



Energy. Commitment. Growth.

SOCIETY OF ACTUARIES

# 2011 **YEAR IN REVIEW** REPORT

Welcome to the 2011 Year in Review. It's been another exciting year. This publication demonstrates people working together with enthusiastic commitment and extraordinary energy to further our vision to be the leading professionals in the measurement and management of risk. We hope you enjoy reading this summary of the important work that was accomplished last year to advance the SOA's mission and vision.

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## LETTER FROM THE PRESIDENT



Dear Members:

The 12 months I served as SOA president were some of the most memorable in my career as an actuary. It was truly an honor to serve you, the world's finest risk management professionals. Serving as president has also confirmed something I have already known—that our credentials are world-class, and that our members are truly the best of the best.

As you read through the pages of this report, you'll see first-hand what I mean. We have made tremendous strides in education, research, and international endeavors. You will see what we accomplished in a year's time.

While these achievements are truly notable, what I appreciated the most were the extraordinary people I met during my travels. No matter where I went, people energized and enlightened me. I learned so much about the human spirit and shared that excitement and enthusiasm with the people I spent time with during 2011.

I had the good fortune to meet so many actuaries. We are a very diverse group with a wide range of interests. It reinforced my convictions that the actuarial profession is full of very talented people.

The travel was great—from the United States to Canada and across the world. Talking with leaders of other actuarial organizations around the globe has given me a keener understanding of how actuaries practice at home and in other countries. There are differences and similarities in how we do our jobs, but at the end of the day, the sharing of ideas brings us closer together and makes our profession stronger.

Another part of the job I thoroughly enjoyed was presenting new fellows with their hard-earned certificates at the Fellowship Admissions Course. The vitality of our new FSAs is energizing, and I trust that spirit carries through for years to come.

The enthusiasm of members and candidates is equally uplifting and contagious. They shared their ideas, concerns and accomplishments with me. Meeting so many talented people gave me a clearer picture of what the SOA can do for our members and the profession.

And what fun it was to visit university campuses and speak to student groups. I met with the next generation of our profession. Students are inquisitive, spirited and full of new and exciting ideas. Our future is in good hands.

Last, but certainly not least, I tip my hat to the SOA staff. They are a wonderful group. I have a greater appreciation of everything they do to support our members and candidates. I honored them with a Presidential Award. They certainly deserve it.

Many thanks to all of you—the members, candidates, the Board, the SOA staff—for making 2011 a truly memorable year for me. I look forward to working with you in the years to come as the profession continues to expand. May 2012 be a healthy and prosperous year for us all.

Sincerely,

A handwritten signature in black ink that reads "Donald J. Segal". The signature is written in a cursive, flowing style.

Donald J. Segal, FSA, EA, FCA, MAAA

# KNOWLEDGE MATTERS

Enhancing and improving the quality of actuarial education continues to be an important venture. Providing a diverse menu of educational topics, extending our reach around the world, and strengthening our academic initiatives prepares the profession for a strong future.

## FELLOWSHIP LEVEL EXAMS OFFERED TWICE PER YEAR

Fall 2011 marked the first session of all Society of Actuaries (SOA) fellowship exams being administered in the same sitting. Education volunteers and staff worked for two years to implement the necessary structure and processes for this challenging enhancement to exam delivery for fellowship candidates. Candidates enjoy important new benefits such as increased administrations, scheduling flexibility and a recommended order for FSA requirements.

## CERA/FSA RESTRUCTURING

At its March 2011 meeting, the Board of Directors approved enhancements to the pathway to the Chartered Enterprise Risk Analyst (CERA) credential and moved to expand enterprise risk management (ERM) learning opportunities in all tracks for candidates pursuing fellowship. At the heart of the changes is a new ERM-focused examination. As part of the new CERA pathway and the Finance/ERM fellowship track, the ERM exam will exhibit an exclusive ERM focus, with a general scope appropriate for all practice areas. "These changes will meet the needs of candidates and employers seeking to acquire comprehensive ERM education," said SOA President Donald J. Segal, FSA, EA, FCA, MAAA.

For candidates pursuing an FSA on tracks other than Finance/ERM, there will be an option to learn ERM and receive the CERA credential. The focused approach of the ERM exam will provide the requisite education in a more efficient framework. "The changes are designed to deliver a CERA pathway that is easily available to any of our candidates," said Steve Eadie, FSA, FCIA, and a member of the Education Executive Group. "We are better coordinating the ERM content across the Fundamentals of Actuarial Practice (FAP) e-Learning course, the exam, and the

fellowship module." The new CERA requirements will become effective on July 1, 2012.

[Additional information on the restructuring](#) is available on the SOA website.

## NEW VERSION OF FAP LAUNCHED IN JANUARY

In January 2012 important updates to the FAP e-learning course became effective. The updated course was significantly enhanced with many new readings and an improved flow of material, including strengthened ERM content. This marks the first step toward implementation of the CERA/FSA restructuring changes approved by the SOA Board in March 2011.

The SOA published a new book for use in the course. *Understanding Actuarial Practice* replaces four of the seven books that were required for FAP and brings together four different practice areas at a level that candidates need to understand the material. The book presents the material in a more organized fashion, as

well as reduces costs for candidates and employers. FAP content has been revised to follow the flow of material as presented in *Understanding Actuarial Practice*.

### New in 2011:

**1078** new ASAs  
**173** new CERAs  
**598** new FSAs

## ENHANCEMENT TO DMAC MODULE

A redesigned version of the SOA's Decision Making and Communication module (DMAC), originally developed in 2007, was released in January 2011. Part of the redesign included the addition of a case study that tracks through several of the module's sections. The case study, which simulates a task force charged with making recommendations to the board to improve its enterprise risk management process, emphasizes communication and uses a real life example to work through the various steps of the decision-making process. In 2011 the SOA also added audiocasts that introduce the contents of each assignment related to the case study. "It's a kind of mentoring," said SOA Education volunteer Jill Carpenter, FSA, MAAA, "and we encourage students to take advantage of this opportunity. These are skills that they will be using on the job."



