Old Cherokee Trail Rd.

Blueberry Falls: Sod repairs associated with AT&T manhole structure repairs.

Cherokee Farm: Provided year-round landscape property maintenance to include the Knoxville city greenway expansion.

Ellington/Plant Biotech: Prep for Board of Trustees visit.

Mossman Laboratory Building: Assume maintenance of new landscape improvements.

Assist contractor with tree limb removal for equipment clearance on Volunteer Blvd. steam system upgrades.

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 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.

Trim/remove hollies for brick tuck-pointing and window replacement at Hoskins, Jessie Harris, and Ferris Hall.

Campus wide asphalt pothole repair.

Bush hog mowing along non-UT properties adjacent to campus.

Stokely Residence Hall: Assist the Agriculture Bio-Systems Engineering Department with rain garden installation.

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.

20,000 Flowers



12,000 Tulips



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Landscape Irrigation Systems: Monitor, repair, adjust, and winterize campus-wide. Upgrade irrigation controllers and connect to central control management system.

Leaf removal: 175 tons of leaves campus-wide taken to compost site.

Preparation for visits by UT Board of Trustees and ESPN Game Day.

Remove old building signs where new ones have been installed.

Inventory and develop a plan for street tree replacements during winter months.



Monitor rose population throughout campus to control Rose Rosette virus management.

Sod repairs throughout campus.

Emergency roadway repair campus wide

caused by sinkhole activity.

Campus wide: Plant and inventory new trees throughout campus.

Tree cleanup associated with storm events.

Systemic insecticide treatment of hackberry and river birch for aphids over parking/seating areas

Update tree inventory database.

North Concord property: Cut grass around parking lot and spray weeds in pavement cracks.

Thompson-Boling Arena: Assist with Monster Jam dirt clean-up at east and west service area.

Student Union: Move outdoor plaza furnishings for Volapoolooza.

New building construction: Transplant shrubs and trees from the site prior to site demolition



Campus Wide: Swap/installation of new outdoor trash/recycle units

White Nationalist Rick Tyler: Provide pedestrian barricades, road blocks, and support as needed for campus security on 5/28/2019

Mashburn Garden (CBT): Installation of drainage

improvements, concrete pad for bench, landscape irrigation, plantings and Mashburn plaque.

Tickle College of Engineering entry wall: Installation of landscape plants, mulch, and turf.

Blueberry Falls: Upgrades to pumps and infrastructure for improved water volume.

Nursing Annex: Install landscape improvements at main entrance.

Student Union: Preparations for ribbon cutting ceremony.

Smokey Dog Sculptures: Excavate for construction of new bases, set precast bases at all locations throughout campus, sod repairs around bases, and irrigation adjustments.

Academic Research and Support

Assist Biosystems Engineering department with installation of stormwater rain garden project.



Dr. Bass Anthropology Facility: Provide removal of fallen trees, fence repair, service road maintenance, and maintenance service to skid steer loader.

Assist Urban Forestry class with basic rope setup for climbing instruction.

Hosted Arbor Day celebration.

Continue treatment of Ash trees for Emerald Ash borer and demonstration for Dr. Lambden's Entomology class.

Coordinating talks with Urban Forestry and Facilities Services staff to develop tree inventory data collection tools, i.e. PDA, laptop, GPS, etc.

Clarence Brown Theater: Assist with transport of production scenery storage trailer

A&A: Move sculptures for Art Department so that FS can perform repairs

Veterinary Medicine: Demolition of barn on Cherokee Farm.

Training

Landscape Academy: Conduct sessions with new and existing staff and continue development of upper level curriculum.

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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.

Excavation and backhoe hand signal training for heavy equipment team.

Conduct departmental snow removal training and SOP review.

Aerial lift training (Arboriculture).

Lock & Key Services



Lock & Key Services is responsible for the keying, installation, and repairs of mechanical locks and exit hardware across campus. In addition, we repair, change combinations and service safes. We provide service for desk, file cabinet, and furniture locks and keys, as well as, duplication and code cutting of various types of keys.

Completed Work Request/Projects for FY18/19 - 2,798

Our shop front office processes, cuts and distributes all key request for the campus community as well as receives the keys back and returns them upon departure.

Keys issued FY19 – 8,100

Returned/Lost FY19 – 7,381

Larger projects for FY18/19

Magnolia & Dogwood Housing – Configuring and setting up and installing cores.

Mossman Bldg. – Vivarium installing and changing lock functions for space.

Delta Tau Delta Fraternity House – Install and repair



door locks and rekey entire house to new master, cut and issue keys.

Alpha Gamma Rho – Rekey entire house new master, cut and issue keys.

Dunford Hall – Relocation of Humanities Center – rekeying of new space.

Walter's Academic Building – Configuring and setting up and installing new cores for entire building for the new occupants.

Student Union Phase II – Configuring and setting up and installing cores.

Vol Condos - Rekey all and issue new keys.

Continuing Projects for FY19

Classroom security/Campus wide – Lock & Key, along with Simplex Security, is in the process of providing the ability to lock classrooms and meeting rooms where not already present the ability to lock space from inside the room without the need to step into the corridor to do so.

Rapid Response Team



Spring Cleanup

Spring Cleanup is a special event held for nine weeks annually as an effort to declutter academic buildings by moving items no longer needed. Staff from Rapid Response Team work building by building to help simplify the process. Computer and laboratory equipment, furniture, office supplies, paper files, and more can be recycled, discarded, or sent to UT Warehousing.

Special Events

RRT is responsible for setup and tear down of special events on campus. This includes delivery and setup of tables, chairs, stages, and containers for recycling and trash.

During the 2018-19 academic year more than 1,000 work requests were performed by RRT. These work requests included 306 events and 485 moves.

FACILITIES SERVICES ANNUAL REPORTS

Surplus Moves

RRT performs moves of unwanted items to the Surplus Warehouse from offices and buildings on campus. The team also moves items requested from the Surplus Warehouse to offices and buildings.

Banners

Installation and maintenance of banners for the Main and Agricultural campuses is the responsibility of RRT.

Relocations

RRT performs whole building and office relocations. New building moves consist of complete move-in of equipment, furniture, supplies, and personnel into facilities.

Rapid Response Team handled the moves associated with the Mossman Building and Student Union Phase II.

Classroom “Clean out”

When a classroom is scheduled for a construction project, RRT removes all furniture, desks, etc. from the space and take items to storage until construction project is complete. Once the project is finished, RRT returns items back to the classroom.

Sanitation Safety

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. Ser-

vices 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.

2018-19 Academic Year

During the last fiscal year, the office processed approximately 3,000 work requests.

Preventive Maintenance Work Requests Generated – 1,850 WRs

Preventive Maintenance Work Requests (completed) – 1,822 WRs

On Demand Work Requests – Sanitation Safety: 1,021 WRs; Abatement: 134 WRs

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

Asbestos Abatement: Samples have been taken campus-wide to determine the type, location, and quantity of asbestos in our buildings. During this fiscal year, with the help of student workers, we have completely transformed the asbestos data base of over 8,000 samples and hundreds of pages of supporting documentation into the Clean Building Operating system of Archibus. The Sanitation Safety office coordinates asbestos abatement when said materials are found during a renovation or maintenance project being conducted by the Facilities Services Department. Facilities Operations has three individuals on campus who are state licensed as asbestos abatement supervisors, inspectors, designers, and monitors.

UT Recycling/Sustainability

The UT Office of Sustainability is committed to promoting the responsible consumption of human, economic, and environmental resources on the University of Tennessee, Knoxville campus. We use holistic data collection and analysis to inform sustainability initiatives and develop collaborations with campus and community partners to reduce the environmental impacts of the university’s operations, all while engaging the campus community in what it means to Make Orange Green.



FACILITIES SERVICES ANNUAL REPORTS

Zero Waste Efforts

Conducted week-long waste audits on 35 buildings to collect pre-My Tiny Trash diversion data.

Implemented My Tiny Trash in 34 buildings consisting of approximately 4,000 individual offices.

Coordinated 42 Zero Waste Orientation meals, serving meals to about 28,000 people this summer with an average diversion rate of 94 percent.



Organized 14 additional zero waste events throughout the year ranging in size from 100 to 5,000+ attendees.

Collaborated with the Post-Landfill Action Network to conduct interviews and strategic planning sessions with 14 different campus departments and offices to develop a Zero Waste Commitment for campus.



Presented a proposal for a Zero Waste Commitment to Interim Chancellor Davis and Senior Vice Chancellor Chris Cimino in partnership with the Committee on the Campus Environment.

Delivered food waste, plant material, manure, and bedding totaling over 850 tons from 31 different campus locations each week to our compost site.

Completed a project to

strategically place every outdoor metal waste receptacle on campus to be paired with a matching recycling receptacle.

Recycling Outreach -

Increased social media following by 700 people over the last year.

Initiated two new social media campaigns: "Q&A Wednesday" and "Which Bin?".

Coordinated Recycle Mania, a 2 month-long intercollegiate recycling competition, to promote student engagement with recycling and waste reduction. As part of the competition, planned and hosted 13 events including a donation drive, documentary film screenings, a campus and fort cleanup, and a Free Store pop-up shop.

Coordinated Public Recycling Drop-Off Awareness Week, with a culminating event called "Drop-Off Fest" that brought in over 450 people, 25% of which were new visitors.

Recruited more than 125 volunteers who contributed about 700 hours of community service to Zero Waste Gameday.

