



PennState
Finance and Business

Penn State UPPS: The next 100 years...

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Physical Security

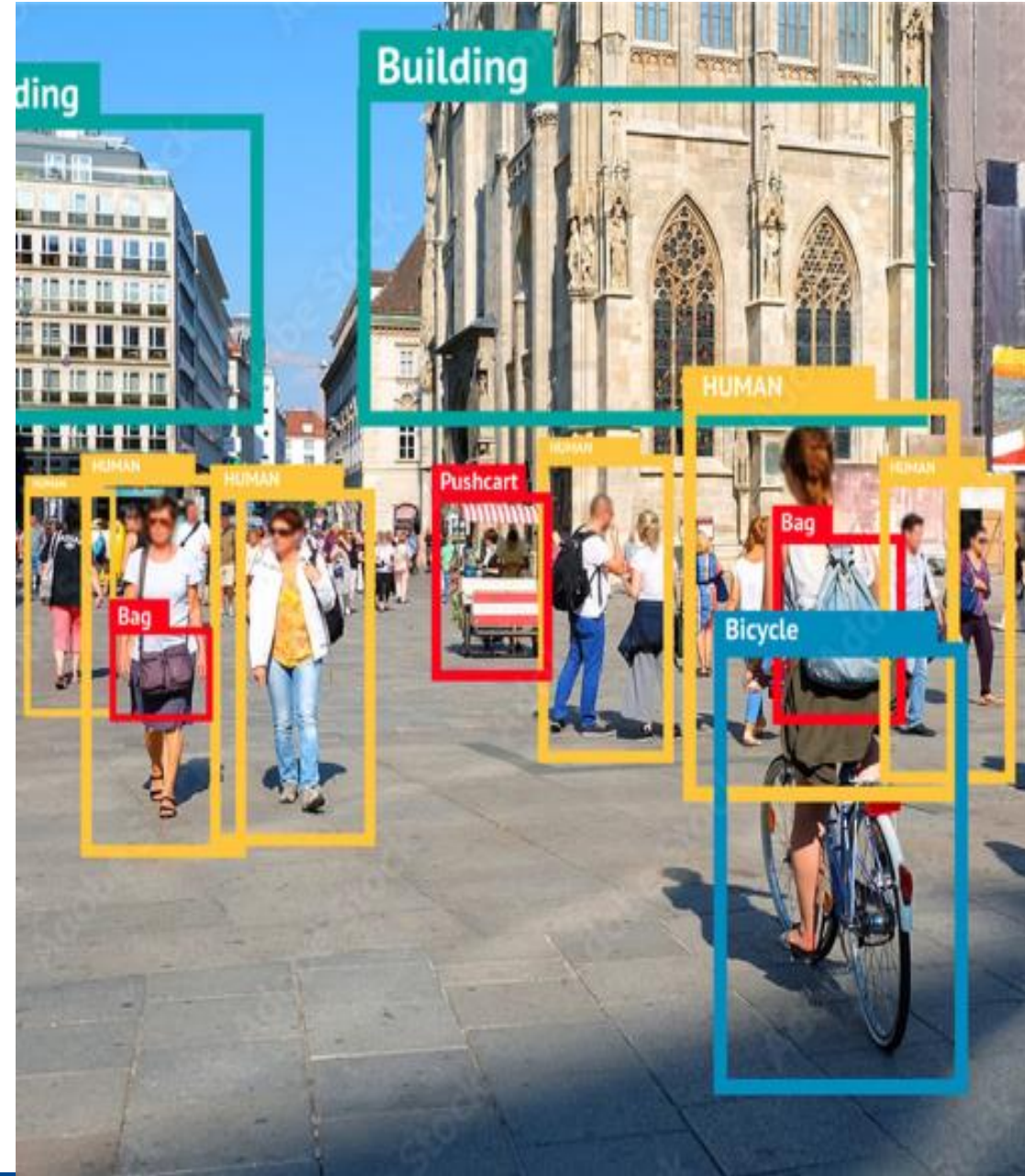
University Police & Public Safety



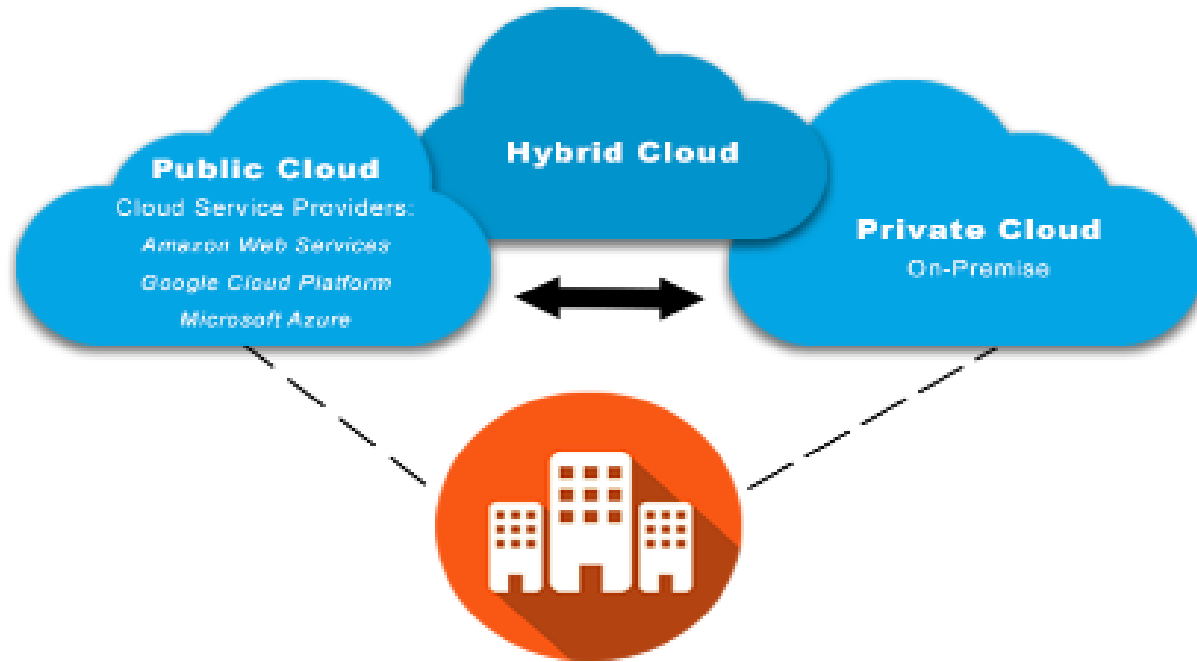
AI Powered Video Analytics

aka (Proactive Surveillance)

Cameras now detect, classify, and analyze behavior (e.g., loitering, unusual movement, crowds) in real-time, reducing false alarms and alerting personnel before incidents escalate.



