

# TEXAS TECH UNIVERSITY



2023 Annual Report  
for the  
Department of Environmental Health and Safety

### **From the Assistant Vice President for Environmental Health & Safety**

I am happy to present the Annual Report for the Department of Environmental Health and Safety (EHS) for the 2023 academic year. During this year, the University population continued to grow, exceeding an enrollment of 40,000 students for the fifth year in a row and surpassing \$230,000,000 in research expenditures as we celebrated our centennial. This report highlights some of the department's accomplishments during this memorable year.

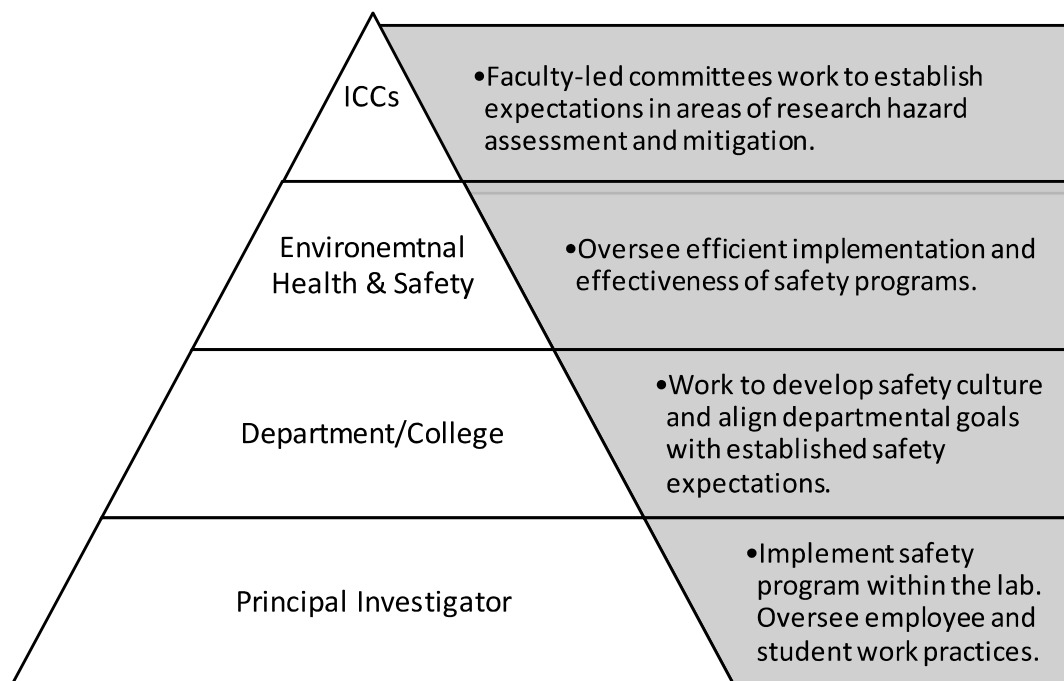
For the 2023 academic year, we continued to support the university in lab cleanouts as many new faculty members joined the university. We were happy to announce the hiring of our new Chemical Hygiene Officer, Todd Germain, to the department. The department organized and hosted the Prepare and Protect Conference led by Sean G. Kaufman. This conference provided resources and classroom-based training to help the University research community refocus on research safety. We were excited to announce the Huckabee College of Architecture as the fourth recipient of the Presidential Departmental Excellence in Safety Award. Finally, through the support of the Vice President for Research and Innovation, our office expanded our Occupational Health Program to expand medical surveillance services to all animal users, as well as additional medical surveillance services for research and support employees and students. With the success of the year 2023, we look forward to continuing to grow to support the expanding university research and scholarship mission in 2024.

A handwritten signature in black ink, appearing to read 'Matt Roe', with a stylized, cursive script.

Matt Roe, Assistant Vice President for Environmental Health & Safety

## Academic Safety

The Academic Safety section encompasses multiple programs, including Biological Safety, Radiation and Laser Safety, Chemical Hygiene, and Physical Hazards, focusing on reducing injury from academic activities. The Academic Safety program is implemented collaboratively, with EHS as a knowledgeable partner and leader in developing these programs.