## NEW GUIDANCE FOR SOA WRITTEN EXAMS

*The Guide to SOA Written Exams: How to be Successful on an SOA Written Exam* is a comprehensive guide that has been prepared to provide general advice and guidance for candidates undertaking written answer examinations. Bringing together advice that was previously scattered throughout [soa.org](http://soa.org) with new insights to aid in exam preparation, the guide is available free of charge on the SOA website.

## PROFESSIONALISM E-COURSES

The year 2011 marked the completion of a series of four professionalism e-courses. The Professionalism in Practice series includes an e-course for each of precepts 2, 3, 10 and 13 of the Code of Professional Conduct. This series of e-courses offers SOA members globally an accessible way to earn professionalism CPD credit.

In 2011,  
16 sections sponsored 35 SOA webinars.  
This was **80%** of all SOA webinars.

## PODCASTS

The Actuary of the Future (AOF) Section became the pilot group to produce the SOA's first podcast. A podcast is a short audio recording, usually no more than 5 to 10 minutes, which can be played on demand via a computer or on a hand-held device such as an iPod. The first series of [podcasts](#) produced by the AOF was on the subject of networking. These are available to the general public on the SOA website. As a result of the pilot program, the SOA was able to develop templates and documentation that will enable other sections to produce their own podcasts efficiently and cost-effectively. "The possibilities are endless," said AOF Section Council member Ashwini Vaidya, FSA, MAAA, who played an integral part in the program. "Educational podcasts can be developed that build soft skills, or that record interviews or roundtable discussions on topics of interest to our

members. Podcasts will be sponsored by sections or other entities within the SOA. The goal is to provide a convenient, portable means by which members can gain valuable information that will help them with their careers."

## CENTERS OF ACTUARIAL EXCELLENCE

*The Centers of Actuarial Excellence (CAE) program* is a key component in the SOA's plan to strengthen the position of the academic branch of the profession. The SOA Board of Directors identified that strengthening the role of academics within the actuarial profession has the potential to enhance research and intellectual capital development. The academic branch helps the profession grow stronger and plays an integral role in advancing actuarial knowledge.

The SOA's CAE program continues to thrive with 23 universities now sharing the prestigious designation. In 2011, the SOA expanded eligibility for CAE to Hong Kong as a pilot program. Allowing Hong Kong schools to apply for CAE status was a way to encourage these schools to retain their connection with the SOA's education pathway. The pilot expansion to Hong Kong is also supported by the SOA's international strategy. Two Hong Kong schools were awarded CAE status in December.

## CAE GRANTS

As a benefit of attaining CAE status, schools can compete for SOA-sponsored grants to help universities make significant investments in their programs, research and the profession in the areas of education and research.

Georgia State University's Department of Risk Management and Insurance research grant, *Improving the Risk Models of Financial Institutions* (Principal Investigator: Richard Phillips, Ph.D.), funds a partnership involving the university, the SOA and Bloomberg L.P. to publish indices of tail risk events across different risk exposures by designing survey instruments, developing and estimating models producing objective probabilities, and refining the indices over time.



The Actuarial Science, Risk Management and Insurance Department at the University of Wisconsin–Madison is actively working on its learning grant project titled, *Technology Enhanced Learning in Actuarial Science Classes*. This project, headed by Edward W. Frees, FSA, Ph.D., is a systematic plan for integrating technology enhanced learning tools into actuarial science classes and other aspects of the program’s curriculum.

**CAE CONFERENCE**

On June 30, 2011, the first annual CAE Conference was held, with faculty representatives attending from all CAE schools. The agenda included presentations from the 2010 CAE grant recipients as well as discussions on improving the grant process and building academic actuarial research. Breakout sessions included discussions on diversity, high school outreach and business communication skills. Attendees praised the conference as an excellent way to share best practices and connect to other academics and the profession.

The Centers of Actuarial Excellence (CAE) program is a key component in the SOA’s plan to strengthen the position of the academic branch of the profession.

**2011–2012 SOCIETY OF ACTUARIES’ JAMES C. HICKMAN SCHOLARS NAMED**

The SOA awarded six new SOA [James C. Hickman Scholars](#) in 2011. Each recipient will receive a \$20,000 stipend for the 2011–2012 academic year. The recipients were chosen from a pool of highly qualified applicants currently in (or applying to) actuarial science (or a related field) doctoral programs in the United States or Canada. Recipients have made good progress toward, or have already attained, an actuarial credential.

THE 2011–2012 SOA HICKMAN SCHOLARS

Marc-André Desrosiers, FCAS  
*University of Wisconsin–Madison*

Anne MacKay, ASA  
*University of Waterloo*

Tianxiang Shi  
*University of Waterloo*

Shengzhe (Thomas) Tang, ASA  
*University of Toronto*

Zhongyi Yuan  
*University of Iowa*

Wenyuan Zheng  
*University of Connecticut*

In addition, two 2009–2010 and three 2010–2011 SOA Hickman Scholars had their \$20,000 stipends renewed for the 2011–2012 academic year:

Maciej Augustyniak  
*Université de Montréal*

Michael Batty, FSA, CERA  
*University of Wisconsin–Madison*

Robert Erhardt, ACAS  
*University of North Carolina at Chapel Hill*

Qingchong (Mark) Zhang, ASA, MAAA  
*Northwestern University*

Zhe Zhu  
*Massachusetts Institute of Technology*

Three SOA Hickman Scholar recipients celebrated the achievement of completing their doctoral studies this year:

Mario Ghossoub graduated from the University of Waterloo in August having completed a large body of research work. His Ph.D. dissertation



alone produced two research papers and a published work titled, "Static Portfolio Choice under Cumulative Prospect Theory."

Jared Klyman completed his graduate studies in the Operations Research and Financial Engineering Department at Princeton University where he attended, spoke and participated in many industry conferences and seminars. In his last year, Jared received the distinction of winning two teaching awards based on nominations from professors, deans and direct student feedback.

Tia Goss Sawhney received her doctorate from the University of Illinois at Chicago's School of Public Health in May. She is currently the director of Data, Analytics & Research for the Illinois Department of Healthcare and Family Services. Tia is also a Social Insurance and Public Finance (SIPF) Section Council member and serves as a member of the Centers of Actuarial Excellence (CAE) Evaluation Committee.

In 2012, the SOA is launching a new member benefit. Each person who belongs to at least one section will receive a coupon for **\$25 off** a section-sponsored **webinar**.