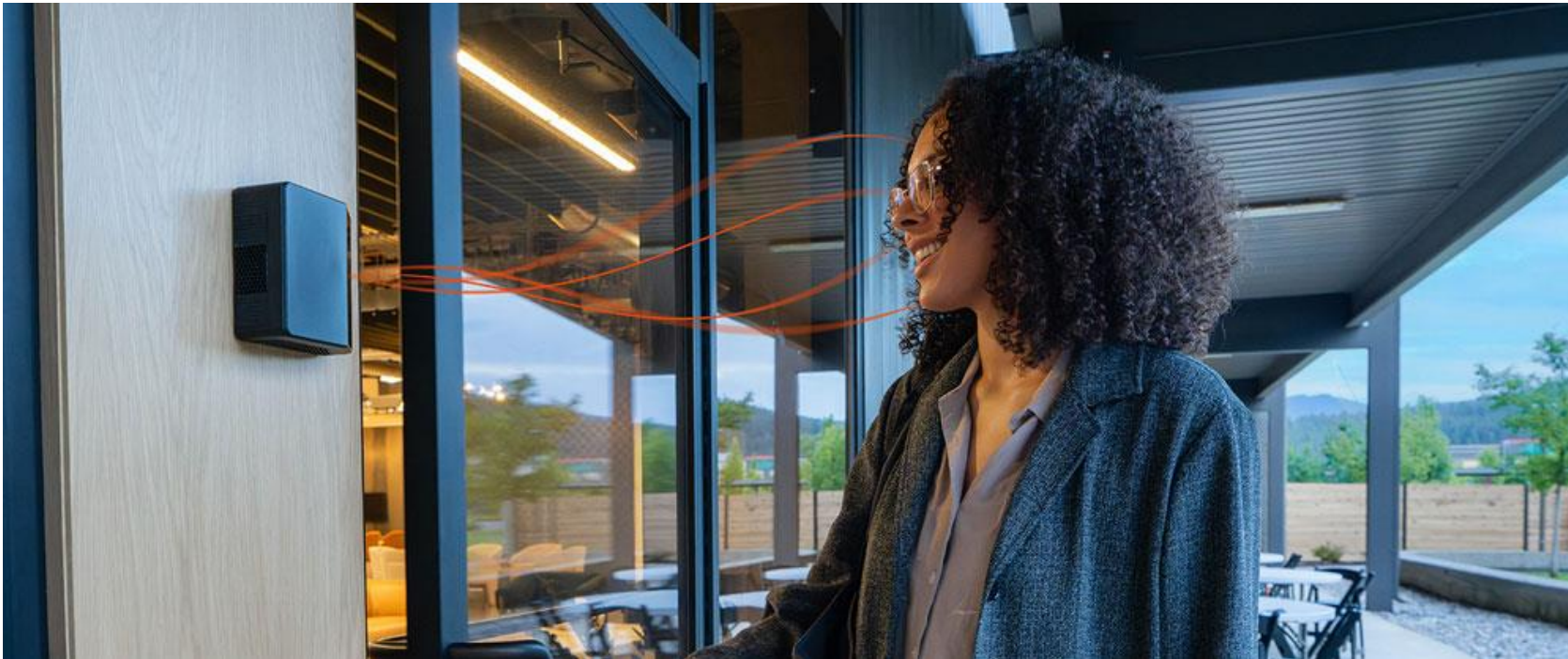
Cloud Managed & Hybrid Systems



Organizations are moving to cloud-based security, allowing for remote management, easier system updates, and the integration of existing hardware without full replacements.

