



UNIVERSITY OF MARYLAND

DEPARTMENT OF ENVIRONMENTAL SAFETY, SUSTAINABILITY AND RISK

ANNUAL REPORT 2022-2023





**DEPARTMENT OF ENVIRONMENTAL
SAFETY, SUSTAINABILITY & RISK**
2022-2023 ANNUAL REPORT

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MESSAGE FROM THE EXECUTIVE DIRECTOR



Greetings from ESSR!

In 2022, the University of Maryland launched its Strategic Plan titled *Fearlessly Forward: In Pursuit of Excellence and Impact for the Public Good*. With support from the Division of Administration (VPA), the Department of Environmental Safety, Sustainability and Risk (ESSR) is focused on ways to support the following University commitments: *We Invest in People & Communities, We Take on Humanity's Grand Challenges, We Partner to Advance the Public Good, and We Reimagine Learning*.

These commitments are a starting point for assessing the role ESSR holds at the University and as part of the Division of Administration. Our department has focused intently on evaluating how to provide exceptional customer service to the campus community and how to invest back into our dedicated staff. For the past several months, ESSR senior leadership has assessed unit email reflectors created for customer communication with our team. Email responses from ESSR staff to customers are reviewed to ensure responses are substantial. Additionally, we are re-evaluating how we invest in our staff by establishing a career pathway program and collaborating with VPA to revamp the hiring and staff orientation process.

Throughout the year, our department participates in Maryland Day, Good Neighbor Day, Earth Day, and a host of other outreach events to educate and provide resources to UMD students, faculty, and staff. Other examples of ESSR supporting the University's Strategic Plan appear throughout this report. We hope you enjoy reading about our department, our programs, and the interesting and challenging work completed by our staff.

Please let us know how we can help you. Our commitment to safety and customer service is an ongoing effort and we are very interested in hearing your feedback. Please send any comments or suggestions to safety@umd.edu.

Here's to moving Fearlessly Forward!

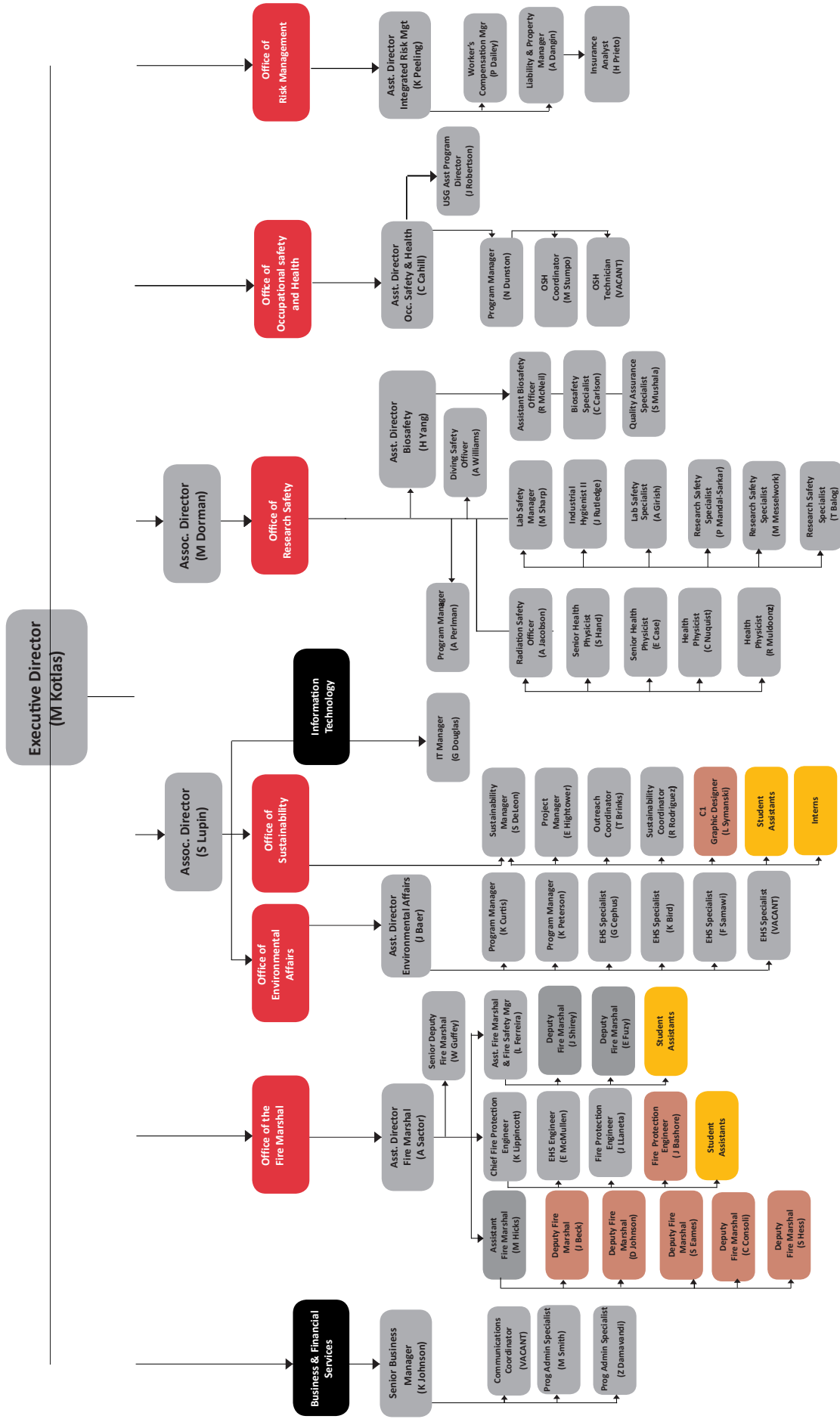
Sincerely,

A handwritten signature in black ink that reads "Maureen M. Kotlas". The signature is written in a cursive, flowing style.

Maureen Kotlas
Executive Director



DEPARTMENT OF ENVIRONMENTAL SAFETY, SUSTAINABILITY & RISK



Full Time
Part Time
Students



DEPARTMENT OF ENVIRONMENTAL SAFETY, SUSTAINABILITY & RISK

OUR VISION

Our vision is a campus where safety and sustainability are core values at every level of the institution.

OUR MISSION

Our mission is to provide leadership in the identification and management of safety and environmental risks and to foster excellence in safety and sustainability through our technical expertise, our quality of work and our professional integrity.