#### EDUCATION TOTALS FOR 2011

Exams administered: **50,052**

E-learning modules and assessments accessed: **19,237**

Professionalism course participants: **1,885**

#### UNIVERSITY OUTREACH PROGRAM

The SOA's University Outreach program, first launched in 2007, has been helping the profession engage with students on college campuses across the United States, Canada and Asia. SOA education and marketing/communication staff are joined on campus by practicing actuaries to promote the profession as well as share education-related information with students, faculty and advisors. In 2011 the format of the program evolved into a panel discussion with up to three actuaries serving on each panel. This new format has proven to provide a more engaging and interactive experience according to student feedback. Since the program's inception, 55 university outreach visits have been completed reaching 2,797 students and 312 faculty and advisors. 2011-2012 SOA President Brad Smith, FSA, MAAA participated in three visits this year in Singapore and South Korea.



# FOCUS ON RESEARCH

Producing quality research that expands knowledge and provides new information for members, the public and other research stakeholders is paramount. Re-examining the development research agenda, broadening the scope of research development, and sharing important results expands the boundaries of actuarial science.

## 2011 LIVING TO 100 SYMPOSIUM AND MONOGRAPH

This [fourth triennial symposium](#) drew attendees from 17 countries, nearly 50 participating organizations/sponsors and speakers from all over the world. Approximately 35 papers were presented at the symposium and are now available in the [2011 Living to 100 Symposium online monograph](#). Topics covered include mortality modeling, measurement and trends, obesity and other factors that may affect mortality, mortality compression, predictors of exceptional longevity, slowing the aging process, and implications of increasing aging populations. The transcripts of formal and informal discussions, panel discussions, and keynote presentations are also included in the monograph.

## OBESITY STUDY

According to the Society of Actuaries (SOA) [obesity study](#) by lead researchers Donald Behan, FSA, FCA, MAAA, and Samuel Cox, FSA, CERA, the total economic cost of overweight and obesity in the United States and Canada reaches \$300 billion per year, with 90 percent of the total—\$270 billion—attributed to the United States. While much research has been conducted on obesity, this Committee on Life Insurance Research-sponsored study analyzed existing research, pulling the data and compiling comprehensive financial results. “There are many studies about the effects of obesity,” said Behan, “but there was nothing that really pulled the results together for the overall financial cost.”

The report looks at the economic costs of overweight and obesity caused by the increased need for medical

care, and the loss of economic productivity resulting from excess mortality and disability. What is significant about this report is that the results are of interest to just about everyone. “Anybody who is involved in the costs of medical care or mortality, or any individual who is worried about obesity, this report should be of great interest to them,” said Behan. “While this report details the costs involved, it also shows how the rate of obesity has been an increasing problem. Not only are there more people that are obese, but the degree of very significant serious obesity has increased even more.”

## SOA EXPERIENCE STUDIES

### Group Long-Term Disability Experience Table Now Available

The [2008 Group Long-Term Disability Experience Table](#) has been created as a follow-up to the 2008 Experience Study. The robust nature of the data in the new experience study allowed for the creation of a table that incorporates new parameters, and combinations of parameters compared to prior studies. This report outlines the development of the new table. Accompanying the report is an Excel workbook that contains the table itself and different ways of accessing the table values. A second Excel workbook contains a pivot table of termination results, including expectations developed with the new table.

### Intercompany Long-Term Care Insurance Experience Report Contains New Features

Findings from the [Long-Term Care Experience Report](#) indicate that Alzheimer’s claims are the most frequent, longest and most expensive overall claim, with cancer claims being the leading cause of claim under age 65. The report also shows claim incidence and mortality rates similar to prior reports and lapse rates continuing a decreasing pattern. Based on data submitted from 35 organizations and covering 310,000 claimants and \$13.1 billion of benefits, the report traces experience through the end of 2007. Enhanced from earlier SOA long-term care experience studies, this report now contains regional breakout analysis and information on assisted living care claims, consisting of 17 percent of the claim payments.





## THE FINANCIAL RECOVERY FOR RETIREES CONTINUES

To measure the effects of the dramatic financial downturn on retirees' finances, the SOA, LIMRA and the International Foundation for Retirement Education (InFRE) have followed up with the respondents of a 2008 study, *Will Retirement Assets Last a Lifetime?* In 2009 and again in 2011, the three organizations investigated how these same respondents have been reacting to the long-term effects of the 2008 market downturn and the continuing financial situation.

The 2011 study, *The Financial Recovery for Retirees Continues*, was fielded in June 2011 and explores the attitudes of 461 retirees who were in the original 2008 and 2009 studies. The results are contrasted with those of the two prior studies.

The original 2008 study surveyed 1,524 retirees ages 55 to 75 with \$100,000 or more in household investable assets prior to the financial downturn. The participants were re-contacted in April 2009 and posed a subset of the original questions via an online survey. The report, *What a Difference a Year Makes*, presents the results of the 2009 survey compared with the original 2008 study.

These reports represent a follow-up effort to a series of focus groups conducted in 2005. For interested readers, the findings from the series of focus groups can be found by clicking on this link: [Spending and Investing in Retirement—Is there a Strategy?](#)

## IMPLICATIONS OF THE EMERGING POST-RETIREMENT MARKET FOR LIFE INSURANCE INDUSTRY

According to a recent [SOA study](#), there is an opportunity and need for improved financial services for baby boomers as they enter retirement, and the insurance industry is in the best position to provide these services. The study, cosponsored by the Committee on Life Insurance Research and the Product Development Section, examines the perceptions of the needs and risks of retirement over the years, projects resulting implications, and offers potential approaches for success.

In order for the insurance industry to truly succeed, products, as well as the delivery and marketing of them, will need to be retooled. Education of both consumers and financial services providers is also key to ensuring the public is well served. A foundation for such education might best be offered impartially and interactively using the Internet to address questions of trust and understandability. In particular, the risk-protecting products uniquely offered by insurance companies need to be demystified by simpler and more transparent explanations.

7 sections pledged **\$340K** in new research dollars in 2011 (\$120K from the Financial Reporting Section). Section leaders and volunteers help determine projects and man project teams.

