

University of Massachusetts Enterprise Risk Management Program

Audit and Risk Committee

December 14, 2022



University of Massachusetts

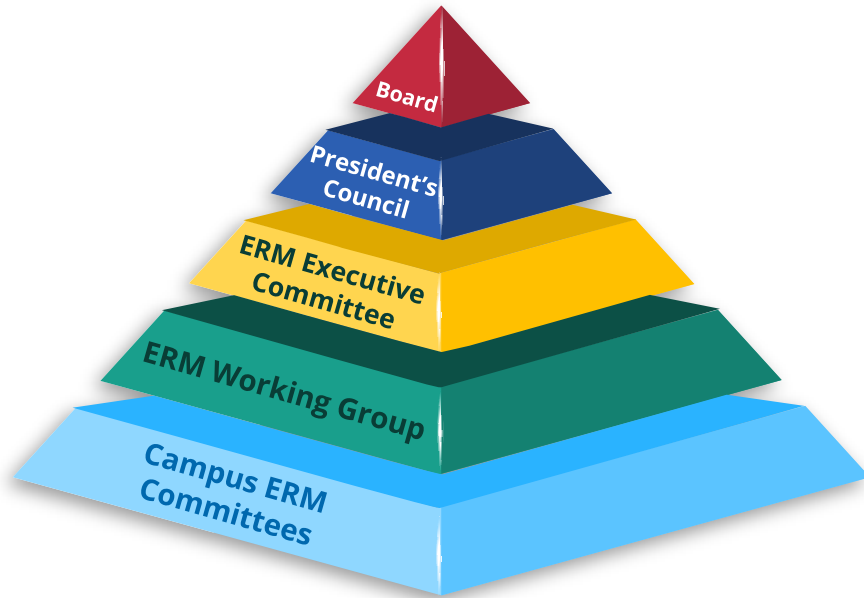
Amherst • Boston • Dartmouth • Lowell • Medical School • UMassOnline

Agenda

- ERM Program Updates
- Mitigation Assessment Rollout
 - Preliminary Results for Top 5 Risks
- Next Steps

Systemwide ERM Program

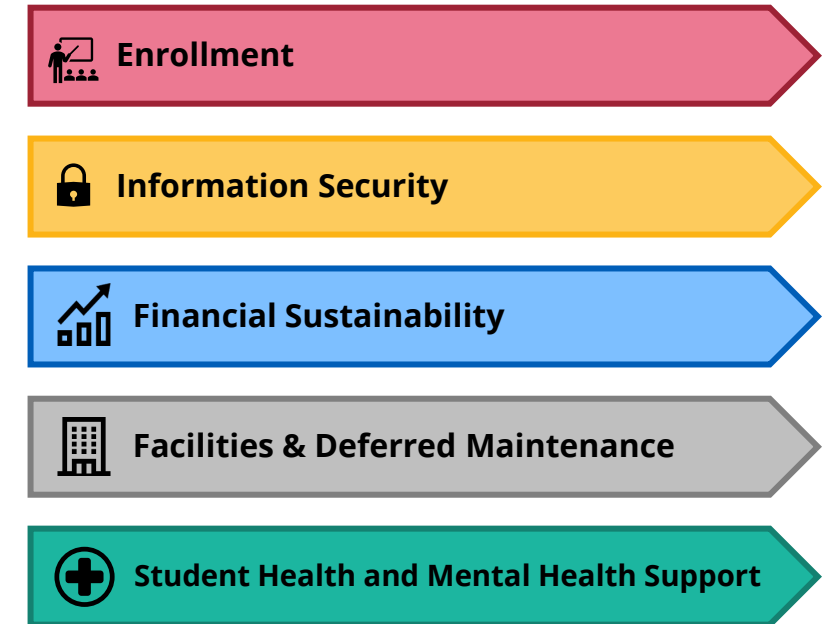
Governance Structure



Two-Year Program Cycle



Top 5 FY22 Systemwide Risks



ERM Program Updates



- Adapted systemwide risk assessment tools for campuses
 - Presented at 10/27/22 ERM Working Group Meeting
 - Incorporating feedback, and will redistribute



- Presented at national conference in September 2022
 - Session selected as Best of URMIA 2022
 - Providing follow-on webinar to be offered to full membership in February 2023



- Selected to present at PRIMA national conference in Spring 2023

Mitigation Assessment Program Update

Mitigation Assessment Program - Goals

Transparency	Context	Analysis
<ul style="list-style-type: none">▪ Document mitigation strategies▪ Highlight depth and breadth of work	<ul style="list-style-type: none">▪ Align mitigation assessment to risk assessment<ul style="list-style-type: none">• Consequence• Likelihood▪ Enable comparison of risk exposure and impact of mitigation on risk exposure	<ul style="list-style-type: none">▪ Understand whether mitigation strategies are reducing risk exposure▪ Better inform decision-making

