ANNUAL REPORT

2018

OFFICE OF
CAMPUS SAFETY

304 E. 24th St.
Suite 202
Austin, TX 78712

512.471.5767
OVERVIEW

ABOUT

The Campus Safety office fosters a secure environment for the University’s academic and research enterprise. Emergency planning and routine safety operations are at the forefront for the departments in this area of the Financial and Administrative Services (FAS) portfolio. The Campus Safety mission analyzes, prepares for, protects from, and responds to potential hazards and safety risks in order to promote the safety and continuity of the university environment and operations.

Our vision provides a resilient framework and environment that enriches the university academic and research mission by establishing an innovative and adaptable safety culture.

Our core values are rooted in the framework of Service, Stewardship, Integrity, Innovation, Diversity, and Teamwork.

Our overarching goals are designed to:

• Develop, gain approval, and implement safety and security programs that ensure the welfare of our campus community;
• Develop, implement, and sustain effective campus safety and security communications;
• Promote best management practices in campus safety operations;
• Foster high quality services, campus diversity, and leadership that supports Campus Safety operations; and
• Promote safety and security educational programs throughout the campus community.

Our team consists of Environmental Health & Safety, Fire Prevention Services, and the Office of Emergency Preparedness.
LEADERSHIP

FROM THE ASSISTANT VICE PRESIDENT

Welcome to the 2018 Annual Report for the Office Campus Safety (OCS). The departmental reports reflect a proactive and comprehensive approach to what our units achieve on an annual basis. The campus safety mission is an ever-evolving process designed to support student life, academic, research, athletics and operational endeavors on the University’s main and satellite campuses. In January 2018, an organizational shift occurred creating the current Office of Campus Safety; developed as an efficient response organization to our changing environment. These reports provide a snapshot of the contributions that our units made throughout the 2018 calendar year. This family of reports represent an ongoing strategy targeting identified opportunities to enhance our campus environment and to provide tools to empower the community. A strategy designed with you in mind. Your safety is our top priority.

Jimmy

JAMES H. JOHNSON
ASSISTANT VICE PRESIDENT,
OFFICE OF CAMPUS SAFETY
EHS receives many Live Animal Requests every year from student organizations wishing to include live animals as part of their events. This petting zoo featured a baby llama, baby goats, and a wallaby.

Cover photo: Concrete balusters on the stairwell between Anna Hiss Gym and Pharmacy.
Photo credit: Joseph Bussey, used with permission.
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OVERVIEW

ABOUT US

Environmental Health and Safety, EHS, is a campus department with a mission to promote healthy and safe operations on campus, to protect students, faculty, staff and visitors, and to ensure the protection of the environment. EHS works closely with campus departments such as Facilities Services, UT Police Department, Fire Prevention Services, Emergency Preparedness, Project Management and Construction Services, Utilities and Energy Management, and Capital Projects and Construction to achieve our mission.

EHS has both primary program areas and support services, and each has several areas of emphasis. Our program areas include Campus and Occupational Safety, Environmental Programs, Biological and Laboratory Safety, and Radiation and Laser Safety. Our Support Services include Animal Make Safe, On-Call Response, Food and Drinking Water Safety, Indoor Air Quality, Unmanned Aerial Vehicles, Training and Outreach, and Project Planning and Design Review.

Much of our focus is mandated from city, state and federal regulations that are designed to protect human health and the environment. By focusing our attention on complying with these regulations, and applying best practices, we ensure a safe learning, working and visiting environment for everyone at the University of Texas at Austin.

Environmental Health and Safety works to protect the health and safety of the faculty, staff, students, and visitors at UT in compliance with local, state, and federal regulations.

EHS staff attending autoclave system technical training.
FROM THE DIRECTOR

Welcome to the 2018 Annual Report for Environmental Health and Safety (EHS). Please understand that this is a condensed snapshot of the various programs within EHS. We have not attempted to describe everything we do because it would likely be rather long and boring. Instead, we provided facts and information that will provoke some thought about campus safety and hopefully, reflect the contributions of the entire staff. EHS has many programs to help provide a safe and environmentally responsible campus, but we cannot do it alone. We hope you find this information to be both interesting and useful.

JOHN SALSMAN
DIRECTOR, EHS

SAFETY IS THE RESPONSIBILITY OF EVERY MEMBER OF THE CAMPUS COMMUNITY: STUDENTS, FACULTY, STAFF, AND VISITORS.

Together we must maintain a healthy and safe campus and foster a culture of safety throughout the university.
STATEMENTS

VISION, MISSION & VALUES

VISION

It is our vision to become a recognized national leader and innovator in campus environmental health and safety.

MISSION

The mission of Environmental Health and Safety is to promote healthy and safe operations on campus, to protect students, faculty, staff, and visitors and to ensure the protection of the environment.

VALUES

- **Service**: We are customer service-oriented and offer responsive, reliable and seamless support.
- **Stewardship**: We are exceptional caretakers of the resources entrusted to FAS.
- **Integrity**: We perform our work in a transparent, honest, and accountable manner. We also commit to meeting all compliance and reporting standards.
- **Innovation**: We are creative and innovative in our service to the campus community.
- **Diversity**: We believe the best ideas are born from sharing viewpoints, opinions, and perceptions from colleagues with varied backgrounds and experiences.
- **Teamwork**: We work collaboratively across our organizations on common objectives and develop efficient and cost-effective systems and processes for campus.
Environmental Health and Safety is under the Campus Safety office within the Financial and Administrative Services portfolio. Units under this portfolio support and enhance the University’s core mission to be more effective, efficient, and achieve operational excellence.

FINANCIAL AND ADMINISTRATIVE SERVICES
DARRELL BAZZELL, SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

CAMPUS SAFETY
JIMMY JOHNSON, ASSISTANT VICE PRESIDENT

ENVIRONMENTAL HEALTH AND SAFETY
JOHN SALSMAN, DIRECTOR
NENA ANDERSON, ASSOCIATE DIRECTOR
ANDREA MCNAIR, ASSOCIATE DIRECTOR
DEWAYNE HOLCOMB, ASSOCIATE DIRECTOR

Total 34 employees
MANAGEMENT

THE TEAM

NENA ANDERSON
ASSOCIATE DIRECTOR
ENVIRONMENTAL PROGRAMS
- Environmental Programs
- Food and Drinking Water Safety
- On-Call Response

ANDREA MCNAIR
ASSOCIATE DIRECTOR
CAMPUS, OCCUPATIONAL, AND LABORATORY SAFETY
- Biological and Laboratory Safety
- Campus and Occupational Safety

DEWAYNE HOLCOMB
ASSOCIATE DIRECTOR, RSO, LSO
RADIATION AND LASER SAFETY
- Radiation Safety
- Laser Safety
WHAT WE DO

OUR PROGRAMS AND SERVICES

PROGRAM AREAS

BIOLOGICAL AND LABORATORY SAFETY
- Chemical Safety
- Biological Safety
- Laboratory Evaluations
- Hazardous Materials Shipping

CAMPUS AND OCCUPATIONAL SAFETY
- Fall Protection
- Asbestos
- Hearing Conservation
- Aerial Lift and Crane Safety
- Machine Shop Safety
- Respiratory Protection

ENVIRONMENTAL PROGRAMS
- Regulatory Compliance and Support
- Hazardous Waste Management
- Water Quality (Stormwater and Wastewater)
- Pollution and Spill Prevention

RADIATION AND LASER SAFETY
- Radioactive Materials Permitting and Licensing
- X-ray and Laser Registration
- Laboratory Evaluations

SERVICES

ANIMAL MAKE SAFE
- Wildlife Incidents
- Animals on Campus

FOOD AND DRINKING WATER SAFETY
- Food Safety Inspections
- Food Distribution Approval
- Drinking Water Testing

ON-CALL RESPONSE
- On-Call Program
- 24/7 Emergency Response

PROJECT PLANNING AND DESIGN REVIEW
- New and Existing Construction Review
- Design and Construction Standards

UNMANNED AERIAL VEHICLES
- UAV Request Approval

TRAINING AND OUTREACH
- Training Management
- Campus Outreach
HOW WE WORK

BUILDING RELATIONSHIPS

CAMPUS PARTNERS
EHS works closely with other campus departments such as Fire Prevention Services, Emergency Preparedness, Project Management and Construction Services, Facilities Services, Utilities and Energy Management, Campus Planning and Construction, and the University’s Colleges and Schools.

COMMUNITY PARTNERS
EHS serves as a liaison with regulatory and compliance agencies such as the Environmental Protection Agency, the Drug Enforcement Administration, the U.S. Department of Transportation, the City of Austin, the Texas Commission on Environmental Quality, and the Texas Department of State Health Services. EHS is charged with certain health and safety inspections and compliance for all applicable federal, state, and local regulations and other EHS requirements intended to protect safety, health, and the environment.