*Academic safety program framework.*

### Highlights:

#### *Raider Risk Assessment Management Program (RRAMP)*

Beginning in December 2019, EHS introduced the campus community to an online safety management system (RRAMP) that allows users to review their chemical inventories, view and respond to annual safety assessments, view personnel training status, and perform an online risk assessment resulting in an automated work area safety plan. In 2023, EHS began the requirement of Work Area Safety Plan management within this system and has obtained a 43% submission completion.

#### *Safety Surveys*

EHS was able to resume research space safety surveys, conduct inspections of all research spaces, and certify all fume hoods and safety showers. Additionally, we established a multimedia inspection regimen with all academic areas inspecting simultaneously during the annual announced inspections. This was done to reduce the burden on lab groups and more efficiently manage safety.

### *Biological Safety*

In April of 2023, the Institutional Biosafety Committee adopted and rolled out the Cayuse online protocol management system. Together with the Institutional Animal Care and Use Committee, which adopted the same system in 2022, these protocol reviews should reduce the administrative burden for principal investigators and allow for more efficient regulatory compliance.

### *Radiation Safety*

In July of 2023, the Texas Department of State Health Services performed a broad license inspection, and the University received no findings and was determined to be “in compliance.”

## **Occupational Safety**

The Occupational Safety section works to create and manage programs designed "to ensure so far as possible every working man and woman... safe and healthful working conditions..." (Occupational Safety and Health Act 1970). These programs are focused on the proactive control of hazards within the work environment through elimination or communication and management.

Highlights:

### *Operations Safety*

To engage more actively with personnel in the Operations Division, EHS worked with division management to hire an embedded safety position within this unit that reports to EHS but works within Operations on a day-to-day basis. This model has worked well at other universities and has shown promise in developing consistency in policies and procedures across university units. The embedded safety officer, David Barber, has increased EHS's presence in operations by conducting regular site inspections, directly consulting with staff and management on safety issues, and investigating incidents. While it is too early to see a change in incident statistics, David is raising safety awareness in operations and, most importantly, is often with workers so he can correct situations before they become incidents.

### *Laboratory Safety*

Occupational Safety supported the lab safety group on several key projects, including revamping the compressed, liquified, and cryogenic gas use language in the Chemical Hygiene Plan and conducting chemical exposure assessments of students and faculty in several labs across campus.

### *Shop Safety*

EHS partnered with the Huckabee College of Architecture to form a Shop Managers Safety Group. This group consists of representatives of both academic and operational shops and serves to share best practices and safety lessons from different shops

across departments and disciplines. Last year the group met twice and discussed addressing disabilities in shop spaces and reviewed shop inspection checklists.

#### *Other areas*

EHS has traditionally focused its efforts on operations and shop spaces (both academic and operational) but has not dedicated much effort to other departments on campus. Over the past year, we have developed relationships with individuals in other areas such as Student Housing, Hospitality, and Athletics to address overlooked issues in those departments. As a result, we have identified individuals in Student Housing and Athletics and included them in the Occupational Health program medical surveillance. We have worked with Hospitality to make food preparation areas safer workspaces.

### **Environmental Protection**

The Environmental Protection section focuses primarily on compliance with federal and state environmental regulations. In addition to ensuring the University adheres to compliance requirements, Environmental Protection provides several services to the campus, including:

- Chemical management,
- Hazardous chemical and infectious waste disposal,
- Surplus chemical redistribution,
- Universal Waste and electronic equipment recycling,
- Pollution prevention and waste minimization, and
- Training and education related to waste.

Air compliance responsibilities include permitting, testing, and reporting air pollution sources associated with the Texas Tech University Federal Operating Permit and reporting the quantity of greenhouse gas emissions from the campus annually. Water compliance activities include the inspection, permitting, and reporting associated with stormwater runoff, fuel storage tanks, and sanitary sewer discharges, and the management and oversight of the University's four Public Water Systems. These services protect not only individuals on campus but also the Lubbock community.