OUR VALUES

The Department of Environmental Safety, Sustainability & Risk (ESSR) holds these values as intrinsic to our mission –

Protect People and the Environment

We put the highest priority in returning people home the same or better than they arrived. Through education, training and knowledge sharing we promote a culture of safety and sustainability.

Excellence

We expect state-of-the-art competencies of ourselves and others in all areas of workplace safety, environmental management and sustainability. We deliver high quality programs and services to the campus community.

Leadership

Our people at all levels, have ownership and take initiative in their areas of responsibility and demonstrate the safe, sustainable and environmentally friendly behaviors we expect of others.

Service


We provide professional services to the University of Maryland community. We are a resource for those we support and we follow through on our commitments in a timely manner.

Diversity

We acknowledge and honor the fundamental value and dignity of all individuals. We are committed to inclusiveness and actively seeking and encouraging discussion and participation from a diverse group with different perspectives and experiences.

Collaboration

We are committed to building partnerships and working together to find the best solutions to collectively achieve our goals. We are open to new ideas and creative solutions. We seek to engage and motivate the campus community to accept ownership of the university's safety and sustainability culture.



The Office of Environmental Affairs (OEA) consists of a staff of seven and is engaged in three primary areas of focus – regulated waste management, environmental compliance assurance, and assisting with environmental aspects real estate initiatives. The unit also manages the beneficial reutilization of the University's legacy landfill areas under a RCRA Corrective Action Permit. OEA works with campus stakeholders to facilitate campus-wide compliance with federal and state environmental regulations including regulated waste management, air quality permits, fuel and oil storage tank management, stormwater and water quality permits, and remediation. OEA helps the campus community manage environmental risk by developing policies, procedures, training, and consulting with campus entities including faculty, staff and students in labs, offices, and maintenance shops. OEA conducts required regulatory inspections, testing, and reporting. OEA provides oil and hazardous materials spill response and remediation capabilities for the campus.

Regulated Waste Management Programs

The regulated waste programs encompass the collection, management, and disposal of all chemical, biological, and radioactive, and universal waste generated at UMD properties. This includes facilities at the College Park campus and UMD's satellite facilities including the Institute for Bioscience and Biotechnology Research (IBBR) in Rockville, Maryland and various farms and remote research facilities throughout the state. OEA operates a fully-permitted hazardous waste storage facility on campus, one of only 14 such facilities in the state of Maryland. The facility's operations are performed in a safe manner to ensure that all waste is managed safely, and practices meet all federal and state environmental regulations.

Spill & Incident Response

Clean up and spill responses for most HAZMAT incidents are managed by the OEA unit. OEA staff are on call 24 hours a day, 365 days a year to respond to and mitigate environmental incidents on the campus.

Stormwater / Pollution Prevention Compliance and Training

OEA currently manages multiple stormwater permits and pollution prevention programs for the University.

- Industrial Discharge Permit, which specifically regulates campus discharges from outfalls to surrounding streams (Permit #08-DP-2618).
- General Discharge Permit for Stormwater Associated with Industrial Activities (Permit #12-SW-3281A), which permits the discharge of stormwater from certain facilities that are targeted as high potential sources for stormwater pollution.

- NPDES Municipal Separate Storm Sewer System (MS4) Phase II General Permit (Permit #13-SF-5501), which covers the general discharge of stormwater run-off from land, pavement, building rooftops and construction sites on campus.
- General Permit for Discharges Associated with Pesticide Application (17-PE-0195), which streamlines the use of herbicides and pesticides at the College Park campus and all satellite UMD facilities.
- Spill Prevention Control and Countermeasure (SPCC) Plan to prevent and mitigate oil spills on campus, IBBR / USG campus, as well as the 6 farms operated by the University.
- Two Oil Operations Permits for the College Park campus and operations at the Severn Building.

Air Quality Permitting and Reporting

UMD is required under federal and state regulations to hold a Title V Air Quality Permit, with this requirement being primarily driven by the university's Combined Heat and Power (CHP) facility. OEA collaborates with other departments on campus to ensure that various management tasks associated with the Title V Air Quality Permit are completed and submitted in a timely manner. This includes testing fuel-burning equipment, permitting new fuel-burning equipment and reporting air emissions from the campus, including "greenhouse gas" emissions. OEA also continued to provide support to the IBBR campus with their state-issued air Permit to Operate, ultimately helping them convert from Synthetic Minor status to a more basic Air Quality Permit to Construct. OEA continues to provide technical support to the University as plans and implements the NextGen project, which seeks to refurbish the university's CHP facility.



Campus Development Initiatives

During FY23, OEA continued to provide support to the University as we acquired new property, developed existing properties, divested property, and engaged in new relationships with non-University entities. In addition to conducting environmental

site assessments related to property acquisition and divestment transactions, OEA provided technical assistance to multiple partnerships with non-University entities. Examples include the Purple Line Project, several start-up ventures, and projects related to the acquisition, divestment, and beneficial redevelopment of impaired land in the University's Discovery District.

OFFICE OF ENVIRONMENTAL AFFAIRS - FISCAL YEAR 2023 BY THE NUMBERS	
Regulated Waste Management Programs	
Completed Regulated Waste Pickup Requests	9,320 requests
Hazardous Chemical Waste (solid & liquid) Disposal	64,100 pounds
Biohazardous Waste (solid) Disposal	28,900 pounds
Radioactive Waste (solid & liquid) Disposal	1,938 pounds
Universal Waste (e.g., batteries & bulbs) Recycling	22,800 pounds
Scrap / Semi-Precious Metal Recycling	730 pounds
Used Oil Recycling	240 gallons
Used Antifreeze Recycling	58 gallons
Old Latex Paint	11,900 pounds
Oil Contaminated Soil	167 tons
Waste Diverted as Municipal Solid Waste	410 pounds
Regulated Waste Training Provided	4,400 faculty, staff, students
Laboratory Cleanouts	46 cleanouts
Unknown/Unidentified Wastes Tested	214 waste items
Spill & Incident Response	
Oil Spills	19 incidents
Chemical Spills	9 incidents
Sewage Overflow	1 incident
Stormwater / Pollution Prevention Compliance and Training	
Stormwater Permits Managed and Implemented	4 permits
Outfall Sampling and Inspection	49 outfalls
Illicit Discharge Investigations	5 investigations
Spill Prevention Control Plan (SPCC)	380 regulated assets
SPCC Plan Inspections Completed	146 inspections
Pollution Prevention Training Provided	388 faculty, staff, students
Air Quality Permitting and Reporting	
Title V Air Quality Permit Renewal	Issued in FY23 (revision underway)
Air Permits to Construct (4)	Boilers, generators, etc.
Air Quality Training Provided	10 staff

The Office of the Fire Marshal (OFM) works to preserve and protect life and property from fire, explosion, and natural hazards. This is accomplished through enforcement of the State Fire Prevention Code, fire protection engineering, training, public education, fire investigation, emergency response and preparedness. OFM is the Authority Having Jurisdiction (AHJ) for the University of Maryland. Fire Marshals are delegated legal authority by the Maryland State Fire Marshal.