Campus Garden, Food Recovery, and Donations

In partnership with the Food Recovery Network, we rescued 21,048.4 pounds of food from Zero Waste Gameday, various events, and campus dining locations that provided 17,540 meals to people in need in the Knoxville area.

Donated 509.4 pounds of fresh, organic produce from the Grow Lab to Smokey's Pantry and the Love Kitchen.

Coordinated and directed the collection of over 30,000 pounds of canned food through hosting All Campus Events' Tower of Cans homecoming event.

The Free Store collected 2,739 pounds of donated clothing, home furnishings, kitchenware, and small appliances that were distributed to over 700 students.

In collaboration with the Clarence Brown Theatre, diverted 27,179 pounds of theater flats, scenery, and props from the landfill and donated them to under-served schools in the area. This donation will impact approximately 690 students this year, continuing for years to come.

Recruited 116 volunteers who contributed 249 hours of community service work aimed at reducing food insecurity.

Food Systems Coordinator, Leah McCord, co-chaired the first Hunger and Homelessness Summit at UT and the first Grow-



FACILITIES SERVICES ANNUAL REPORTS

TeachKnox Summit that helps area educators learn how to bring nature and food systems into their classrooms and the classroom out into nature.

Leah McCord also won CAC AmeriCorps' VISTA Servant Leadership Award for excellence in her year of service at UT Recycling.

Academic Engagement

Gave presentations to 16 different undergraduate courses and 4 student organizations about UT Recycling's various projects and volunteer opportunities.

Gave 12 presentations to RAs from every UT residence hall on how to recycle properly on campus/at the public drop-off and volunteer opportunities for their residents.

Created the UT Recycling Research Internship Program. The program oversaw 6 research interns in the first year who worked on projects such as in-depth waste audits on campus buildings and weighing post-consumer food waste from campus dining locations. The name will change to the UT Sustainability Internship Program for Fall 2019 and the program's scope will broaden beyond waste to all aspects of sustainability.



UTILITIES SERVICES

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.

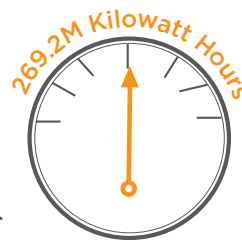
The acquisition of many streets by the university has greatly expanded these responsibilities by adding miles of storm water piping, many additional street lights, and other facilities



ties 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.

\$6 Million
Main Substation
Project

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 door security systems, provide electrical power for special events and fire watch coordination.

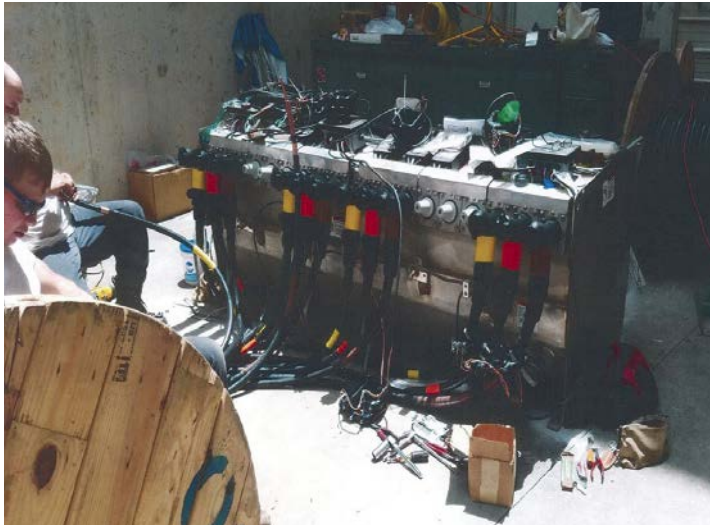
Some major accomplishments for this unit in the past year are the completion of the \$6 million Todd Helton Substation project. This station, and its related components, consist of state of the art, gas insulated switchgear which is totally enclosed in a secure building. The previous switching equipment was housed outdoors and exposed to weather, animal intrusion, and prone to failure of components. The new gear is totally protected from all of these, and greatly enhances the reliability of electrical service for campus. It is much safer and more versatile to operate, and requires almost no maintenance other than regular inspection. The Electrical Services unit has also installed several thousand feet of high voltage replacement cable, assisted with various capital building projects and performed many major projects over the past year.

To provide information for some perspective on the magni-

FACILITIES SERVICES ANNUAL REPORTS

tude of these systems please consider the following:

Power consumption for campus during the 2018-2019 fiscal year was 269,246,019 Kilowatt hours at a cost of \$19,933,017.



Air Conditioning Services

The HVAC unit is responsible for the operation, repair, and maintenance of all heating, ventilation and air conditioning systems such as chillers, large air handlers, hot water heating equipment, humidification and de-humidification equipment, heating water and chilled water pumps, control and process air compressor systems, process chilled water systems and individual room equipment serving dormitory rooms, offices, and research areas. They also program, operate, and maintain the energy management and control system which remotely monitors and operates building systems. 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.

Some major accomplishments for this unit include the replacement of large chillers and cooling towers at Andy Holt Tower, Communications, Claxton Education, Auxiliary Services, UT Police Department, Brenda Lawson and Jessie Harris Buildings. They installed several new roof top units at Kingston Pike Building and 1610 University Ave, and replaced air handlers in several locations, most notably a very large and difficult unit at Dabney Buehler Hall.

They also participated in many large capital projects.

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 and renovates new and existing systems, maintain fire hydrants, cleans 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.

Some major accomplishments for this unit in the past year include rerouting and replacement of a water main on the Hill between Austin Peay and Ayres Hall.

They performed major sewer

replacements at the Steam Plant and Student Aquatic Center, planned and supervised a major sewer relocation along Estabrook Road and made major repairs to the water mains serving Plant Science Biotech, Carrick Hall, and the Steam Plant. Repairs to a 10" line at Allan Jones Aquatic Center, repair and replacement of fire hydrants, repair of water main and storm drains at Tom Black Track, and Hearing and Speech, and maintenance and repair of pressure reducing valves and back flow preventers across campus. They installed new chilled water piping for the previously mentioned chiller replacements and made several major repairs to the Geothermal systems at Sorority Village and participated in the campus Steam outage making many major repairs to the Steam Distribution system campus wide.

For perspective the campus used approximately 577 million gallons of water at a cost of \$2.8 million dollars for water and \$5.8 million for sanitary sewer.

Steam Plant

The Steam Plant produces all steam for distribution to campus. Almost all 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.

Some major accomplishments for the 2018-2019 fiscal year include the purchase and installation of a condensate polisher to provide better water treatment for the boilers, new stainless steel condensate piping and major boiler repairs.

Gallons
of
WATER

577,
000,
000

FACILITIES SERVICES ANNUAL REPORTS

During the year, this plant produced over 839.5 million pounds of steam, generated over 30 thousand megawatt-hours of electricity, and consumed approximately 51.7 million gallons of water.

During that same period, the plant consumed over 1 billion cubic feet of natural gas and 332 thousand gallons of fuel oil at a cost exceeding \$5.2 million dollars.

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 unequaled 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



ONE CALL AWAY, 24 HOURS A DAY.

construction.

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

ZONE MAINTENANCE

With the reorganization of Facilities Services in 2019, Zone Maintenance personnel have been further empowered to perform more tasks without being required to call on others. This has provided a more efficient and effective way to service the campus community.

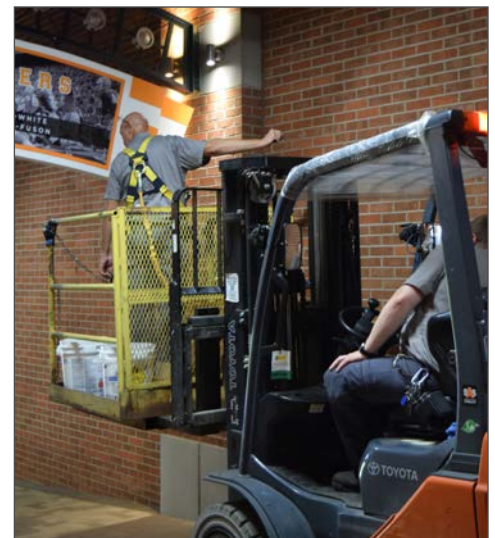
One Call Shift



The Zone Maintenance One Call shift is continuing to operate. There is a minimum of two people on site at all times during the shift. Having two individuals on site enables the unit to better handle repairs requiring multiple workers. Personnel are also able to better handle repair requests during peak times. One person can stay with a problem while the other handles calls. "Droppable" tasks are assigned for slow periods. This shift also provided enhanced off-hour coverage for the Zone Maintenance unit. Three people are assigned to each shift (first, second and third). These shifts rotate seven days on, two days off, eight on, four off, and repeat every fourth week.

Zone Maintenance Inspections Initiative

Building inspections encompass different levels. Foremen inspect the buildings in their respective zones, which allows them to provide on-the-spot training to Maintenance Specialists in the building should any deficiency arise. Currently, each building is inspected twice a year. Other inspections are completed using a peer network of Maintenance Specialists. This entails placing Maintenance Specialists in neighboring locations to inspect each other's buildings. This network can be increased so that Foremen also inspect each other's buildings, etc. These inspections are used to combat situations in which a person in the same environment, for a period of time, may become accustomed to seeing certain issues, and may, therefore, cease to recognize problems. This procedure also provides the opportunity to rotate the responsibility to different foremen, especially in the event of vacancies or searches.



Zone Maintenance Specialties Team

The newest initiative is the creation of the Zone Maintenance Specialties Team. We repurposing 6 employees to create this team. Duties of the team will include glass, door operators, managing the ZM lifts and working with the zones to assist with larger projects. This will allow the zones to keep up with the work load when larger projects come up.