#### Highlights:

Assisted in sustainably recycling more than 21 tons of university waste materials and appropriately disposing of more than 24.4 tons of hazardous waste while reducing costs by 32% from FY 2021. During FY 2023, Texas Tech University maintained a "satisfactory" environmental record during all regulatory inspections.

In FY 2023, the section conducted over 1,000 hazardous waste pick-ups and collected over 9,000 containers and more than 64,000 lbs. of hazardous waste that were all safely disposed of at a permitted facility. In addition, 35 large-scale laboratory cleanouts were conducted on the campus.

## Outreach and Training

The Outreach and Training section directs programs at community engagement in safety and the development and distribution of practical safety training and other informational materials in support of department safety programs. This section seeks to educate the university community about our safety programs and engage faculty, staff, and students in learning opportunities and initiatives to help develop a continuously improving safety culture.

Highlights:

### *President's Departmental Excellence in Safety Award*

The fourth annual Presidential Departmental Excellence in Safety Award was awarded in FY 2023 to the Huckabee College of Architecture. The recipient was chosen based on the departmental achievements in safety programs through a competitive review and award process. Many qualified applicant departments showed remarkable strides in department-led safety initiatives during the process.

The award is supported by the Office of the President and the Office of Research and Innovation. The funds allow the recipient department to further its safety mission.



*Left to right Lesley Washington, Executive Director; Urs Peter Flueckiger, Dean of the Huckabee College of Architecture; Hinton Vick, Shop Supervisor; Jeff Hoover, College Safety Officer, received the award from President Schovanec*

### *Shop Manager Safety Group*

A new initiative was started in October 2022 in collaboration with the Occupational Safety section, bringing together shop managers from academic, student-facing shops and shop managers from the Operational shops (e.g., Operations, Housing, etc.) to collaborate with EHS personnel. Inspiration was taken from the Student Shop Managers Consortium. The group has helped establish best practices in shop spaces on campus and serves as a networking and collaboration tool for shop managers and support staff.





*Lunch session of the inaugural shop managers safety group meeting.*

### *Prepare and Protect Research Conference*



*Images from the Prepare and Protect Research Safety Conference – top left, Leadership Dinner, top right, technical session in the TIPS Lab, bottom left, Sean showing how to remove PPE (Personal Protective Equipment), bottom right, classroom lunch session.*

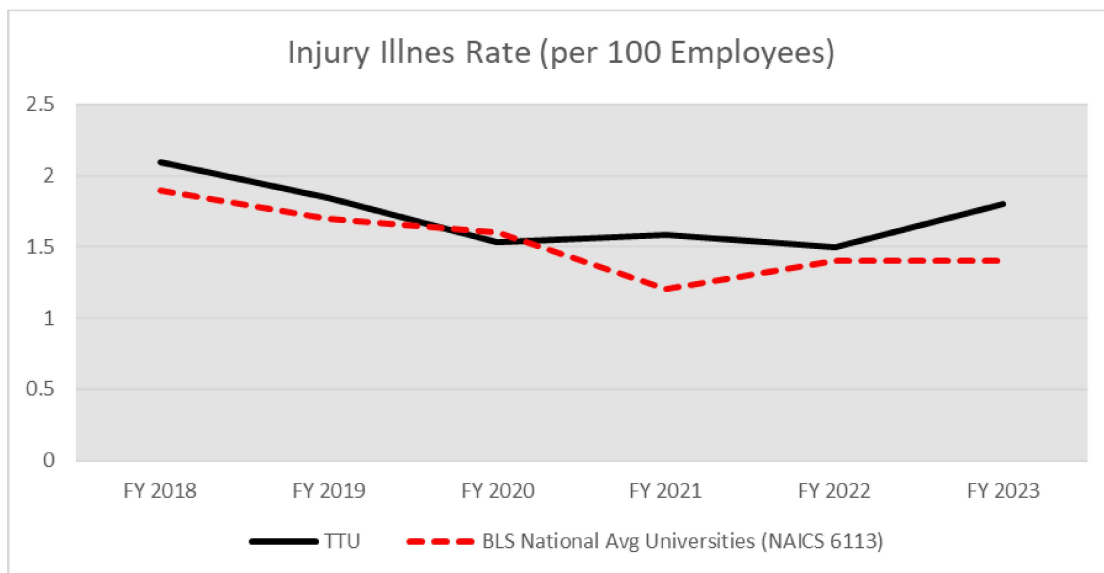
EHS organized a three-day conference on campus with behavioral and biosafety specialist Sean G. Kaufman, founder, and CEO of Safer Behaviors. Over 100 researchers attended the events of the conference, composed of a Leadership Dinner