CUSTOMERS
EHS serves the campus community. Our customers include faculty, staff, students, campus visitors, and volunteers.

IN 2018 THE FACILITIES SERVICE CENTER ROUTED 129 CAMPUS TROUBLE CALLS TO EHS.
UT AUSTIN

EHS provides support in ensuring healthy and safe operations on campus, protecting students, faculty, staff, and visitors, and ensuring protection of the environment.

TRAINING
* Update and maintain online safety courses
* Instructor-led training as requested

TECHNICAL KNOWLEDGE
* Construction plan review
* Serving on regulatory committees
* Subject matter experts on health and safety issues

RESEARCH
* Technical review for renovations
* Space evaluations
* Biosafety cabinet evaluations
* Lab evaluations
* Controlled substances
* Committee reviews
* Consulting on safe lab practices
* New PI orientation
* Equipment cleanup/monitoring
* Lab closeouts

CAMPUS EVENTS
* Technical knowledge and emergency response support
* Safety reviews
* Outreach to campus community

STUDENTS
* Review and consultation for student events
* Provide student-oriented training

ENVIRONMENTAL
* Collaboration relating to Waller Creek and urban ecosystems
* Chemical and Biological spill cleanup

SAFE WORK ENVIRONMENT
* Odor/IAQ response
* Hazardous materials shipments
* Risk assessments
* Accident investigations
* Emergency incident response
* Exposure monitoring
* Fit test suitability

SAFE CAMPUS
* 24/7 incident response
* Food establishment inspections
* Drinking water testing
* Identification of slip/trip/fall hazards
* Spill cleanup
* Wildlife incident mitigation

SAFETY WORKS WHEN PEOPLE WORK TOGETHER
YEAR IN REVIEW

HIGHLIGHTS

ENVIRONMENTAL PROGRAMS

2
City of Austin Excellence in Pretreatment Awards received

TRAINING AND OUTREACH

5
Training modules developed (3) or updated (2), and published to UTLearn

ENVIRONMENTAL PROGRAMS

136
Indoor Air Quality Responses

BIOLOGICAL AND LABORATORY SAFETY

463
Research protocols reviewed (364 Institutional Biosafety Committee (IBC), 99 Institutional Animal Care and Use Committee (IACUC))

HAZARDOUS WASTE

7,926
Individual chemical waste items submitted for pickup

CAMPUS AND OCCUPATIONAL SAFETY

RE-ORGANIZATION

1,797,349
Increase in square footage from 2017-2018 that EHS supports

FOOD, WATER, SANITATION

27
Food truck permits issued

BIOLOGICAL AND LABORATORY SAFETY

ORGANIZATION

UNIVERSITY SUPPORT

Food truck permits issued

Biological and Laboratory Safety and Campus and Occupational Safety joined to become COALS

Increase in square footage from 2017-2018 that EHS supports
EMERGENCY RESPONSE

CITY-WIDE BOIL WATER NOTICE

In October of 2018, Austin Water issued a city-wide boil water notice for all of their customers, including the University of Texas at Austin. This was the first time a city-wide boil water notice had been issued in the history of the city’s water utility.

Historic flooding into the city’s water supply lake created very high levels of silt which required extended filtration and limited the availability of safe, treated water for consumption. The boil water notice remained in place for seven days, creating an unprecedented water crisis on campus.

Staff from Environmental Health and Safety worked with Facilities Services and Utilities and Energy Management to ensure the safety of the drinking water. EHS also worked with Building Managers to cover campus water fountains and with on-campus food establishments for food and water issues caused by the notice.
PROGRAM AREAS

BIOLOGICAL AND LABORATORY SAFETY

Lab Safety conducts safety evaluations of research and teaching laboratories at UT Austin and satellite facilities. This program also provides training and guidance on a number of laboratory topics including bloodborne pathogens, hazardous materials shipping, chemical safety, biological safety, select agents and toxins, and controlled substances. Lab Safety also investigates laboratory incidents including fires, spills, laboratory injuries, and any chemical or biological exposure.

Accomplishments

- Assisted the CDC in an inspection for the import of non-human primate materials.
- Reviewed 99 IACUC and 364 IBC protocols.
- Provided design support to initial Energy Engineering Building (EEB) planning process.
- Supported decommissioning and close out of laboratories in W.R. Woolrich Labs (WRW) Building.
- Initiated the campus-owned liquid nitrogen tank testing program.
- Onboarded 25 new PIs on laboratory safety (up from 14 last year) which consumes about 15 hours of staff time for each PI.

Future

- Develop a Handbook of Operating Procedures (HOP) on hazardous materials shipping.
- Create a formal written laboratory close out program.
- Transition from an older version of the EHS Assistant laboratory safety database to a more versatile and mobile application.
Although lab evaluation workload has been steadily increasing, the number of inspectors was reduced from 5.75 to 5.17 FTEs in 2018. To manage increased workload, a risk assessment of lower hazard (LHL1) labs allowed us to change evaluation frequency from annual to once every two years. Unfortunately, with the increase in new labs, there was a negligible change in the number of lab evaluations. Estimated projections of new labs include EER (2019), WEL’78 wing (2020), and EEB (2021).

In 2017, new construction (EER and HDB) and taking over MSI/FAML fume hood testing caused a large spike in the number of fume hoods tested annually. Then in 2018, 133 fume hoods were removed for the WEL’78 wing renovation. Additional new fume hoods will be added to the testing inventory when WEL’78 wing (2020) and EEB (2021) are completed. Currently, one FTE completes all fume hood evaluations for the entire university.

Of the 1256 fume hoods evaluated in 2018, 9% failed. As a result of these evaluations, EHS entered 193 work orders to restore either fume hood functionality or proper room pressurization.

Lab hazard levels (LHLs) were implemented in 2018 to account for a reduction of inspectors and increase in the number of labs. LHL1 are the lowest hazard level, evaluated once every two years. LHL2 labs are evaluated annually and LHL3 labs (also referred to as high hazard) are evaluated twice each year. As hazard levels increase, there was an increase in the number of evaluation items noted in 2018.
PROGRAM AREAS

______ CAMPUS AND OCCUPATIONAL SAFETY

Campus and Occupational Safety focuses on preventing incidents to ensure the safety of students, faculty, staff and visitors. Initiatives include the Occupational Safety Committee, Respirator Protection, Fall Protection, Machine Guarding, Construction Design Review, Aerial Lifts and Cranes, Indoor Air Quality, Confined Space, Hearing Conservation and Industrial Hygiene.

Accomplishments
• Redesigned and deployed hot work permit program to achieve campus consensus.
• Developed and implemented Campus Mobile Crane program and procedures.
• Contributed to 5 separate design and construction standard divisions. Planned and developed the first gas monitoring design standard.
• Reactivated the campus ventilation committee due to stop work order at NHB.
• Developed Asbestos Protected Building Program.
• Four, week-long site visits to McDonald Observatory to provide assessments for occupational safety and industrial hygiene support. Provided respirator fit testing and personal protective equipment training/demonstration.
• Supported CPC demolition of WRW with identification of hazardous materials.
• Coordinated confined space drills with Austin Fire Department.
• Successfully convinced PMCS and CPC the cost-effectiveness of parapets and guardrails rather than active fall protection with anchors.

Future
• Finalize the gas monitoring design standard.
• Establish online hot work permit approval system (with a mobile application).
• Establish confined space inventory database and finalize campus confined space program.
• Redevelop and re-organize occupational safety program information for departmental EHS webpage redesign.
• Plan review for new UT Football South Endzone project.
• Contribute to the successful design and construction of EEB. Identify project costs for fall protection to save funds for EEB.
Currently, a significant number of employees are seeking advanced medical care from an external provider and underutilizing the campus occupational health clinic (HealthPoint – OHP). Injury reports are limited to injuries reported to OHP and WCI. Lack of a shared and easily accessible incident database prevents injury trend analysis and communicating lessons learned since departmental safety coordinators conduct independent investigations.

The initial architectural design process typically neglects fall protection to maintain aesthetics, for example at EEB. Once added to the design, campus is unaware of the costs associated with active fall protection systems (anchors tiebacks). Passive fall protection (parapets and guardrails) are significantly more cost-effective than active fall protection.

The Asbestos Service Center data suggests that projects have a ~25% chance of identifying asbestos in disturbed materials.
Environmental Programs is tasked with ensuring compliance with City, State, and Federal permits and regulations related to water quality (stormwater and sanitary sewer), water recycling, flood control, and erosion control. This program is also responsible for the proper disposal of chemical and biological waste for the University.

**Accomplishments**

- Received two City of Austin Excellence in Pretreatment awards- Main Campus and PRC.
- Main campus upgraded to Major Industrial User (wastewater permit).
- Developed Pretreatment Device Training modules (OH 108, OH 109) in UTLearn.
- Increased support for Dell Medical School.
- Addressed systemic hood failure in NHB; participated in problem identification and tested all hoods.

