



Enterprise Risk Management at Texas A&M University

An Integrated Approach to Assessing and Managing Risks

EUCG Conference – Spring 2012 Workshop

April 17, 2012

Objectives

- Overview of Enterprise Risk Management
- Enterprise Risk Management at Texas A&M University
 - TAMU's ERM Implementation
 - TAMU's Risk Assessment Process
 - How risks are identified, ranked, and mitigated
 - Examples of TAMU major risks
 - Examples of TAMU risk mitigation/response

ERM Definition (coso)

- A process, affected by an entity's board of directors, management, and other personnel,
applied in strategy setting **across the enterprise**,
designed to **identify potential events (risks)** that may affect the entity and to **manage risk** to be within the entity's risk appetite (tolerance)
to provide reasonable assurance regarding the **achievement of the entity's objectives.**

COSO Eight Components

- COSO's eight ERM components are interrelated and integrated with management processes
 - **Internal environment** (tone, philosophy, executive management commitment)
 - **Objective setting** (objectives align with mission and are within risk appetite)
 - **Event identification** (risks are identified from internal and external events)
 - **Risk assessment** (likelihood and impact analyzed)
 - **Risk response** (processes in place to manage, mitigating strategies to avoid, accept, reduce, transfer, share)
 - **Control activities** (policies and procedures to ensure risk response are effectively carried out)
 - **Information and communication** (relevant, effective, and timely)
 - **Monitoring** (on going management activities and separate evaluations)

NACUBO's Eight Key Elements

- NACUBO's key ERM elements include support from the top/involvement of personnel at all levels
 - Senior management commitment
 - Risk management owner (designate chief risk officer responsible to implement the ERM program)
 - ERM framework/process and common language
 - Communication (entity's objectives clearly defined and communicated throughout the organization -risks impact achievement of objectives)
 - Risk management process in place (ability to assess risks and take timely corrective action to mitigate risks)
 - Monitoring (Internal Audit involved; include also management, unit heads, Compliance Program personnel, etc.)
 - Human resources processes (establish accountability)
 - Effective training (able to mobilize staff)

Benefits of ERM (coso)

- *Aligning risk appetite and strategy* – Management considers the unit’s risk appetite in evaluating strategic alternatives, setting related objectives, and developing mechanisms to manage related risks.
- *Enhancing risk response decisions* – Enterprise risk management provides the standards to identify and select among alternative risk responses – risk avoidance, reduction, sharing, and acceptance.
- *Reducing operational surprises and losses* – Universities gain improved capability to identify potential events and establish responses, reducing surprises and associated costs/losses.
- *Identifying and managing multiple and cross-enterprise risks* – Every enterprise faces a myriad of risks affecting different parts of the organization. Enterprise risk management facilitates effective response to the interrelated impacts, and integrated responses to multiple risks.
- *Seizing opportunities* – By considering a full range of potential events, management is positioned to identify and proactively realize opportunities.
- *Improving deployment of capital* – Using risk information allows management to effectively assess capital needs and enhance capital allocation.

TAMU Realized ERM Benefits



- Value added process
 - Involve participants in identifying and managing risks - active as part of the solution
 - Increase participant's exposure to other areas - enhances knowledge of operations
 - Increase risk consciousness in decision making - provides new perspective
 - Focus resources and efforts on high risk areas - breaks down barriers and demonstrates priorities that are used

About Texas A&M University

- Texas' first public institution of higher learning - opened Oct. 4, 1876 (Land, Sea, and Space-grant federal designations)
- Main campus located in College Station with over 50,000 students
- A member of the Texas A&M University System (11 Univ., 7 agencies, 1 HSC)
- Conduct research valued at over \$630 million annually
- Large campus - over 5,100 acres, housing for 10,000 students, golf course and an airport, over 600 buildings, over 1.5 billion gallons of water/year consumed, 5 utility plants and 2 waste water treatment facilities
 - Produce, deliver, and manage utilities and energy - domestic water transmission system, electricity, chilled water, hot water, domestic hot/cold water, steam, over 2000 revenue-quality meters in over 500 buildings, solid waste 9,000 tons/year, total recycling of 11,670 tons/year, gross hauled recycling over 9,800 tons/year, etc.