for the compliance committee and other safety leaders, technical sessions in the TIPS Lab, and hybrid classroom sessions focusing on risk management and mitigation. The conference content was well-received by attendees.

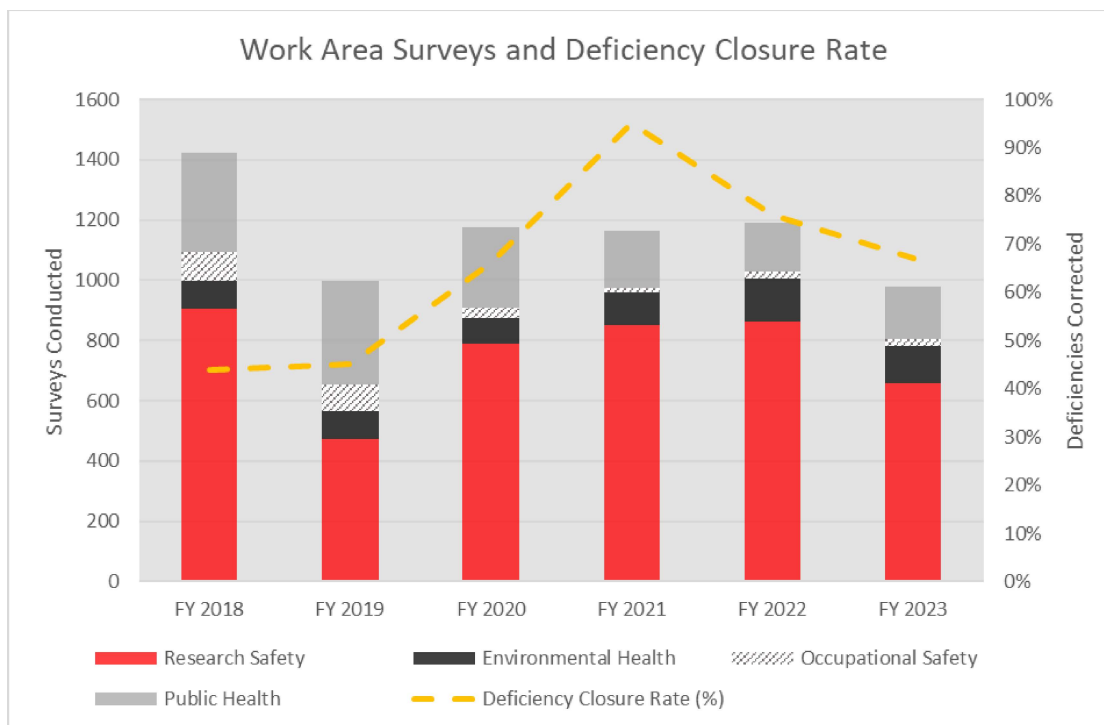


## Department Metrics

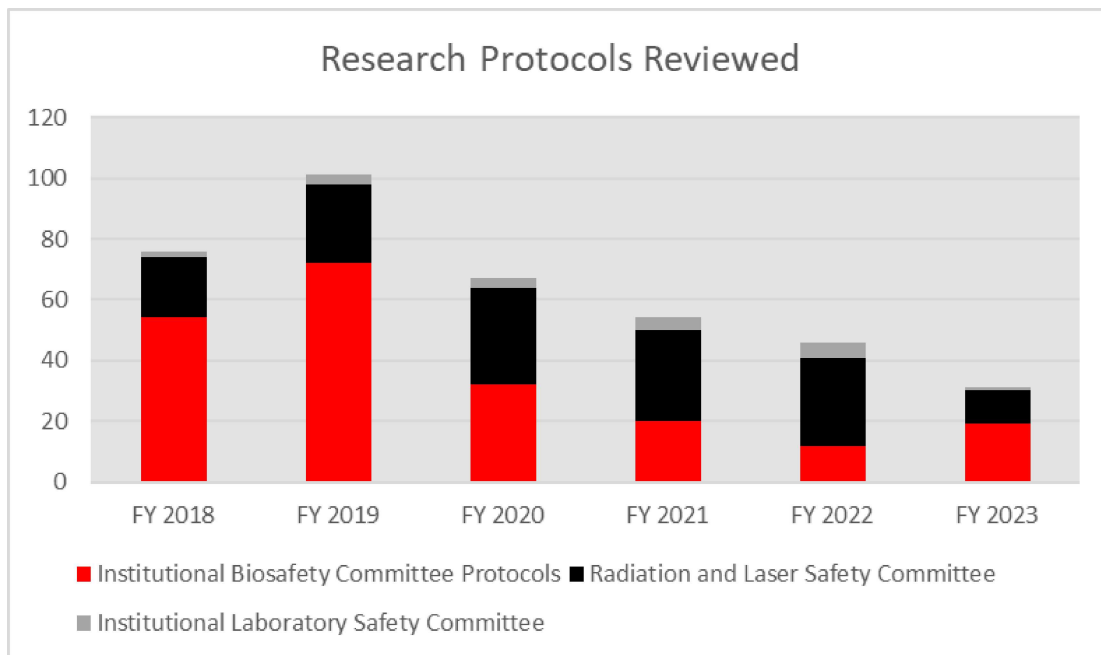
## Risk Management:



*Injury/Illness rate per 100 employees compared to the National Average of Universities from the Bureau of Labor Statistics.*