Mitigation Assessment - Stakeholder Engagement Process



- Academic Advisory Council
- Budget Directors
- Chief Information Security Officers
- Controllers
- Enrollment Managers*

- Facilities and Deferred Maintenance Group (E&E)*
- Health Services and Behavioral Health Directors*
- Human Resources Administrators
- International Relations Advisory Committee
- Student Affairs Advisory Committee

- Previewed presentation of preliminary results with ERM Working Group on 10/27/22

* Stakeholder engagement still underway

Mitigation Assessment - Methodology

Individual Effectiveness

Measure the effectiveness of an ***individual*** mitigation strategy on reducing risk exposure

Comparative Effectiveness

Compare the effectiveness of ***multiple*** mitigation strategies on reducing risk exposure

Aggregate Effectiveness

Measure the ***aggregate*** effectiveness of all risk mitigation strategies on reducing risk exposure

Mitigation Assessment – What It Does and Does Not Tell Us

Mitigation Assessment Program provides leadership with information to inform discussion about whether to accept the residual risk or take additional actions to avoid, transfer or further reduce risk

Does

- ✓ Provides transparency on risk mitigation strategies
- ✓ Demonstrates progress on mitigating risk or depicts areas that may require additional attention
- ✓ Enables more robust discussions on risk and risk mitigation
- ✓ Demonstrates movement in addressing risk

Does Not

- ✗ Does not track key performance indicators
- ✗ Does not define risk tolerance
- ✗ Does not define specific follow-on actions needed
- ✗ Does not conclude satisfaction or dissatisfaction with status of addressing risk

Mitigation Assessment Preliminary Results Top 5 FY22 Systemwide Risks

Individual and Comparative Assessments



Information Security

# Strategies	17
Risk Mitigation Partners	<ul style="list-style-type: none">• Campus Chief Information Security Officers• UITS
Key Observations	<ul style="list-style-type: none">• Substantial progress has been made systemwide• Campus readiness varies• More detailed information will be provided in Executive Session

Effective

More Effective



Preliminary Individual and Comparative Mitigation Strategy Assessment

1	Incident Detection and Response
2	Attack Resistance
3	Communications Protection Identity and Access Management Vulnerability Management
4	Business Continuity/Disaster Recovery Data Management Data Theft Resistance
5	Data Loss Prevention Network Protection Third-Party Assessment
6	Administrative System Access Managed Cloud Environments (IaaS) Third Party Penetration Testing Training/Awareness
7	Cyber Security Insurance Optimization



Financial Sustainability

# Strategies	19
Risk Mitigation Partners	<ul style="list-style-type: none">• UMPO A&F Team• Campus Budget Directors• Campus Controllers
Key Observations	<ul style="list-style-type: none">• Reporting and tracking increase transparency and inform decision-making• State financial support is essential to sustainability

Effective

More Effective

Preliminary Individual and Comparative Mitigation Strategy Assessment

1	State Financial Support State Funding of CBA Increases
2	Reporting: Quarterly Budget Projections & Annual Budget Reporting Reporting: Quarterly Capital Reporting & Biennial Capital Plan
3	Reaching/Maintaining 2% Operating Margin Cash Flow Modeling and Projections Reporting - Annual Five-Year Forecast Refresh Reserve Policy SPARC Dashboard UMass Global Financial Reporting
4	Maintaining Availability of Line of Credit Operating Cash Invested with Foundation Implementation of UMPlan for Annual Budgeting UMPlan - Financial Forecast Module UMPlan - Tuition Planning Module
5	Compliance with Federal Grants
6	Monitoring Standard Metrics Adoption and Forecasting of Changes in GASB Appropriate Account Treatment for P3s



Facilities & Deferred Maintenance

# Strategies	7
Risk Mitigation Partners	Facilities and Deferred Maintenance Working Group (EE)
Key Observations	<ul style="list-style-type: none"> • Systemwide tracking provides increased transparency and informs decision-making • Targets for catch up and keep are newly established • This reflects progress from a systemwide perspective; campus level assessments have not been completed

Preliminary Individual and Comparative Mitigation Strategy Assessment

1	Reaching/Maintaining Keep Up Targets
2	Reaching/Maintaining Catch Up Targets
3	Reporting – Biannual Capital Plan Reporting – Quarterly Capital including Catch Up and Keep Up
4	Annual Update of Campus Deferred Maintenance (Gordian) Capital Policy
5	Tracking Spending Against DCAMM Contracts

Effective

More Effective



Preliminary Individual and Comparative Mitigation Strategy Assessment

Assessment Is Ongoing

Need additional data and strategies for a more comprehensive assessment



Student Health and Mental Health Support

# Strategies	16
Risk Mitigation Partners	<ul style="list-style-type: none">Behavioral Health Services DirectorsHealth Services DirectorsStudent Affairs Advisory Committee