Building Level Authority

A major initiative, in concert with the Archibus system, is that issues encountered by customers are routed directly to a building's Maintenance Specialist without the need to

FACILITIES SERVICES ANNUAL REPORTS

route through several levels of review. This results in quicker problem resolution and reduces the workload on several levels of review while decreasing the number of response required from central shops. Providing Maintenance Specialists with more building level authority reduces the number of work requests generated by Zone Maintenance to the central shops.

Critical Parts Inventory

The unit will begin to keep deeper inventory parts on hand for equipment that has critical impact on the campus, especially if it is a piece of equipment where long lead times can hamper campus operations for a long period of time.

Zone Maintenance Career Ladder

Currently the career ladder allows movement to higher levels based on demonstrated skill coupled with tests and/or certifications.

Customer Service Training

All throughout campus Zone Maintenance employees are complimented on the exemplary job that they do and the quality of service that comes from the group. Still, the unit has a desire to take the level of service even higher. In 2015, Zone Maintenance employees completed a series of customer service training courses conducted by UT Employee and Organizational Development (EOD). This training was tailored specifically for Zone Maintenance and addressed standards and best practices to use as personnel interact with the campus community. Another goal of the training was to encourage the uniformity in how Zone Maintenance personnel respond to customers and how customer concerns are handled. New employees are scheduled to receive this training soon after they start.

Zone Maintenance Zero Failure Initiative

The Zero Failure Initiative within Zone Maintenance is a focus on certain components and/or modes of failure that should not be expected if normal expected maintenance is performed. Zero failure does not automatically point at the Maintenance Specialist, but will require an evaluation of the failure in each of the categories to determine if failure is the result of a manufacturing or design flaw, misapplication, needed training, poor performance by a Maintenance Specialist, or other. The goal of this initiative is to minimize these failures by improving the quality of materials and tools the unit receives, improving the training, if that is determined to be the root case, and improve employee performance where indicated. The desired outcome of this program is to investigate any failures categorized into the zero failure category and determine why a given failure occurred. Such investigations may uncover a need for additional training or tools, in addition to parts or equipment performance. To date, this initiative has identified training needs for employees that were re-purposed from other areas

of Facilities Services. This has culminated with ZM allowing other seasoned employees to spend more time mentoring the employees new to the tasks. For example, premature bearings failures in air handlers were occurring in one of the newer campus buildings. Additional training was provided for installation procedures while transitioning to a different bearing manufacturer.

Zone Maintenance General Initiatives

In order to better serve our customers, the maintenance zones have been adjusted to a more customer based structure.

Zone Maintenance & Archibus

The Archibus management system provides Zone Maintenance with information the unit has not had in the past. It is able to provide the management data and reporting the group did not have access to. With the system, work requests are routed directly from the requester to the personnel in the buildings. This direct routing results in shorter response times. Requesters will be able to provide feedback on how their request was handled. In addition, requesters will also be able to track the progress of their work request.

Zone Maintenance - Energy Management Group

This newly formed group is tasked with reducing the overall cost of utilities while improving performance of campus systems while maintaining or improving indoor air quality. These goals will be accomplished with a combination of building recommissioning, customer training, and engineering improvements.



For more information about each Facilities Services unit and office go to fs.utk.edu

APPENDICES

A

SIGHTLINES

B

APPA FPI REPORT

APPENDIX A - SIGHTLINES

Sightlines data has not been released at the time of the Annual Report's publishing. As this report becomes available, it will be added as Appendix A.

APPENDIX B - APPA FPI

1. APPA: Leadership in Educational Facilities

Facilities Performance Indicators Report (FPI) for 2018 – Comparison of average costs for grounds, custodial, maintenance, and other functional areas among peer institutions.



APPA FPI Report - 2018-19

University of Tennessee/Knoxville

Region:

Gross Square Feet:

Carnegie: Research

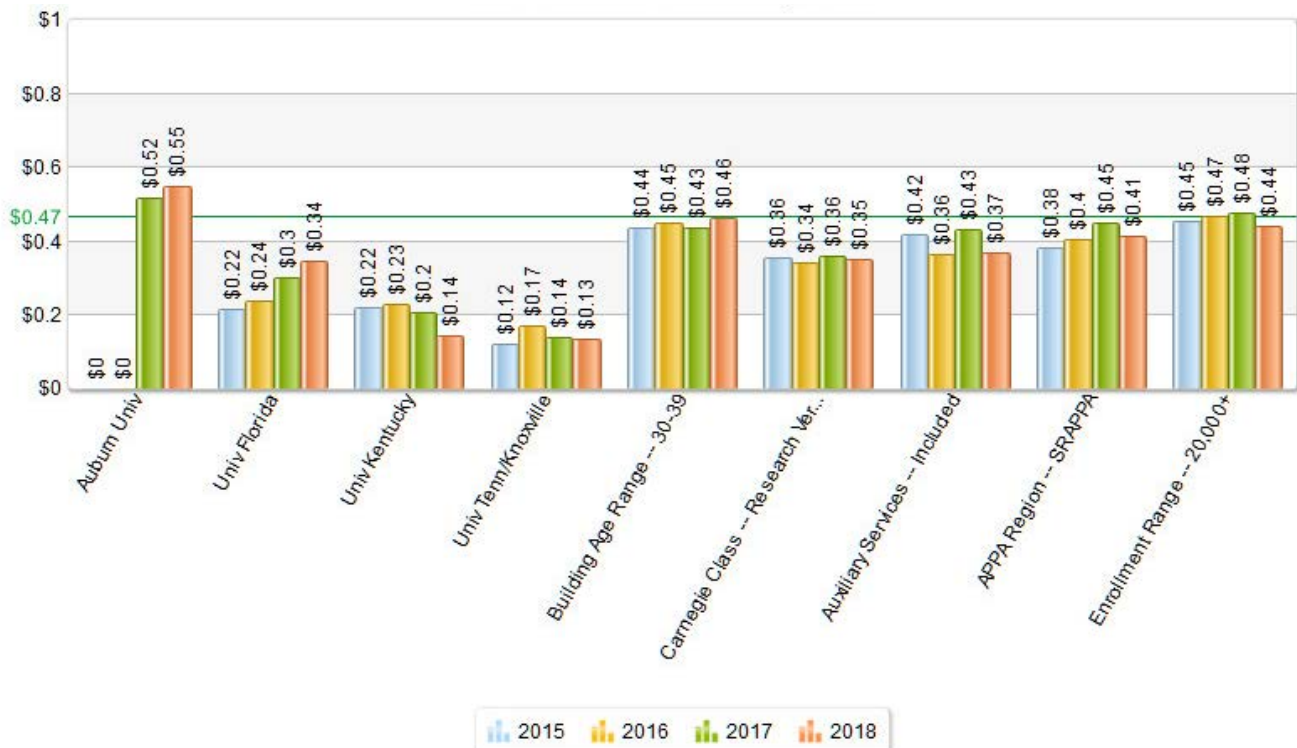
Number of Buildings:

Funding:

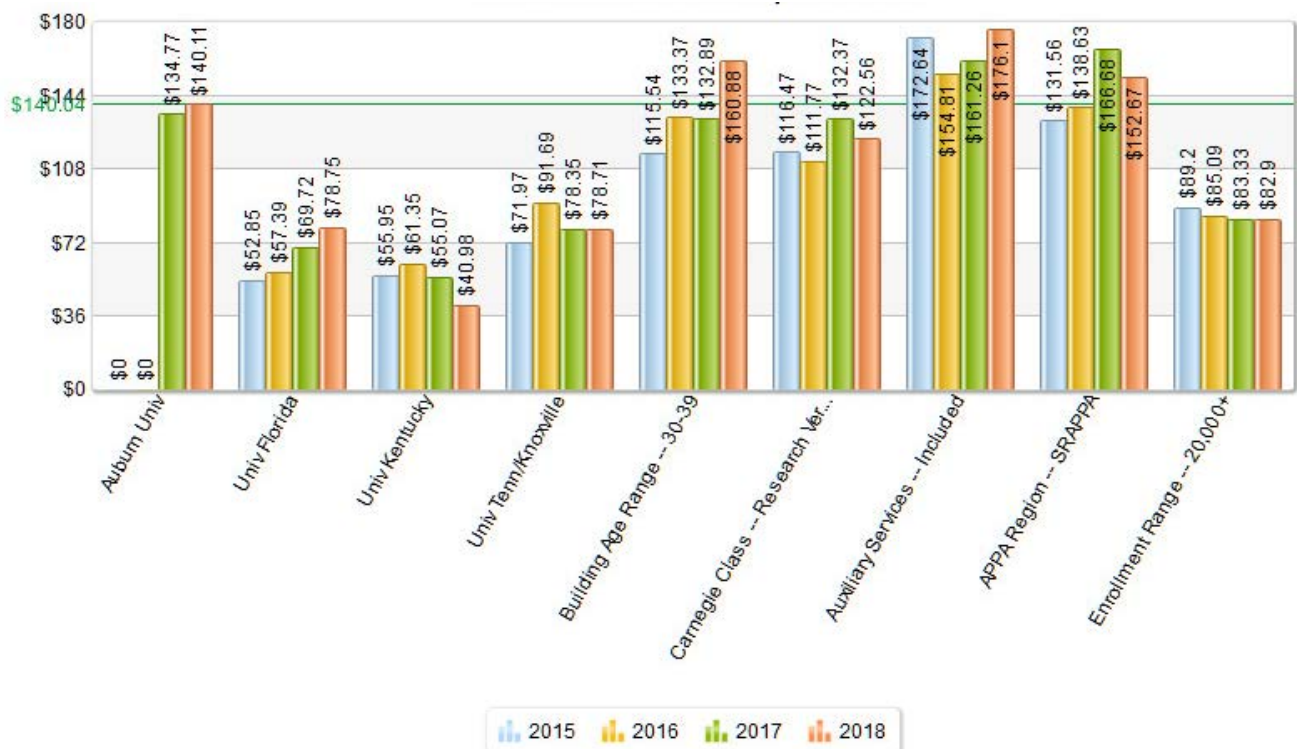
Number of Students:

APPENDIX B - APPA FPI

Administration Total Cost per GSF

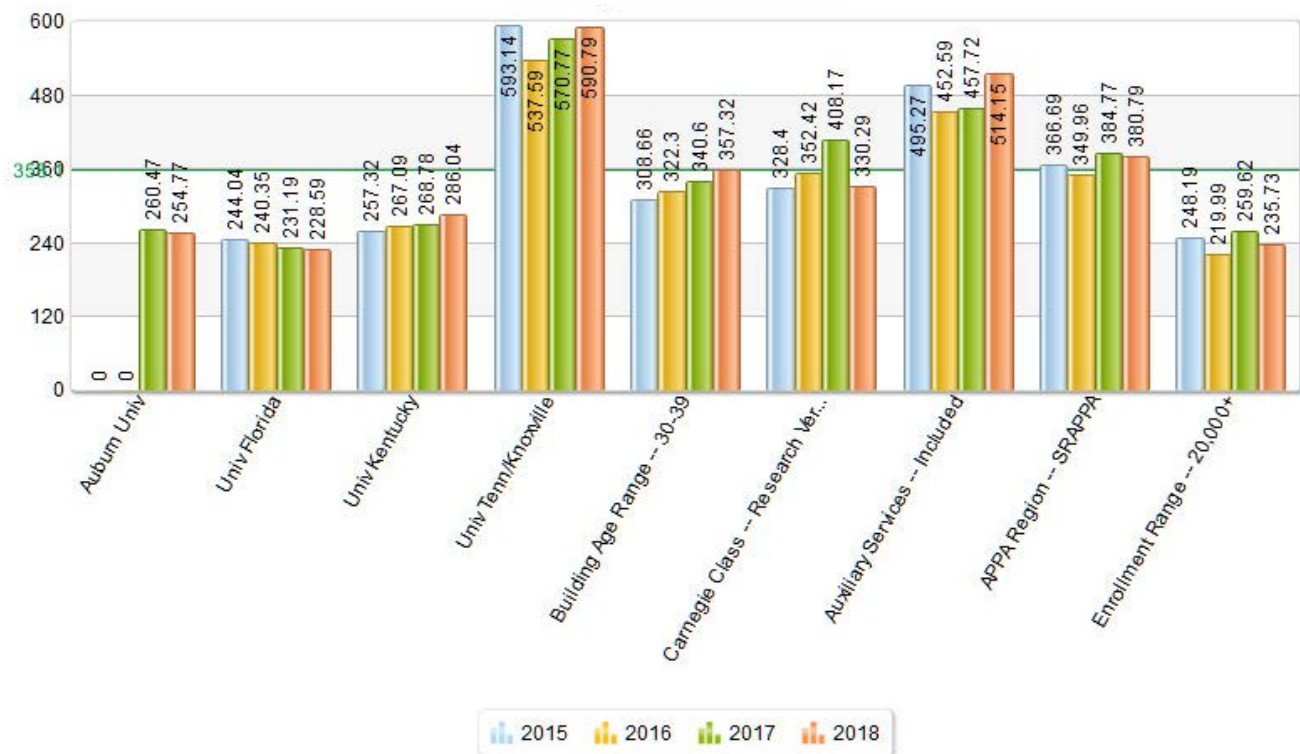


Administration Total Cost per Student

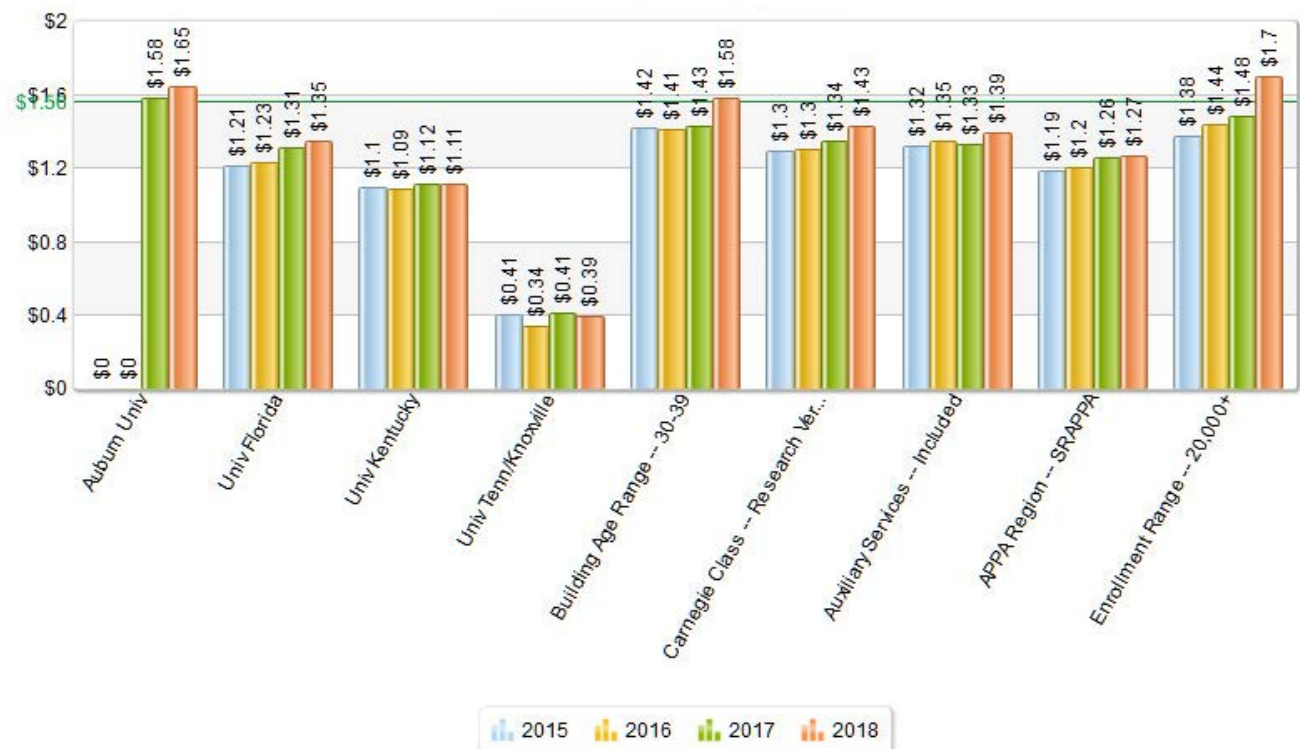


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Average GSF/Student FTE

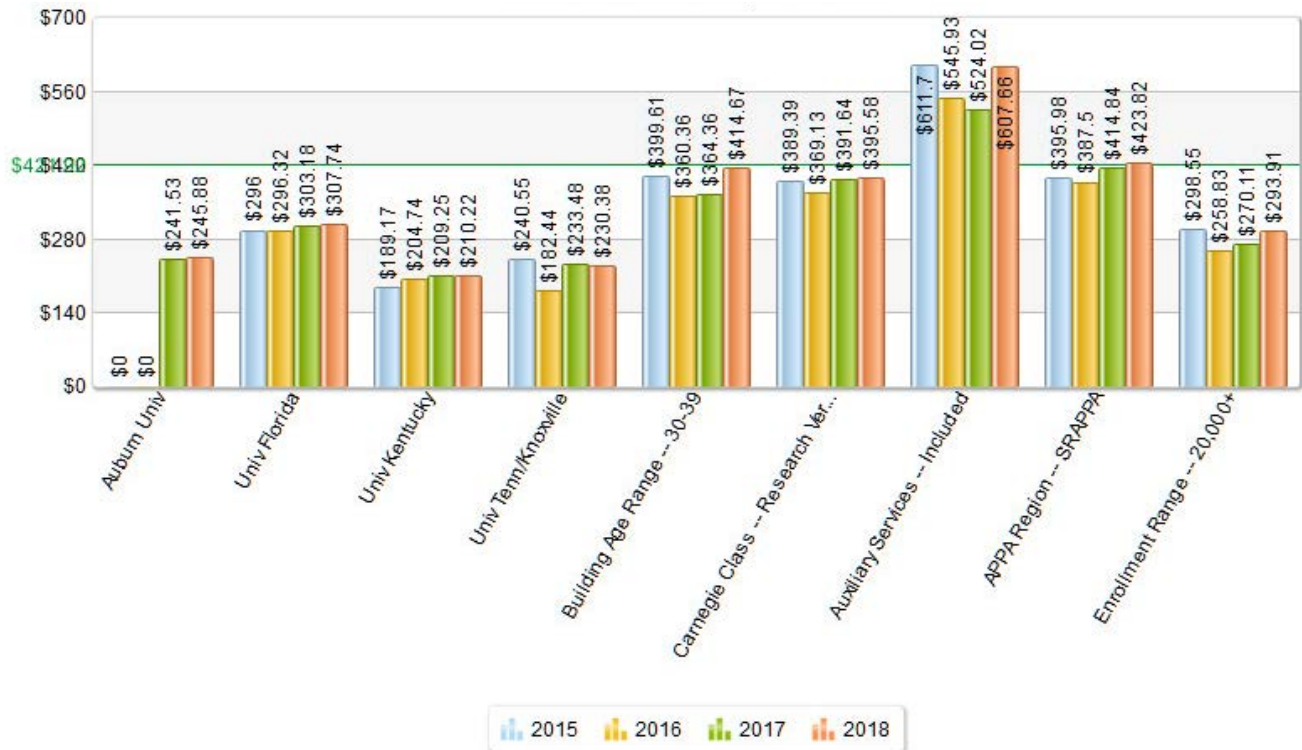


Custodial Total Cost per GSF



APPENDIX B - APPA FPI

Custodial Total Cost per Student



Energy Total Cost per GSF with Purchased Utilities

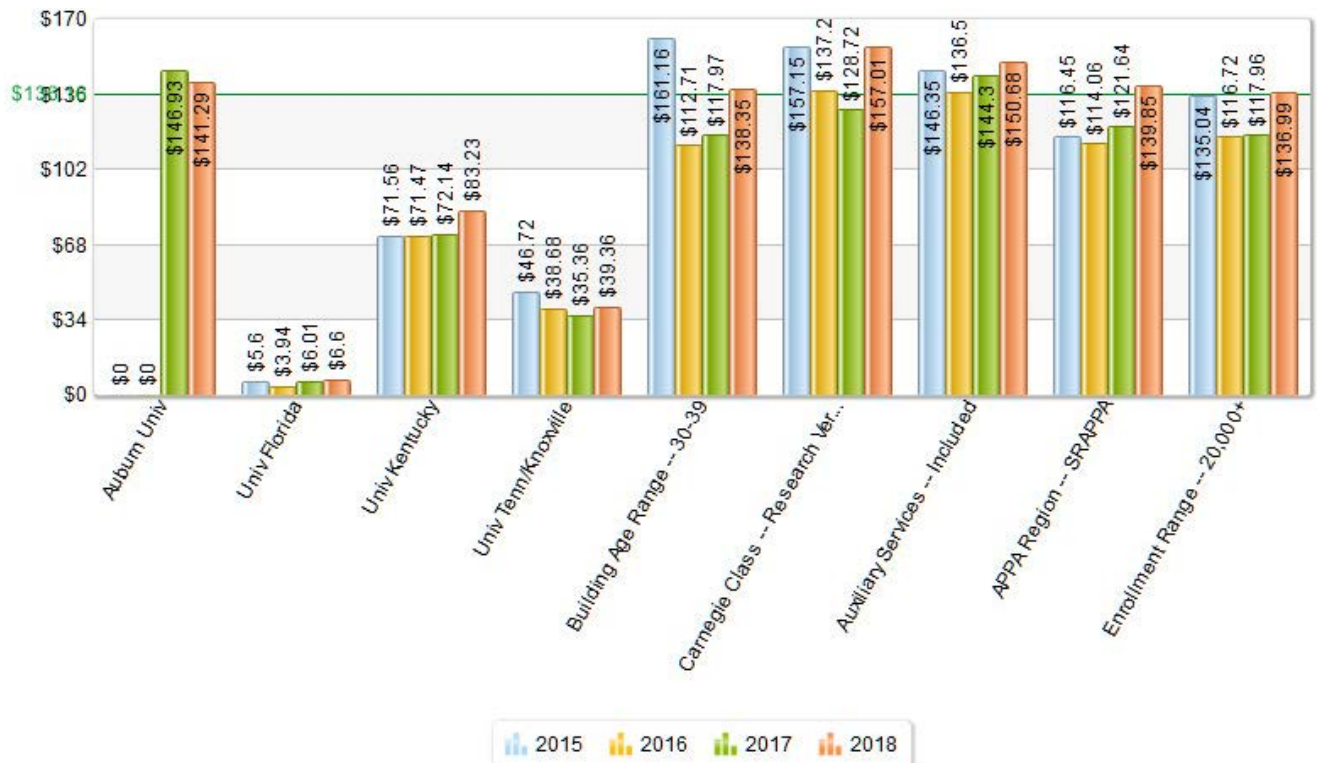


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Energy Total Cost per GSF without Purchased Utilities

