CFO Division
Office of Risk Services
Annual Report 2009/2010

University of California
Enterprise Risk Management

Foreword

 The University of California has been moving from Traditional Risk Management, which focuses on liability, to Strategic Risk Management, which focuses on all types of risks. Managing our risks across the enterprise in a strategic manner improves the cost of borrowing, creates efficiency, reduces IT redundancy, and reduces the cost of risk.

Rating Agencies such as Standard & Poor's are now explicitly looking for an organization's approach to managing enterprise or holistic risk as part of developing ratings. Improving an organization's Standard & Poor's rating results in significant savings in the cost of borrowing – just one example of how enterprise risk can achieve financial savings.

How have we reduced the cost of risk? By investing in loss prevention and loss control programs as part of our overall Enterprise Risk Management strategy we have achieved cost avoidance savings of $420 million.

The foundation of UC's Enterprise Risk Management (ERM) program is to have people actively manage their various risks. The Enterprise Risk Management Information System (ERMIS) provides a variety of qualitative and quantitative tools to help UC locations identify their risks and determine where to strategically deploy resources. It can define, highlight, and predict risk and trends to allow managers to intervene before problems arise, and it is a data rich construct that can be adapted to other sectors, such as programmatic, personnel, and operational programs. The ERMIS creates efficiencies by automating manual processes, and the application flexibility reduces IT redundancy.

By managing our risk strategically across the system we can achieve Savings and Efficiency.

Following the recent financial failures in the US and elsewhere, significant attention has been paid to catastrophic risk and emerging risk. While our ERM program helps us with analytics that can provide a "heads up" on emerging risk, UC takes the approach that we need to be Event Ready and develop tools that can apply to a variety of events, from a burst pipe to a pandemic. Examples of these tools include Mission Continuity Planning, Crisis Communication Programs, and decision making tools and modeling exercises. Continuity planning is in progress at all UC locations to ensure continuity of research, teaching, patient care, and public service following any major disaster or extraordinary disruption to campus or medical center operations. The award-winning "UC Ready" tool is being used systemwide and emergency response and preparedness continues to be a focus.

— Grace M. Crickette, Chief Risk Officer

Introduction

The University's Risk Management program has matured over the last 5 years from a traditional risk management program to an enterprise risk management service center. As a service center we provide a wide array of solutions to assist the members of the University with identifying, managing, mitigating, and monitoring their risk to improve outcomes.

Enterprise Risk Management (ERM) Solution Set

Crisis & Consequence Management	Loss Prevention & Loss Control	Risk Financing & Claims Management Program	Enterprise Risk Management Program
			ERM Systemwide Panel
	Environmental Due Diligence Program	Workers' Compensation	Risk Assessments
	Be Smart About Safety	Professional Medical & Hospital Liability	Risk Ranking Tools
Crisis Communications	Environment, Health & Safety	Human Subject Injury	Risk Management Leadership Council
Public Safety	Threat & Security Services	General Liability	Risk Management Tools & Training
UC Ready Panel	6% Prescription	Employment Practices Liability	Enterprise Data Mgmt/Analysis
UC Ready Forum	Travel Assistance	Property	Enterprise Response Enablement
UC Ready Software	Occupational and Employee Health Advisory Coalition	Fine Arts	UC Tracker
Emergency Management	Environment, Health & Safety Leadership Council	Construction	UC Action
Incident Command Centers	Employment Practices Improvement Committee	Auto	Enterprise Risk Management Information System
UCOP Crisis Management Response Team	Web-Based Incident Reporting System	Auxiliary Groups	Risk Summit

A Strategic View of Risk

Risk Services' strategy is to ensure that the solutions we deploy are focused on results: creating efficiency, reducing the cost of risk, improving the cost of borrowing, and reducing IT and operational redundancy.

For example, leveraging our ERMIS to support automating SAS 112/115 Financial Control Attestation creates efficiency, decreases the chances of a financial loss, and reduces IT redundancy.