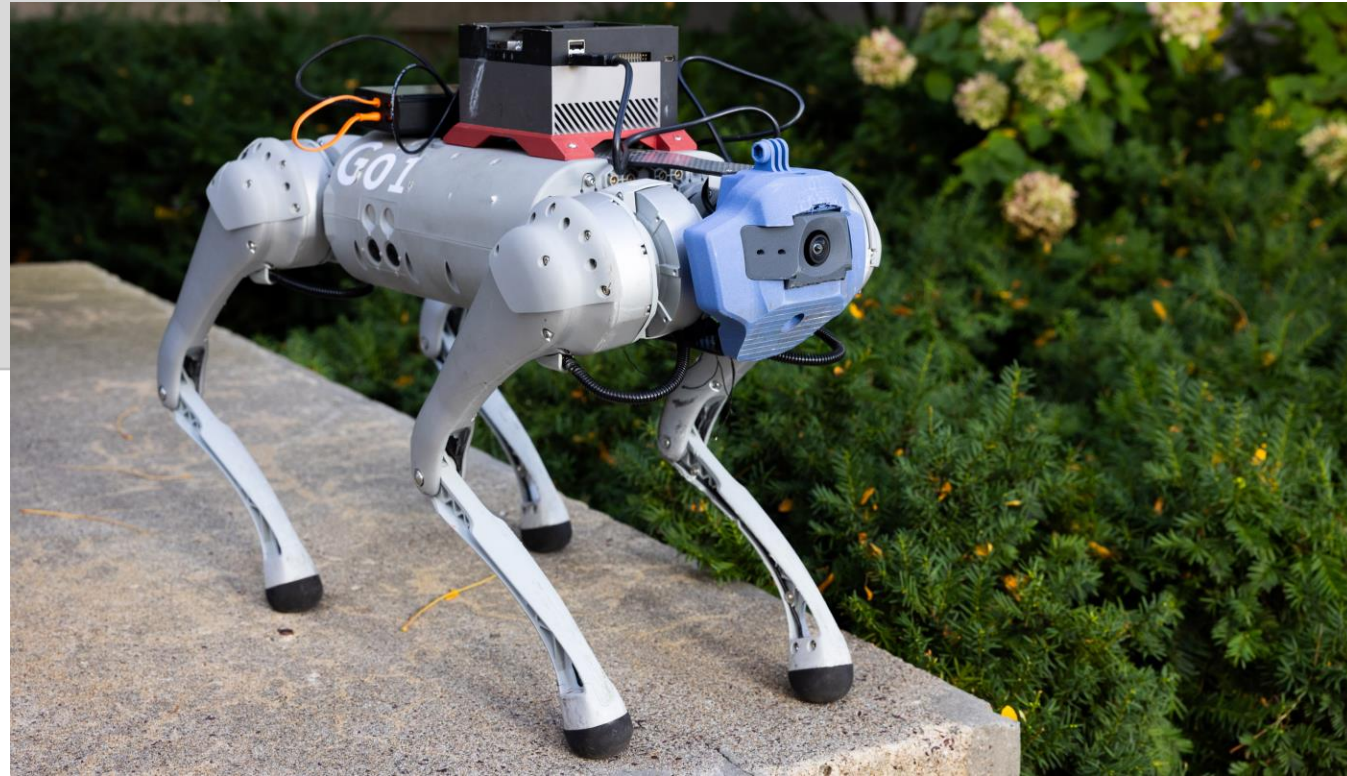
Advanced Biometric Access Control

Fingerprint, facial recognition, and palm vein scanners are becoming standard for secure, contactless access, offering high accuracy and integration with AI for anomaly detection.

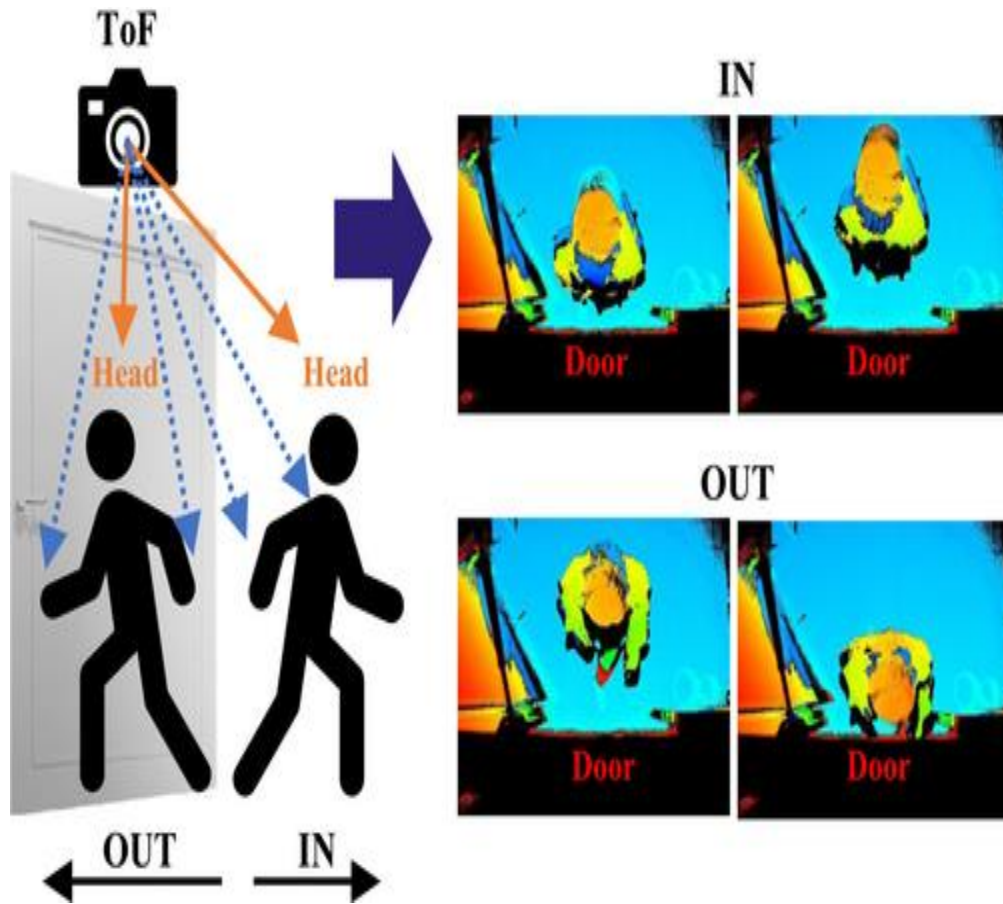


Autonomous Robots & Drones

Robotics and drones provide automated perimeter security and patrolling, acting as mobile surveillance nodes.



Privacy Conscious Sensing & Volumetric Detection



Technologies that detect threats without compromising privacy (e.g., LIDAR or radar) and advanced sensors that monitor 3D spaces.

In conclusion...

These technologies are aimed at reducing "alert fatigue," providing faster incident responses, and improving overall operational efficiency.

Environmental Health and Safety (EHS)

Develop and implement environmental and occupational health and safety programs throughout Penn State's multi-campus system.