Integrated Approach

- In 1999, Management Advisory Services was established to assist management and respond to requests for objective consulting services.
- In 2004, University Risk and Compliance was established that incorporated management advisory services with two new initiatives and a reorganization of Safety and Security (including Environmental Health and Safety and University Police) under one Associate Vice President.

New Initiatives:

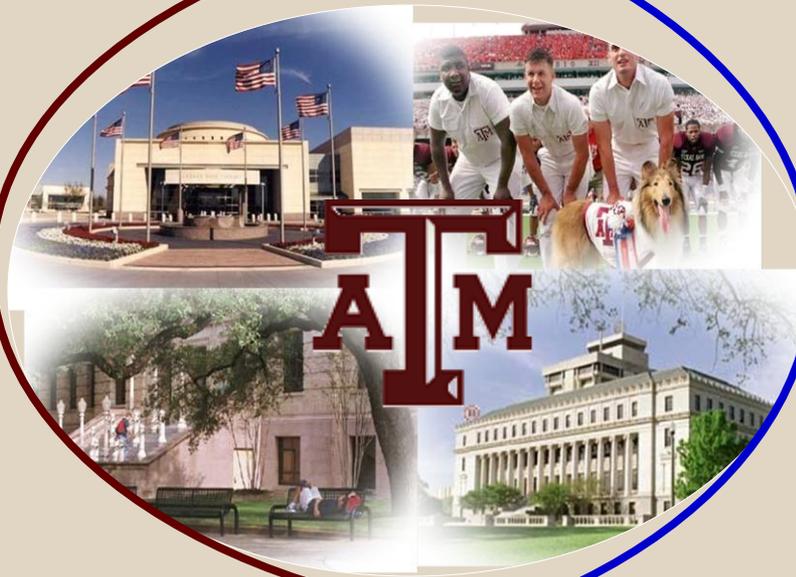
- Enterprise Risk Management
- University Compliance

University Risk and Compliance (URC)