Enrollment

# Strategies	6
Risk Mitigation Partners	<ul style="list-style-type: none">UMPO Academic AffairsCampus Enrollment Managers

Mitigation Assessment Preliminary Results Top 5 FY22 Systemwide Risks

Aggregate Assessments

Movement in Reducing Risk Exposure



Enrollment

TBD - Assessment work still ongoing

Information Security



Financial Sustainability



**Facilities and
Deferred Maintenance**



**Student Health and
Mental Health Support**

TBD - Assessment work still ongoing

Assessed Residual Risk

Next Steps

- Continue work to assess Enrollment and Student Health and Mental Health Support mitigation strategies
- Continue mitigation assessment work on Risks 6-10

Appendix A

FY22 Systemwide Risk Registry

FY 2022 Systemwide Risk Registry

■ Priority Risks

Rank	Risk
1	Enrollment
2	Information Security
3	Financial Sustainability
4	Facilities and Deferred Maintenance
5	Student Health & Mental Health Support
6	Vendor Risk Management
7	Attract, Recruit, Retain Faculty and Staff
8	International Activities
9	Information Privacy
10	Diversity, Equity, Inclusion and Accessibility

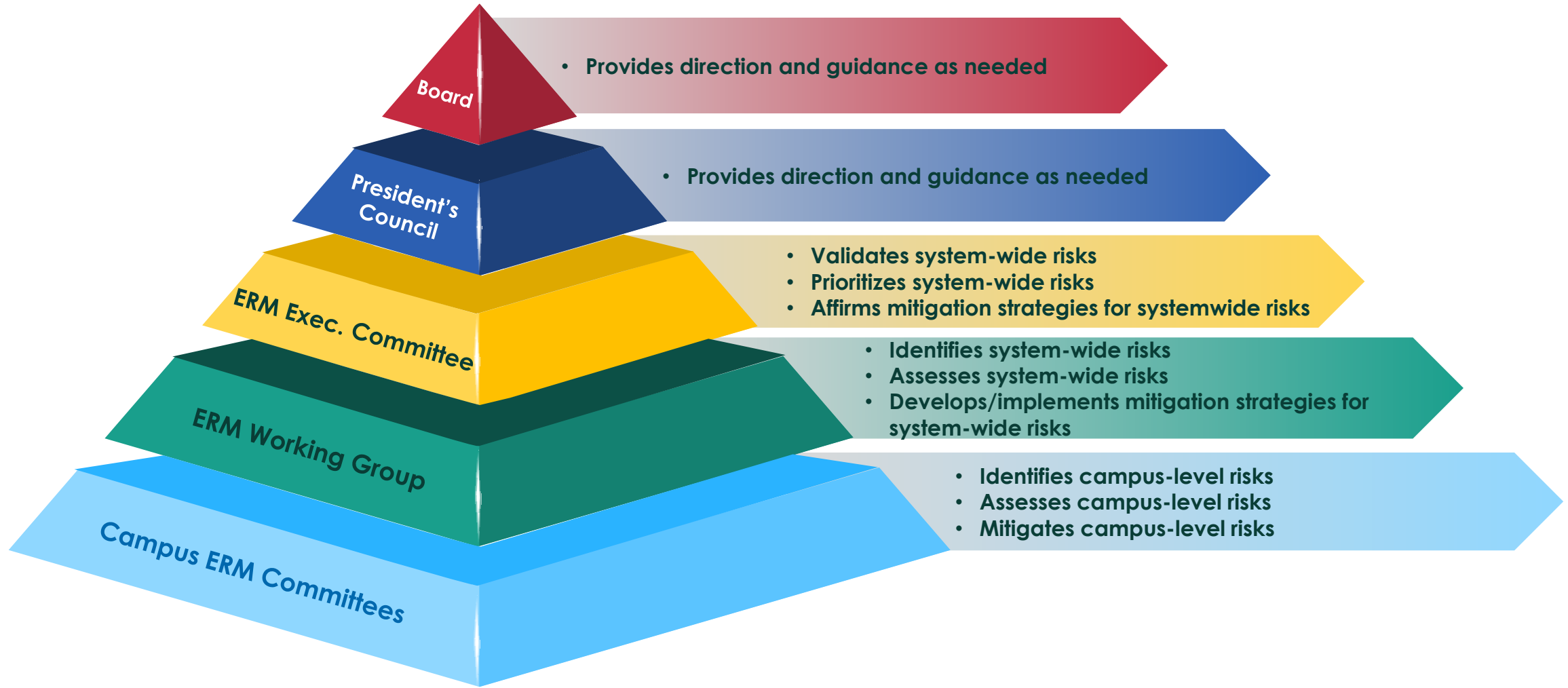
Rank	Risk
11	All Hazards Planning & Response Capabilities
12	Multi-State Payroll Tax
13	Labor Relations
14	Data Management
15	Research
16	Multi-State Business Tax
17	Sexual Assault Policies & Response Procedures
18	IT Disaster Recovery
19	Continuity Planning
20	Environmental Health, Public Health, & Safety Regulations