**Future**

- Implementation of Environmental Management System.
- Development of Environmental Programs training module.
- Development of an MOU with Utilities for water and wastewater emergencies.
Environmental Programs provides a range of services, from responding to environmental incidents to construction site plan review and inspections, to full-fledged compliance support. We manage the University’s state-issued stormwater permit and City-issued wastewater permits. With a focus on maintaining compliance, the Environmental Programs team offers support for multiple sites, in addition to the UT main campus, by conducting sampling, reviewing stormwater pollution prevention plans (SWPPP), providing guidance and inspections on spill prevention, control, and countermeasures (SPCC) and providing compliance support for water, wastewater and petroleum storage tank regulations.

Energetic waste streams such as non-halogenated solvents are blended at the Port Arthur facility and shipped to one of our approved Cement Kiln Partners. The Waste Derived Fuels that are generated provide a direct fuel replacement of fossil fuels (coal, natural gas or fuel oil) that are required to maintain kiln temperatures.

Through Veolia’s fuel blending process UT Austin’s hazardous waste streams provided approximately 575,385,000 BTUs of energy. This is enough energy to power an average American house using 911 kW/hr a month, for 185 months. On the high-end UT Austin’s hazardous waste streams provide enough energy to power the same house for 444 months.

*Waste streams that are diverted from traditional landfill disposal. In 2018 a total of 40% was diverted.

In 2018 UT Austin shipped out approximately 5 tractor trailers worth of biological waste or 18,071 cu ft.
PROGRAM AREAS

RADIATION AND LASER SAFETY

Radiation and Laser Safety provides safety and compliance support and training for the use of radioactive materials, x-ray machines, and lasers. Training provided includes Basic Radiological Health, Laser Safety, and refresher training. EHS holds the registrations and licenses for University lasers and radioactive materials, and issues permits to users.

Accomplishments

- Dell Medical School was approved for their own radioactive materials (RAM) license for diagnostic and research use.
- Radiation Safety added a Radiation Safety Officer to oversee the use of RAM and x-ray units at Dell Medical School.
- Licensing of PET/CT scanner for UT Health Austin.
- Full certification of UT Health Austin’s state-of-the-art 3D mammography facility.
- Laser Safety staff member was recognized by the Board of Laser Safety as a Certified Laser Safety Officer.
- Completed the safety evaluation for the new veterinary laser system at MSI, and for two UV room sterilization systems.
- Devised a creative solution to overcome Department of Energy laser safety course technical issues to incorporate the course into UTLearn.

Future

- Development of a new X-ray Safety training module in UTLearn.
- Development of a Liquid Scintillation Counter calibration program.
- Complete the ten-year technical renewal for UT Austin’s Texas Department of State Health Services registration for lasers.
- Support and upgrade safety analysis for revitalized Texas Petawatt laser projects.
- Continue support for the installation of the NASA laser ranging station at McDonald Observatory.
- Coordinate logistics for the DOE Laser Safety Workshop.
The number of Authorized RAM Users (AUs) has remained relatively constant over the last nine years. In 2018, there were two new Authorized Users (AUs) of radioactive materials.

This chart of the number of Authorized Laser Users (Principal Investigators) arriving and leaving UT annually demonstrates the continuous increase in laser use over the last seven years. These figures show an average annual net gain, varying widely year to year, of about ten new ALUs per year.
Lab Safety Specialist, Anthony Garza, performs a lab evaluation.
SUPPORT SERVICES

SUMMARY

ANIMAL MAKE SAFE

The Animal Make Safe (AMS) program works to minimize negative human/wildlife interactions by safely and humanely responding to live animal incidents on campus. Techniques include capture and removal, live trapping, and exclusion. AMS also reviews and approves requests to include animals as part of special events.

FOOD, WATER, AND SANITATION

EHS staff are responsible for conducting food safety inspections of the permitted food vendors and kitchen facilities on campus, approving the distribution of food on campus by staff, students, or vendors, and ensuring quality drinking water.

ON-CALL RESPONSE

Environmental Programs oversees the coordination and training for the EHS on-call program to ensure incident response 24 hours a day/7 days a week. Incidents that EHS responds to include hazardous material spills, fires, odors, animals, and lab incidents.

PROJECT PLANNING AND DESIGN REVIEW

The primary function of Project Planning and Design Review is to ensure that facilities are designed and constructed to meet established safety and environmental regulations and best practices. EHS works closely with PMCS to coordinate projects needing EHS input.

TRAINING AND OUTREACH

EHS offers a variety of health and safety training opportunities to the campus community including classes in laboratory safety, laser and radiation safety, occupational safety and environmental concerns. EHS produces informational brochures, posters, signs, and other outreach materials to keep UT Austin students, faculty, staff, and visitors informed and safe. EHS also participates in campus events to raise awareness about our department and general safety.

UNMANNED AERIAL VEHICLES (UAVS)

EHS is responsible for the coordination of UAV flight requests in accordance with HOP 8-1070 Unmanned Aerial Vehicles. UT Austin requires that all UAV flight requests be submitted in advance for review and potential approval by the UAV Review Group.
**SUPPORT SERVICES**

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**ANIMAL MAKE SAFE**

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**Accomplishments**

- Answered 135 animal incident calls routed through the Facilities Service Center, UTPD, FCMS, and EHS front desk or direct calls to AMS during business hours.
- Processed 50 Live Animal Requests to bring animals onto campus.
- Cross-trained five EHS FTEs to respond to animal incidents.
- Investigated one potential rabies exposure and two animal contact incidents.
- Submitted four requests for animal exclusion/building repairs (PHR (2), GEA, LFH).

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**Future**

- Revise guidelines for animal response and exclusion decisions, particularly raccoon incident response.
- Convert Live Animal Request form to online.
- Improve AMS incident response during the day - formalize procedures with FTEs and front desk staff.

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**Animal Incidents in 2018**

- Birds and bats make up the largest percentage of animal incidents.

**Live Animal Requests 2018**

- Including live animals as part of events continues to be a popular request.

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Lab Safety Specialist, Corina Hernandez holds a baby Mockingbird that was rescued after becoming tangled in string.
**SUPPORT SERVICES**

**FOOD, WATER, AND SANITATION PROGRAM**

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**Accomplishments**

- Water testing on campus and at satellite locations during the Austin Flooding and Boil Water Notice. Seventy-five water samples on main campus and satellite facilities.
- Four new permitted food establishments.
- Assisted with the restoration of MSI Cafe following Hurricane Harvey.
- Twenty-seven food truck permits issued.
- Began temporary food event education for student groups through Dean of Students three times per year.
- Inspected eleven pools.
- Inspected four daycares.

**Future**

- Updating program information on EHS website.
- Develop a more efficient system for food distribution request system and student events.
- Create a digital database accessible on EHS website for health inspection scores.

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Decreasing Food Distribution Request Submittals can be attributed to streamlining the process, providing training to end users, and combining recurring events.
SUPPORT SERVICES

ON-CALL RESPONSE

EHS responds to a variety of emergency situations and incidents during regular work hours and on-call, after hours.

EHS may be called out to respond to anything from “near-miss” situations, where a major accident was avoided, to major fires and explosions. More commonly, EHS on-call staff respond to chemical spills, chemical exposures, and lab equipment incidents.

Accomplishments

• Supported the university by responding to incidents during working hours, after hours, and on weekends and holidays.

Future

• Continue to improve the on-call program through procedure review, communication, and training.
SUPPORT SERVICES

PROJECT PLANNING AND DESIGN REVIEW

Accomplishments

• 370 Project Reviews, an increase of 30% over the previous year. Projects included:
  - Finishing out laboratories for the new Energy Education and Research building.
  - Finishing out Vivarium, clinic spaces and Ambulatory Surgery Center at the Dell Medical Complex.
  - New Energy Engineering Building.
  - New Applied Research Laboratories at Pickle Research Campus.
• Began development of a Campus Ventilation Management Plan.

Future

• Anticipated 30% increase in Project Reviews for 2019 Including:
  - Major renovation for SEA building.
  - Major renovation for South End Zone of the stadium.
  - Development and revisions for UT Design and Construction Standards.
SUPPORT SERVICES

TRAINING AND OUTREACH

Accomplishments

• Developed, updated and published multiple training modules (Radiation Safety Awareness, Pretreatment Devices (2), Bloodborne Pathogens, SPCC).
• Participated in numerous outreach events, including UT Marketplace, Texas Family Showcase, the Sustainability Tabling Event, and Student Government Safety Week.
• Began regularly posting on the Campus Safety social media Facebook and Twitter accounts.

Future

• Develop a new system for entering OH 102 forms.
• Update website to reflect changes in organization structure and improve ease of finding information.
• Hire employee/student worker to assist with training, outreach, and social media.
• Continue to update existing classes and develop new online training.
• Update tabling event materials and improve community engagement.