Enterprise Risk Management

Safety & Security

University Compliance



URC

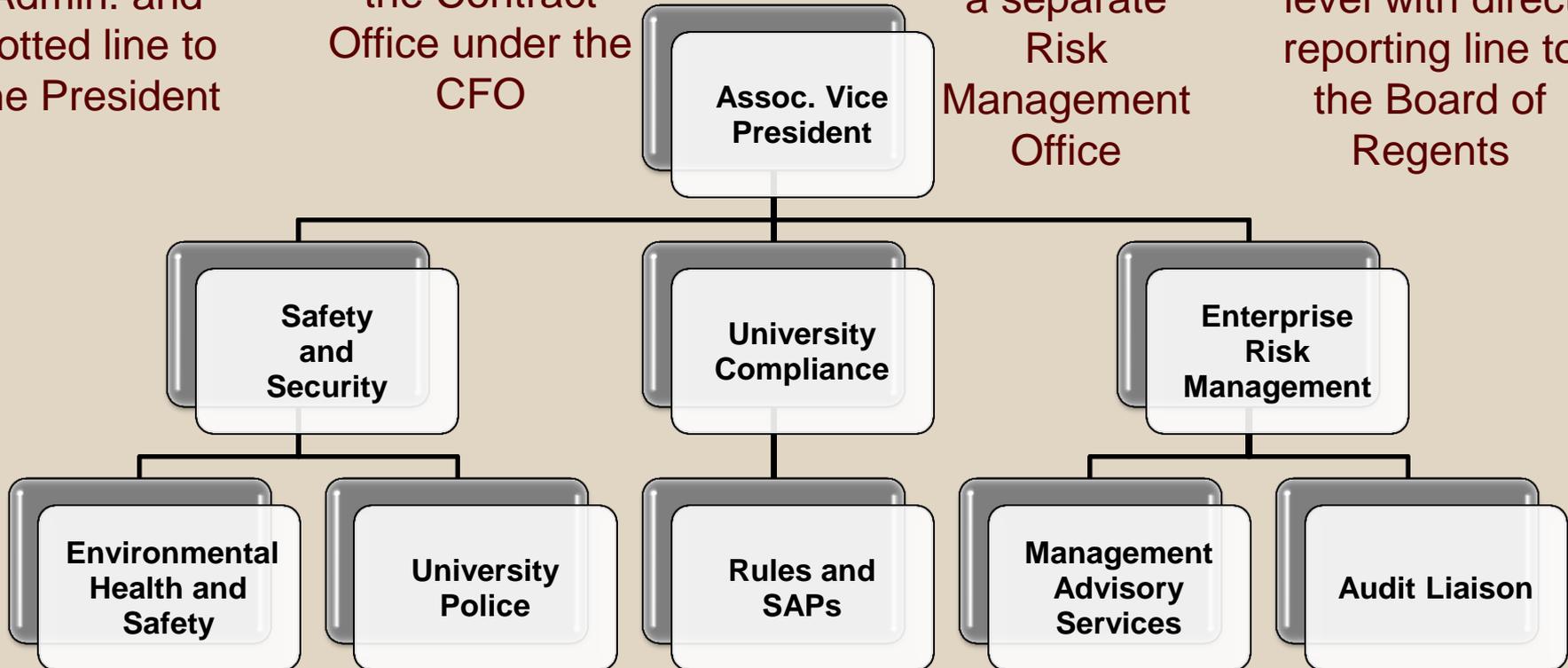
URC Organizational Structure

URC has direct reporting line to VP for Admin. and dotted line to the President

University departmental insurance positioned in the Contract Office under the CFO

The Texas A&M University System has a separate Risk Management Office

URC coordinates with Internal Audit who is positioned at the System level with direct reporting line to the Board of Regents



ERM Drivers



- Management (CEOs, CFOs)
- Boards
- Audit Committees
- Auditors (Internal and External)
- Significant Events



ERM at TAMU

- Top down approach
 - University-wide risk assessment first performed in 2004, updated 2006, 2009, and again in 2011
 - Walk through review of significant mitigating activities (2008 and 2010)
 - Risk assessments performed on major University units (e.g., divisions, colleges, auxiliaries) updated periodically
- ERM Governance
 - System Policy 03.01 (Aug. 2008, updated June 2010)
 - President's Memorandum (Sept. 2009)
 - Internal audit report on ERM (Sept. 2010) and follow-up audit (Feb. 2012)
 - Standard Administrative Procedure 03.01.01.M0.01 (March 2011)

Common Risk Language



- Risk

Any event or action that adversely impacts the organization's ability to achieve its objectives (compliance, strategic, operational, reputational, financial, technology, fraud, etc.)

- Mitigating activities/strategies

Actions, procedures, and processes used to manage and monitor risks (limit, avoid, accept, transfer, share)

- Risk ranking

Prioritize and rank (high, medium, low)

- Consider potential impact (consequences)
- Consider probability of occurrence (likelihood of happening)

- Risk assessment

Process used to identify, prioritize, and document risks, mitigating strategies, monitoring processes, and any gaps

- Risk tolerance/appetite (conservative - moderate)

Risks Categories

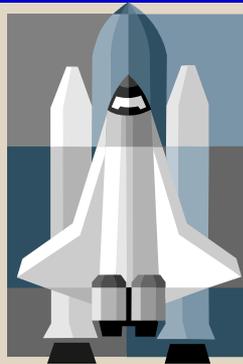
Risk: Any event or action that adversely impacts the organization's ability to achieve its objectives



Ranking the Risks

Impact

Effect on achieving objectives, the consequences



High

show-stopper/loss of program, significant wide spread injuries, death, large loss (%/\$ of budget, rev, exp), criminal penalty, liability

Medium

inefficient and moderate loss, significant extra/rework, fines, moderate/minor injury

LOW

little to no effect, warning, extra work, reprimand, small limited loss

Probability

Likelihood that the risk will happen



High

will happen frequently, occurs often, on-going event, predictable, one-time event that may recur

Medium

will happen infrequently, sometimes occurs, unpredictable

LOW

will seldom happen, infrequent, rarely happens, has not happened

Risk Assessment Tools

- Facilitated sessions
- Excel spreadsheets
 - Color coded, easy to use, linked w/macros
 - Free (developed by David B. Crawford, UTS)
 - Available on URC website: <http://universityrisk.tamu.edu/>
- Voting software and touch pad equipment
 - Anonymous ranking of impact and probability
- Data management software for entity-wide data

ACTIVITIES	RISKS						
	1	2	3	4	5	6	7
Research Finance & Administration	HH Noncompliance with policies, rules, laws	HH Untimely reporting	HH Not rewarding academic excellence	HM Lack of coordinated research admin.	HM Unfunded mandates	LH Not following protocols	
Research Development, Programs & Facilitation	HM Decrease in State support	HM Lack of research management information	HM Ineffective metrics for evaluating programs and personnel	HM Lack of seed/incentive funding	HM Lack of industrial funding/partnerships		