## 2010 EMERGING RISKS SURVEY

The Joint Risk Management Section, which is comprised of the SOA, the Casualty Actuarial Society (CAS) and the Canadian Institute of Actuaries (CIA) released their [findings from the 2010 Emerging Risks Survey](#). Authored by Max Rudolph, FSA, CERA, MAAA, the report tracks the thoughts of risk managers about emerging risks across time. The fourth survey of its kind, the 2010 results demonstrate that trends are as important as absolute responses. "Optimally, risk managers should be thinking 10 years out. It is appropriate to think this far out," said Rudolph. "If you can pick out tomorrow's risks and avoid them today, you can really help your company make better decisions."

When evaluating possible emerging risks, one pit-fall that must be avoided is anchoring, which is the tendency to let recent events dominate thinking about potential events. The financial crisis is a perfect example. "As we get further away from the financial crisis, people are more willing to consider non-financial risks," noted Rudolph. "We tend to worry about whatever recently happened and that makes sense, but as risk managers we need to be able to look 10 years or more down the road and determine if this is a possible opportunity or a possible threat."



## FOCUS ON RESEARCH

Many of the top emerging risks identified in the 2010 report come from economic and geographic categories. Among the top emerging risks identified by the respondents include a fall in the value of the U.S. dollar and a potential Chinese economic hard landing. As future surveys are completed, enough data will eventually be stored that a comparison can be done between the potential risks and actual outcomes.

### RAPID RETIREMENT RESEARCH

The Rapid Retirement Research Pilot was approved by the SOA Board of Directors in 2010 to test an assumption that if we have access to existing data that can be used to analyze current issues of concern, if we have models in place that can be used to analyze that data, then we should be able to do a much quicker turnaround on issues that are of key importance today.

“There will be individual employers for whom the pension plan funding requirements pose a greater short-term challenge.”

The first project, *The Rising Tide of Pension Contributions Post-2008: How Much and When?* was completed fall 2011. This report provides a system-wide analysis of the expected contribution requirements for the U.S. single-employer defined-benefit system over the remainder of the decade. While the pattern of projected contribution requirements is likely not a surprise to most consulting actuaries or individual plan sponsors, the report is unique in that it shows the aggregate results for the system. The report evaluates these results in the context of recent history—including regulatory and economic changes—and shows how the individual decisions that are being made have affected the pension system.

The report used data from the regulatory filings of private sector defined-benefit pension plans and the Pension Insurance Modeling System, originally developed for the Pension Benefit Guaranty Corp., to analyze the private, single-employer defined-benefit system. By simulating the demographic and economic experience of those plans over more than 10 years, the SOA projects the funding requirements of the system for each year.

While challenges remain for many plan sponsors, system-wide these challenges should not be considered insurmountable, according to Joseph Silvestri, FSA, EA, FCA, MAAA, retirement research actuary with the SOA and lead researcher of the report. “The data shows that employers, on average, have been contributing well in excess of the minimum requirements for the last several years,” Silvestri said. “While the system as a whole is successfully navigating the rising tide of minimum required contributions, there will be individual employers for whom the pension plan funding requirements pose a greater short-term challenge.”

### HEALTH ACTUARIAL RESEARCH INITIATIVE (HARI)

The 2011 SOA budget included funding for a significant two-year health research initiative, HARI. The amount of \$300,000 has been allocated for 2011, and an additional \$300,000 is planned for 2012.

HARI’s mission is to develop actuarial research, in partnership with the SOA’s research function, that uses the Affordable Care Act (ACA) as a launch point for studying change in health care systems, in the United States and in other countries. The research will serve to inform the public and policymakers, and help to address the short time frames required by the implementation dates of the ACA.

The first HARI project will be a study of risk adjustment under the ACA. Milliman was selected from a pool of five proposers to complete this study, which will consider several scenarios under a population model, and analyze the effects of risk adjustment on the health care market based on these scenarios. This work is expected to be complete in early 2012.

The second project will be an analysis of actuarial and risk issues involved in accountable care organizations. Milliman was chosen as the researcher and the project is targeted for completion mid-2012.

The HARI oversight group plans at least one more project to begin by the end of 2012, with the topic to be determined.

# EXPANDING BOUNDARIES RESEARCH

The Society of Actuaries (SOA) Board of Directors has undertaken a review of the SOA's intellectual capital strategy, with the current phase including a review of the research strategy. The Develop Knowledge Team (DKT), which has been tasked with this review, proposed that the SOA consider its research strategy by how well the research supported development in the following areas: expanding knowledge, expanding boundaries and developing intellectual capital.

The DKT proposed the following mission statement, which the board approved:

*The SOA supports research that advances actuarial knowledge, expands the boundaries of actuarial science, and develops intellectual capital for use by existing and future generations of actuaries.*

The DKT has organized the research strategy around the three types of research outlined in the mission statement:

**Advancing knowledge**—this research will ensure that we continue to broaden and deepen actuarial science and its applications. Examples include research performed by academics and others working in the pure science and its applications.

**Expanding boundaries**—this research will renew, strengthen, refocus and rethink the roles that actuarial science and actuaries play. Examples include Living to 100, Retirement 20/20, the Health Actuarial Research Initiative (HARI), and the Rapid Retirement Research pilot.

**Intellectual capital research**—this research is best defined as common tools used by actuaries. The best example is experience studies, which members consistently cite as delivering high value.

The board strongly favored research that moved to expand boundaries, either by expanding practice, creating public policy research or creating research of societal interest. Therefore, the DKT proposed a strategy that includes the following components:

- Devote new resources to expanding boundary research.
- Work to build expanding boundary research projects that are multiyear, multistage projects, thus affording opportunities to achieve multiple objectives.
- Establish a research oversight committee to set a research schedule and determine funding needs.

The DKT expects to phase in the new research strategy over the next two years. While a greater emphasis will be placed on research that expands boundaries, this will not preclude the approval of research projects in the other areas.

# ACTUARIES IN ADVANCED BUSINESS ANALYTICS INITIATIVE

According to the U.S. Department of Labor, significant growth in analytic jobs is anticipated in all industries through 2018. Actuaries have long been looked to when there was a need to perform analytics. The purpose of this strategic initiative was to determine if there were significant opportunities for actuaries in business analytics and, if so, how should the Society of Actuaries (SOA) respond? A team that included leading practitioners and educators in analytics, including actuaries and non-actuaries, was formed to assess the landscape and identify the skills and techniques that define an actuarial practitioner of advanced business analytics.