The rating agency Standard and Poor's has recognized UC for its ERM program:

> *"The UC has implemented a system-wide enterprise risk management information system, which, in our opinion, is a credit strength."*
>
> *RatingsDirect on the Global Credit Portal, September 9, 2010*

Risk = Opportunity

Our solutions allow the University to take on new opportunities and, by managing risk strategically, ensure optimum outcomes. We have learned that by focusing on developing tools that address a broad array of risks, both frequent and infrequent but catastrophic ("black swans"), and small and large, we create a more efficient and effective program.

There are basic best practices for all areas of risk, but these practices have to be sustainable and ongoing – we need to be practiced in order to be nimble. If our solution is not used on a regular basis then we will fall short when we try to deploy it during a catastrophic event.

We have developed tools and ongoing and sustainable practices for all areas of risk:

- Mission continuity planning

- Crisis Management and Crisis Communication programs and plans
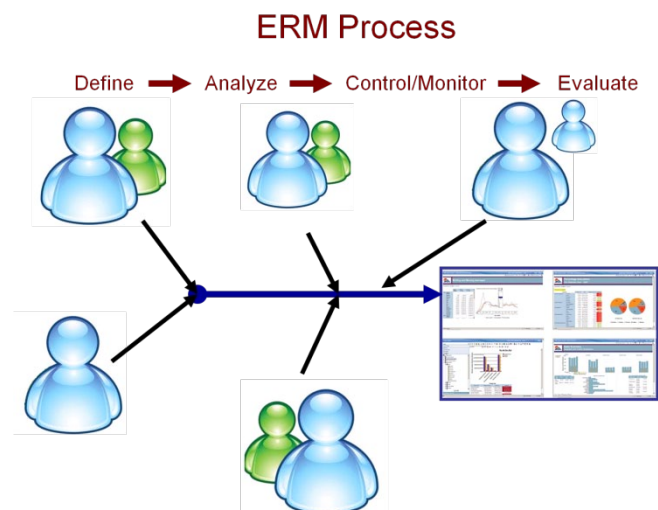
- Decision making tools and decision making training scenario modeling exercises

- Dashboard reporting on key areas of risk

- Formal retrospective reviews on all incidents that incur an expense over $50,000

- Financial control attestation (SAS 112/115)

- Risk financing and risk transfer program

- Loss prevention and loss control programs

Providing tools to help manage risk

The Risk Services website – http://www.ucop.edu/riskmgt – is continuously enhanced providing new tools to help managers at all levels identify, assess, and manage their risks, thereby reducing the cost of risk.

The **UC Enterprise Risk Management Information System (ERMIS)** provides users with a single portal through which they can access and analyze information related to their specific area.

- **UC Action** enhances the efficiency of monitoring controls established in response to specific incidences through continuous monitoring and automated follow-up.
- **UC Tracker*** has taken a manual process and provided a software tool that facilitates the review and documentation of key financial controls related to the preparation of the University's financial statements. Taking this process from manual to electronic format improves transparency and accuracy of information and creates efficiencies.
- **UC Ready†**, an award winning Mission Continuity Tool that allows all UC departments systemwide to develop plans to ensure continuation of operations.
- The **ERM Maturity Level Model** provides a framework for the campuses and medical centers to plan their ERM programs and measure and monitor their progress in using the ERM tools to better manage their risks.
- **Risk Assessment Workbooks** have been created to support risk assessments at each of the UC locations.

ERM Process

Define → Analyze → Control/Monitor → Evaluate

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* Part of the Working Smarter initiative.
† Part of the Working Smarter initiative.

Providing tools to help manage risk

Everyone is a Risk Manager. We all need to be able to identify, manage, and monitor our risks in order to have success. Risk Services' role is to deliver a variety of tools across the enterprise.

- The **UC Risk Services website**, **webinars** and **Risk Summit** provide educational materials and training systemwide.
- Innovative loss prevention and loss control programs including **Be Smart About Safety***, the **6% Prescription** (premium rebate program for implementation of patient safety initiatives), the **Employment Practices Improvement Committee (EPIC)**, **Integrated Safety and Environmental Management (ISEM)**, and **Emergency Management programs**.
- Supporting systemwide groups, such as the **Risk Management Leadership Council (RMLC)**, **Occupational Health Physicians (OEHAC)**, the **Council of Emergency Managers,** and others.
- Deploying risk financing strategies and new insurance products that facilitate UC's mission, for example: **UCIP**, the **University Controlled Insurance Program*** for construction, the **UC Equipment Maintenance Insurance Program (UCEMIP)***, **UCTRIPS***, which provides travel insurance and travel services, **CampusConnexions***, providing insurance to Student and Support Groups, and **Cyber Coverage** focused on implementation of best practices.