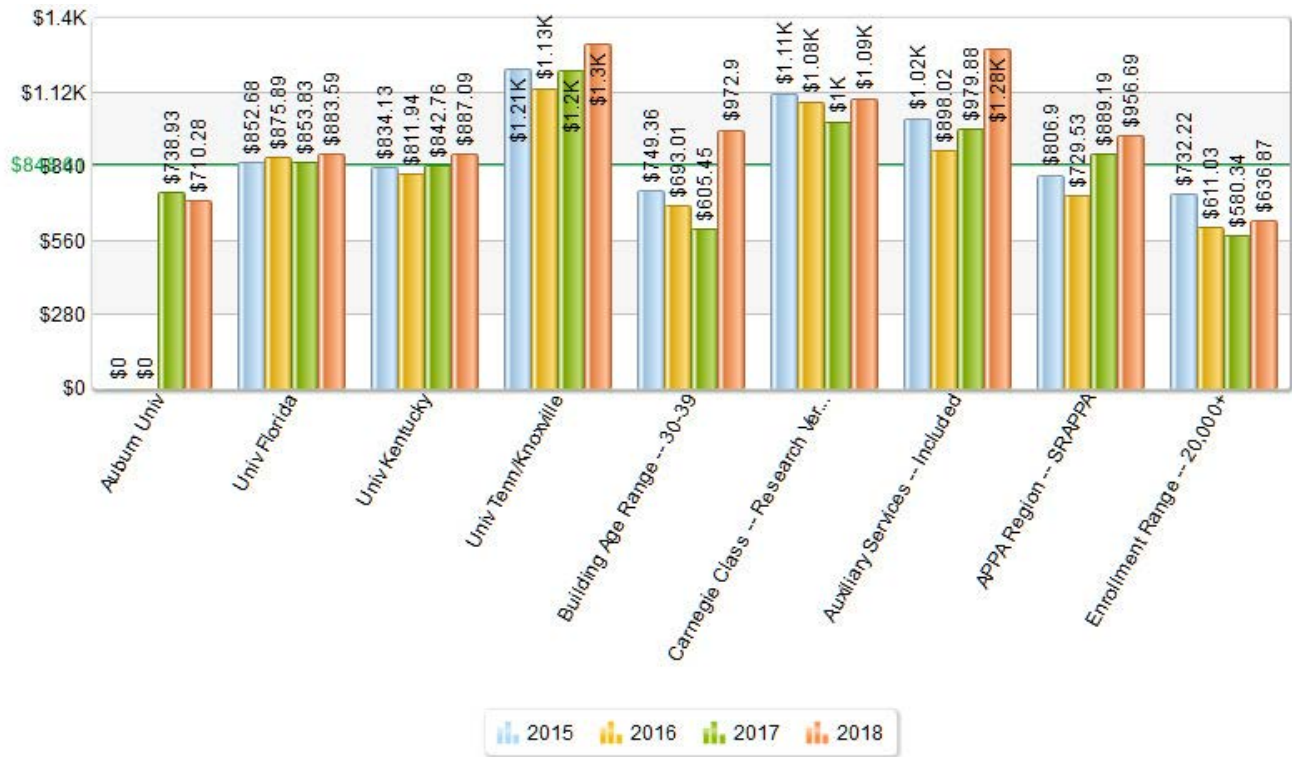


Energy Total Cost per Student FTE without Purchased Utilities

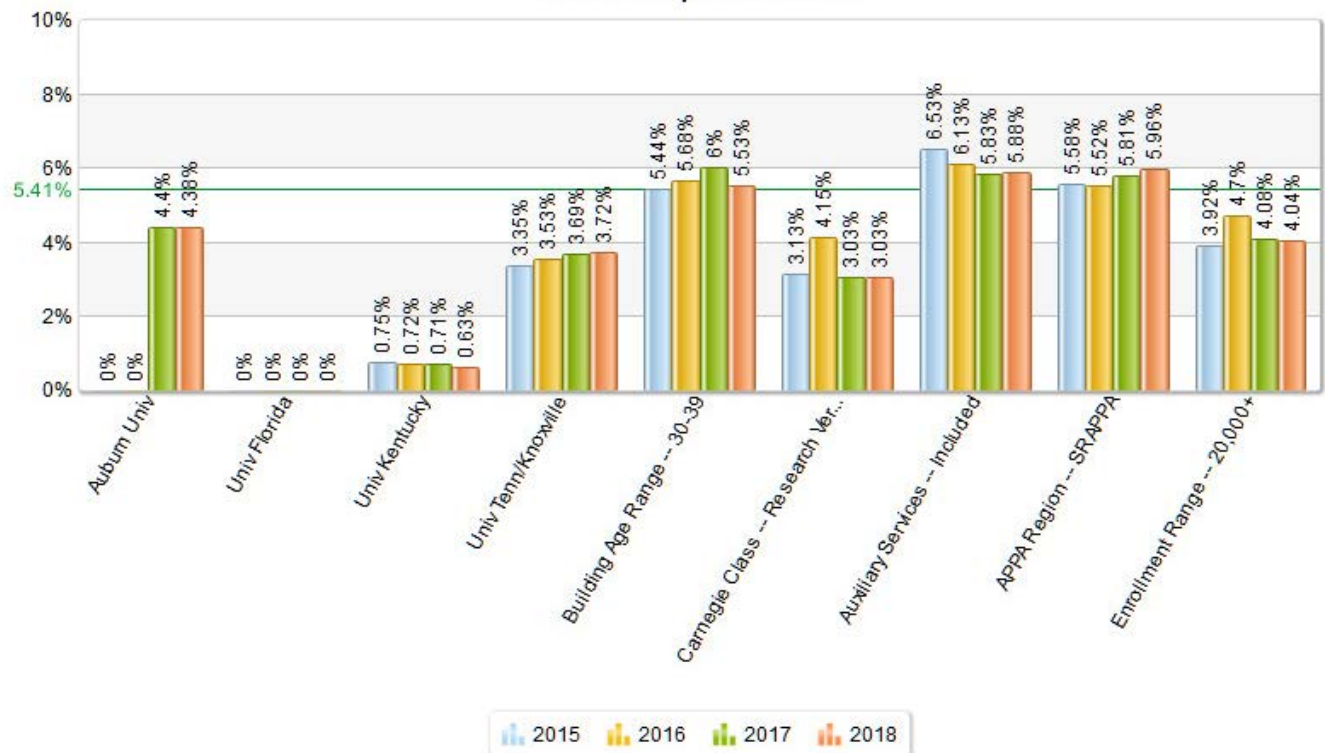


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Energy Total Cost per Student FTE with Purchased Utilities