Advanced business analytics provides employers with insightful decision making and affords the opportunity to assess a marketplace from a totally new perspective.

The terminology surrounding analytics is still evolving—from infomatics to “Big Data.” One of the first accomplishments of the team was to define advanced business analytics for our profession:

- Advanced business analytics for actuaries is a set of tools and techniques used to describe, predict and recommend business courses of action based on consumer and distributor behavior.
- It draws from many disciplines.
- It relies heavily on vast amounts of data and computing power, statistics, modeling, optimization, dashboard and alerts, market research and clustering.
- Advanced business analytics provides employers with insightful decision making and affords the opportunity to assess a marketplace from a totally new perspective.

“With the definition set,” said Lisa Tourville, ASA, MAAA, and team lead, “we have a floor from which to build upon.”

The initiative had two components—to research and to recommend. The former included: environmental scanning, which included careers, salaries and providers of education; market research, which included surveying SOA members’ understanding of and interest in advanced business analytics; and employer interviews to determine the degree of analytics currently performed in their organizations and future opportunities. Additional information was obtained on educational resources for analytics provided by universities and via other continuing education programs.

The team identified the skills and techniques that define an actuarial practitioner of advanced business analytics, the gaps between those skills and techniques versus an FSA education, and has recommended a course of study to address these gaps. The recommendation includes applications in Prequalifying Education, Professional Development, Research and Marketing. The findings of the initiative will be presented at the March 2012 board meeting.

# A FRESH PERSPECTIVE ON INTERNATIONAL MATTERS

To remain strong and vibrant, the actuarial profession continues to extend its global reach, offering high-quality education and research. The SOA is truly an international organization. As a global profession, there is a great deal to contribute by working together to ensure that our voices are heard and respected.

To examine the ever-changing demands for actuarial expertise around the world and the SOA's role in education and research was one component of the charge given to the International Membership Strategy Task Force. Appointed in 2010 by then SOA President S. Michael McLaughlin, FSA, CERA, FIA, MAAA, the group developed the principles and framework with regard to how the SOA should support and develop its membership and member services outside of Canada and the United States.

Keen awareness of remaining consistent with existing SOA governance doctrines guided the project, which aimed to better direct existing efforts and present ideas for the long-term sustainability of an international community of SOA members.

During its research, the task force affirmed that any international strategic posture adopted by the SOA must be accretive to the value of the SOA credentials. The group's recommendations, therefore, focused on supporting existing stakeholders by maintaining and increasing the value of the SOA credential. Following are some additional findings:

- The value of the SOA credential to our members—whether working internationally or not—will be enhanced by the degree to which it is recognized and valued internationally.
- Worldwide recognition of the SOA credential leads to a more portable credential. Portability is an attractive and important quality for credential holders.
- Actuarial professional opportunities are rapidly increasing in emerging countries around the world.
- The SOA faces new competition and, as a result, will see fewer ad hoc opportunities for international growth.
- The definition of success as an actuarial association in the international professional marketplace is changing rapidly and is no longer solely based on membership size. Brand recognition and assurance of quality standards, and maintenance of strong communities of actuaries, are hallmarks of a strong international presence.

The SOA is committed to actuarial excellence around the world. Strategically speaking, the SOA will proactively and purposefully increase its international presence and influence to:

- Strengthen the value of our credentials in today's global environment.
- More effectively meet the needs of our members in the context of rapidly growing internationalization.
- Advance the reputation and impact of the actuarial profession globally.
- Meet the competitive challenges arising from other disciplines and credentials.

We will achieve these strategic aims by growing our international membership, building sustainable international communities, and cultivating opportunities for actuaries worldwide.

“The fast-changing global environment, together with the continuing emergence of international growth and expansion opportunities, compel us to focus attention on the commitment of the SOA to international actuarial needs as well as the deployment of SOA resources to meet those needs.”

– DARRYL WAGNER, FSA, MAAA

# CANADIAN MEMBER ENGAGEMENT

This initiative was approved by the Board of Directors as a strategic initiative in October 2010. During 2011 the Society of Actuaries (SOA) has been working to identify specific actions to increase the value Canadian members and candidates gain from their relationships with the SOA.

Canadians represent 18 percent of the overall SOA membership. However, Canadian members have expressed a slightly lower satisfaction with the SOA than their U.S. counterparts. Canadian members also join sections in a lower proportion. A Canadian Advisory Team was formed and consisted of eight SOA volunteers based in Canada. The team reviewed the principal activities and services of the SOA from the Canadian perspective, identified gaps between what members need and what is currently provided, and recommended how to improve services. Some of the recommendations include:

- Create a staff fellow position located in Canada. Joseph De Dominicis, FSA, FCIA, was hired in late 2011 and will spearhead the development of the SOA's presence and programs in Canada. Joseph will be based in Toronto.
- Partner more frequently with the Canadian Institute of Actuaries (CIA) for the benefit of Canadian members.
- Increase the number of professional development events held in Canada and the number of webcasts relevant to Canadian members, partnering with the CIA whenever possible.
- Increase the quantity of research that benefits Canadian members and widely publicize the resulting research.
- Encourage more Canadian content within the sections and strengthen the position of Canadian members in the section decision processes.

## BYLAWS CHANGE ON JOINT DISCIPLINE

Society of Actuaries (SOA) members voted to amend the bylaws with regard to the proposed joint disciplinary process. The bylaws amendment passed with 4,300 fellows, or 31.7 percent of those eligible, voting on the issue; and 4,044, or 94 percent, voting to approve the amendment.

"I am very pleased that our members participated so strongly in their election and have voted overwhelmingly to pass this important bylaws amendment. That it passed by such a large margin signifies that fellows recognize the importance of improving our profession's disciplinary process. This move enhances our commitment to professionalism, and will benefit each of our members," said SOA President Donald J. Segal, FSA, EA, FCA, MAAA.

The change in the bylaws empowers the SOA to enter into an [Agreement on Joint Discipline](#) with the other U.S.-based actuarial organizations. Like the SOA, each of the other organizations has also been making changes in its bylaws, as necessary, and seeking approval from its members for this new process. Once all the organizations have acted on such changes, the final form of the agreement will be sent to each organization for approval.