7,000+ people took over 20,000 EHS online classes in 2018.

Ryan Green, Radiation Safety Specialist, and Matt McKinney, Laboratory Safety Specialist work the EHS table at the fall UT Marketplace event.

SUPPORT SERVICES

UNMANNED AERIAL VEHICLES (UAVS)

Accomplishments
- FTE designated to handle UAV requests.
- Approved forty-four UAV requests and denied eleven.

Future
- Update website to provide needed information for flight requests.
- Continue to work on improving the online request process.

As the use of UAVs for research becomes more popular, UAV requests and approvals are expected to increase yearly.
ANNUAL REPORT

2018

Addressing the Fire Prevention Needs of the UT Austin Campus Community

304 E. 24th St.
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Austin, TX 78712
3637-495-512

fireprevention.
utexas.edu
FPS staff train students on proper use of fire extinguishers.

Cover Photo: Commencement 2014 Fireworks
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OVERVIEW

ABOUT

The University of Texas at Austin Fire Prevention Services (FPS) office ensures a safe environment for faculty, staff, students and visitors by providing a comprehensive fire prevention program. Our fire safety professionals are charged with monitoring all university buildings for compliance with local and state requirements, and partner with our community stakeholders to perform the inspections and drills necessary for risk reduction and the potential negative repercussions of fire on campus.

FPS is a division of the Office of Campus Safety and is directed by Fire Marshal Waymon Jackson. Drawing on a community-oriented philosophy, our team develops partnerships with a variety of university organizations to support campus fire prevention efforts, and works diligently with fraternities and sororities to enhance these efforts in off-campus housing. Our partnerships extend to local resources such as the Austin Fire Department, to ensure building construction and renovation projects address the needs of area emergency responders and aid in establishing pre-incident planning for campus facilities.

As part of our continual effort to improve campus safety and emergency preparedness, FPS serves as the university's liaison with the Texas State Fire Marshal's Office and local emergency responders. Our organization confers with the state fire marshal to ensure that new construction projects comply with applicable codes, as well as to develop compliance solutions for existing structures. We dedicate ourselves to the campus community through a comprehensive program of inspection, prevention, plan review and public education efforts designed to minimize risk and maximize campus fire-life safety.

HAVE AN EXIT STRATEGY

Fire in a dorm room? Club or concert venue? Public building? Your chance of surviving rests entirely on your ability to reach an unblocked exit. You have sixty seconds. Go.
FROM THE DIRECTOR

Welcome to the 2018 Annual Report for Fire Prevention Services (FPS). Fire Prevention Services is a small group of fire professionals consisting of certified fire inspectors and fire protection engineers dedicated to providing a campus safe from fire and other related hazards.

Everything we do is driven by our mission - a commitment to partner with our university community, state and municipal fire protection agencies in the prevention of fire and the advancement of fire safety education programs.

This is a brief account of the various activities carried out on a daily basis by FPS. A snapshot is provided of the many activities and duties that are prescribed by the many codes and regulations FPS enforce to provide an environment safe from the effects of fire and other hazards. In 2018, FPS welcomed two new team members and performed more plan reviews than we have ever before. As we continue to serve the university community here in Austin and at our satellite locations throughout the state, we will continue to be diligent in our commitment to safety at the University of Texas at Austin.

Waymon

WAYMON JACKSON
DIRECTOR/FIRE MARSHAL
FIRE PREVENTION SERVICES
STATEMENTS

VISION, MISSION & VALUES

It is Fire Prevention Services' (FPS) vision to become a recognized national leader and innovator in campus fire and life safety and recognized as leaders in protecting people, property and maintaining continuity of operations from the effects of fire and related hazards.

Our mission is to protect lives and property on The University of Texas at Austin campus in conjunction with our university community, state and municipal fire protection agencies, and to collaborate with these agencies in the prevention of fire and the advancement of fire safety education programs.

Leadership: We encourage our employees to excel with integrity and the spirit that nothing is impossible.

Excellence: We encourage our employees strive to excel in every aspect of our mission and approach every challenge with a determination to succeed.

Competency: We strive to maintain certifications through participation in continuing education programs and to constantly improve our skills, abilities, and knowledge.

Customer Orientation: We are committed to collaborating with the university community to provide safe code compliant solutions to lessen any economic impact to the University.

Partnership: We promote valued internal and external relationships with the university community, local, state and national organizations and encourage an open exchange of ideas and information.

Responsibility: To serve as the motivation for the implementation of fire and life safety programs at the University of Texas and beyond.

Stewardship: We believe in being good stewards of the University’s resources and in exercising frugality.

Honesty: We believe that honesty is always the best policy and that trust has to be earned.
Fire Prevention Services is under the Office of Campus Safety within the Financial and Administrative Services portfolio. Units under this portfolio continually strive to improve service to the campus and the broader community while meeting compliance and reporting standards.

**WHO WE ARE**

**FINANCIAL AND ADMINISTRATIVE SERVICES**
DARRELL BAZZELL, SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

**CAMPUS SAFETY**
JIMMY JOHNSON, ASSISTANT VICE PRESIDENT

**FIRE PREVENTION SERVICES**
WAYMON JACKSON, DIRECTOR/FIRE MARSHAL
JOSHUA LAMBERT, ASSISTANT DIRECTOR/
ASSISTANT FIRE MARSHAL
ROOSEVELT EASLEY, LEAD INSPECTOR

**ORGANIZATION**

**MANAGEMENT**

**ENGINEERING STAFF**

**INSPECTION STAFF**

**MCDONALD OBSERVATORY**

Total 11 employees
MANAGEMENT

THE TEAM

JOSHUA LAMBERT, P.E.
ASSISTANT DIRECTOR/
ASSISTANT FIRE MARSHAL

ROOSEVELT EASLEY
LEAD INSPECTOR
### YEAR IN REVIEW

#### HIGHLIGHTS

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<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<td>Plan Reviews</td>
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<td>Fire Drills</td>
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<td>Outreach Activities</td>
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<tr>
<td>Building Inspections</td>
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</tr>
</tbody>
</table>
WHAT WE DO

OUR PROGRAMS AND SERVICES

PROGRAM AREAS

FIRE/LIFE SAFETY PLAN REVIEW
- Fire Protection System Review
- Fire Alarm System Review
- Smoke Management System Review
- Mass Notification System Review
- Hazardous Chemical Storage Review
- Means of Egress Review
- Fire Department Access Review
- Chemical Laboratory Review

RESPONSIBLE FIRE PROTECTION ENGINEER
- Consulting with campus stakeholders on fire and life safety issues.
- Acting as the liaison for the university with the State Fire Marshals office and Austin Fire Department
- Attending building construction and renovation project meetings

INSPECTIONS
- Fire Inspections
- General Life Safety Inspections
- Means of Egress Inspections
- Dormitory Inspections
- Food Truck Inspections
- Emergency Lighting Inspections

FIRE EXTINGUISHER MAINTENANCE
- Fire Extinguisher Inspections
- Removing Discharged and out of Service Fire Extinguishers
- Servicing Fire Extinguishers
- Returning Extinguishers to

MCDONALD OBSERVATORY FIRE MARSHAL
- Fire Inspections
- Fire Protection System Inspections, Testing and Maintenance
- Wildfire Prevention and Response
- Safety Training
- Environmental Safety and Health
- Emergency Response
SUPPORT AREAS

TRAINING
• Setting-up online training registration
• Perform Fire Extinguisher Training

FIRE DRILLS
• Coordinating the fire drill with building manager and FSSS
• Monitoring fire drills

SPECIAL EVENTS
• Attending pre-event briefings
• Performing pre-event outdoor inspections
• Performing pre-event indoor inspections
• Outdoor Tailgating Inspections
• Monitoring events
• Pyrotechnics Display Inspections

LIFE SAFETY ENHANCEMENTS
• Fire Alarm Installations/Upgrades
• Fire Suppression Installations/Upgrades
• Emergency Lighting Installations/Upgrades

TECHNICAL COMMITTEES / SERVICE
• NFPA Technical Committees
• UL Standard Development
• Texas Fire Protection Association
• NICET Board of Governors

WILDFIRE PROTECTION PLANNING
• Wildfire Response Plans
• Wildfire Prevention
• Controlled Burns
• Emergency Response
• Landscape Management

OUTREACH
• Community Engagement
• Social Media
• Tabling
• Live Demonstrations
PROGRAM AREAS

PLAN REVIEW

The FPS Engineering Department provides fire and life safety guidance to the University community as the Authority Having Jurisdiction (AHJ) for the enforcement of fire/life safety codes and standards. Each engineer provides services to specific client groups on campus and acts as a single point of contact for any fire and life safety questions or issues that may arise. Responsibilities of FPS engineering staff include:

• Reviewing construction plans for new structures and building renovation projects.
• Conducting periodic installation inspections of fire protection and life safety systems.
• Acting as the liaison between contractors and the State Fire Marshal’s Office.
• Acting as the liaison between contractors and the Austin Fire Department.
• Code consultation with architects and engineers.
Accomplishments

• Completed 40% more plan review requests than 2017
• Worked with CPC to bring EER and RBRH online with phased occupancy

Future

• Establish new campus standards for flammable gas detection
• Reduce the number of reviews per project

FPS engineers perform plan reviews of documents provided by Project Management and Construction Services (PMCS) and Capital Planning and Construction (CPC) Project Managers or other entities such as Architect and Engineering Firms. In-depth reviews are performed to verify project plans and specifications conform to the applicable NFPA and ICC codes and standards, the University of Texas Design and Construction Standards and the Texas Accessibility Standard.