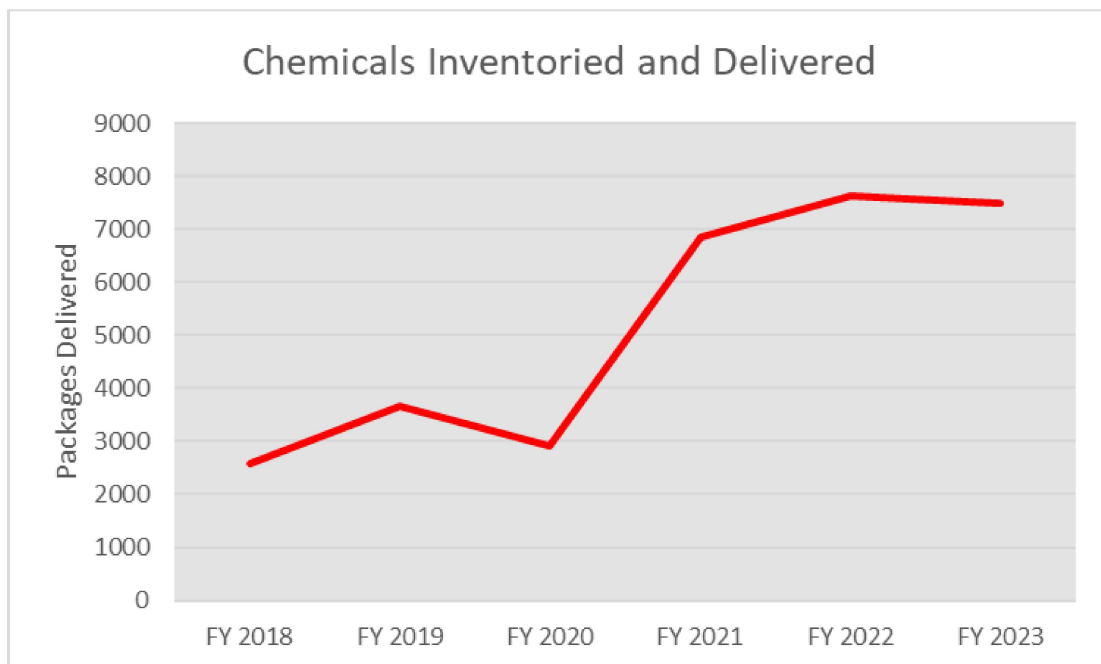


*Work area surveys conducted and deficiency closure rate.*

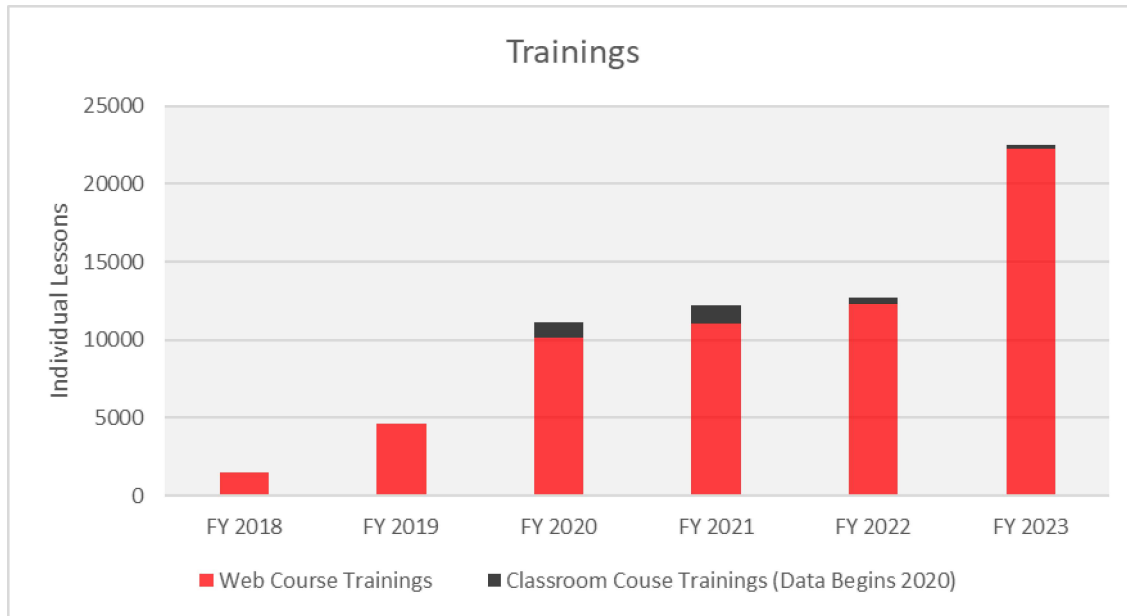