PennState
University Police
and Public Safety

EHS Modernization Strategic Plan

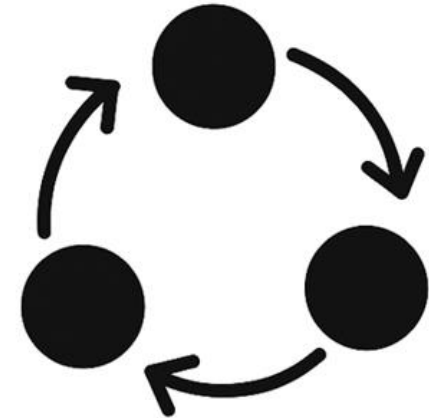
- Journey to transform the University's historical de-centralized management model to an enhanced EHS support and engagement model



**PEOPLE
/TEAM**



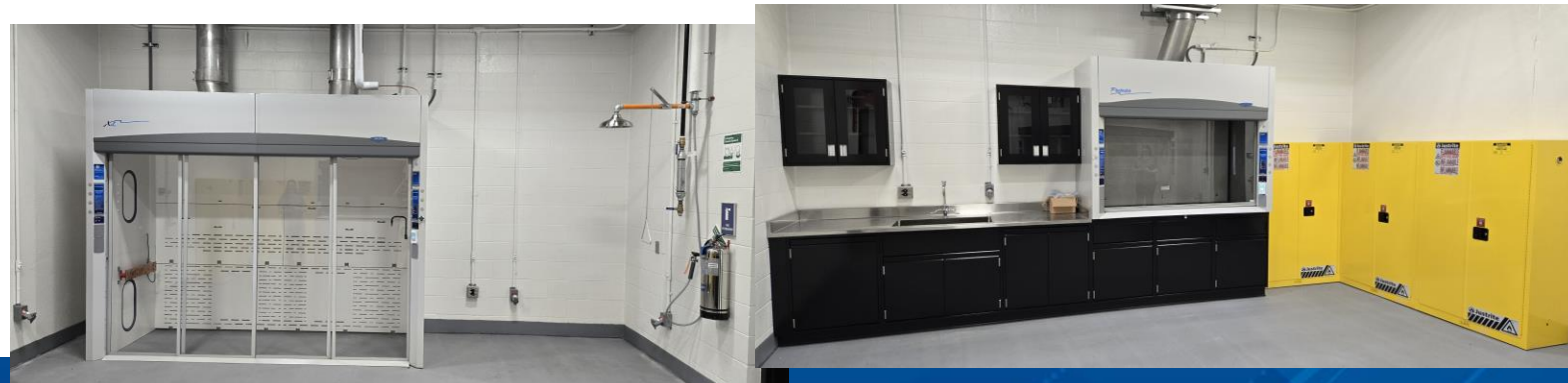
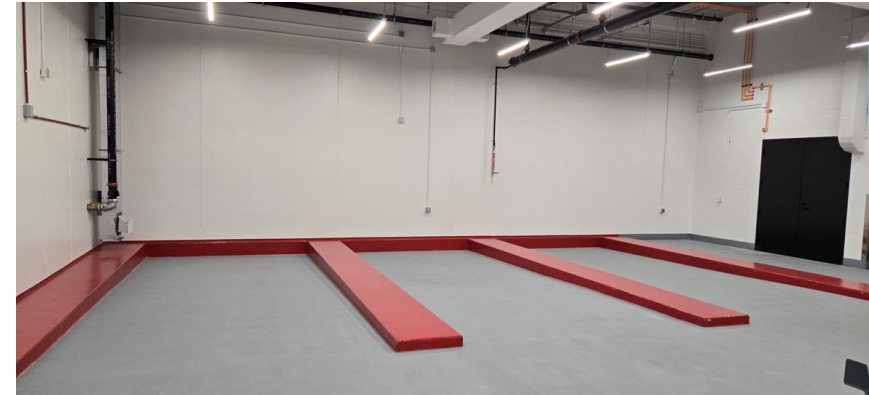
FACILITIES