FPS saw a sharp rise in both the number of plan review requests and projects in review for 2018. This dramatic increase was driven primarily by an increase in construction managed by PMCS. In addition to the number of projects and review requests, the complexity and scope of these projects have increased as well. Accommodating this extra workload has been a challenge for FPS in 2018 and will continue for the foreseeable future. FPS is working with PMCS to optimize the review process and reduce the number of required reviews for each project.
PROGRAM AREAS

FIRE SAFETY INSPECTIONS

All FPS Inspectors have successfully completed a four-hour exam and a practicum to become certified through the National Fire Protection Association as Fire Inspector I. Most of our fire inspectors have taken special courses, received training and obtained certifications in various specialty fields such as Master Fire Inspector, Fire Officer II, Pyrotechnics before a Proximate Audience, Hazardous Waste and Emergency Response, Incident Management Team and Incident Command System.

FPS Inspection staff perform fire safety inspections of all University facilities on a regular basis to assess and mitigate potential fire and life safety hazards in buildings, ultimately to ensure the safety of students, faculty, staff, and visitors. Fire safety inspections are a crucial component of a well-rounded fire prevention program and help to reduce the incidence of fire emergencies and limit the effects of a fire should one occur. These inspections focus on identifying fire safety hazards and deficiencies in building fire and life safety systems. FPS inspectors work closely with building managers and Facilities Services to ensure that identified hazards and deficiencies are addressed in a timely manner.

In addition to performing annual fire life safety inspections, the FPS Inspection team has developed a good working relationship with the Texas State Fire Marshal’s Office (SFMO) fire inspectors and escorts them during their inspections on campus. The FPS Inspector is the responsible person to accompany the SFMO fire inspector with keys to all areas and offers any assistance the SFMO Inspector may need.
Accomplishments

- Performed over 200 fire inspections and follow-ups.
- Completed a project to install new Fire Department Connection signage in accordance with SFMO requirements throughout the main campus.

Future

- Transition to a new mobile inspections platform.
- Develop an emergency response map for PRC.

FPS strives to inspect each University building at least annually. With over 200 facilities (over 25 million square feet) on the main campus and well over 100 additional buildings spread out on several satellite campuses throughout the state, this is a daunting task. FPS has five fire inspectors on staff, with inspection responsibilities distributed such that each inspector is responsible for a similar amount of square footage. The number of inspections conducted each year has steadily increased as FPS has added additional fire inspectors and the campus has continued to grow.

FPS inspectors also witness acceptance testing of fire protection systems for newly constructed buildings and renovations of existing buildings. These inspections typically happen on very short notice and adjustments to inspectors’ schedules are frequently required to accommodate requests from PMCS and CPC. FPS saw a dramatic decrease in this activity for 2018 as there were fewer CPC projects in the phase of the construction cycle that typically drive this activity.
In order to enhance client service to university departments, FPS has established the Responsible Fire Protection Engineer program. The goal of the program is to provide a single point of contact at FPS for designated colleges and departments at the university. The program covers the main campus as well as satellite locations in and outside of the city of Austin. This provides convenience and consistency for clients throughout the university community when seeking guidance from FPS on fire and life safety in specific buildings.
There is a designated Primary Engineer and Alternate Engineer assigned to each building, based on the primary client or geographic location. Duties of the responsible building engineer include:

- Consulting with campus stakeholders on fire and life safety issues.
- Attending building construction and renovation project meetings.
- Collaborating with Austin Fire Department and the State Fire Marshal's office.
- Conducting periodic construction inspections and monitoring acceptance testing of fire protection and life safety systems.
- Coordinating with fire protection service providers to ensure a high quality of work on fire protection and fire alarm systems on campus.

Engineers also monitor and supervise special events on campus alongside FPS inspectors. Football games, Explore UT (open house for campus), Graduations, and Commencement are some of the most attended events at UT and the engineering staff are responsible for reviewing conditions and procedures for guest safety. FPS engineers are involved in pre-event planning to evaluate items such as venue configurations, occupant loads, egress procedures, tents, cooking operations, fireworks displays, and other hazardous activities.

**Accomplishments**

- Updated all FPS Standard Operating Procedures.
- Collaborated with University Housing and Dining to update holiday decoration policies in university apartments.
- Coordinated training opportunity with the Austin Fire Department in WRW prior to demolition activities.
- Worked with the Austin Fire Department to re-key all 52 existing Knox boxes to the new fire department key cylinder.

**Future**

- Implement a campus wide policy for temporary decorative lighting.
- Initiate a new program for conducting pre-fire planning with the Austin Fire Department.
- Update all key sets in existing Knox boxes to the new color coded secure key ring system.
- Publish university fire safety manual.
PROGRAM AREAS

FIRE EXTINGUISHER MAINTENANCE

Portable fire extinguishers are provided throughout most University facilities and serve as the first line of defense against fires that are still in the incipient stages. Occupants should only use portable fire extinguishers if they are comfortable with their use. FPS offers fire extinguisher training regularly throughout the year; this training is available to all university students, faculty, and staff.
FPS is responsible for maintaining portable fire extinguishers for the vast majority of buildings and programs on the Main Campus, MCD, and PRC. FPS inspectors perform annual maintenance activities over the course of regular annual building fire safety inspections. This annual maintenance consists of an in-depth external inspection of the extinguisher and its components. Periodically, fire extinguishers will require internal inspection and/or hydrostatic testing. FPS manages a contract with an outside service firm to conduct this work. Extinguishers that are due for internal maintenance and/or hydrostatic testing are rotated out of service and sent to the contractor for these services. The rotation of extinguishers for internal maintenance and hydrostatic testing can cause fluctuations in the number of inspections since both the existing extinguisher and the new replacement extinguisher are logged as inspected. In 2017 there was a large number of extinguishers that received these services, resulting in a spike in inspections.

**Accomplishments**

- Incorporated fire extinguisher maintenance program with McDonald Observatory

**Future**

- Expand the fire extinguisher maintenance program to MSI
The McDonald Observatory (MCD) Fire Marshal is a semi-autonomous division of FPS that oversees fire prevention, environmental health and safety, and emergency response at the observatory. The MCD Fire Marshal program was originally established in 2006 as part of a collaborative effort that included the University of Texas at Austin, Texas State Fire Marshal’s Office, Texas Forest Service, McDonald Observatory Firefighters, and the Fort Davis Fire Department. The MCD Fire Marshal works closely with the university Fire Marshal to coordinate on special projects, training, and periodic inspections.
The MCD Fire Marshal provides a wide range of services to the observatory to ensure the safety of students, faculty, staff, and visitors.

- Fire and life safety inspections
- Fire apparatus maintenance and inspections
- Coordinates inspections, testing, and maintenance of fire alarm and fire protection equipment
- Provides training on fire apparatus, fire prevention, and occupational safety
- Manages wildland fuel load
- Coordinates third party compliance inspections
- Advises, coordinates, and assists public events
- Inspections of first aid kits and AEDs

**Accomplishments**

- Achieved Firewise Community continuance
- Worked with McDonald Observatory to shift focus from fire response to fire prevention
- Developed plan for fuel reduction as a component of fire prevention program

**Future**

- Reduce fuel loading in buildings and grounds
- Develop and introduce “New Employee Safety Orientation” training, to be deployed through UT Learn
- Correct fire, life safety, and occupational safety hazards identified by 2018 FPS and EHS inspections
SUPPORT AREAS

TRAINING

Fire Inspector demonstrating the proper use of fire extinguishers at Explore UT.

FPS provides training to various university stakeholders on the proper use of portable fire extinguishers as well as general fire safety and fire prevention practices. By arming students, faculty, and staff with this knowledge they can play an important role in preventing fires on campus and helping to control the effects of a fire should one occur.
FPS’ largest and most well-known training program is the Fire Extinguisher Training Program. Students learn how to effectively operate portable fire extinguishers and when it is safe to do so. Any member of the university community can sign up for these classes on UT Learn. For some university community members, this training is required on a recurring basis. Classes are scheduled for 1-hour sessions and include a 15-20 minute lecture and 30 minutes of hands-on demonstration with FPS’ live fire training prop where each student gets personal experience and training using an actual fire extinguisher. This program has repeatedly been credited by students for giving them the skills, knowledge, and confidence to effectively use a portable fire extinguisher in actual fire incidents.