*Institutional compliance committee research protocols reviewed.*

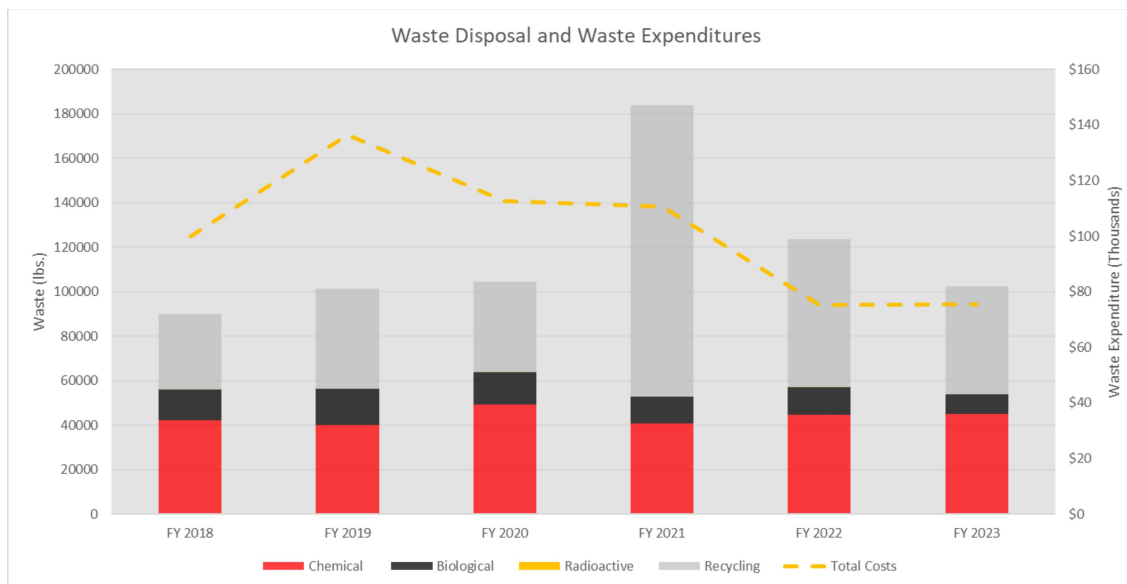
#### Services:



*Chemicals received and entered the online chemical inventory delivered to academic work areas by EHS personnel. EHS Academic Safety maintains online chemical inventories for all academic work areas on campus.*

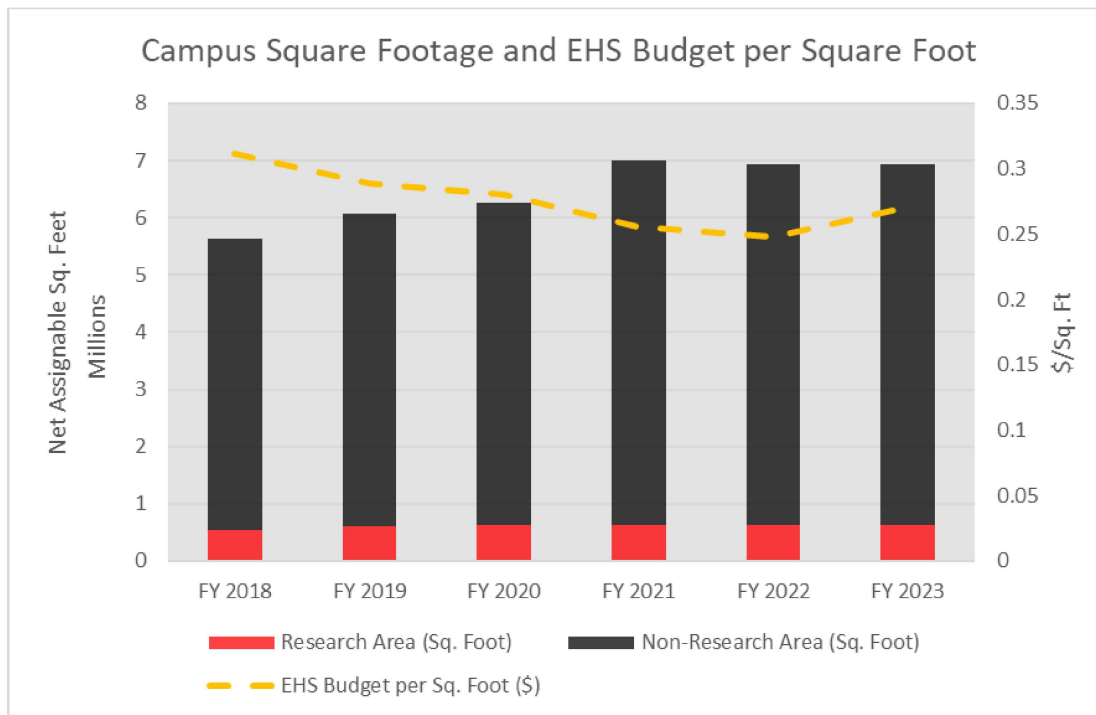


Individual training session enrollments over FY 2018-2020. FY 2020 began tracking in-person class attendance.



Waste disposal and waste expenditures.

## Finances:



*Campus square footage and EHS budget per square foot. This represents a decrease in budgeted dollars per square foot while realizing an increase in square foot responsibilities.*