Plan Review and Construction

OFM issued Certificates of Occupancy for the following UMD and College Park Service Center capital projects with a total value of approximately \$388 million:

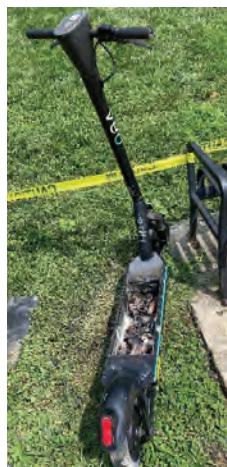
- Thurgood Marshall Hall (previously the School of Public Policy)
- Johnson-Whittle Hall
- Yahentamitsi Dining Hall
- Frostburg State University – Education and Health Sciences Center



OFM engineers on a construction site at Bowie State University

Micromobility

Micromobility refers to a range of lightweight vehicles driven at speeds up to 15 mph designed to travel short distances. They are typically powered by lithium-ion battery technology. Their increasing popularity has led to safety aspects that challenge current campus infrastructure. The Department of Transportation Services has taken the lead on micromobility use by requiring vehicles to be registered, managing the contract for vehicle rentals,



Scooter fire on McKeldin Mall

and communicating regulations for their safe use. OFM has focused fire related safety efforts by keeping these vehicles out of buildings and away from egress pathways, especially residential and public assembly buildings. A scooter fire on McKeldin Mall demonstrated the volatility and danger of lithium-ion batteries. The phenomenon of thermal runaway associated with these batteries makes extinguishing a fire very difficult using conventional fire extinguishing methods.

To address micromobility safety concerns, the OFM is working with campus partners to develop accommodations for the safe storage and charging of these vehicles outside of buildings. For new construction projects, architects have been asked to consider including areas where e-scooters and bikes can be secured and safely charged. These measures will help mitigate the risk of fire in buildings as well as the issue of impeding emergency exits.

Fire Safety for People with Access and Functional Needs

One pillar of the UMD Strategic Plan is to “Invest in People and Communities.” OFM has striven to address the concerns of people with access and functional needs with regards to fire safety and emergency planning. In November 2022 in New Brunswick, New Jersey, Fire Marshal Al Sactor moderated a panel discussion at the national Center for Campus Fire Safety Campus Fire Forum, “Fire Safety for Student with Disabilities.” The panelists included Justine “Justice” Shorter, Disaster Protection Advisor for the National Disability Rights Network, and Emily Singer Lucio, ADA/504 Coordinator for the University of Maryland. Ms. Lucio also presented information during an ESSR staff meeting coordinated by OFM, challenging staff



Two-way communication phone for area of refuge



to reduce barriers that hinder access to university activities for people with access and functional needs. Those needs include living with limited mobility, low vision, deficiencies in hearing and speech as well as cognitive and behavioral impairments.

Safe and efficient egress from buildings in case of an emergency is a top priority for OFM. To support the safety of individuals with limited mobility, areas of refuge or rescue assistance are designed so that individuals who are unable to use the stairs can shelter in place and inform emergency personnel of their location. OFM has led the coordination among multiple departments to install and operate the systems capable of two-way communication from multiple floors and areas of buildings. In compliance with American with Disabilities Act (ADA) requirements, system signs and devices have both audible and visual features and include braille with details such as location, procedure for use, and operation instructions. As buildings are being constructed and renovated, these types of devices are being installed and will provide better support to all members of the campus community during emergencies.

Growing Pains

Multiple, simultaneous construction projects created challenges for maintaining emergency vehicle access and emergency exits from buildings.

The Purple Line, combined with Baltimore Avenue improvements, Campus Drive storm drain upgrade and steam pipe projects, has left much of campus with closed roads, excavations, and construction fencing.



Construction impacts Campus Drive

OFM continuously works with VPA project managers, contractors, and Facilities Management to maintain adequate roads for emergency vehicles – including fire trucks as long as 60 feet and weighing upwards of 62,000 pounds – and safe emergency exiting from affected buildings.

Collaboration with Facilities Management

To ensure the effectiveness of fire protection and other life safety systems, OFM and Facilities Management began to conduct regular meetings to review the testing and maintenance needs and coordinate efforts. Communication has been enhanced through this collaboration. An effective strategy was to create a database which enables staff from OFM and Facilities Management to share testing reports, inspection records, and other vital life safety related information. Another success was the sharing of the new project management software, CxAlloy. Use of CxAlloy, has enabled construction project compliance issues identified by OFM to be efficiently resolved in a timely manner by Facilities Management.



Fire Protection Engineer Jessimay LLaneta

FPE Jessimay Llaneta joined the Office of the Fire Marshal in 2020 during the tumult of the COVID pandemic. She has become an indispensable member of the plan review and construction team. She was born in the Philippines and moved to the United States with her family when she was 18. Earning her Bachelor of Science degree in Architecture from the University of Maryland, she began her career as an architect. Jessimay found her stepping stone to the fire protection and life safety field when she accepted a position as an entry level fire protection engineer for the Prince George's County government in 2015 and worked her way up to acting supervisor. She is involved in plan review and inspection of various new construction and renovation projects on the College Park campus as well as other University System of Maryland campuses as part of the College Park Service Center.



RESEARCH SAFETY

The Office of Research Safety (ORS) provides the expertise in Biosafety, Laboratory Safety, Radiation Safety, Laser Safety, and Scientific Diving Safety professional staff who support the research community in meeting the University's **Expectations for Conducting Safe Research**. Additionally, a dedicated ORS staff member provides focused safety and compliance support to the Department of Laboratory Animal Resources and researchers who work with and care for animals.