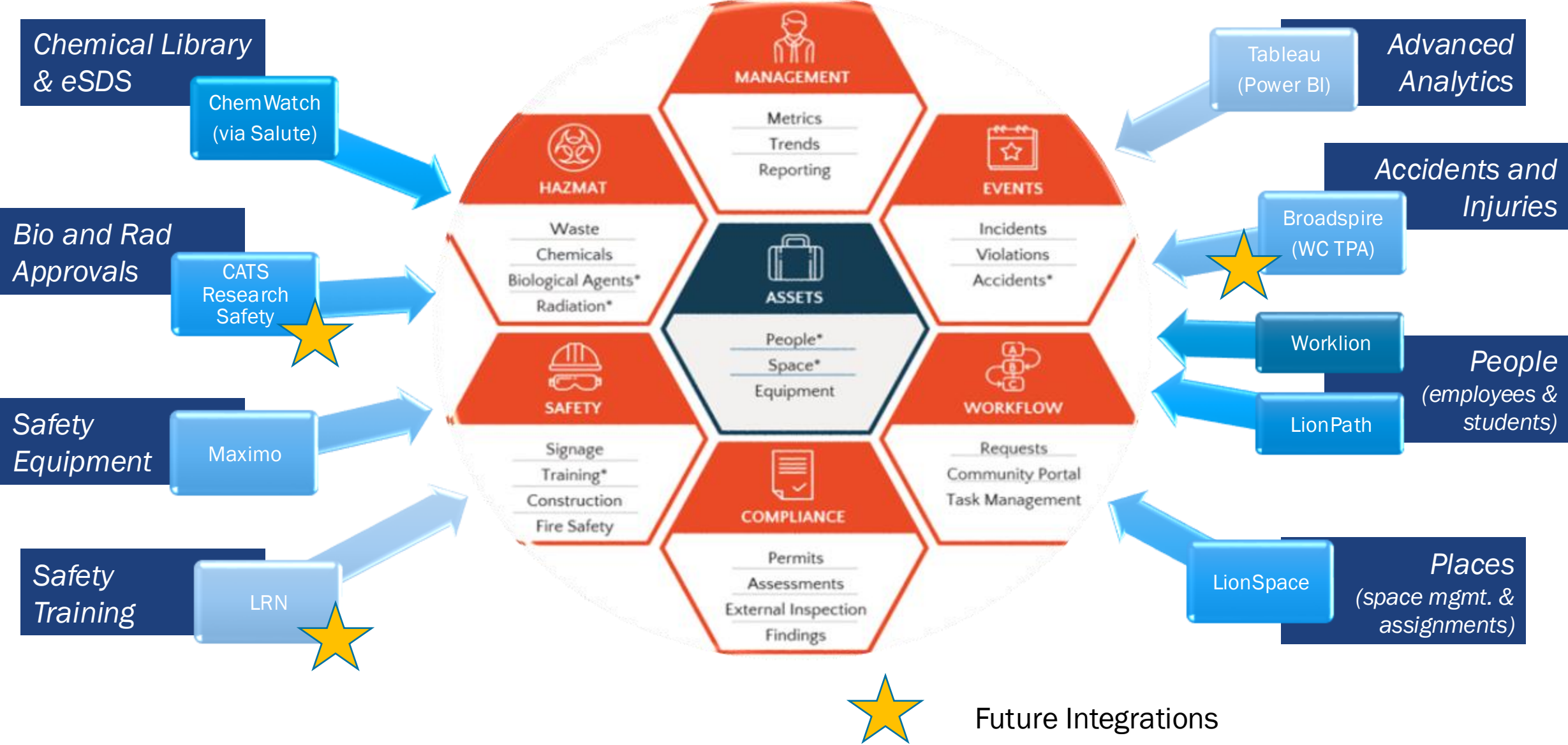
**PROGRAMS
/SERVICES**

Environmental Management Facility

- ~ 4,000 chemical waste pickup requests/year
- ~ 25,000 chemical containers/year processed
- ~ 170,000 lbs. hazardous chemical waste shipped/year
- Consolidate chemical, radioactive, and universal waste streams generated across UP campus
- Started operations late 2025



Leveraging Technology – Data Driven Decisions



Enterprise Level - Data Driven Decisions

Universal EHS
Risk Assessment



Customized Safety Plans
and Hazard Mitigation



Safety & Risk
Communications

CONCEPT MODEL

EHS Program Applicability

- Training
- Medical
- EHS Workflows
- External Workflows

Responsibilities of Supervisor and Employees

Training Needs Assessment
and LMS Integration **LionSafe**

LMS Credential

Medical Clearances
as a LMS Record

EHS risk inventories or
assessments in **LionSafe**

Other PSU Units and
Committees; OR

Regulatory Permits, Reports
and Inspections in **LionSafe**

Responsible Person Risk Profile & Safety Plan



LionSafe Risk Assessment Summary Report

This report is an overview of the applicable responses reflected on the respective LionSafe Risk Assessment. Responsible Persons must review, share, and implement requirements below within their work group. For any questions or help from EHS, please email psuehs@psu.edu or call (814) 865-6391.

Responsible Person: John Asbury
Building Name: Benkovic Building
Address: 376 SCIENCE DR
Space No.: 0050000-018C
Object Details:
Email: jba11@psu.edu

LRA Administrative Section

I acknowledge that the responsible person of this assessment must be the PI/Supervisor of the respective work group. This may require changing the "responsible person's" name at the beginning of this assessment.

Acknowledge

As the Responsible Person of my work group, I certify that I will ensure all members of my work group have reviewed this assessment entirely. Everyone will be aware and understand the potential hazards and how to control them within the scope of their work.

Accept and Acknowledge

Select the option that best describes your role for this work group (only the roles listed are permitted to complete this assessment):

Safety Officer

Provide a brief description of your group's work/research including website links that may apply for your workgroup.

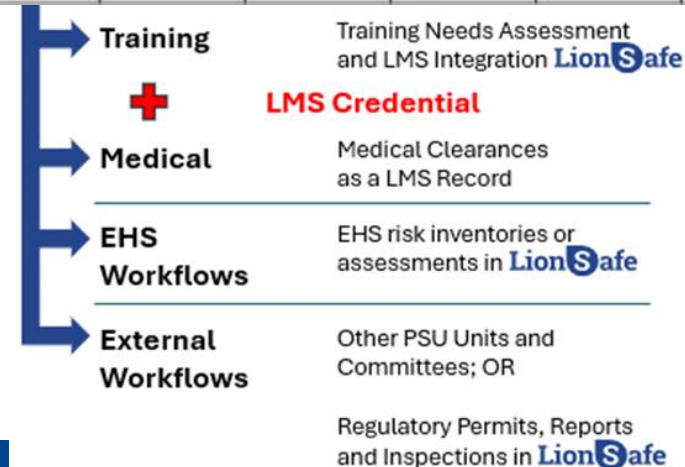
<https://sites.psu.edu/asburylabpsu/>

Data Driven Decisions...Risk-based Resource Allocations (EHS *LionSafe* Risk Assessment in Academic/Research Units)

OPP LS Campus	OPP LS ORG1	OPP LionSpace All Space PIs	OPP LionSpace Total "Lab" PIs	EHS LionSafe Completed LRAs	Chemical Safety	Biological Safety	Radiation Safety	Workplace Safety	PPE	Environmental	HazMat	Special Programs
1-UP	1640 - College of Earth and Mineral Sciences	231	125	64	133	3	71	66	61	1	17	18
1-UP	2120 - Agricultural Sciences	448	226	63	137	129	38	64	61	0	43	63
1-UP	2310 - College of Liberal Arts	103	67									
1-UP	2750 - College of Education	43	4									
1-UP	2970 - Smeal College of Business	4										
1-UP	3860 - College of Engineering	428	337	3	6	0	3	3	2	0	2	0
1-UP	4310 - ARL-Applied Research Laboratory	1	1									
1-UP	5400 - Eberly College of Science	301	149	98	215	102	225	95	106	0	62	16
1-UP	5420 - Arts Architecture	32	6	5	7	0	0	18	6	0	0	3
1-UP	5640 - College of Nursing	1										
1-UP	6390 - Vice President for Research	255	149	83	201	157	119	81	82	4	53	8
1-UP	6970 - Health and Human Development	143	65	24	34	86	14	9	19	0	12	6
1-UP	7080 - College of IST	59	53									
	Totals	2049	1182	340	733	477	470	336	337	5	189	114