Risks ranked considering both their impact and probability:
 Impact - the consequence(s) of the risk occurring (H=High, M=Medium, L=Low)
 Probability - the likelihood of the risk occurring (H=High, M=Medium, L=Low)

■ = HH, HM
■ = HL, MH
■ = MM, ML, LH
■ = LM, LL

	Risks						Evidence of Control Activity
	Noncompliance with policies, rules, laws	Untimely reporting	Not rewarding academic excellence	Lack of a coordinated research admin. structure	Unfunded mandates	Not following protocol	
Research Finance & Administration							
M i t i g a t i n g							Grant training for proposal development group, Research Foundation personnel, and dept staff. New faculty orientation. Online training.
Marketing & communication to Legislators & Public				x	x		Presentation to legislature (Govt. Affairs/VP/President). Publications/Waste. Research road show - committees.
Policies/Forms				x		x	Cost sharing, review procedures, signed approval documents.
A c t i v i t y							Signature sheets. Email notification for changes.
Signature authority - based on delegation	x	x		x			
PI certifications						x	Online training. Forms signed.
Office of research compliance	x	x		x		x	Manager oversight and verbal communication with Sr. mgmt.
Budgetary control	x	x		x	x		Budget analysis (budget vs. actual). Analysis review documented by signature and date.

Risk Assessment Steps

Review mission and strategic plan/goals/objectives

Identify major activities and functions

Identify and rank risks

Prioritize by considering impact and probability

Identify and document mitigating activities

Evidence of activity occurring and designated accountable person/position

Review monitoring and executive reporting processes

Supervisory reviews, managerial oversight, communication flows, and other assurances gained by management that risks are effectively managed

Follow-up - Assess Effectiveness of Mitigations

Perform a limited review or walk through - focusing on significant mitigating activities of highest ranked risks; review mitigations are adequate and working as planned 18

University-wide “Red” Risk Examples

- Risks related to quality programs/graduates (insufficient funding or financial aid, academic integrity of curriculum, etc.)
- Risks related to information and communications (inadequate information/data on decision making, ineffective marketing/communicating to broad constituency, etc.)
- Risk of not meeting expectations of constituencies (integrity, transparency, and accountability)
- Safety risks related to University facilities and events (instructional environments, fire and life safety requirements, large scale health crisis/disasters, open environment, trains, etc.)
- Risk of noncompliance with rules, regulations, laws, contracts, grants, etc. (i.e., conflicts of interest, human/animal subjects, IRB, time & effort, research misconduct, grant award requirements, export controls, NCAA, FERPA, Student Financial Aid, Title IX, confidential information, accreditation, etc.)

University-wide “Red” Risk

Examples continued

- Safety risks related to travel (international, student travel to University sponsored events, etc.)
- Safety risks related to student/employee behaviors (inability to enhance safety culture, changing nature of constituency population (mental health, violent behavior, etc.), safety issues accompanying undertrained, overconfident and youth constituency (hazing, alcohol use, etc.), inadequate protective equipment/training, etc.)
- Risks related to building and infrastructure (deteriorating facilities, magnitude of deferred maintenance, utility or operations interruptions, support funding for increasing number of buildings/square footage, addressing accessibility issues, etc.)

Risk Mitigation/Response Examples

- **Safety risks - inability to change the safety culture**
 - Expanded the mission and role of Environmental, Health, and Safety
 - Implemented the Safety Hotline (now Risk, Fraud, Misconduct Hotline)
 - Included safety issues in President's Council meetings and other executive staff meetings
 - Formed safety councils within colleges and departments
 - Reallocation of funds (\$3.3 million to EHS, Police, etc., \$7 million to deferred maintenance)
 - Safety included as a factor in performance evaluations (staff, students, and faculty)
- **Risk assessments performed in planning and development – information used in decision making**
 - Major campus road
 - International center
 - Student organizations activities – pre-event planning

Questions?



Contact

Information:

Margaret “Peggy” Zapalac

Director, University Risk Management

m-zapalac@tamu.edu

979-845-8115

<http://urc.tamu.edu/>

<http://universityrisk.tamu.edu/>