> *OPRS support was critical to our being able to implement the LifeWings operating room safety program. We were able to train over 900 of our operating room staff and physicians. The improved communication among staff is already having a positive impact on patient safety in our operating rooms. In my 10 years this has been the most successful collaboration between the Office of the President and the hospitals that I've experienced.… we think it will make a substantial improvement in our risk management profile at UCLA.*
>
> *— J. Thomas Rosenthal, MD Chief Medical Officer, UCLA Health System*
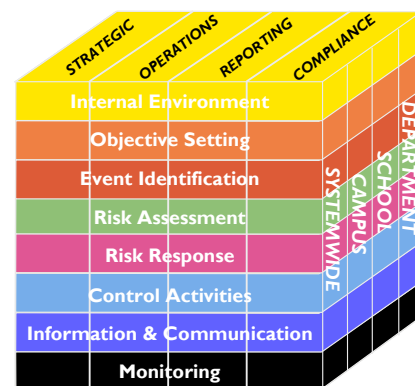
Risk Assessments

Risk Assessment is a key part of all Enterprise Risk Management programs. For more than a decade, the University of California has conducted risk assessments at the systemwide, campus, and department levels. Some assessments are done annually and some are done when the need arises — for example, when a new venture is being contemplated. The Office of Risk Services (OPRS) offers several risk assessment tools to support these activities. These tools have

been constructed to provide insight from multiple perspectives — financial, operational, reporting, etc.

The University's Risk Assessment tools have also been adopted by many other higher education institutions and private organizations. For example, this year one of our systemwide assessments was adopted by the Federal Emergency Management Agency (FEMA), who wrote, "After reviewing several different models, FEMA selected UC's Hazard Vulnerability Assessment (HVA) model as the best tool for colleges and universities." FEMA has recently adopted the University's HVA Model for its Multi-Hazard Emergency Planning for Higher Education course (E-363 application for Higher Education). The HVA completed by UC in 2005 continues to provide us with a road map on how to most effectively manage catastrophic risk. Through Working Smarter programs such as UCReady and Be Smart About Safety we have been able to implement mitigation measures that have addressed many of the risks identified in the HVA.

In 2007, OPRS conducted a comprehensive review of risks at the ten campuses, five medical centers, UCOP, and the division of Agriculture and Natural Resources as part of an initial Enterprise Risk Management Maturity Assessment. We also identified key performance indicators that could be used to measure and monitor the identified risks and activities. This review resulted in a comprehensive list of risks across the system, which we classified into different risk areas (e.g., HR, Research, Medical Centers, Internal Audit, Controls, IT, etc.) in conjunction with suggested key performance indicators that could be used to

Figure 1. COSO ERM Framework

measure each risk. This key performance indicator listing/risk inventory has guided us in our development of the UC Enterprise Risk Management Information System (ERMIS) to meet the campuses' greatest needs.

In 2010, we conducted discussions with the UC community to identify some of the most common risks facing higher education. OPRS reviewed various information sources that were publicly available and searchable on the web to identify those risks recognized most frequently by UC, professional associations affiliated with the higher education industry, and other institutions universities around the country, such as the University of Illinois and the Association of College and University Auditors (ACUA) in conjunction with Texas A&M. Based on this information gathering process, OPRS generated a list of approximately 49 common risks and their associated existing management and mitigation activities and provided this information to the campuses as ERM Bulletin #12.

Assessing risks periodically, whether at a systemwide, campus, or departmental level, enables us to manage our evolving risk profile effectively by determining where our risk potential is the highest. This enables us to direct limited resources effectively to reduce our vulnerability and the cost of risk.