**Accomplishments**
- Procured a new trailer that will allow for deployment of training at locations outside of Austin

**Future**
- Provide fire extinguisher training programs at satellite campuses (MCD, MSI, etc.)
- Create an on-line crowd manager training program for students, faculty, and staff
SUPPORT AREAS

FIRE DRILLS

Fire drill at Jester West conducted by FPS Inspectors.

Practice is key to ensuring that evacuation plans are executed effectively in the event of an emergency. FPS performs fire drills in each building with a frequency in accordance with the requirements of NFPA 1, the Fire Code. The purpose of emergency egress and relocation drills is to educate the participants in the fire safety features of the building, the egress facilities available, and the procedures to be followed. Speed in emptying buildings or relocating occupants, while desirable, is not the only objective.
FPS inspectors coordinate with occupants, building managers, and the UT Fire Safety Systems Shop to conduct regular evacuation drills on campus. After each drill, FPS inspectors meet with the building manager and floor managers, building staff who assist with evacuation efforts, to evaluate the evacuation. Fire drills are conducted on an annual basis, at a minimum. Monthly drills are conducted at the UT Elementary School and day care centers, while drills are held once per semester in all dormitories (fall, spring, summer sessions 1 & 2).

![Five Year Fire Drill Distribution](image)

**Accomplishments**
- Performed over 180 fire drills

**Future**
- Update training and drill procedures in coordination with Emergency Preparedness
SUPPORT AREAS

SPECIAL EVENTS

Fire Inspector inspecting tailgate facilities at UT football game.
FPS staff regularly support special events on campus including athletic events, concerts, performing arts events, conferences, and other gatherings by providing fire watch and fire safety supervisory services. This work includes inspections of the venue before and during the event, coordinating fire department response, inspecting vendor areas, supervising pyrotechnics and flame effects, and monitoring crowd conditions. For large events such as football games and commencement, FPS will also have representatives working in the Emergency Operations Center. Many of these events take place outside of normal business hours on nights and weekends and are taken on as extra hours by FPS staff.

![Special Events Chart](chart.png)

**Accomplishments**
- Implemented new pre-event checklists for major campus venues
- Revised SOPs for special events and fire watches
- Supported the roll out of Bevo Boulevard, a new UT Football tradition

**Future**
- Obtain pyrotechnics licenses for two additional inspectors
- Train two FPS staff to serve as subject matter experts on propane use and installations
SUPPORT AREAS

LIFE SAFETY ENHANCEMENTS

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<tr>
<th>CP</th>
<th>Title</th>
<th>PM</th>
<th>Status</th>
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<td>1</td>
<td>CPV 42167</td>
<td>GSB: FIRE ALARM SYSTEM UPGRADE</td>
<td>AKINS, ANDREW P</td>
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<td>SIMPLEX, GRINNELL</td>
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<td>10/21/2015: AREA 3 THIRD PARTY COMMENT HAS BEEN ADDRESSED W/ THE EXCEPTION OF THE RETURN AIR DETECTORS. ON 4 &amp; 5, PROPOSAL FOR ARRAYS COST $56,000, AND STUDY TO RELOCATE DETECTORS AT THE RETURN AIR FAN HAS NOT RESULTED IN ANY COST REDUCTION. AWAITING DIRECTION FROM FPS. ABOUT $41,000 REMAIN IN CONTINGENCY.</td>
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<td>3</td>
<td>CPV 53806</td>
<td>NOA: REPLACE FIRE ALARM/ASYNCHRONOUS SYSTEM</td>
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<td>SUBSTCOM</td>
<td>JENSEN HUGHES, SIMPLEX/GRINNELL</td>
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<td>1/20/2017 CPV 53806: RECEIVED D&amp;M&amp;S FROM CONTRACTOR (NOV. 6TH) AND PROVIDED A COPY TO LEONARD (FSS). LED REVIEWED AND PROVIDED ADDITIONAL COMMENTS ON DOCUMENTS FOR CONTRACTOR TO MAKE. COMMENTS WERE SENT TO CONTRACTOR FOR CORRECTIONS AS REQUIRED.</td>
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<td>BOEY, DARRIC W</td>
<td>DESIGNDEV</td>
<td>TOM GREEN &amp; COMPANY</td>
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<td>10/25/2017 CPV 72915: FINAL PAY AP IS APPROVED FOR EMERGENCY LIGHTING WORK AT COM BLDG. WAITING ON DUEKE/MACK TO APPROVE INVOICE FOR EMERGENCY LIGHTING WORK DONE AT COM BLDG.</td>
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<td>6</td>
<td>CPV 74024</td>
<td>LAC INSTALL FIRE SAFETY EQUIPMENT FOR LIFE SAFETY</td>
<td>BRENNISER, CHRISTOPHER</td>
<td>CONST</td>
<td>FRANK HAUGHT, SIMPLEX, GRINNELL</td>
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<td>8/30/2017 CPV 74024: 99% COMPLETED. SIMPLEX HAS FOUND A SOLUTION TO THEIR SOFTWARE ISSUES AND IMPLEMENTED THE FIXES. THEY HAVE RESUMED WORK AT LAC, PERFORMING THE END ROUNDS AND PARTY TESTING THIS WEEK. PSD FINAL ACCEPTANCE TESTING IS SCHEDULED FOR NEXT WEEK. HOPE TO HAVE THIS PROJECT CLOSED OUT BY THE END OF THE MONTH.</td>
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</table>

FPS capital project status updates.
One very important function Fire Prevention Services (FPS) is empowered to perform is the continuous monitoring and assessment of the life safety systems and features of the University of Texas at Austin buildings. FPS reviews inspection reports performed by FPS personnel and the State Fire Marshal's Office (SFMO) to assess code deficiencies. Historical data for systems such as fire alarm systems, fire suppression systems, smoke management systems, emergency lighting, etc. are evaluated to determine systems expected life cycle or determine if systems are nearing their useful end of life. This data is evaluated and prioritized to determine what life safety systems FPS will request Library & Equipment, Repair and Rehabilitation (LERR) funding to initiate system upgrades annually. FPS then prepares a LERR request detailing the work to be performed along with justification for the request and includes the estimated cost of the work. Approved requests and funding is used to establish a project to be managed by PMCS. During the course of the projects, FPS staff meets bi-weekly with the PMCS project managers to receive updates and monitor the progress of the projects. Projects that do not receive approved funding are placed back in the queue to be re-assessed the following year.

LERR funded projects include, but are not limited to:

- Campus-Wide Water Distribution System
- Campus-Wide Outdoor and In-Building Mass Notification System
- Smoke Management Systems
- Fire Suppression System Installation/Upgrades
- Fire Alarm System Installation/Upgrades
- Emergency Lighting Installation/Upgrades
- Correction of Egress Issues

Projects Completed in 2018

- Fire alarm upgrades in GEB and LAC
- Door holder installation in FS1
- Knox box installations at PRC

Projects in Construction

- Fire sprinkler system installations in ARL, BE1, and PRCC
- Fire alarm system upgrades in CPE, JGB, JHH, and PRCC

Projects in Design

- Fire sprinkler installation and fire alarm upgrade in BTL
- Mass notification system installation in LTH
- Fire alarm upgrade in WMB
Debut demonstration of the FPS Burn House.
Fire Prevention Services (FPS) promotes fire safety throughout the University community, on and off-campus, through regular outreach activities including training, demonstrations, and tabling at community events. FPS also collaborates with the Austin Fire Department, Lake Travis Fire and Rescue, and other community fire departments to provide a wide variety of educational activities. Regular programs include the UT Elementary School’s Safety Awareness Day, Fire Prevention Week, National Night Out, UT Halloween Extravaganza, and Explore UT.

FPS has collaborated with University Housing and Dining (UHD) to construct a live burn demonstration trailer, which will be used to conduct demonstrations on fire hazards in residential environments and the effectiveness of fire sprinkler systems.

**Accomplishments**

- *Introduced the FPS Burn House and held our first burn demonstration.*
- *Introduced our social media platform in collaboration with UT Campus Safety, Environmental Health and Safety, and Emergency Preparedness.*

**Future**

- *Build a second Burn House for use in conducting side by side demonstrations to show the effectiveness of fire sprinklers.*
SUPPORT AREAS

TECHNICAL COMMITTEES / SERVICE

NFPA STANDARDS IN ACTION
Your Voice Matters

nfpa.org/standardsinaction

NFPA campaign to engage fire service personnel in standards development from NFPA Facebook.