At UMD research excellence and safety are inextricably intertwined. Thus, safety is a core value of our institution and an integral part of the responsible conduct of research. The University leadership expects all members of our research community to integrate safety into their research activities, to strive for excellence and to go beyond minimum compliance. From collecting samples in remote areas around the world to handling hazardous materials within the research and teaching laboratories on campus, research often provides for multiple health and safety risks and regulatory requirements to be identified and managed. ORS offers a broad range of services and partners with the research community by providing comprehensive safety training classes, conducting risk assessments and exposure monitoring, and assisting with implementation of safety controls to minimize risks. ORS directly administers many of the university's federal and state licenses and registrations for hazardous and risk significant materials, ensuring that our campus' regulatory commitments are met as the research community works to achieve their research goals.

Supporting our Campus Leaders – UROC Safety Program Review

The A. James Clark School of Engineering's Uncrewed Aircraft Systems Research and Operations Center (UROC) scientists travel across the globe to remote areas in support of research projects involving drones. Most notably, in 2019 UROC successfully delivered the first ever kidney for transplant via a drone! UROC Director James Alexander places the highest priority on safety, knowing research is not a static endeavor and managing safety requires ongoing reassessment, feedback, and reinforcement. Directly aligned with the **Expectation: Strive for Continuous Improvement**, this year UROC Director James Alexander invited ESSR to conduct an external safety assurance audit of UROC's operations, which fulfills their own aviation safety

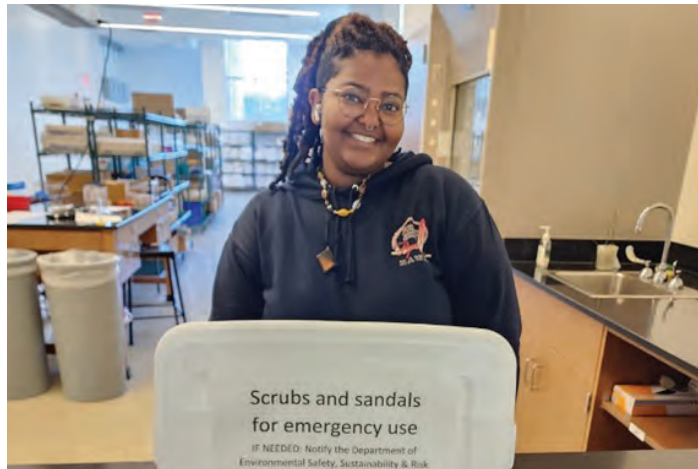
management program and best practice requirements. ORS coordinated ESSR staff to conduct this audit and provided a risk evaluation of field operations where hazards health and safety, regulatory, and reputational risks are present. Staff members evaluated the engineering controls, administrative controls, personal protective equipment, and the training that UROC has in place to control these risks. The format of audit was highly regarded by UROC and ESSR has been invited back to conduct future external audits.

Augmenting Safety Resources for Students

One of the important actions within the **Expectation: Assess and Plan for Hazards and Risks** is to **Plan for Emergencies**. However, when an accidental chemical exposure occurs, people can be reluctant to



Two UROC drone operators test a drone lift-off at the UROC facility in California, Maryland.



Meheret Messelwork, working with the Chemistry Department's Lower Division Stockroom, displays a bin of medical scrubs and sandals provided by ORS for emergency use.



remove contaminated clothing if no replacements are readily available. Any hesitation can hinder efforts to effectively rinse off chemicals and ultimately prolong exposure. In our undergraduate chemistry teaching labs, students are working with corrosive and toxic chemicals. To support our students' emergency preparedness, ORS Laboratory Safety procured and assembled bins with surgical scrubs and slide sandals in multiple sizes. Our goal is to ensure the students will have replacement clothing immediately available should an emergency occur. The free kits were delivered to the Chemistry Department's Lower Division Stockrooms, which are open when Chemistry lab classes are in session.

A New Autoclave Verification Program

To safeguard the environment and our community, UMD is committed to the legal and proper disposal of all laboratory waste. In fiscal year 2023, ORS launched a free Monthly Autoclave Verification Program to ensure biological waste is adequately sterilized and decontaminated prior to disposal. This initiative provides test kits to the research community which are used to verify autoclave functionality and the complete inactivation of biological materials. Partnering with the research community for more than 60 campus autoclaves, over 400 biological indicator tests were performed by autoclave users. Together we are **Demonstrating a Commitment to Safety.**

Improving Processes to Reduce Administrative Burden

To increase operational efficiency and reduce administrative burden on UMD's scientific community, ORS created a joint inspection program between Laboratory Safety and Biosafety teams so that only one annual inspection is required to any of the 213 affected laboratories on campus where biological materials are used.

Augmenting Non-Ionizing Radiation Safety

Radiation Safety launched a campus wide Static Magnetic Field program to verify and confirm magnetic field maps provided by the manufacturers and installers of Magnetic Resonance Imaging, Nuclear Magnetic Resonance Spectroscopy, and other instruments used for research on campus. These measurements document field levels at specific areas within and outside the laboratory for assessment of the operator's exposure



Radiation Safety Health Physicist, Clay Nuquist conducts a static magnetic field measurements of the Bruker BioSpec 9.4 Tesla MRI scanner located at A. James Clark Hall School of Engineering.

as compared to occupational exposure limits and the potential exposure to public spaces. The survey allows users and operators to identify and establish safety zone parameters. The program ensures proper signage and notification of safe boundaries for visitors and members of the public who have implanted medical devices.

Strengthening Laser Safety

Helping to provide safe research activities on campus involves addressing a wide range of hazards, including the two highest classes of lasers: Class 3B and Class 4. In 2022, the University formed the Laser Safety Subcommittee of the Laboratory Safety & Operations Committee. Faculty and staff members with experience in lasers and engineering protection management, advise the campus Laser Safety Officer on program guidelines and requirements. This year, the Laser Safety Officer worked collaboratively with the Wind Tunnel Engineer and his staff, providing in time training and daily site support for all faculty, students and staff involved with the PIV experiments in the UMD Wind Tunnel. Significant effort was undertaken by the staff to safely secure the facility and control exposure to reflected laser light hazards. They provided support, guidance, administration, and the expertise to collaboratively facilitate a safe operation for all personnel involved. Capping off the collaborative effort, Facilities Management ensured no University facilities personnel would enter the experimental areas for the duration of the project. A truly collaborative effort!

OCCUPATIONAL SAFETY AND HEALTH

The Office of Occupational Safety and Health (OSH) is continually dedicated to preventing illness, as well as injury, and disease by identifying hazards, evaluating corrective measures, and implementing controls and developing Occupational Safety and Health programs. OSH collaborates with university departments including Facilities Management, University Health Center, University of Maryland Police, Residence Life, and academic departments to promote an effective safety culture. This results in building partnerships to identify the best solutions and collectively achieve the UMD goal of a safe workforce.