Enterprise Risk Management Maturity

Our Enterprise Risk Management (ERM) program* has matured to encompass our entire program rather than being a stand-alone program. Each location has documented their ERM Plan and assessed their ERM maturity level, which we will be measuring and monitoring annually.

Activities Documented

Rating agencies are looking at organizations' ERM maturity levels and factoring this into their ratings. UC for the first time self-rated based on Standard and Poor's rating methodology. Locations documented 107 ERM activities in five categories:

Categories of ERM Activities				
Internal Environment / Objective Setting (32 activities)	**Event Identification / Risk Assessment (24 activities)**	**Risk Response / Control Activities (25 activities)**	**Information and Communication (13 activities)**	**Monitoring (13 activities)**
Tone-at-the-top Strategic planning Framework Groups & communications Policies Training & tools	Strategic risk assessments Unit/process risk assessments Incident reporting Methodology	Risk response Control activities	Information Communications Training	Monitoring

Maturity levels were assigned (Level 5: Leadership; Level 4: Managed; Level 3: Repeatable; Level 2: Initial; Level 1: Ad hoc):

ERM Components	Average Maturity Level Rating
Internal Environment/Objective Setting	3.17
Event Identification/Risk Assessment	2.98
Risk Response/Control Activities	2.88
Information & Communication	2.88
Monitoring	2.58

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* Part of the Working Smarter initiative.

The average rating for UC indicates that our ERM maturity level is at an "Initial" level, moving towards "Repeatable". We will be self-rating again this year and expect to see continuing improvement.

The Expanding Risk Universe

While reducing the Cost of Risk is one of our primary goals, we are also charged with ensuring that University faculty, staff, students, guests, operations, and assets are appropriately provided proper protection in case of an adverse event. Our development of programs to provide this protection is as diverse as the University itself, and changes and grows as the University does.

Construction Risk

An example of our expanding risk universe was moving from contractor's insurance to the University Controlled Insurance Program (UCIP).

UC generates one of the largest volumes of construction in the State of California and faces a myriad of risks relating to construction operations and defects, which vary with the size and type of construction project.

Systemwide Insurance programs developed by our office include Builder's Risk, University Controlled Insurance Program, and University Professional Insurance Program.

Construction Risk Programs

- Master Builder's Risk program was implemented in 1989 for all projects $200,000 and over
- University Controlled Insurance Program (UCIP) implemented January 1, 2010 for all projects $25,000,000 and over.
  - Anticipated savings
    - 1-3% of total construction value
    - Estimated $17m annual savings
- University Professional Insurance Program targeted implementation late 2010.

Benefits to the University

Cost savings, plus:

- Uniform and consistent coverage
- Broader coverage for the project duration
- Limits dedicated to the project
- Control over terms and conditions of coverage
- Security of knowing UC is being properly protected
- Enhanced safety leading to improved loss experience and a safer construction site

Results

In 2009 we expanded the Be Smart About Safety program to all programs to reduce the frequency of claims.

For Professional Liability, we have the **6% Prescription** program that provides incentives to the Medical Centers to implement strategic loss prevention programs focused on patient care.

We also monitor metrics in areas of safety, such as fire prevention and travel.

- National Fire Prevention Agency (NFPA) National Emergency Management Standard Systemwide Benchmarking Trends (2008-2009):
  - Compliance with programmatic criteria increased from 81% to 88%
  - Improvement reported at 6/10 campuses and all (5/5) medical center locations
- Travel assistance
  - 1,171 total calls
  - 347 cases provided assistance services
    - 340 medical-related
    - 7 security extractions

We significantly changed our program in FY 2004/05 to focus on loss prevention and loss control efforts. These programs have resulted in significant reductions in the number of losses and claims over the last 5 years. Where you see increases in claims this is due to the program taking in more claims — in other words, these losses were previously occurring but not reported.