Rank	Risk
21	Alcohol and Substance Abuse
22	Crisis Communications
23	Immigration Rules and Regulations
24	Fraud, Waste, and Abuse
25	Uninsured Loss
26	Employment Laws and Regulations
27	NCAA Regulations
28	Policies and Procedures Regarding Minors on Campus
29	Academic Quality and Standards
30	Oversight of Student Organizations

Appendix B

ERM Governance Roles and Membership

UMass ERM Governance Structure



ERM Working Group Membership

Last Name	First Name	Campus	Title	ERM Working Group Member		
				Campus Lead	SME	SME Topic
Britton	Kirsten	Amherst	Senior Associate Athletic Director		X	Athletics
Carragher	Candyce	UMPO	Senior Executive Associate to the Senior Vice President		X	Academic Affairs Student Affairs
Cho	David	UPST	Chief Procurement Officer		X	Procurement
Coleman	Brian	Medical	Associate CIO – Information Security	X		
Comeau	Justin	Boston	Manager, Emergency Planning & Business Continuity	X		
Conklin	Shane	Amherst	Associate Vice Chancellor for Facilities and Campus Services		X	Facilities
Culverwell	Marcy	Medical	Associate Vice Chancellor, Administration and Finance	X		
Dunlap	John	UMPO	Chief Human Resources Officer		X	Human Resources
Hescock	Jeff	Amherst	Executive Director of Environmental Health and Safety & Emergency Management	X	X	Safety and Security
Hitchcock	Patrick	UMPO	Controller		X	Controller
Karberg	Andrew	UMPO	Associate Counsel, Compliance, Ethics, International Affairs		X	Legal
LaGrassa	Michael	Dartmouth	Associate Vice Chancellor of Administrative Operations & Compliance	X		
Mayers	Darryl	Boston	Assistant Vice Chancellor for Contracts and Compliance	X		
Murphy	Colin	UMPO	Director of Marketing and Communications		X	Communications
Packard	Christine	UMPO	Director, Enterprise Risk Management	X		
Pasquini	LeeAnn	UMPO	Assistant Vice President for Budget & Planning		X	Finance
Russell	Andrew	UMPO	Senior Assistant VP of Operations and Associate Treasurer		X	Tax
Scano	Derek	UMPO	Assistant Director, Internal Audit		X	Internal Audit
Smith	Bradford	UITs	Chief Information Security Officer		X	IT
Stockwell	Joshua	UMPO	Associate Counsel for IP and Research		X	Research
Sullivan	June	Medical	Senior Director, Compliance and Policy	X		
TBD	TBD	Dartmouth	TBD	X		
TBD	TBD	TBD	TBD		X	Int'l Activities
TBD	TBD	TBD	TBD		X	Health/Mental Health
Tucker	Josh	UMPO	Insurance Analyst		X	Insurance
Wood	Rick	Lowell	Director, Office of Life Safety and Emergency Management	X		
Yanka	Ruth	Amherst	Executive Director A&F Operations, Vice Chancellor Administration and Finance	X		

ERM Executive Committee Membership

Last Name	First Name	Campus	Title	Executive Committee Seat
Calise	Lisa	UMPO	Senior Vice President and Treasurer, Administration and Finance	SVP, Administration and Finance
Culverwell	Marcy	Medical	Associate Vice Chancellor, Administration and Finance	Medical School
David	Kyle	UMPO	Director, Internal Audit	Director, Internal Audit
Giuliani	Chris	Boston	Associate Vice Chancellor for Administration and Finance	Boston
Gorzkowicz	Matt	UMPO	Associate Vice President Administration and Finance	AVP, Administration and Finance
Hescock	Jeff	Amherst	Director, Environmental Health and Safety	Amherst
Karberg	Andrew	UMPO	Associate Counsel, Compliance, Ethics, International Affairs	Research
Leone	Gerry	UMPO	General Counsel	General Counsel
Miliano	Tom	Lowell	Associate VC, Administrative Services	Lowell
Milligan	Michael	UITs	Interim Chief Information Officer	Chief Information Officer
Newman	Katherine	UMPO	SVP and Chancellor, Academic Programs	SVP, Academic Affairs
Packard	Christine	UMPO	Director, Enterprise Risk Management	ERM Director/Chair
Piggot	Robyn	Dartmouth	Chief of Staff	Dartmouth