Fire and building codes are developed through open processes that allow stakeholders and the general public to participate in the code writing process. FPS staff participate in the development of fire and building codes through service on the NFPA technical committees that deliberate changes to the codes and standards. Through this committee service, FPS gives the University a strong voice in the code development process to represent the unique challenges and concerns involved in protecting large university campuses such as ours. Serving on NFPA technical committees also helps FPS staff stay at the forefront of fire protection best practices and principles, and provides valuable insight on future changes to the code as well as an in-depth knowledge of the codes and standards that are being enforced today.
**Current Technical Committee Membership**

- NFPA 101/5000 – Correlating Committee
- NFPA 101/5000 – Technical Committee on Assembly Occupancies
- NFPA 101/5000 – Technical Committee on Fire Protection Features
- NFPA 101/5000 – Technical Committee on Means of Egress
- NFPA 101/5000 – Technical Committee on Residential Occupancies
- NFPA 72 – Technical Committee on Emergency Communication Systems
- NFPA 72 – Technical Committee on Notification Appliances for Fire Alarm and Signaling Systems
- UL 2524 Standard for In-Building 2-Way Emergency Communication Enhancement Systems
- UL 2572 Standard for Mass Notification Systems

FPS Staff also serve on other technical committees and hold leadership roles in regional professional organizations as well as the board of the National Institute for Certification in Engineering Technologies (NICET), a national certification organization. Serving in leadership of these organizations enhances the reputation of the University, helps to develop a strong network of support, and provides FPS staff with invaluable leadership experience.

**Current Leadership Service**

- NICET Board of Governors
- Texas Fire Protection Association (TFPA)
- UT System Fire and Life Safety Advisory (FLSAG)

**Accomplishments**

- David Madole appointed to the NICET Board of Governors
- Josh Lambert elected Vice President of TFPA
- Josh Lambert elected as Secretary of the UT System FLSAG

**Future**

- Second Draft meetings for the 2021 editions of NFPA 101 & 5000
- First Draft meetings for the 2022 edition of NFPA 72
ANNUAL REPORT

2018

Addressing the Emergency Management Needs of the UT Austin Campus Community
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OVERVIEW

ABOUT

The Office of Emergency Preparedness (OEP) implements programs and projects in emergency and disaster planning, training, mitigation, response, and recovery. We are tasked with creating a comprehensive emergency management program for the University to save lives, protect property, promote continuity of operations, and reduce the overall effects of large-scale disasters. In addition to planning for the entire campus, OEP assists departments with developing their emergency plans and acts as the primary liaison between the University and outside government emergency management agencies.

OEP is part of the Office of Campus Safety and works closely with the other Campus Safety departments, Environmental Health & Safety and Fire Prevention Services. OEP also works closely with other campus partners including, the University of Texas Police Department, Facilities Services, Athletics, Parking & Transportation Services, and the Dean of Students in order to build a disaster resilient university.

Although OEP is a small department, our team is passionate about and dedicated to ensuring The University of Texas is ready for whatever comes its way. With the help of our partners, we are building a disaster resilient university that can bounce back from anything so that our community can quickly get back to changing the world.
Welcome to the 2018 Office of Emergency Preparedness Annual Report. As we reflect back on 2018 and toward 2019, we continue to use the word resiliency. In the Office of Emergency Preparedness, resiliency to us is the ability to overcome all kinds of challenges and bounce back more powerful, wiser, and stronger. This report will provide a glimpse into the many different types of challenges that OEP faced in 2018 and the strategies and actions taken to overcome those challenges. These accomplishments could not have been completed without the continued support and partnership of many other departments across campus and the region. I invite you to learn from this report the successes and challenges the Office of Emergency Preparedness has had over the past year and the exciting goals, objectives, and opportunities to come over the next year as we continue to empower resiliency across The University of Texas at Austin.

Jonathan
JONATHAN ROBB
DIRECTOR,
OFFICE OF EMERGENCY PREPAREDNESS

THE UNIVERSITY OF TEXAS STOPS FOR NO STORM

The picture on the left is the Chairman of the Board of Regent’s telegraphed response to a suggestion that UT Medical Branch close after the 1900 hurricane that hit Galveston Island. (See utsystem.edu/office/chancellor/blog/teans-stop-no-storm.)

Today, this sentiment reflects the philosophy of the Office of Emergency Preparedness and the whole of the University to keep performing our mission no matter what.
The Office of Emergency Preparedness enriches the university academic and research mission by being an innovative leader in emergency management both in higher education and the global emergency management field.

The Office of Emergency Preparedness leads the university in becoming disaster resilient by enhancing capabilities required to prepare, respond, recover, and mitigate potential hazards and safety risks.

**VISION**

The Office of Emergency Preparedness enriches the university academic and research mission by being an innovative leader in emergency management both in higher education and the global emergency management field.

**MISSION**

The Office of Emergency Preparedness leads the university in becoming disaster resilient by enhancing capabilities required to prepare, respond, recover, and mitigate potential hazards and safety risks.

**VALUES**

- **Service:** We are customer service oriented and offer responsive, reliable and seamless support.
- **Stewardship:** We are exceptional caretakers of the resources entrusted to FAS.
- **Integrity:** We perform our work in a transparent, honest, accountable manner. We also commit to meeting all compliance and reporting standards.
- **Innovation:** We are creative and innovative in our service to the campus community.
- **Diversity:** We believe the best ideas are born from sharing viewpoints, opinions, and perceptions from colleagues with varied backgrounds and experiences.
- **Teamwork:** We work collaboratively across our organizations on common objectives and develop efficient and cost effective systems and processes for campus.
The Office of Emergency Preparedness is under the Campus Safety office within the Financial and Administrative Services portfolio. Units under this portfolio continually strive to improve service to the campus and the broader community while meeting compliance and reporting standards.

**FINANCIAL AND ADMINISTRATIVE SERVICES**

**DARRELL BAZZELL, SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER**

**CAMPUS SAFETY**

**JIMMY JOHNSON, ASSISTANT VICE PRESIDENT**

**OFFICE OF EMERGENCY PREPAREDNESS**

**JONATHAN ROBB, DIRECTOR**
HOW WE WORK

COLLABORATION

Everyone in the campus community plays a critical role in helping ensure the University is prepared. OEP can only fulfill its mission by working closely with other campus departments such as the University of Texas Police Department, Fire Prevention Services, Environmental Health & Safety, and Facilities Services.

CONNECTING THE DOTS

Before, during, and after a crisis, OEP works diligently to help all of the departments involved in responding to an emergency work together. This makes crisis response more efficient and ultimately makes the University more resilient.

CAMPUS SAFETY & SECURITY COMMITTEE

OEP is a part of and works very closely with the Campus Safety & Security (CSAS) Committee. This committee’s mission is to provide strategy and guidelines for campus-wide security initiatives that affect the University community. The CSAS committee is made up of a cross-section of University constituents, from a multitude of interest areas, with the goal of creating consensus on issues impacting campus safety.
## YEAR IN REVIEW

### HIGHLIGHTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Emergency Management</strong></td>
<td>11 Emergency Operations Center activations in support of special events including home football games and commencement</td>
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<td></td>
<td>1 Everbridge Impact Award for innovatively using text messages during commencement.</td>
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<tr>
<td><strong>Emergency Management</strong></td>
<td>40,032 Bottles of water distributed during the city-wide boil water notice</td>
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<tr>
<td><strong>Training &amp; Exercises</strong></td>
<td>8 Staff conducted eight different safety presentations for floor managers or other groups</td>
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<td><strong>Campus Safety</strong></td>
<td>29 New building emergency plans developed</td>
</tr>
<tr>
<td><strong>Training &amp; Exercises</strong></td>
<td>7 Exercises that OEP participated in or coordinated</td>
</tr>
<tr>
<td><strong>Campus Safety</strong></td>
<td>96 Safety hubs installed.</td>
</tr>
<tr>
<td><strong>Campus Safety</strong></td>
<td>17 Staff met with 17 different departments to address their individual safety concerns.</td>
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</table>
Emergency Management & Planning is OEP’s core function. OEP’s responsibilities for this program area include:

- Leading the University’s efforts in all phases of Emergency Management: Mitigation, Preparedness, Response, and Recovery;
- Developing and maintaining the University’s Emergency Operations Plan and its Annexes for Infectious Disease, Severe Weather, Restricted Access and Building Management, Academic Continuity, and Business Continuity;
- Developing Incident Action Plans for special events and incidents that occur on campus;
- Liaising with external agencies involved in emergency response on campus and other community partners;
- Coordinating the emergency response to any incident that occurs on campus;
- Coordinating emergency management notification systems, and
- Directing the Emergency Operations Center during incidents or special events.