# COMMUNICATION, VISIBILITY, & SOCIAL MEDIA: SEEING A BIGGER PICTURE

Clear, focused, progressive communication can be a powerful tool that not only informs but also brings a community together. From newspaper articles to blogs to websites to one-on-one interviews to online news sources to social media, SOA members are raising their visibility in the media and are connecting with each other using the vast array of social media tools.

## MEMBER AND CANDIDATE DIALOGUE

Strengthening a dialogue with members and candidates is very important to the SOA and we continue to broaden the channels by which the SOA communicates, including social media.

- The [SOA's LinkedIn group](#) continues to grow and now has more than 7000 members. Online discussions among group members are on a diverse range of topics, including industry issues, SOA research, SOA events and professional opportunities. In addition, 11 sections now have their own LinkedIn groups.
- The [Speaking of Actuaries Blog](#) continues to provide dialogue on issues like health care reform, retirement, and social security issues. We encourage members to join the discussions.

The **Joint Risk Management Section**, co-sponsored by the Casualty Actuarial Society, the Canadian Institute of Actuaries, and the Society of Actuaries, has the **largest LinkedIn group membership**.

- Members and candidates alike interact with the SOA via Twitter and share many items of interest regarding the actuarial profession. The Twitter feed has over 1600 followers. If you haven't already, [join the conversation!](#)
- Meet the Presidents was introduced at the 2009 Annual Meeting as an informal way for members to meet and talk with the president regarding the SOA and the actuarial profession. Meet the Presidents sessions are held at major SOA meetings.

Strengthening a dialogue with members and candidates is very important to the SOA.

- Interactive Sessions with SOA Leaders were launched in 2010 and continue to be a successful way to have a dialogue with members on important SOA topics. Three sessions were held in 2011 covering topics such as the proposed changes to the joint disciplinary process, [results of the member and candidate survey](#), enhancements to the CERA pathway, and the SOA's 2012 strategic initiatives. [The archive of the sessions](#) can be accessed on [soa.org](#).
- The SOA developed a Candidate Community Facebook page, which launched October 2011. To date there are over 3000 "fans" from all around the globe. Not only are candidates interacting with the SOA, but they are actively engaging with each other, such as looking for study partners and exam advice.

As SOA President Donald J. Segal, FSA, EA, FCA, MAAA, stated in his [2010 Annual Meeting presidential address](#), "If you don't communicate, you can't do much else. We need to have more communication with our members, not "to" but "with". All too often in our world communication is viewed as one-way.





COMMUNICATION, VISIBILITY, & SOCIAL MEDIA: SEEING A BIGGER PICTURE

Communication must be an exchange of information. The SOA must provide the tools and the means for members to engage in these conversations.”

RAISING VISIBILITY

The SOA continues its mission of promoting the actuarial profession’s image in the media. In 2010 we formed three Viewpoints & Visibility (V&V) teams comprised of dedicated volunteer experts focusing on retirement, health care and enterprise risk

management. The teams work together to publicize the strength of the actuarial profession by identifying opportunities for broad-interest research and by sharing thought leadership and expert commentary with the media.

All of our media placements continue to build the actuary’s reputation as a source of informed and unbiased thinking on some of the most important issues facing society today.

**TOP TIER MEDIA COVERAGE**

The Seattle Times  
 Forbes  
 AP REUTERS  
 WALL STREET JOURNAL  
 DailyFinance  
 YAHOO! NEWS  
 Bloomberg Businessweek  
 CHICAGO TRIBUNE  
 THE BOSTON GLOBE  
 THE MIAMI HERALD  
 THE HUFFINGTON POST  
 The Street  
 CNN Money.com  
 MarketWatch  
 THE SACRAMENTO BEE  
 washingtonexaminer.com  
 The Examiner  
 THE OKLAHOMAN  
 HOUSTON CHRONICLE  
 LifeHealthPRO  
 TIME  
 msnbc.com  
 The Salt Lake Tribune  
 FOX BUSINESS  
 Institutional Investor  
 San Francisco Chronicle  
 The Fresno Bee



## COMMUNICATION, VISIBILITY, & SOCIAL MEDIA: SEEING A BIGGER PICTURE

### ERM MEDIA HIGHLIGHTS

HUFF POST BUSINESS  
THE INTERNET NEWSPAPER: NEWS BLOGS VIDEO COMMUNITY

**Enterprise Risk Management: Are We Ignoring the Segment With the Most Critical Need?**

**Jay Vadiveloo**  
Senior Consulting Actuary, Towers Watson Risk & Financial Services

Posted: 9/13/11 06:45 PM ET

In the wake of the 2008-2009 financial crisis, the practice of Enterprise Risk Management (ERM) has begun to permeate the business and academic world. However, most of the current

**AP Associated Press**

**World economy needs China to slow growth gradually**

By PAUL VISEMAN, AP Economics Writer – Oct 31, 2011

When surveyed this year by the Society of Actuaries, corporate risk managers in the United States, Canada and elsewhere said a slowdown in China posed the greatest threat to their business.

**Forbes**

**'Margin Call' Is a Whitewash**

*This article is by Sim Segal, president of SimSegal Consulting. He is a fellow of the Society of Actuaries and is a chartered enterprise risk analyst.*

In addition, bankers made the sort of mistake that actuaries are thoroughly trained to avoid. Bankers severely underestimated future mortgage default risk by only examining an inappropriately short historical experience period. They estimated mortgage default risk correlations using credit default swap prices, which were available for less than a decade and only covered a period of soaring house prices. In contrast, actuaries are trained to set future assumptions based on appropriately long and credible historical experience periods, to incorporate a full range of market cycles.

### RETIREMENT MEDIA HIGHLIGHTS

**MarketWatch**

ANDREA COOMBES' WAYS AND MEANS Archives Email alerts  
Nov. 16, 2011, 1:28 p.m. EST

**Retirees are confident, but workers can't retire**  
**Retirees' finances recover, but one-in-four workers plan to work until 80**

That's according to a survey first conducted in February 2008 with 1,524 retirees aged 55 to 75, all of whom had \$100,000 or more in investable assets at the time. The same retirees were surveyed again in April 2009, and a subset of 461 people from the original study were surveyed again in June 2011. The Society of Actuaries, LIMRA and the International Foundation for Retirement Education conducted the study.