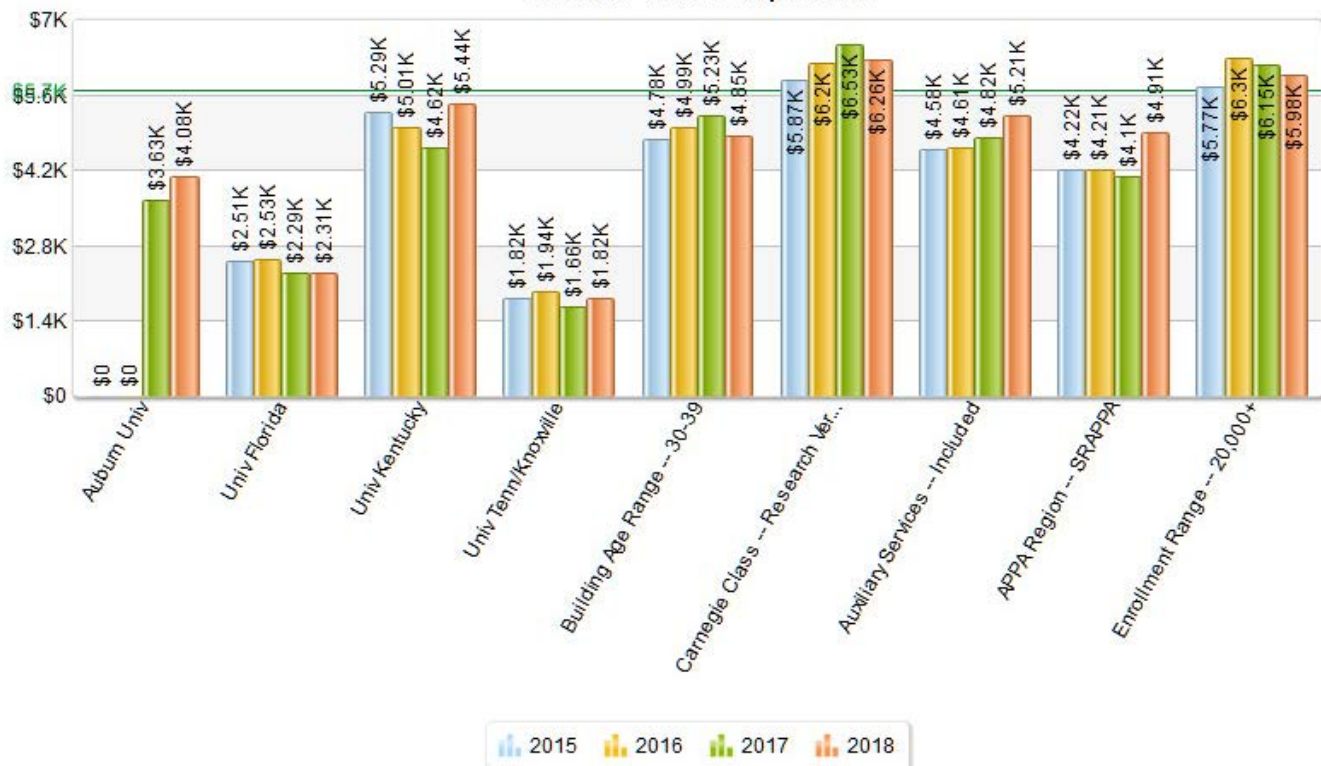


Facilities Expenditures/GIE

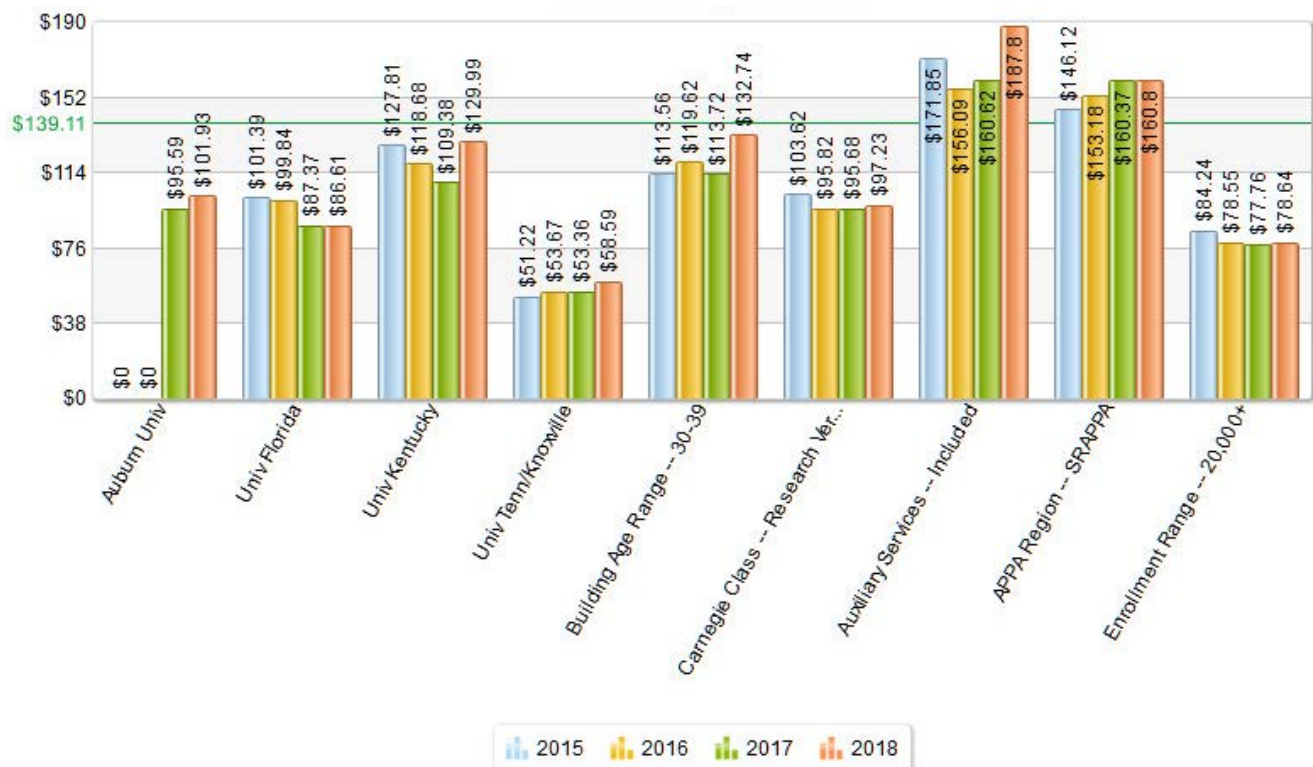


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Grounds Total Cost per Acre

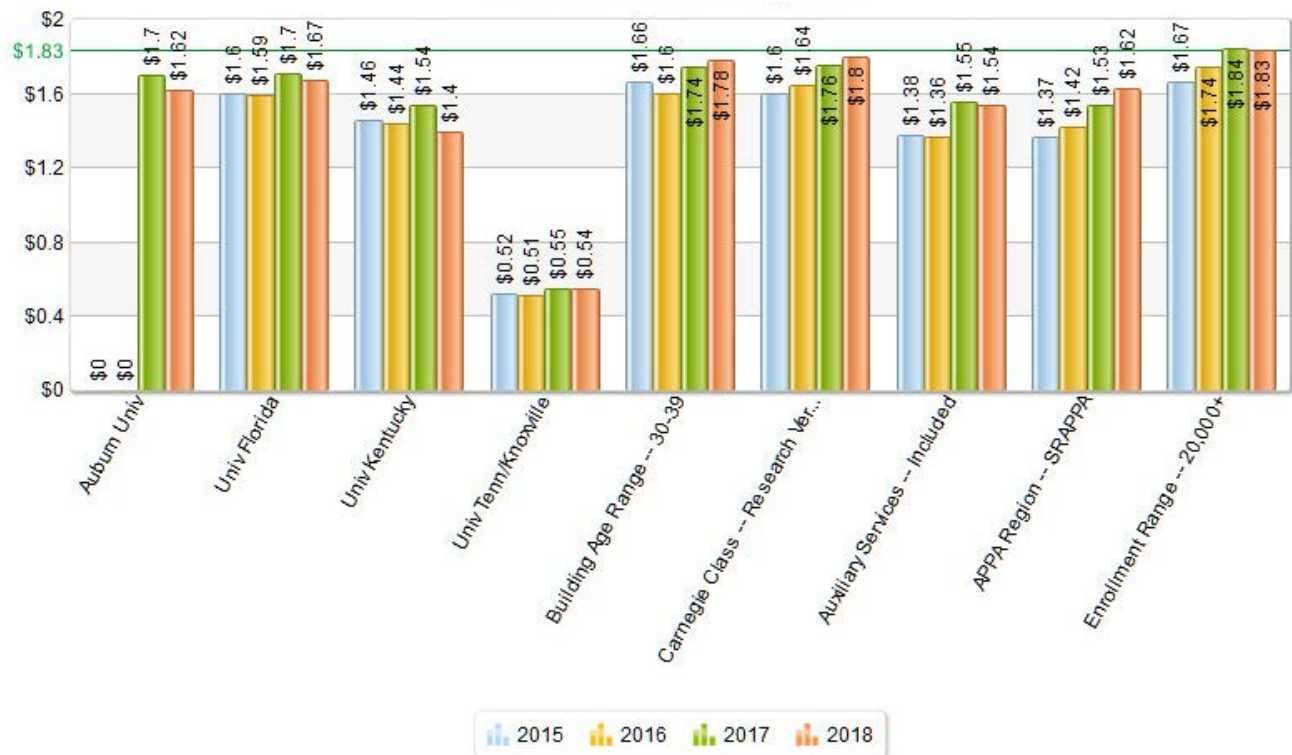


Grounds Cost per Student

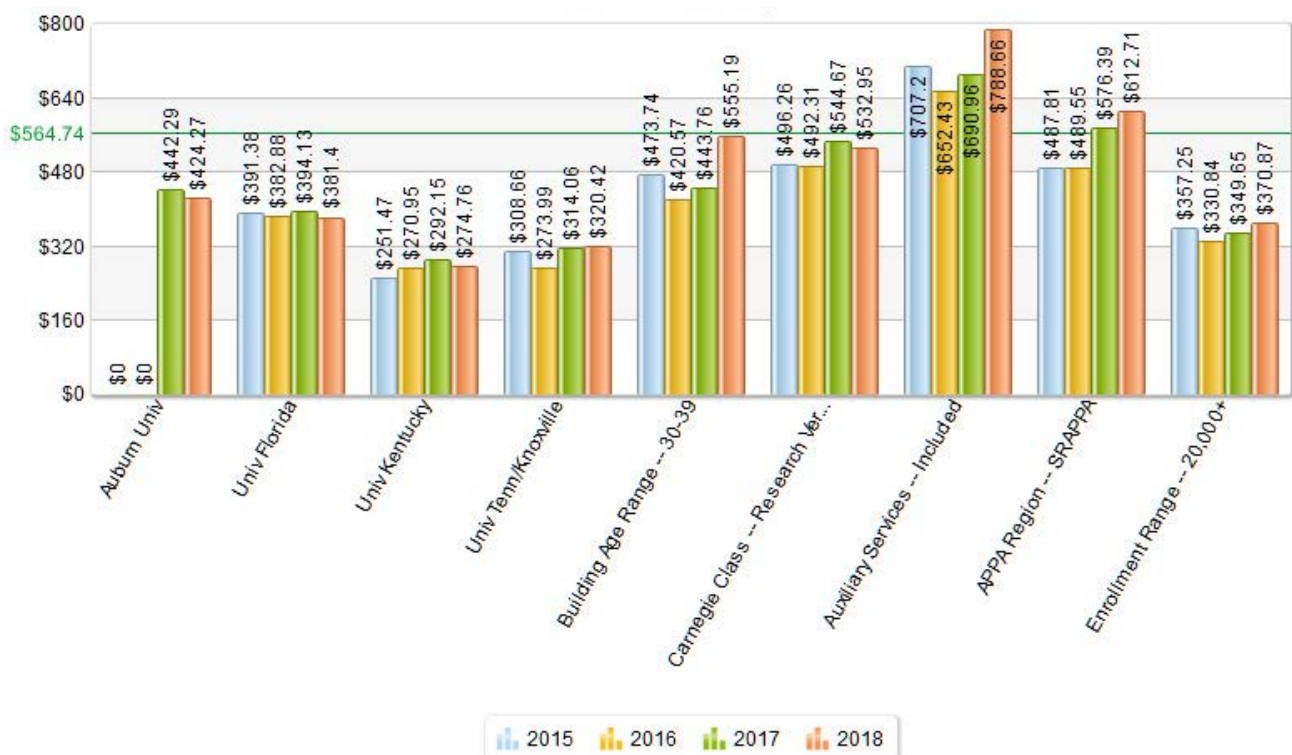


APPENDIX B - APPA FPI

Maintenance Total Cost per GSF