Improved Safety Training and Education Programs

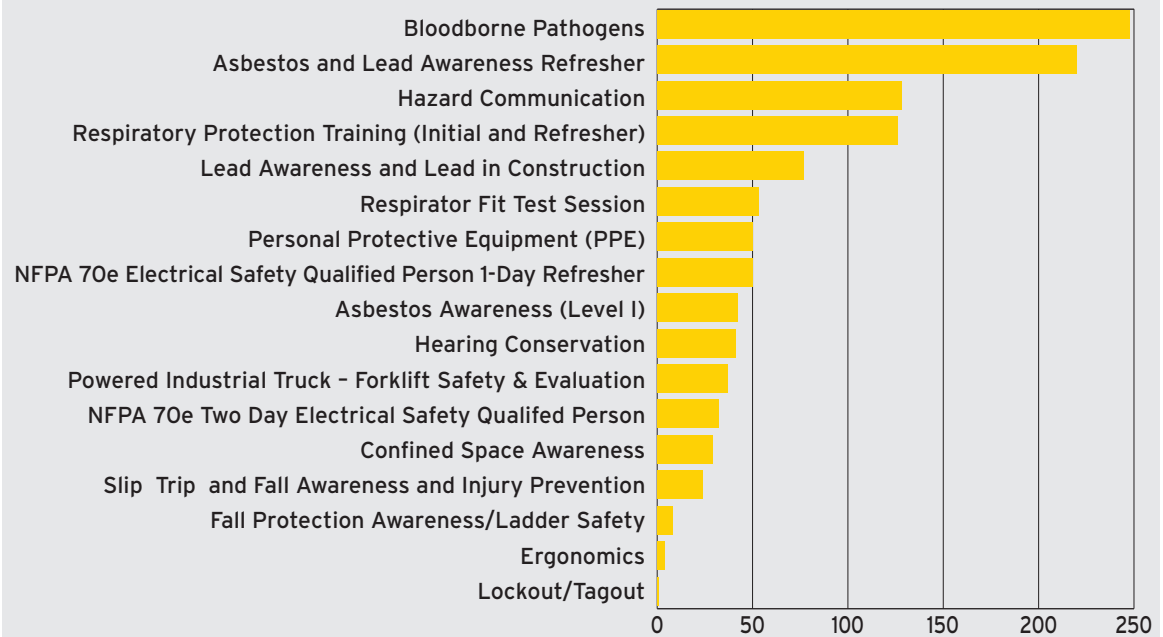
To provide the university community with the knowledge and skills to perform their work in a safe manner for them and their colleagues, we improved our safety courses and greatly increased the number of individuals trained. One thousand seventy faculty, staff and students attended updated training sessions in FY23.

To improve the effectiveness and inclusivity of our training, OSH partnered with the Department of Spanish and Portuguese to begin offering video training modules and in-person training in Spanish.



A safety course being conducted in Spanish

Training Completed in FY 2023



Safety Committees for Hazardous Operations

In order to build integrated partnerships to achieve our health and safety goals, OSH established the Machine Shop Safety Committee. This committee is comprised of over 90 personnel, including machine shop managers and employees, research laboratory staff and students, Makerspace Initiative (MSI) members, and university student groups. This committee was created to engage and motivate the machine shop community to optimize the safety of the work across campus. Regular problem-solving sessions have resulted in significant improvements to machine shop safety.

Throughout the year, the committee has been at work developing the Machine Shop Safety programs to include: shop scenarios; focused training program for managers, employees, and students; hazard identification and assessment tools, such as Job Hazard Analysis (JHA) control of hazardous energy practices, incident reporting, investigation, root cause analysis and lessons learned; regulatory compliance inspections by ESSR; and the creation of a shared drive for all machine shop personnel to collect and share information.



Investigation, Evaluation, and Control of High-Hazard Activities

OSH is responsible for investigating safety hazards on campus and identifying engineering controls to reduce the risks of these operations. In FY23, over \$400,000 was used to fund the following projects:

- Installing interlocking warning devices throughout campus to protect personnel of adjacent spaces or non-lab service personnel who may need to enter the labs.
- **Fall Protection Improvements** at Institute for Bioscience and Biotechnology Research, Yahentamitsi Dining Hall, and Campus Farm barns including guardrail, stair, and ladder systems.
- **Ventilation Improvements** including a dust collection system at the JM Patterson carpentry shop and animal transfer stations and biosafety cabinets at the Biology-Psychology Building.
- **Building Electrical System Upgrades** by furnishing and installing new electrical “company switches” for power distribution at the Clarice Smith Performing Arts Center.
- **Emergency Egress Improvements and Building Security** upgrades by installing fire rated doors, door holders, and relay and control modules at the Animal Sciences/Agricultural Building, Biology-Psychology Building, Plant Sciences Building and Engineering Lab.
- **Newly Identified High Priority Projects** including the leveling of the waste receipt surface at the Environmental Service Facility.

As part of its ongoing efforts over the past year, ESSR has worked closely with Facilities Management (FM) Project Managers and the Facilities Advisory Council (FAC)/Facilities Council (FC) in order to improve the



Assessing Fall Protection

project identification and estimation process, reduce the timeline for bids, and streamline the construction process. These efforts have unquestionably made the UMD College Park campus and surrounding properties safer work and learning environments.

Safety Initiatives at the University of Shady Grove

The University of Shady Grove (USG) hosts educational programs from nine University System of Maryland institutions. ESSR provides on-site support of these programs, maintains ties, and in cases serves as a liaison between programs and the various institutional EHS departments where program instruction involves hazards on campus. The various requirements of the institutional chemical hygiene plans, biosafety manuals, lab safety guides, and committee registrations are supported on campus.

Some key safety initiatives for FY23:

- Supporting expansion of the use of the Biomedical Science and Engineering Building laboratories with new instructional programs.
- Establishing an annual laboratory user meeting where past performance and new EHS initiatives are communicated to campus stakeholders.
- Disseminating the BioRAFT Safety Management Platform to serve campus for OSH and laboratory safety support matters.
- Communicating laboratory safety aspects through development of guidance materials for the EHS website.

In conjunction with various ESSR service groups, OSH provides on-site safety management to USG. Areas of support include risk minimization efforts and safety training, laboratory, safety, hazardous and universal waste management, and environmental compliance.