Figure 2. Number of claims, by program

Program	FY 04/05	FY 08/09	FY 09/10
Auto	N/A	1,051 *	924
Employment Practice (litigated)	56	32	48
Employment Practice (non-litigated)	N/A	13	29 †
General Liability	356	494 ‡	359
Property	369	399 *	361
Workers' Compensation	8,053	5,252	5,057
Hospital Professional Liability	415	332	302

*   Change in reporting requirements in FY 05/06
†   We started taking non-litigated claims into the program in July of 2009, with the aim to 1) reduce litigated cases and 2) identify locations where employment practices could be improved
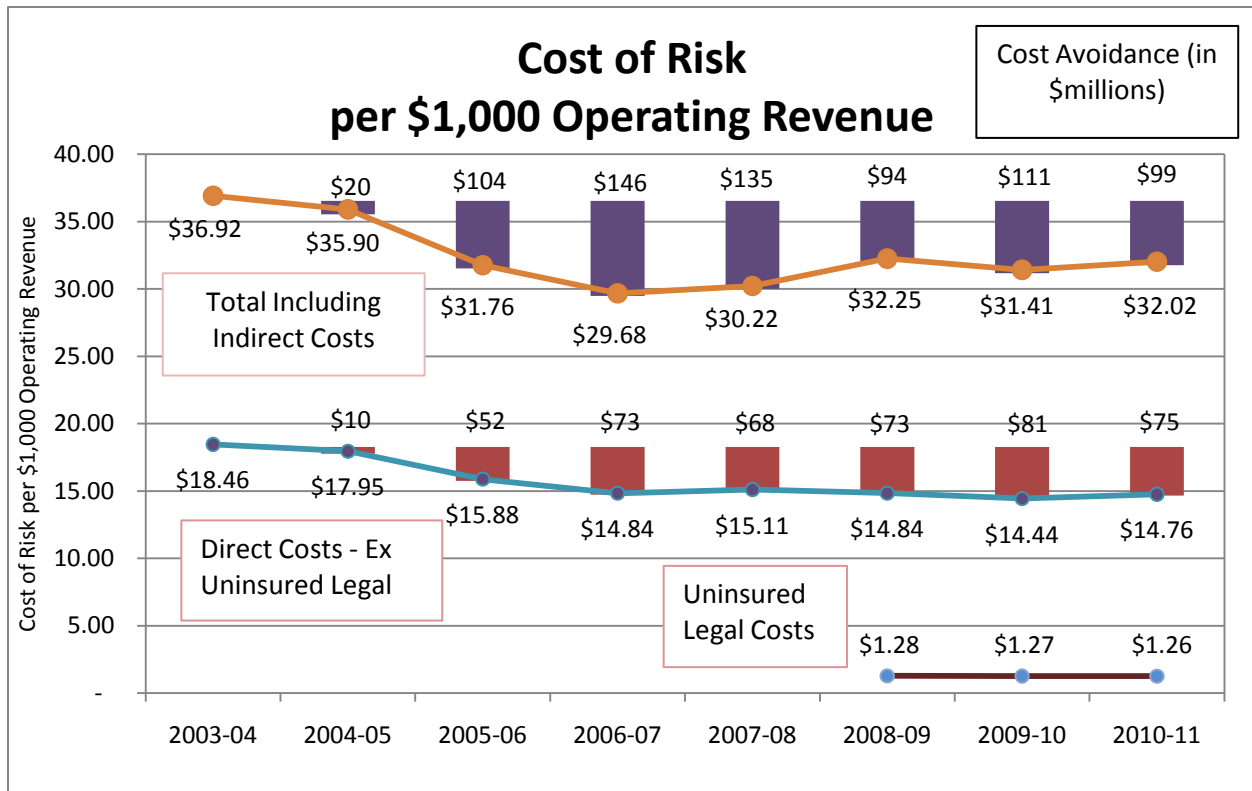‡   Threat & Security losses significantly increased this number

Ongoing Success in Reducing the Cost of Risk

The total cost of risk for the University includes self-insured losses, premiums, claims administration, and loss control and loss prevention expenses. For the purposes of comparing by year, the total cost has also been stated as an amount per $1,000 of systemwide operating budget.

