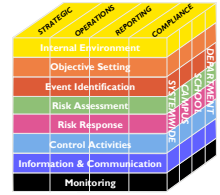


University of California Office of the President Enterprise Risk Management (ERM)

Bulletin #10



March 10, 2010

Enterprise Risk Management: Return on Investment

The Committee of Sponsoring Organizations (COSO) defines Enterprise Risk Management (ERM) as “a process, effected by an entity’s board of directors, management, and other personnel, applied in strategy-setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.” For the University of California (UC), ERM is the framework by which the major risks facing the University are identified and evaluated, helping to facilitate an appropriate risk response to ensure that UC can meet its goals of teaching, research and public service. ERM is now considered to be so important to the success of an organization that credit rating agencies now consider it in their evaluation of an entity’s creditworthiness. The foundation of UC’s ERM program is the people who are actively managing risk. As a key support, the ERM Information System (ERMIS) gives campus stakeholders at multiple levels the information they need when they need it to facilitate business decisions in a timely and effective manner. This is a brief overview of value that we have seen from UC’s ongoing ERM Program.

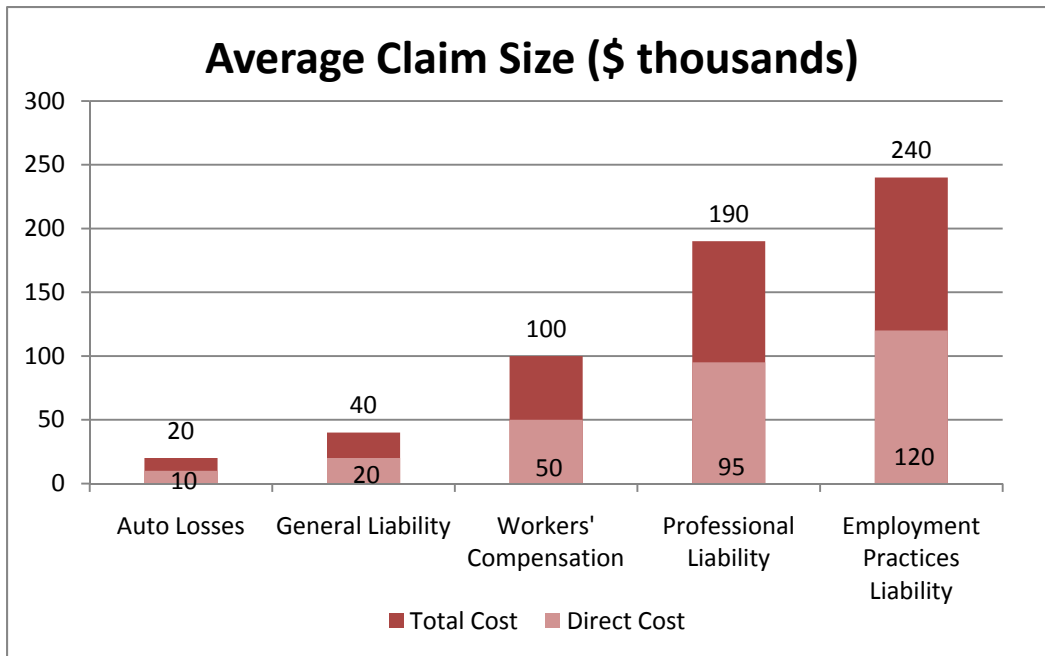
Bickmore, as the University’s Actuary, is working with the Office of the President, Office of Risk Services to develop an ongoing method of review to track the value and savings of the ERM Program, including ERMIS. The areas of review include:



ERMIS is a flexible and dynamic system. It essentially “democratizes” information, in that it has the ability to provide key data and reports to personnel at all levels of UC. We anticipate that as the data integrated by ERMIS becomes richer and as the use of ERMIS becomes more widespread, its value will grow in creative ways which have not yet been considered. The following highlights a few examples that have been identified to date.

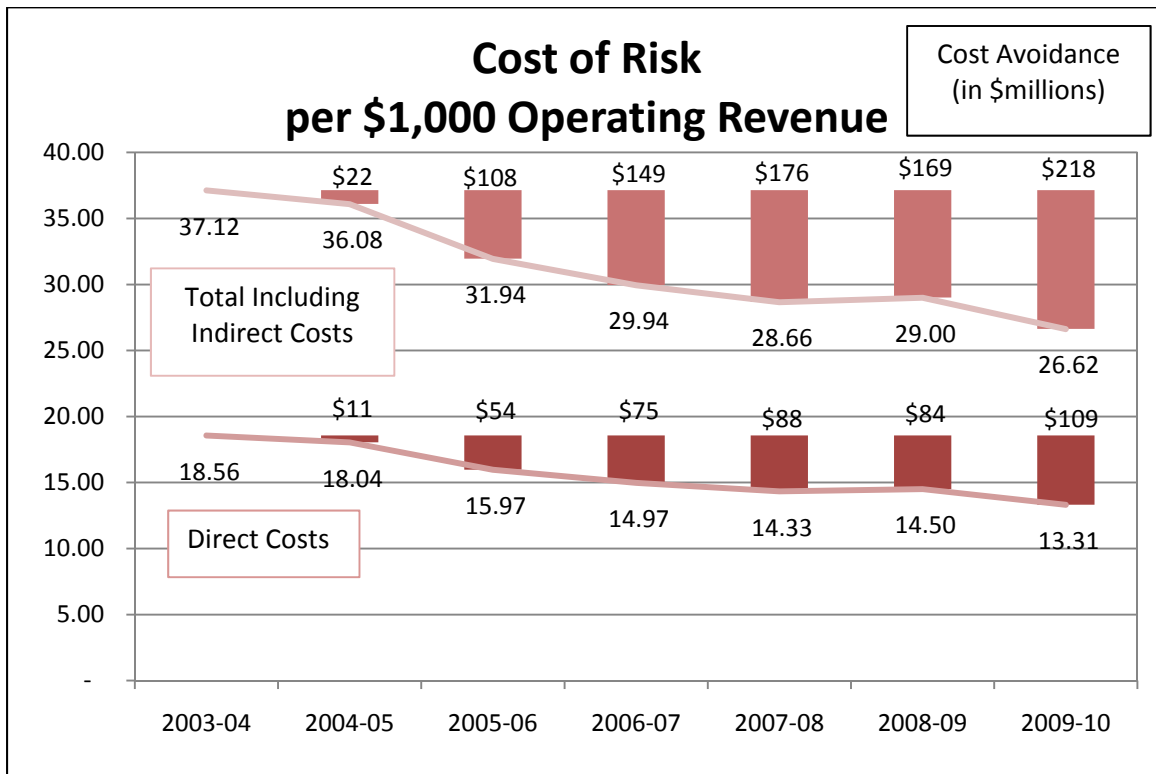
Cost of Risk:

The ERM program and ERMIS provide easy to use tools including Risk Assessments, a Risk Maturity Work Plan, and a variety of other resources to help users identify and manage their risk. These programs are not limited to hazard risks but cut across all risks: operational, compliance, financial, reputational, communication, and strategic. Of these risk categories, hazard risk is the area for which the University has the best and most timely data and which therefore offers an excellent data mine for monitoring the ERM program’s savings and value. 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 range from 1:1, 2:1, 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.



UC’s ERM program and the ERMIS vastly improve the information managers use to identify and manage risk. For example, they provide management with current information on key performance indicators (KPIs) in minutes, allowing managers to identify trends, spot areas which need improvement, and track results over time. In addition, the information is downloadable, facilitating additional analysis that may be desired. This should allow UC to more effectively focus risk management efforts and ultimately save the University money.

The prevention of just one claim can result in significant savings to a department, campus, and/or medical center. This can result exponentially in even greater overall savings across the system. The following graph illustrates the total cost of risk over time, starting in FY 2003-04. The bars above each year represent the total decrease in the cost of risk based on the level established prior to implementing ERM in 2003-04. The dark bars at the bottom represent direct cost savings, while the lighter bars above the top line reflect both direct and indirect cost savings.



Cost of Borrowing:

UC's ability to borrow is crucial to its success. In 2008 UC's total debt exceeded \$10 billion. Key factors affecting the cost of borrowing are ratings provided by credit rating agencies such as Moody's and Standard & Poor's. Both of these agencies now explicitly look for an organization's approach to managing enterprise or holistic risk as part of the process in developing ratings. UC's proactive approach to ERM should help it maintain its excellent credit rating. A 0.1% decrease in interest rates that UC pays on its debt load represents over \$10 million in potential savings.

Create Efficiency & Reduce IT Redundancy:

The University is seeking ways to improve efficiency, thus enabling staff to focus on critical work.

SAS 112/115: Public entities are working hard to make sure that they are identifying and documenting key controls related to the preparation of financial reports. "SAS 112/115 raises the bar for internal controls compliance and documentation... The University must effectively demonstrate to external auditors that an internal control framework has been established and is practiced at all levels in University business administration." (University of Pennsylvania, SAS 112/115 Project at Penn: Documenting and Enhancing Internal Controls, One Business Process at a Time). The effect of internal control weaknesses being reported by our auditors under SAS 112/115 could include negative impacts on research funding & credit ratings, additional federal audits, and reputational damage.

In 2002 the UC Controller's Office estimated that automating SAS 112/115 requirements would cost UC between \$0.5M and \$2.5M. Knowing that key financial controls are working requires information currently stored in several systems (e.g., campus financial and payroll systems) and input from the people performing and certifying the controls. By centralizing data from many sources, UC's ERMIS creates a foundation of information which is accessible, automatically updated, transparent, and less

prone to error. This essentially addresses some of the key requirements of SAS 112/115 in addition to generating administrative savings.

The creation of automated reports within the ERMIS will increase workforce efficiency. Staff spends significant amounts of time currently developing and updating reports. The UC Environmental Health and Safety Staff, Risk Managers, Controllers, Human Resource Managers, and others are developing automated reports that will reduce staff time spent in updating information provided monthly to University leadership. These automated reports will provide more reliable information that is updated more frequently and is readily available without staff support. Further, as noted above, as the type of data available is expanded and the correlating measurement metrics mature, more in-depth analysis of data will be able to be easily performed.

Redundancy can be reduced by the creation of automated reports made readily available to those with a need to know. Instead of having the same or similar reports being developed and maintained without the benefit of shared knowledge at different divisions, departments, schools, campuses, medical centers and other locations, the ERMIS enables sharing of analyses and information easily and efficiently across multiple different locations.

To learn more, please visit the Risk Services website at <http://www.ucop.edu/riskmgt/erm/>.

If you have any questions or would like further information, please contact
Chief Risk Officer Grace M. Crickette (email grace.crickette@ucop.edu, telephone 510-987-9820).