OSH staff conducting an inspection

The Office of Sustainability (OS) supports and advances environmental performance, economic prosperity and social equality through a variety of initiatives. The staff facilitate the development and implementation of sustainable policies, practices and curricula for the campus community. OS also supports the administration of the University Sustainability Council and the University Sustainability Fund, coordinates sustainability-related outreach and education, and partners on campus sustainability progress monitoring.

Bee Campus USA

The University of Maryland, College Park campus became a certified Bee Campus USA affiliate of The Xerces Society for Invertebrate Conservation in April 2023. Led by the UMD Arboretum and Botanical Garden and the Office of Community Engagement, the Bee Campus USA certification amplifies the university's current commitment to reducing pesticide usage, prioritizing native plant installations, and promoting the essential role of pollinators. OS staff supported the effort by participating in a fair that connected the College Park community with information and resources related to native pollinators. The university's achievements enhance the work of the City of College Park which became Bee City USA certified in 2021. The certification also supports an ongoing effort by UMD's Sustainable Maryland program to create a Route One Pollinator Corridor.



Sustainability Fund Increase

Since 2011, the Sustainability Fund has provided students, staff, and faculty the opportunity to implement innovative and impactful sustainability projects and programs on our campus. This has allowed the university to serve as a living lab for sustainability and as a global leader for sustainability progress. In 2022, OS worked with the Student Government Association (SGA) to increase the undergraduate Sustainability Fee from \$12 per student per year to \$18 per student per year in fiscal year 2023. This resulted in a 30% increase in available funds from \$500,000 to about \$665,000 each year. OS has also collaborated with the University Sustainability Council to launch several improvements to the administration and inclusivity of the fund in the coming year. These critical updates will allow UMD's community to further utilize the university as a testbed

for solutions to some of our grand challenges. In 2022-2023, the Sustainability Fund awarded approximately \$275,000 to 12 fund proposals. Proposals ranged from glass waste collection containers to a student sustainability research conference.

Sustainability Intern Success

OS received funding from the University Sustainability Fund in 2022 to host several interns focused on campus outreach and engagement. Together these interns enabled OS to broaden student engagement with campus sustainability and implement high-impact sustainability solutions within its programs and partnerships. Interns also investigated new opportunities to engage faculty and staff in sustainability programs.

Due to the success of the pilot, OS received an additional round of funding from the University Sustainability Fund in 2023 to hire another set of interns and a Sustainability Associate. The associate and interns will support the implementation of the new Sustainability Badge, the Green Workspace pilot, the Outreach Bike, and other programs. OS continues to seek avenues for providing UMD students opportunities to gain real-world experience in the sustainability field.



2023-2024 OS interns and staff. From left to right: Rose Rodriguez, Clare Gallagher, Annika Kuchel, Solana Page, Savannah Holt, Emma Brashear, Lisa Alexander (ResLife), Jordana Fliesser, Taylor Brinks



Members of the Green Terp Outreach team at a campus event.



Participants wait in line to take the Sustainability Superhero Quiz to identify their sustainability superpowers.

Partnering for Good: Do Good Challenge at Maryland Day

OS was invited to represent the Division of Administration in the Do Good Challenge for Maryland Day 2023. The goal of the Do Good Challenge was to encourage patrons to learn, serve, or give, and the OS Sustainability Superheroes tent was selected for embodying these values. At the tent, participants engaged in a number of activities including a sustainability superpowers quiz and seed planting, both of which aimed to educate participants on how their actions impact the environment. Participating in the Do Good Challenge for Maryland Day attracted hundreds of additional visitors to the sustainability tent.

Riding Fearlessly Forward

After receiving funding from the University Sustainability Fund, OS successfully launched the SustainableUMD Outreach Bike in March of 2023. The bike allowed OS to engage campus members at a number of events such as the Terp to Terp Open Shop, a Staff Sustainability Coffee Chat, and EarthFest. The Outreach Bike serves as

a mobile outreach center where students, staff, and faculty have the ability to engage with activities that educate about sustainability topics such as mindful consumption. Through these events, OS reached over 600 campus members and collaborated with three new partners to host subsequent events. The Outreach Bike serves as an exciting new tool for OS to continue engaging thousands of UMD students, staff, and faculty and to create new cross-campus partnerships.

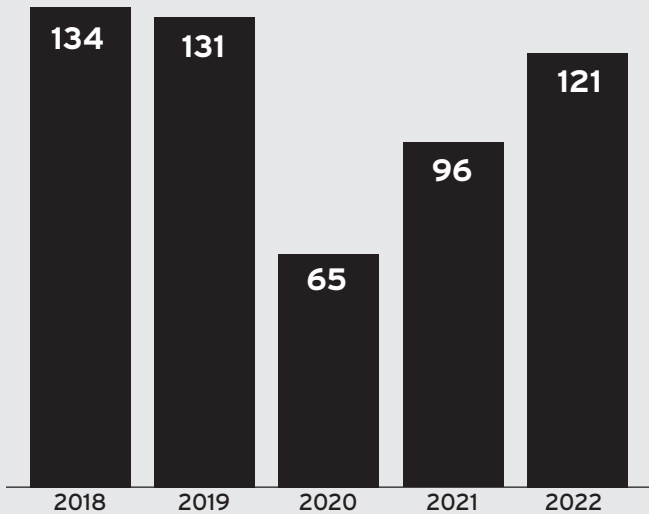


OS Outreach Associate and Residential Engagement Intern table at the Outreach Bike at the Terp to Terp Open Shop event.