The annual *direct* cost of UC's hazard risks (workers' compensation, general liability, employment practices liability, professional liability, auto liability, and property) is over $250 million. In addition, studies by OSHA and the American Society of Safety Engineers (ASSE) estimate that the ratio of indirect costs to direct costs can be 1 to 1, 2 to 1, or even higher. This means that the true cost of these hazard risks for UC could exceed $500 million. In that context, a reduction in costs of 1% would save the University $5 million.

Figure 3. Cost of Risk per $1,000 Operating Revenue for FY 09/10 reduced from $18.46 to $14.76

The graph above illustrates the cost of risk per $1,000 Operating Revenue over time, starting in FY 2003-04. For both Direct Costs and Total Including Indirect costs, the bars above each year represent the total decrease in the cost of risk based on the level established prior to implementing Enterprise Risk Management in 2003-04. The dark bars at the bottom represent direct cost savings, while the bars above the top line reflect both direct and indirect cost savings.

The rates shown on the Direct Costs line represent the originally projected cost of risk for each year, adjusted to reflect restatements of fixed costs such as expenses and premiums. The projection for 2010-11 was based on the June 30, 2009 actuarial study. (Unlike other years on

this graph, the 2010-11 projection was derived before any experience had accumulated for that year, and thus reflects potential conservatism.)

Expanding Scope of Cost of Risk

In 2008-09, we were able to begin to capture the costs for uninsured legal matters, managed by the Office of General Counsel, as shown on this graph. As our ERM program matures we should be able to capture additional cost such as fines, penalties, waste, etc. This will give a bigger picture of the Cost of Risk.

Closing

The University of California operates in an inherently complex environment. By strategically managing risk, we can reduce the chance of loss, create greater financial stability, and protect our resources so we can continue the University's mission of supporting teaching, research and public service. Risk Services utilizes a multifunctional approach that attacks the University's entire portfolio of risk by utilizing a host of different tools, workgroups, and initiatives. We recently developed a 5 year strategic plan (Appendix A) that provides the guiding principles of Risk Services' activities:

Mission

- Provide strategic guidance, leadership, oversight and system coordination of various risk management and mitigation activities, including the University's Enterprise Risk Management (ERM), University liability and insurance, Workers' Compensation, Emergency Management, Business Continuity, and Environment Health & Safety Programs.

Vision — 5 Year Accomplishments

- Enterprise Risk Management approach is institutionalized as part of the overall decision-making process system-wide.
- Continuous expansion of innovative loss prevention and loss control programs results in continued reductions in the total cost of risk year over year.
- Prominence and effectiveness of system-wide leadership groups such as the Risk Management Leadership Council (RMLC), Employment Practices Improvement Committee (EPIC), Occupational Health Physicians (OEHAC), and others is recognized both within the organization, as well as by external entities.
- Development and expansion of innovative risk financing strategies help facilitate the UC's Mission.
- Established ability to demonstrate return on investment for major initiatives by leveraging the ERMIS.
- Acts as a model for organizational efficiency and effectiveness.

With the new leadership at the Office of the President, the support of the Risk Management Leadership Council, the EH&S Directors, and many others across the University, we are confident that we can succeed in accomplishing our mission. These are exciting times at UC and the entire Risk Services staff looks forward to serving the UC community.

Appendix A

University of California Risk Services — Strategic Plan 2010-2015

University of California
Risk Services
Strategic Plan 2010-2015

<u>Overview</u>

The University of California operates in an inherently risky environment. By strategically managing risk, we can reduce the chance of loss, create greater financial stability, and protect our resources so we can continue the University's mission of supporting teaching, research and public service. Risk Services utilizes a multifunctional approach that attacks the University's entire portfolio of risk by utilizing a host of different tools, workgroups, and initiatives. This strategic plan provides the guiding principles of Risk Services' activities, however each workgroup or initiative may maintain a more detailed strategic plan focused specifically on their unit, including but not limited to:

- Environmental Health & Safety Leadership Council Strategic Plan 2010-2015

- Risk Management Leadership Council Strategic Plan 2010-2015

- Enterprise Risk Management Strategic Plan 2010-2015

<u>Mission</u>

Provide strategic guidance, leadership, oversight and system coordination of various risk management and mitigation activities, including the University's Enterprise Risk Management (ERM), University liability and insurance, Workers' Compensation, Emergency Management, Business Continuity, and Environment Health & Safety Programs.