OEP strives to fulfill these responsibilities with excellence and dedication. By working with our campus partners, we can lead the University on the path to becoming truly disaster resilient.
Accomplishments

• Responded to a city-wide boil water notice to ensure that all university community members had access to safe drinking water while on campus.
• Coordinated emergency operations for special events, including home football games and commencement.
• Launched WebEx communication system for the Emergency Operations Center and Emergency Command Center.
• Completed required UT System audit of University’s emergency management program.
• Completed guidebooks for the Core Crisis Management Team and Emergency Operations Center Staff.
• Expanded deployment of desktop emergency alert system to colleges, schools, and units.

Future

• Begin the process of accreditation through the Emergency Management Accreditation Program (EMAP).
• Complete Emergency Support Function Annexes.
• Complete Hazard Mitigation Plan.

Special Event EOC Activations

Every fall, tens of thousands gather on campus to cheer on Longhorn Football. One of the jobs of the Office of Emergency Preparedness is to help make sure everyone can enjoy the game safely. To do this, we bring together partners in law enforcement, emergency medical services, campus safety, campus services, athletics, and more in the Emergency Operations Center. Assembling in one location helps make sure that everyone can quickly coordinate efforts to solve problems and respond to incidents during the game.

Helping to support the Longhorns and getting to work closely with all of our partners is definitely one of the most rewarding parts of our jobs every fall.
In late October 2018, Central Texas experienced unprecedented rainfall. As a result, water treatment facilities for the City of Austin were overwhelmed. Because of this, the city was forced to issue a boil water notice. This meant that tap water could not be used for drinking, washing dishes, brushing teeth, or for animals.

The boil water notice was issued early in the morning of October 22. The Office of Emergency Preparedness immediately sent a campus-wide text message to make sure our entire campus community was aware of the situation.

OEP knew that in order to get through the crisis, we would need to enlist all of our campus partners. Facilities Services worked to cover all water fountains on campus to ensure that no one would use them. They also helped reduce campus’s water consumption by turning off outdoor decorative fountains and landscaping irrigation systems.

The boil water notice left our on-campus residents particularly vulnerable. About 7,000 students live in campus dormitories and do not have access to stoves for boiling water. These students also depend on the University for meals and it was critical that our dining facilities had access to safe water for cooking. Fortunately, University Housing and Dining
rose to the occasion and made sure that plenty of drinking water was available for its residents. Because their staff worked hard to prepare clean water for cooking, meal service continued without any issues.

However, while these preparations were critical, they didn’t go far enough. OEP and Campus Safety wanted to make sure that everyone on campus had access to safe drinking water while they were here. Campus Safety bought bottled water by the truckload and Emergency Preparedness spearheaded the efforts to distribute that water.

Once again, we enlisted our campus partners for help. Texas Union, Recreational Sports, and the Student Services Building all dedicated staff and resources to setting up water distribution sites at their facilities. Parking and Transportation Services provided staff to help distribute water. Events and Construction Services helped move pallets of water all over campus. Students from many different campus organizations volunteered to help distribute water. For seven days, the university worked together to distribute more than 40,000 bottles of water to our university community.

The boil water notice was lifted by the city on Sunday, October 28 and the campus returned to normal. OEP is very grateful for all of the support of our campus partners that made our response to this crisis a success.
As one of its member departments, OEP has several responsibilities that support Campus Safety. These responsibilities include:

- Working with Building Managers to develop and maintain Building Emergency Plans;
- Supporting department-owned Automated External Defibrillators (AEDs); and
- Meeting with campus departments to address emergency-related safety concerns such as evacuation and shelter-in-place.

In these ways, OEP helps make the university safer every day.

**Accomplishments**

- Installed 96 safety hubs on campus.
- Developed 29 new Building Emergency plans.
- Met with numerous departments to address emergency-related concerns.
- Conducted multiple safety and emergency preparedness presentations.
- Hosted four building manager meetings to provide important safety information.
Future

- Launch UT Ready program with new educational materials and emergency information signage.
- Develop Building Emergency Month Program.
- Launch Public Access Defibrillator Program.
- Increase training and awareness of Automated External Defibrillator (AEDs) and Bleeding Control Kits (tourniquets).
- Increase outreach and education presentations to the campus community.

![Bar chart showing Buildings with Emergency Plans for 2017 and 2018.]

**SPOTLIGHT ON SAFETY HUBS**

In 2017, OEP launched a new “safety hub” program designed to put critical life safety equipment in every building on the main campus. The safety hubs are located within a well-trafficked entrance of a building and include:

- An Automated External Defibrillator (AED);
- Bleeding Control Kits (Tourniquets);
- A sign with the building name and address; and
- An emergency call box that goes directly to UTPD Dispatch.

Throughout 2018, OEP worked tirelessly with our campus partners to install 96 safety hubs in all of the academic and general purpose classroom buildings on the main campus.

While we hope this equipment is never needed, we are thrilled to be making this life-saving equipment available to the entire campus community.

One of the first safety hubs on campus in the Flawn Academic Center.
Program Areas

Training & Exercises

Training & Exercises are a key part of our program. Training helps ensure that our staff and the University's staff involved in emergency response are always ready for anything. Exercises are important as they are how we test our emergency plans and procedures and make sure that they work. OEP's responsibilities related to training and exercises include:

- Organizing university-wide exercises;
- Ensuring training for Emergency Operations Center staff;
- Assisting with department-level exercises; and
- Participating in training to ensure the staff is knowledgeable about all aspects of emergency management.

![School of Nursing Disaster Drill.](image)

Trainings and Exercises Participated In

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
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<tr>
<td>3</td>
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<tr>
<td>6</td>
<td>7</td>
<td>8</td>
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</table>
Accomplishments

• Conducted first ever training program for University executive staff involved in emergency response.
• Participated in National Tabletop Exercise with hundreds of other universities regarding campus disruption during large-scale events.
• Staff attended both the Risk Management in Higher Education and International Association of Emergency Management conferences to learn about advancements in the field.
• Staff participated in a total of seven different exercises related to emergencies on campus.

Future

• Conduct Point of Dispensing Exercise.
• Begin mini-tabletop series to address partner concerns and increase engagement.
• Develop Training and Exercise Multiyear Plan.
• Conduct training for executive and Emergency Operations Center staff.
• Test procedures for activating the Emergency Operations Center both in person and virtually.

SPOTLIGHT ON THE NATIONAL TABLETOP EXERCISE

In September 2018, staff from OEP, UTPD, and Campus Safety attended the National Tabletop Exercise hosted by the University of Texas at San Antonio. This event brought together campus safety and emergency management leaders from hundreds of institutions of higher education all across the country. The topic of this exercise was civil unrest during a large-scale event. Through this, we found that we were overall very prepared for this scenario and also identified areas for improvement. This exercise helped improve our partnerships and prepare for whatever might come our way.
LOOKING AHEAD

WHAT’S NEXT FOR EMERGENCY PREPAREDNESS

ACCREDITATION

In 2019, the Office of Emergency Preparedness will continue to pursue accreditation through the Emergency Management Accreditation Program (EMAP). EMAP is designed to provide a process of assessment and accreditation backed by industry standards that foster excellence and accountability in emergency management. This process results in a self-assessed and peer-reviewed accreditation that helps ensure the University has all appropriate resources and plans before, during, and after an emergency.

FULL SCALE EXERCISE

The Office of Emergency Preparedness is planning a Point of Dispensing (POD) exercise for the Fall of 2019. If an emergency occurs that requires the mass distribution of medication, the University will establish a POD for University community members. The exercise we will conduct will help test the University’s procedures for establishing a POD and ensure that we are prepared for a public health emergency.

UT READY CAMPAIGN

Next year, the Office of Emergency Preparedness is looking forward to launching a new public education campaign we’re calling UT Ready. With the constant turnover of students, educating our community on emergency procedures and personal preparedness is a constant challenge. The UT Ready campaign will include promotional materials such as pocket guides and giveaways with useful information as well as emergency procedure signage to be posted in all of the classrooms on campus. Our goal is to make the campus not just ready, but UT Ready.

PREPARING THE UNIVERSITY OF TEXAS AT AUSTIN SO IT CAN START CHANGING THE WORLD
BECOMING DISASTER RESILIENT

OUR ULTIMATE GOAL

Disasters can occur at any time and cause a wide range of damage. Many times, the damage could be limited or prevented through comprehensive pre-disaster planning and mitigation. Resiliency is the ability to minimize the potential impact hazards have to a particular area. The Office of Emergency Preparedness strives to develop and implement resiliency efforts across campus to make the University of Texas at Austin a disaster resilient university.

A disaster resilient university recognizes the threats that are posed to its particular campuses, develops, and implements actions that will minimize or mitigate these threats. The commitment to become a disaster resilient university cannot be completed without an extensive partnership and collaboration with many on-and off-campus stakeholders. The programs, plans, and actions that our office develops and implements are designed to withstand the effects of the possible hazards by limiting the losses and interruptions to the University, thus becoming a disaster resilient university.

Celebrating Commencement and the Class of 2018. UT Austin Facebook.