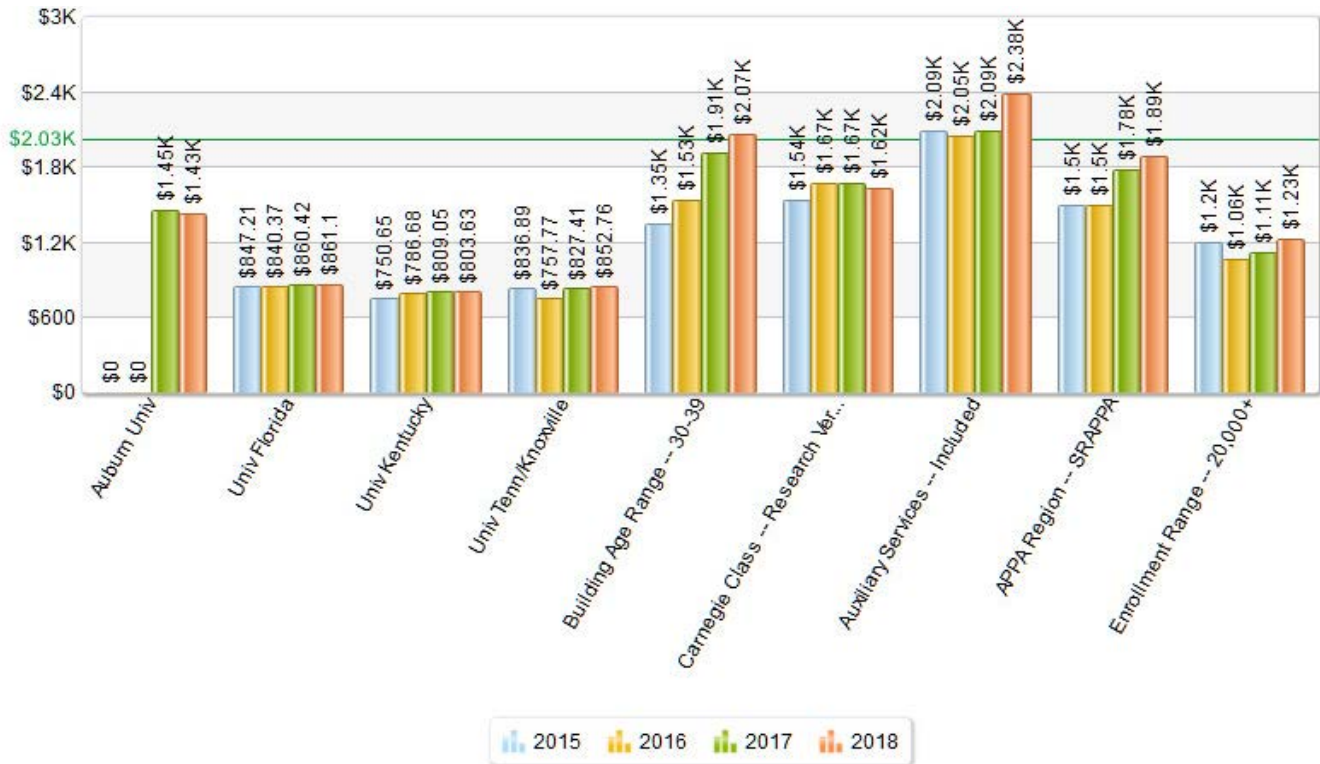


Maintenance Total Cost per Student

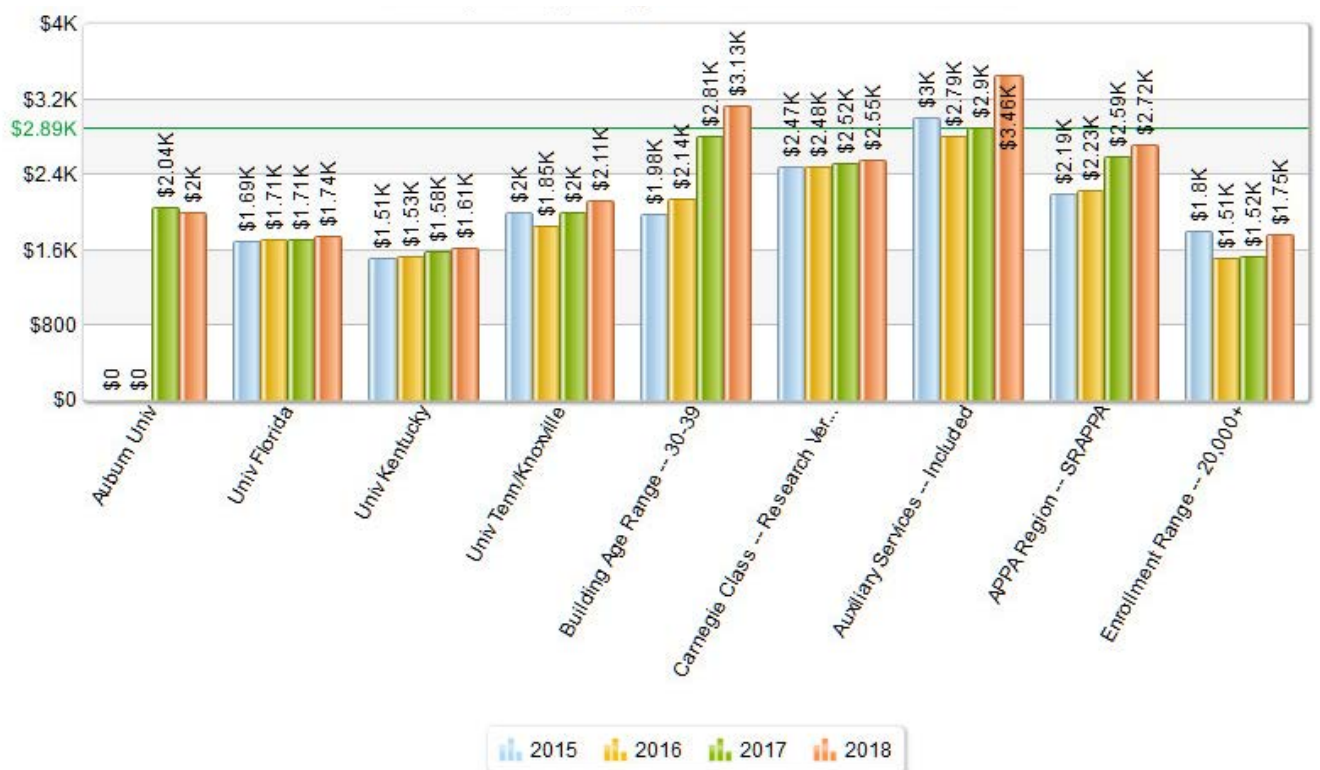


APPENDIX B - APPA FPI

Total Operating Cost per SFTE without Purchased Utilities

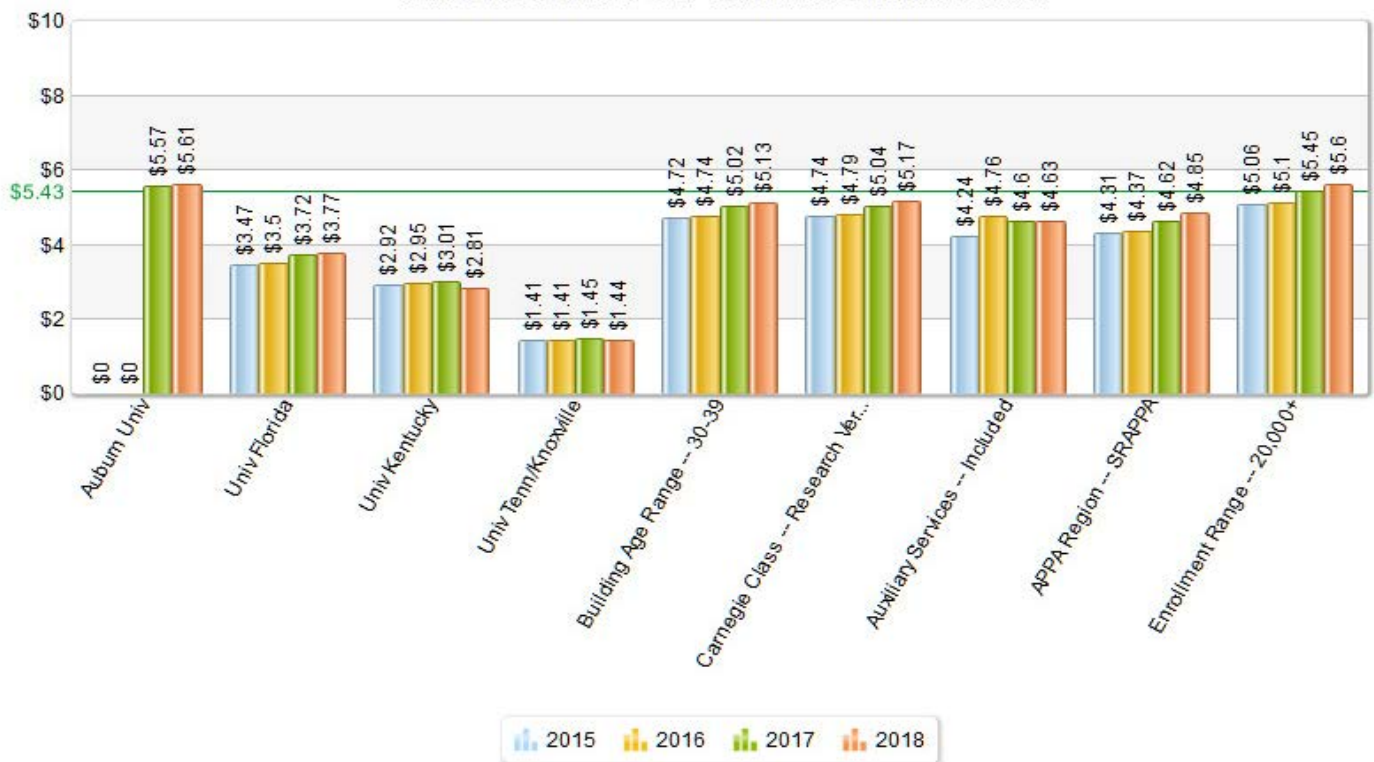


Total Operating Cost per SFTE with Purchased Utilities

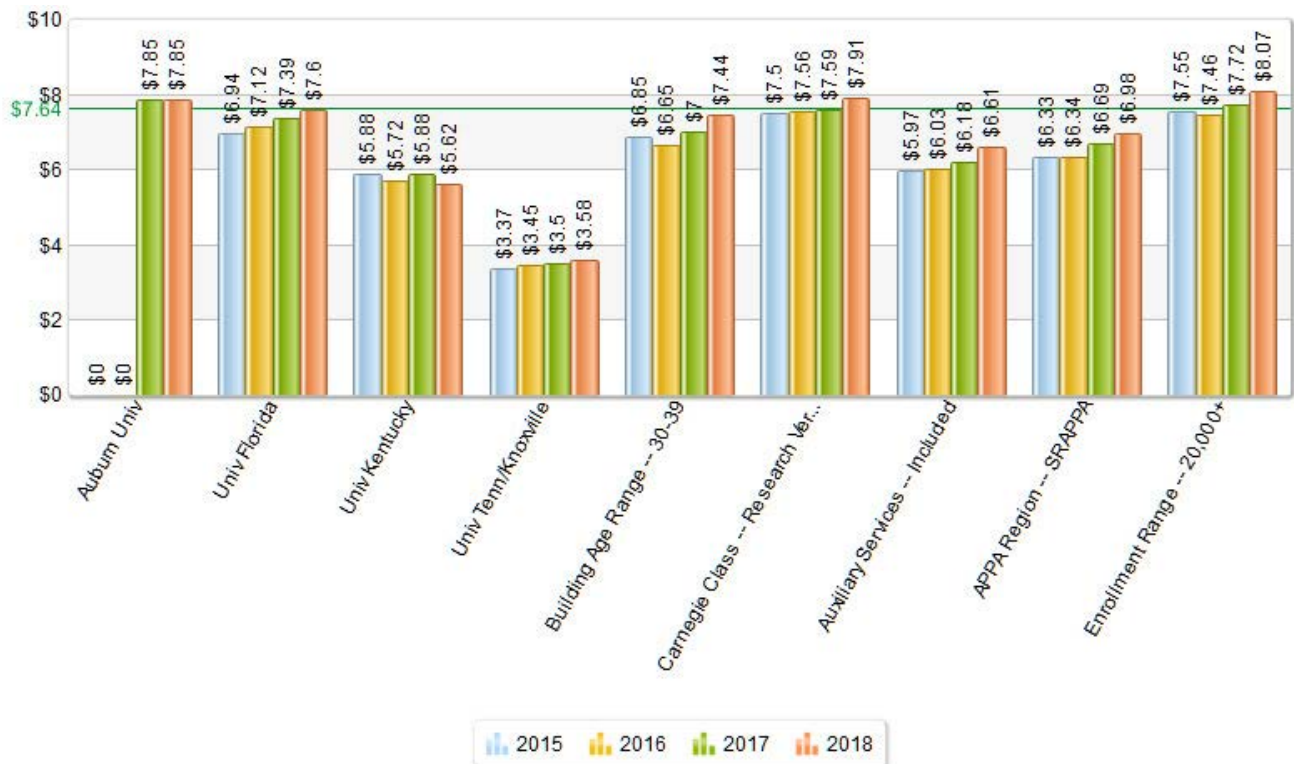


APPENDIX B - APPA FPI

Total O&M Cost Per GSF without Purchased Utilities



Total O&M Cost Per GSF with Purchased Utilities





THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

FACILITIES SERVICES

ANNUAL REPORT 2019

Facilities Services Department

2040 Sutherland Avenue
Knoxville, TN 37996

Phone: 865-974-2178

Fax: 865-974-7786

Email: adminfs@utk.edu

Website: fs.utk.edu