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- Development and expansion of innovative risk financing strategies help facilitate the UC's Mission.

- Established ability to demonstrate return on investment for major initiatives by leveraging the ERMIS.

- Acts as a model for organizational efficiency and effectiveness.

<u>Values</u>

Innovation	Creativity	Effectiveness
Accountability	Efficiency	Resiliency
Advocacy	Resourcefulness	
Collaboration	Competence	

<u>Strategic Objectives</u>

1. Enterprise Risk Management
   a. Support the organization's efforts to improve efficiency, prevent loss, reduce costs, and protect both the human and financial resources of the University. Provide the necessary resources to help locations develop, monitor and support risk management programs that aim to proactively address risk exposures.
   b. Develop consistent key performance indictors and other metrics which focus on leading indicators to be incorporated into the UC Enterprise Risk Management Information System (ERMIS) and provided electronically to senior leadership at all locations to help support various initiatives.
   c. Encourage collaboration and innovation between all locations in the development and/or purchase of new technologies that support continued expansion of ERM activities, improve accountability with the University Community, and help improve organizational efficiencies.
   d. Support the entire spectrum of risk management activity by facilitating improved risk identification, risk evaluation and ongoing monitoring mechanisms through the continued development and use of improved risk assessment tools and specialized control monitoring systems such as UC Action and UC Tracker.

2. Systemwide Leadership Groups
   a. Systemwide Leadership Groups such as the Risk Management Leadership Council and Environment, Health, and Safety Leadership Council enhance the University's ability to address emerging risk issues and environmental factors that can impede the organization's ability to achieve its mission by working in partnership with UC leadership to articulate goals, strategies, priorities and solutions.
   b. Identify relevant and pertinent risk issues across the organization, develop recommended best practices, and communicate to UC leadership to help promote an effective operating environment and a safe and risk-aware culture.
   c. Work to provide the necessary resources to help locations develop, provide, and promote effective risk management programs that are based on actual risk exposure and risk management effort on a location by location basis.

3. Loss Control
   a. Support continued development of innovative loss control initiatives, and ensure ongoing success of existing loss control initiatives such as Be Smart About Safety, the 6% Prescription Rebate Plan, Campus Connexions, Allocation of Premium to School of Medicine Departments, Seismic Retrofitting, and the Integrated Safety and Environmental Management (ISEM) programs, among others.
   b. Encourage collaboration and innovation between all locations in the development and/or purchase of new technologies that increase the efficiency of Risk Services

operations, improve accountability within the UC Community, and provide quantifiable metrics to be included in the ERMIS to measure progress and program performance.

4. Emergency Management
    a. Foster continuous improvement of UC systemwide crisis and consequence management capabilities.
    b. Develop and implement systemwide "failsafe" emergency communications system in the event of campus or regional conventional telecommunications systems failure.
    c. Evaluate feasibility and economic viability of various systemwide enterprise contracts and examine opportunities to leverage systemwide contracting and purchasing power to produce systemwide cost savings.

5. Environmental Health and Safety
    a. Provide resources to develop systemwide strategies and programs to address the top five causes of injury by count and cost of workers' compensation claims, including implementing strategies that address current issues, and incorporate standard ergonomic recommendations into facility planning.
    b. Develop systemwide strategies and programs to address the top three environmental legal and regulatory exposures for the University, including upcoming cap and trade requirements.
    c. Encourage development of program validation and certification through participation in program certification, use of external review, or development of an internal standard for program elements and implementation.

6. Outreach
    a. Promote partnerships with external publications to elevate the prominence of UC's Risk Management programs and initiatives, and expand the overall audience that receives periodic Risk Services communications and invitations to training programs and seminars.
    b. Provide periodic and ongoing training, professional development and continuing education programs utilizing both technological forums such as webinars, as well as the conference format of the annual Risk Summit.
    c. Improve ability to calculate return on investment (ROI) of various OPRS programs and initiatives, and ensure appropriate mechanisms are in place to effectively communicate this value to stakeholders inside and outside the organization.