**DailyFinance**  
An AOL Money & Finance Site

**Americans Getting More Worried About Retirement**

The Actuaries' study, titled *The Financial Recovery for Retirees Continues*, is an attempt to measure the impact of the 2008 economic downturn on retirees' finances. The authors surveyed 461 retirees who had \$100,000 or more in investable household assets in 2008, and who had participated in two previous surveys.

**AP Associated Press**

**401k hardship withdrawals require serious thought**

DAVID PITT, AP Personal Finance Writer

Because hardship withdrawals require the worker to pay taxes and a 10 percent penalty on the money taken out, it should be viewed as a last resort, said Cheryl Krueger, an actuary and financial adviser with Schaumburg, Ill.-based Growing Fortunes Financial Partners.

"Is this something you really ought to be considering," she said workers need to ask themselves.

It's natural that a worker facing a home foreclosure may want to take money out of the 401(k) to hold off the bank for a while. But Krueger said if it only temporarily delays an inevitable foreclosure, using retirement money doesn't make sense.

### HEALTHCARE MEDIA HEADLINES

**LifeHealthPRO**

**Forced Smile**

A tough economy, employment concerns and patient fear make for a challenging dental enrollment season

"It's a struggle out there," according to Steven Stender, a senior actuarial consultant at OptumInsight Consulting, Eden Prairie Minn., a unit of UnitedHealth Group Inc., Minnetonka, Minn. (NYSE:UNH).

**AP Associated Press**

**APNewsBreak: A Twist in Obama's Health**

By AP / RICARDO ALONSO-ZALDIVAR Tuesday, June 21, 2011

Medicare chief actuary Richard Foster says the situation keeps him up at night.

"I don't generally comment on the pros or cons of policy, but that just doesn't make sense," Foster said during a question-and-answer session at a recent professional society meeting.

"This is a situation that got no attention at all," added Foster. "And even now, as I raise the issue with various policymakers, people are not rushing to say ... we need to do something about this."

# VOLUNTEERING: THE LIFE BLOOD OF THE SOCIETY OF ACTUARIES

The Leadership Development Committee launched a new volunteer recognition award in 2011, the Outstanding Volunteer award. Society of Actuaries (SOA) volunteers and staff nominated volunteers who exhibited superior commitment, effort and leadership in their volunteer roles. In addition, volunteers were rated on their ability and willingness to collaborate in team activities and participate in generating and implementing new ideas.

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## THE 10 OUTSTANDING VOLUNTEERS FOR 2011

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Joan C. Barrett, FSA, MAAA

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Jeremy J. Brown, FSA, MAAA, EA

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John G. DiMeo, FSA, CERA, MAAA

---

Stephen A. Eadie, FSA, FCIA

---

Thomas P. Edwalds, FSA, MAAA, ACAS

---

Sandra E. Ellis, FSA, MAAA

---

Jerry F. Enoch, FSA, MAAA

---

Mary R. Hardy, FSA, CERA, FIA

---

Christian-Marc Panneton, FSA, CERA, FCIA

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Anna M. Rappaport, FSA, MAAA

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Volunteering at the SOA provides you with the opportunity to make a meaningful impact on your profession. You will grow personally and gain new skills that can be taken back to your workplace. What's more, your volunteer work can be tailored to you, offering opportunities that interest you and flexibility around your schedule.

## WHAT MEMBERS HAVE SAID ABOUT THEIR VOLUNTEER EXPERIENCES

"Oftentimes we get into our own little niche and volunteering is an interesting way to meet people who have different perspectives. It is also nice to belong to a group of people who understand where you're coming from. For me, it's a creative output as well as a social outlet; something bigger than myself."

– ASHWINI VAIDYA, FSA, MAAA

"I have found volunteering very rewarding. Not only is it a great way to network but also to develop management skills and communication skills. There's a lot of passion in volunteering. It's pretty amazing."

– JILL CARPENTER, FSA, MAAA

"Volunteering with the SOA definitely has several benefits. One, you get to meet people from not only other companies but other tracks. For example, I have gotten to know actuaries in retirement benefits that I would have never met being a life actuary. In addition, you feel like you are part of a community. I have been involved with actuaries from around the country, which helps me feel part of the larger organization."

– KORY OLSEN, FSA, CERA, MAAA

No matter how you choose to volunteer, there's something for everyone at the SOA. Volunteer today and watch a world of opportunity unfold.

Log on to the SOA website to [volunteer](#).

# FINANCIAL RESULTS

The SOA is a non-profit organization—a financial entity with revenues and costs that must be carefully managed to succeed in fulfilling its mission. In setting the annual budget, the overall goal is to provide resources for ongoing operations and strategic initiatives, while maintaining membership equity at acceptable levels.

The SOA has three principal revenue streams: member dues, examination fees and fees charged for professional development. Other sources of revenue include fees for experience studies and research, sponsorships, other revenue and investment income.

The financial results reflect an investment in the actuarial profession and strategic initiatives determined by member and candidate research. The SOA seeks to provide significant value to members as well as the resources the organization needs to achieve its core goals and objectives for years to come.

Total revenues in 2010 were \$38.1 million; 2011 revenues are budgeted to be \$40.3 million.

Historically, basic education and professional development are not only self-supporting, but also contribute to and help cover research projects and operating costs. Membership dues have been used principally to fund the cost of providing services to members.

The SOA 2010 financial results showed a management-basis increase in net assets of \$4,519,000.

The 2011 budget continues to provide resources for the SOA to invest in the future of the actuarial profession. A comparison of the actual 2010 results, the Board-approved 2011 budget, and actual results through Nov. 30, 2011 are shown in the accompanying chart.