RISK MANAGEMENT

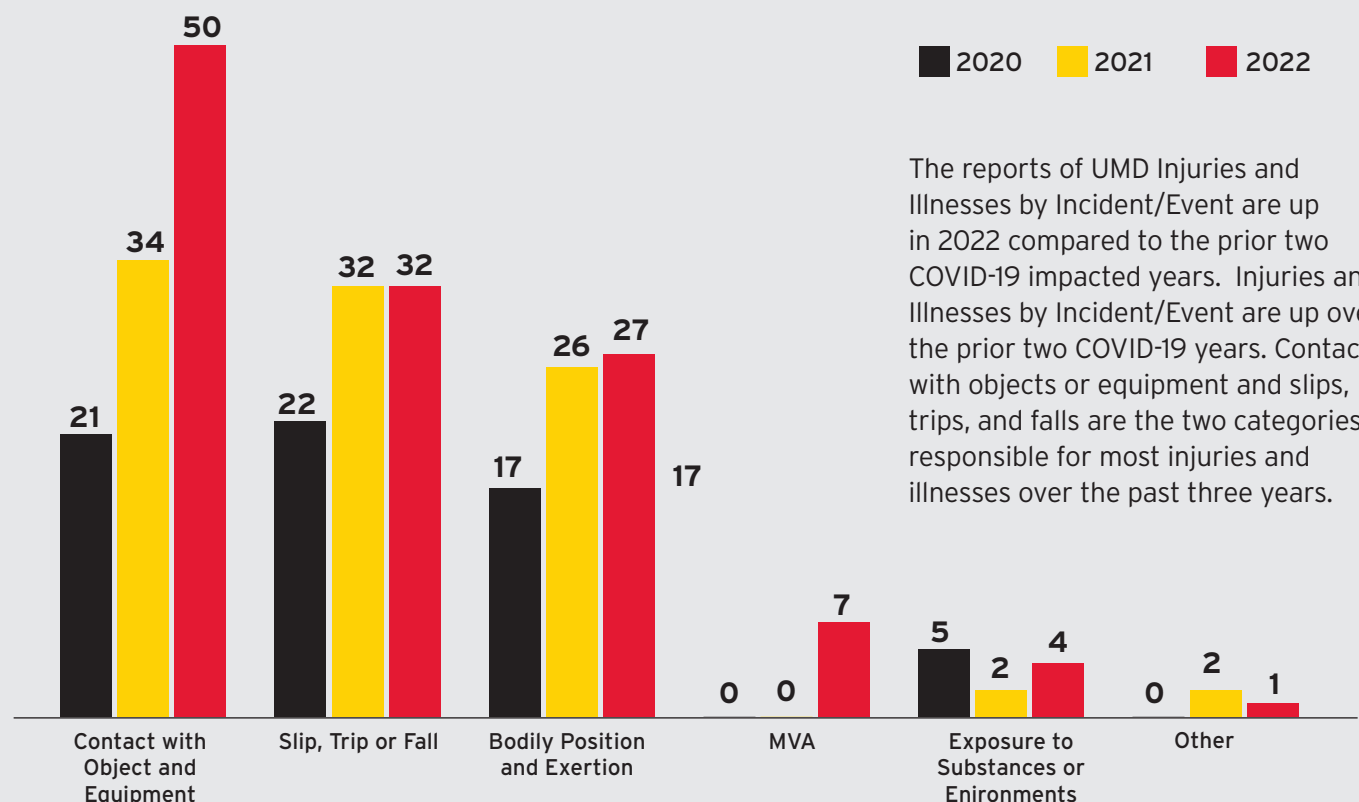
The Office of Risk Management (ORM) supports the academic and operational departments in their efforts to manage risk using a number of methods that are complementary to the Maryland State Self Insurance Program and commercial insurance. The department regularly provides consultation with respect to hazard identification, loss control techniques, risk transfer and the application of commercial insurance.

UMD 5-Year OSHA Recordable Injury & Illnesses



In 2022, the UMD OSHA Recordable Injuries and Illnesses report realized a more typical year with a full year of normal operations at the university. This is shown in the five-year chart of OSHA recordable injuries and illnesses. This is shown in the five-year chart of OSHA recordable injuries and illnesses below. The 2022 injury reports are down from the 2018 and 2019 years. The 2020 and 2021 years were the height of the COVID-19 pandemic.

2020-2022 UMD Recordable Injuries & Illnesses by Incident/Event



The reports of UMD Injuries and Illnesses by Incident/Event are up in 2022 compared to the prior two COVID-19 impacted years. Injuries and Illnesses by Incident/Event are up over the prior two COVID-19 years. Contact with objects or equipment and slips, trips, and falls are the two categories responsible for most injuries and illnesses over the past three years.



Out of State Workers' Compensation Insurance Secured

Workers' compensation is a no-fault system that protects employees for loss of salary and medical expenses in the event of an injury or illness arising out of and in the course of employment.

UMD's research, education and service activities are carried out in places throughout Maryland and beyond, requiring that some personnel live and work out of state as a condition of employment.

Beginning just prior to the COVID shutdown, ORM began assessing the risk of out-of-state workers to identify just how many employees this might involve to:

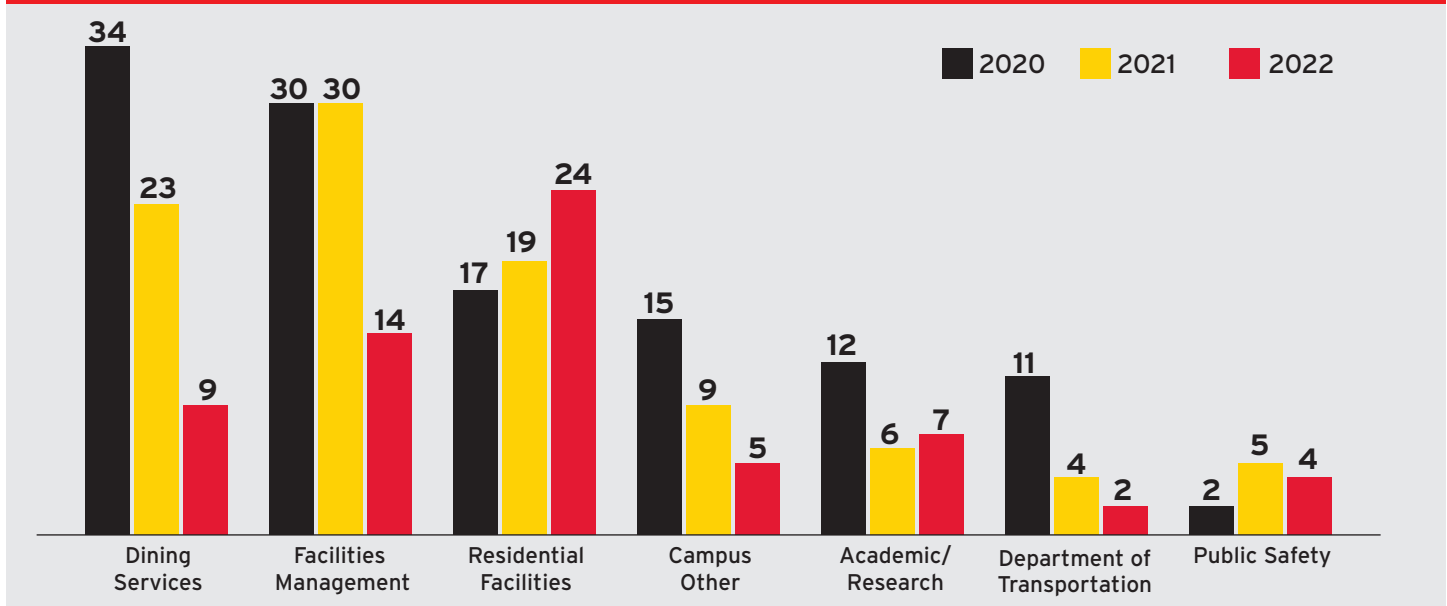
- (1) identify the number of employees who permanently live and work outside of Maryland and their work state location

- (2) determine if UMD had workers' compensation coverage in these respective states.