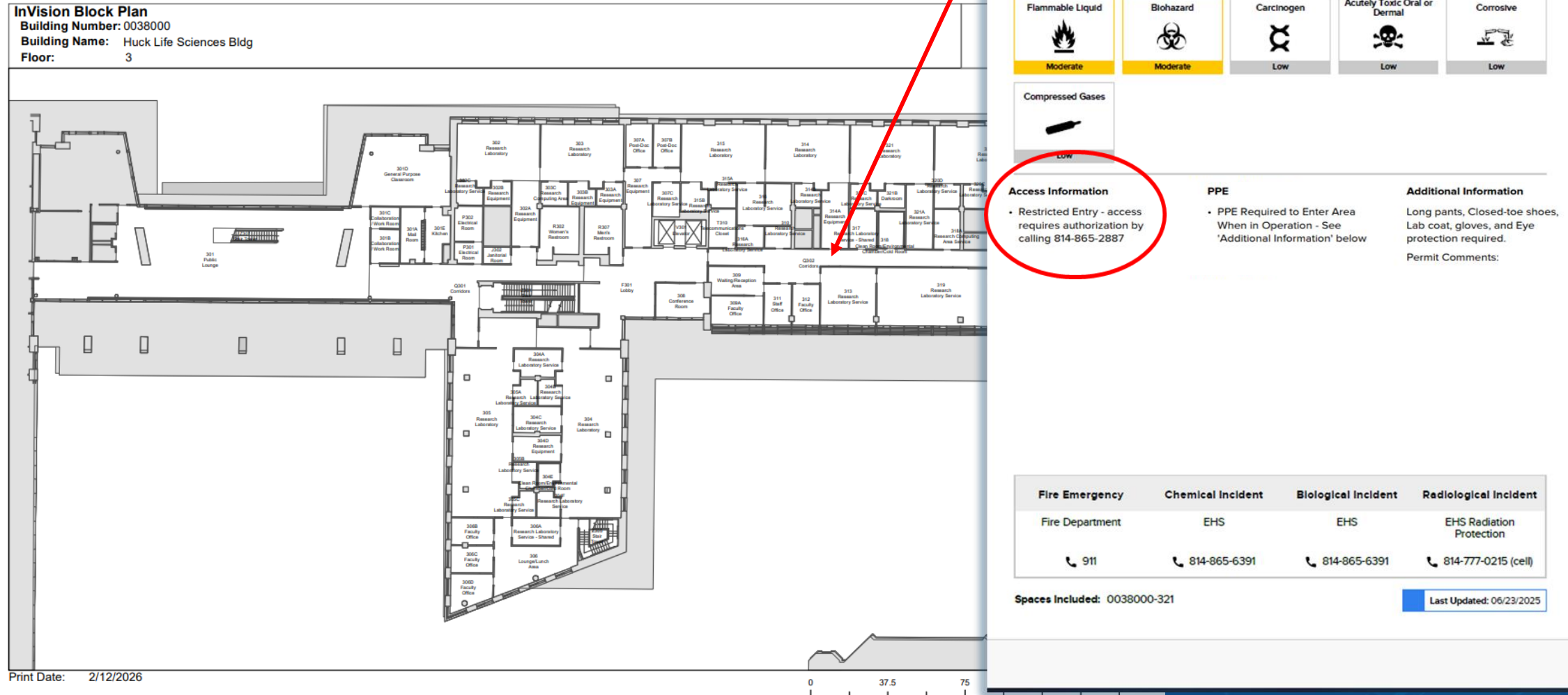
340 LRAs completed ➡ 2,661 Applicable EHS Programs
~7.8 Applicable EHS Programs per Research Group

Anticipate 2H27 – Rollout to F&B Units



Data into Safety and Compliance

- Use Case

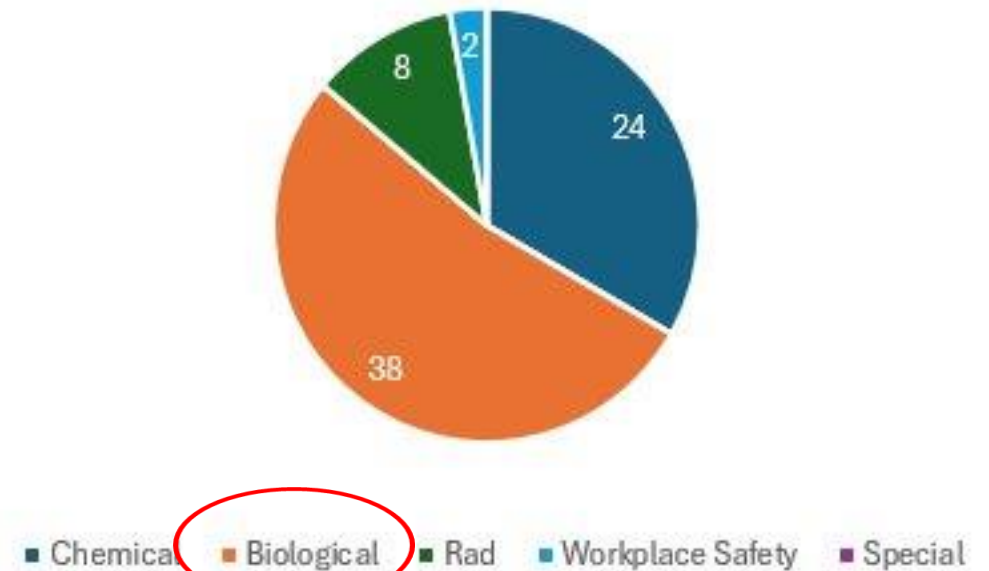


Data into Safety and Compliance

- Use Case

Building Floor 0038000-3	
CHEMICAL / ENVIRO	BIOLOGICAL
Owners 7	BioSafety 6
Gas Monitoring 4	IBC 5
Pesticide 0	BBP Lab 6
Explosives 0	Select Agent 1
CFATS 0	Polio Virus 1
ACM PCB 0	Invertibrates 0
Lead 0	Animal Specimen 4
Storage Tanks 0	IACUC 3
Env Emerg Plan 0	Plants-Pests 1
HazMat Shipping 5	Human Subject 4
Chemical Waste 6	BBP NonLab 1
Universal Waste 2	Bio - Waste 6
PPE	SPECIAL
PPE 6	Machine Shop 0
Hearing 0	Field Safety 1
Respiratory 0	Process Safety 0