## SOA FINANCIALS

### REVENUES (in 1,000s)

2010 Actual	\$38,107
2011 Budget	\$40,342
<b>2011 Actual through 11/30/2011</b>	<b>\$37,103</b>

### 2010 REVENUE DETAILS (in 1,000s)

Examinations	\$20,094
Dues	\$10,210
Professional Development	\$ 5,823
Other	\$ 1,980
<b>Total</b>	<b>\$38,107</b>

### CHANGE IN NET ASSETS (in 1,000s)

2010 Actual	\$ 4,519
2011 Budget	\$ 583
<b>2011 Actual through 11/30/2011</b>	<b>\$ 3,455</b>

### MEMBERSHIP EQUITY (in 1,000s)

2010 Actual	\$27,617
2011 Budget	\$28,200
<b>2011 Actual through 11/30/2011</b>	<b>\$31,073</b>

The above figures use our management basis of accounting, which is slightly more conservative than GAAP. Membership equity for 2010 does not include an additional \$2.2 million of designated funds, which are mostly sections' surpluses.

Membership equity is measured against the following year's expenses, standing at 68.8 percent at the end of 2010. The current membership equity position of \$31.1 million is 74.4 percent of annualized expenses. The target range of membership equity established by the Board is 50 to 100 percent.

Under the Board's leadership, the strength of the SOA's financial position will move strategic ideas forward and enhance our focus on the future of the profession.

## 2010–2011 BOARD OF DIRECTORS

### PRESIDENT

Donald J. Segal, FSA, EA, FCA, MAAA

### PRESIDENT-ELECT

Bradley M. Smith, FSA, MAAA

### VICE-PRESIDENTS

William J. Falk, FSA, FCA, MAAA

Mark J. Freedman, FSA, MAAA

Tonya B. Manning, FSA, EA, FCA, MAAA

Francis P. Sabatini, FSA, CERA, MAAA

Sim Segal, FSA, CERA

Thomas S. Terry, FSA, EA, FCA, MAAA

### SECRETARY/TREASURER

Mark J. Freedman, FSA, MAAA

### PAST PRESIDENTS

Cecil D. Bykerk, FSA, FCA, HonFIA, MAAA

S. Michael McLaughlin, FSA, CERA, FIA, MAAA

### ELECTED BOARD MEMBERS

Jeffrey A. Beckley, FSA, MAAA

Daniel P. Cassidy, FSA, CERA, EA, FCA, MAAA

Steven W. Easson, FSA, FCIA

C. Ian Genno, FSA, CERA, FCIA

Gaetano Geretto, FSA, CERA, FCIA

Jennifer L. Gillespie, FSA, MAAA

R. Dale Hall, FSA, CERA, MAAA

Peggy L. Hauser, FSA, MAAA

Allen M. Klein, FSA, MAAA

John O. Nigh, FSA, CERA, MAAA

Valerie A. Paganelli, FSA, EA, MAAA

Ronald L. Poon-Affat, FSA, FIA, MAAA

Marcus A. Robertson, FSA, FCIA

Alice Rosenblatt, FSA, CERA, MAAA

Martine Sohier, FSA, FCIA

Jim Toole, FSA, CERA, MAAA

Darryl G. Wagner, FSA, MAAA

Donna K. Weninger, FSA, MAAA

## RETIRING BOARD OF DIRECTORS

We would like to recognize the Board members whose terms have expired and thank them for their dedication and tireless efforts in serving the needs of the membership and the actuarial profession.

### PAST PRESIDENT

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### VICE-PRESIDENTS

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Sim Segal, FSA, CERA

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John O. Nigh, FSA, CERA, MAAA

Alice Rosenblatt, FSA, CERA, MAAA

## 2011–2012 NEWLY ELECTED BOARD OF DIRECTORS

We would also like to welcome the 2011–2012 members elected to the Board in September 2011.

### PRESIDENT-ELECT

Tonya B. Manning, FSA, MAAA

### VICE-PRESIDENTS

Jeremy Gold, FSA, CERA, MAAA

Abraham S. Gootzeit, FSA, MAAA

Martine Sohier, FSA, FCIA

### NEWLY ELECTED BOARD MEMBERS

Joan C. Barrett, FSA, MAAA

Sue Blanck, FSA, MAAA

Larry J. Bruning, FSA, MAAA

Susan E. Pantely, FSA, MAAA

Craig W. Reynolds, FSA, MAAA

Susan R. Sames, FSA, MAAA

## INTRODUCING PRESIDENT SMITH

We are proud to introduce Bradley M. Smith, FSA, MAAA, as the 2011–2012 president of the Society of Actuaries (SOA).



Brad joined Milliman & Robertson, Inc., now known as [Milliman](#), in April 1986 to open the life/health practice in Dallas. His practice involved all aspects of life and health insurance including insurance industry mergers and acquisitions, product pricing and financial

statement preparation. He served as a member of Milliman's Board of Directors from May 1996 to May 1999. In May 2000 he was elected to the position of chairman of Milliman, and continues to serve in that capacity.

Before joining Milliman, Brad was vice president and chief actuary at JCPenney Life Insurance Company, where he was heavily involved in direct response marketing analysis, list segmentation, product development and corporate planning.

Brad is a fellow of the Society of Actuaries, a member of the American Academy of Actuaries, and a fellow of the Life Management Institute (LOMA). He has served as vice president and president-elect of the Society of Actuaries. He has also been an elected section council member of the following SOA sections: Financial Reporting, Marketing & Distribution, and Product Development. Brad also served as a member of the SOA's board of governors, director of Publications and chairman of the SOA's 50th anniversary celebration. Brad currently serves as an emeritus trustee of the [Actuarial Foundation](#).

An author of many [articles and papers](#), Brad has been a frequent speaker at a variety of meetings. He has spoken to college audiences at the University of Illinois, University of Washington, Waterloo University and the University of Wisconsin on what it means to be a professional, which is the theme of his 2010 book, *What Do You Think? Preparing for the Question That All Clients Ask*. He has traveled internationally

and has spoken to other professionals, government officials and company executives throughout the United States as well as China, the United Kingdom, Canada, France, Australia, New Zealand, Singapore, India, Spain, Italy, Austria and Germany. In 2009 and 2010, Brad was named to Insurance Newscast's list of the "[100 Most Powerful People in the North American Insurance Industry](#)." He has been quoted in *Forbes*, *Best's Review* and other magazines.

Brad graduated from the University of Illinois in 1977 with highest distinction.

He and his wife, Karen, live in Dallas. They have one daughter, Emily. In his free time, Brad enjoys playing golf and tennis.



**SOCIETY OF ACTUARIES**

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