During FY23, ORM participated in a larger "Out-of-State" working group since this issue is broader than just workers' compensation coverage. We determined that UMD had over 150 employees who work in 20 other states including Alabama, Arizona, California, Colorado, just to name a few. Risk Management also discovered that UMD didn't have workers' compensation policies in any of these 20 states.

Realizing that UMD had an uninsured exposure, Risk Management procured an "Out of State" Workers' Compensation policy. This is a blanket policy that provides lost wage and medical expense benefits for our out of state colleagues. The policy is underwritten by Zurich Insurance and went into effect January 1, 2023, and renews annually.

2020-2022 UMD Recordable Injuries & Illnesses by Unit



Our central injury-generating departments are typically the labor-intensive units, which include Dining Services (DS). In 2022, DS showed an increase in recorded injuries and illnesses. DS reported 1.5 million work hours in 2022, an increase compared to the 1 million work hours in 2021. Reported work hours were impacted by the opening of the first new dining hall in 50 years. Yahentamitsi Dining Hall (Yah-hen-tuh-meet-c), meaning a place to eat, is named for the Piscataway Indian Tribe, Maryland's Native American heritage. The new building is 60,000 square feet, offering 1,000 seats and 11 major food stations (Shih '09, 2021).

Facilities Management (FM) had over 1.2 million work hours in 2022. Like DS, there were more hours worked

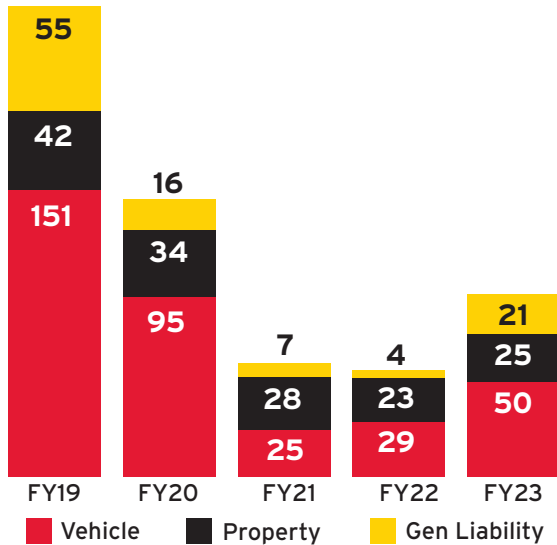
in 2022, due to the opening of a new School of Public Policy opening.

DS and FM run operations 24 hours a day, 365 days a year. The chart above shows that injuries in both units are up from two years ago. More injuries can be expected with the acquirement of the new buildings and more work hours. Injuries were down in 2020 and 2021, the campus was less dense, many dining halls were closed, and most employees and students were working and taking classes virtually.

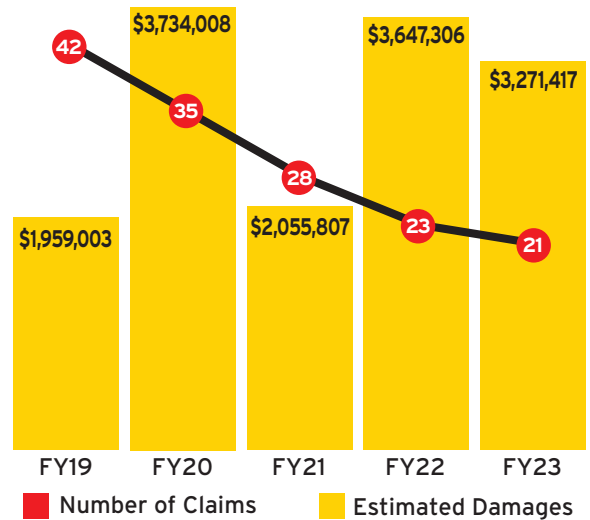
Shih '09, K. (2021, November 9). *CAMPUS & COMMUNITY New Dining Hall Name Unveiled at Ground Blessing Ceremony*. University of Maryland Maryland Today Produced by the Office of Marketing and Communications.

METRICS

INSURANCE PROCESSING CLAIMS FY19-FY23



PROPERTY CLAIMS FY19-FY23



FY23 PROPERTY CLAIMS

Type of Claim	Reason Detail	Number of Claims	Damages (in dollars)
FLOOD	WEATHER	5	\$1,585,000.00
	PIPE FAILURE	6	\$446,217.98
	FREEZING	1	\$500,000.00
	FAULTY EQUIPMENT	1	\$100,000.00
FLOOD TOTAL		13	\$2,631,217.98
FIRE		4	\$270,200.00
POWER OUTAGE		3	\$120,000.00
OTHER		1	\$250,000.00
GRAND TOTAL		21	\$3,271,417.98

FY23 GENERAL LIABILITY

Type of Claim	Number of Claims
TORT INJURY	11
TORT PROPERTY	12
TORT VEHICLE	2
GRAND TOTAL	25

FY23 OFFICE OF THE FIRE MARSHAL

Services	Number
FIRE INSPECTIONS, BUILDING	364
FIRE INSPECTIONS, LABORATORY	387
CONSTRUCTION PLANS REVIEWED	234
CONSTRUCTION INSPECTIONS	116
INCIDENT RESPONSES	346
FIRE SAFETY TRAINING PARTICIPANTS	315
FIRST AID/CPR AED TRAINING PARTICIPANTS	48
EVENTS	172
GRAND TOTAL	1982

FY23 STATE VEHICLE CLAIMS

Type of Claim	Number of Claims
SIDESWIPE	25
BACKING	10
OTHER	7
T-BONE	5
REAR-ENDED	3
FRONTAL	1
GRAND TOTAL	50



**DEPARTMENT OF ENVIRONMENTAL
SAFETY, SUSTAINABILITY & RISK**

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