Huck Third Floor (72 Total)



Data into Safety and Compliance

- Use Case

 PennState

Environmental Health and Safety

ABOUTCONTACT USFAQS

Environmental Protection +Hazardous Materials +Laboratory and Research Safety +Radiation Protection +Workplace Safety +LionSafe +

Home

Training

This webpage lists all of the EHS training by program area. They can be searched using a specific term or filtered by program. Click on the course name to open the description. The narratives explain who needs to take the training, if it is required or recommended, If it is a one-time training or needs to be taken more than once, the format of the training, and provides a link to the training and program webpage.

Note to Students: If you are not receiving compensation from Penn State and you have not yet taken a class on Penn State's Learning Resource Network (LRN), you will first need to create an account using your Penn State access account. Navigate to the [LRN](#) and click on "Login to LRN." The links below will then take you to the correct training.

Note to Supervisors: Reference the [Guide](#) to assist in registering employees and generating reports.

BIOSAFETY

Autoclave Safety	+
Bloodborne Pathogens - Research Personnel	+
Regulated Medical Waste	+
Yearly Biosafety Training	+

Data into Safety and Compliance



PennState

[Home](#) [Learning](#) [Reports](#) [ILT](#) [Admin](#) [Skills](#) [Resources](#)

ONLINE CLASS

EHS - Autoclave Safety

Last Updated 01/04/2024

Details

This course is an optional, but strongly recommended training for laboratory personnel who need to operate autoclaves. A summary of the program requirements can be found at the [Biological Safety](#) webpage.

The format of the training is an online presentation. Additional hands-on training must also be provided by the supervisor or a knowledgeable person.

Contact [EHS Department](#) by email or call the EHS office at 814-865-6391 for more information.

[Show More](#)



ONLINE CLASS
EHS - Autoclave Safety

[Launch](#) 

or

[Assign](#)



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University Police and Public Safety

Safety and Compliance Awareness

- Leverage data from core University systems of record
- Risk data available by responsible person, space, floor, and building
- Transparent information for individuals performing standard facility operations and emergency repairs including key contact personnel
- Ability to focus resources on higher risk areas across the University
- Critical information available to emergency response groups

Information Technology

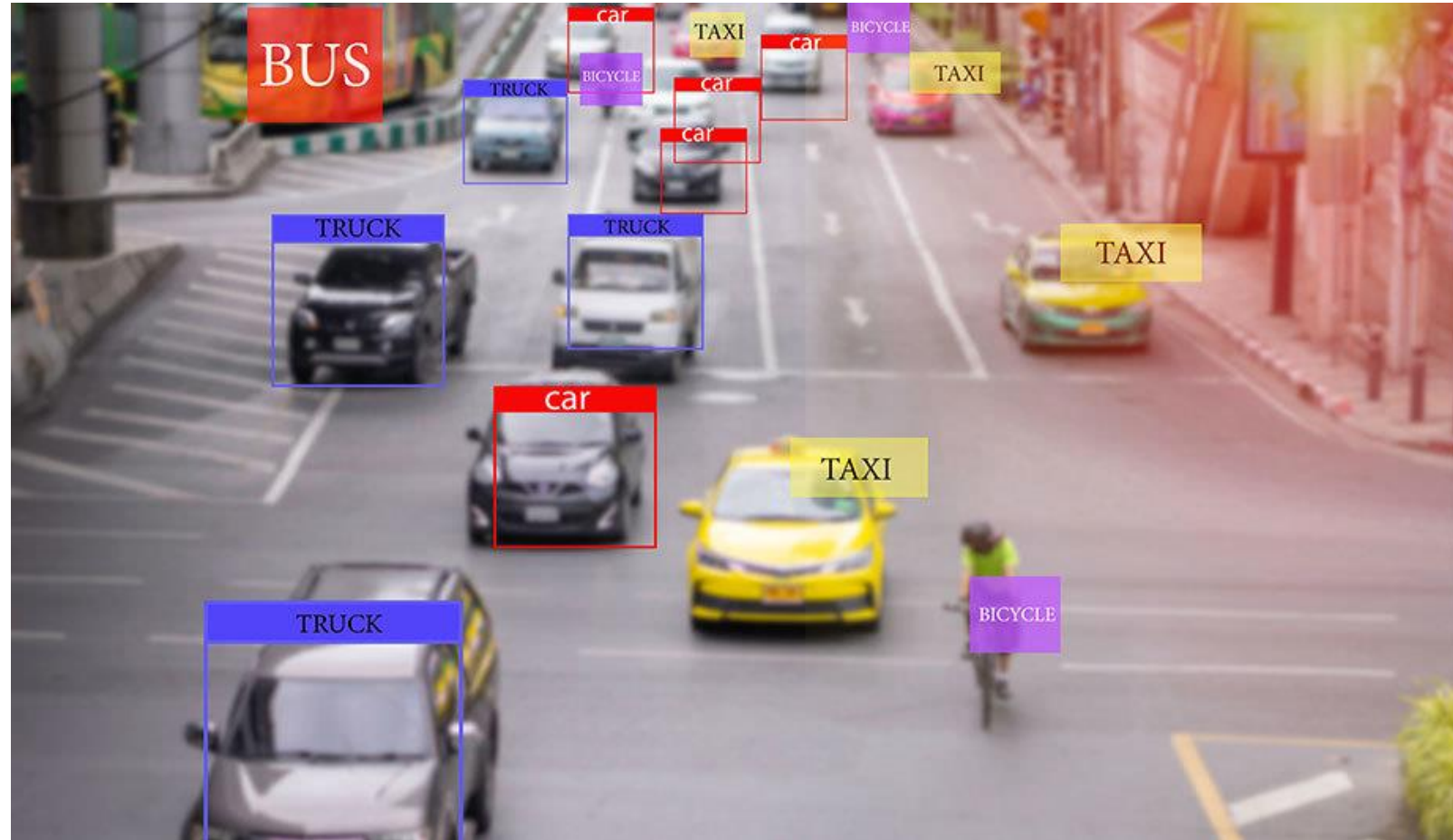
University Police & Public Safety





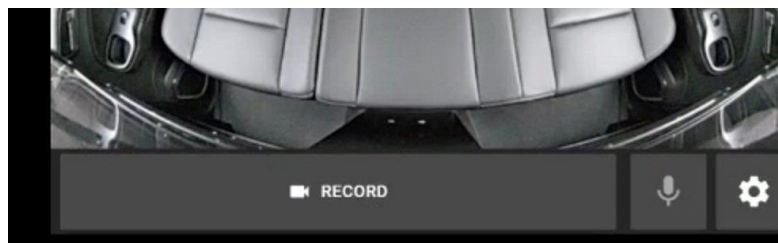
Artificial Intelligence

- Crime analysis
- Video analysis
- Social media analysis



Smart Vehicles

- Network connectivity
 - Location
 - Telemetry data
- Voice activated controls
- Integrated cameras
- GPS Launchers



Wearables

- Body worn cameras
- Health and wellness tracking
- VR and AR training tools



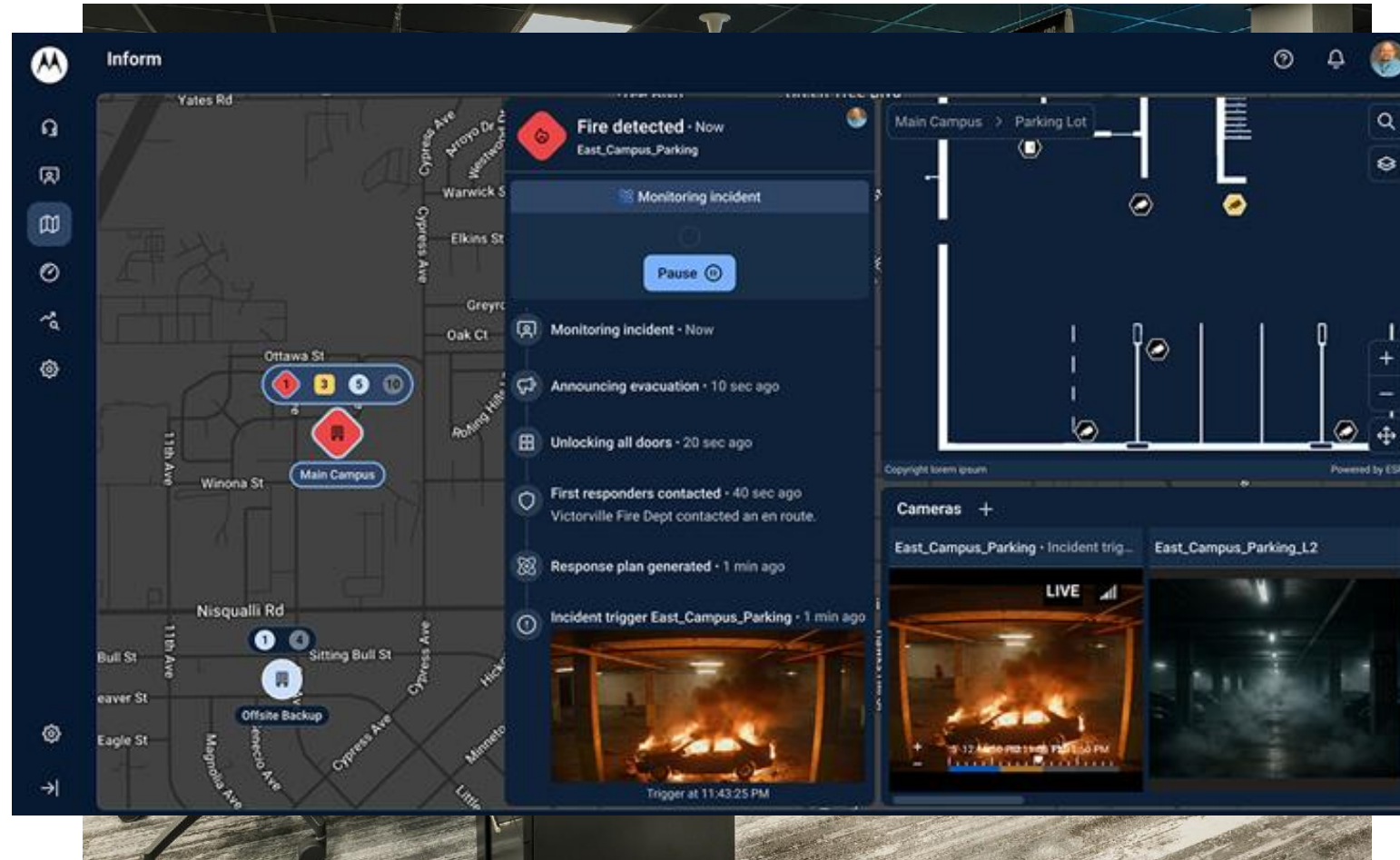
Robotics

- Aerial drones
 - Drone as first responder
- EOD
- Tactical
- Patrol
- Humanoid



Real Time Crime Centers

- Data Sources:
 - CCTV
 - BWC
 - ALPR
 - Shot detection systems
 - Alarm systems
 - Geolocation data
 - Access control systems



Thank you!

Questions...

