



# A N N U A L M E E T I N G

*November 3-6, 2013 • Hilton Minneapolis • Minneapolis, MN*

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## Continuing Education

The CAS Continuing Education Policy applies to all ACAS and FCAS members who provide actuarial services. Actuarial services are defined in the CAS Code of Professional Conduct as “professional services provided to a Principal by an individual acting in the capacity of an actuary. Such services include the rendering of advice, recommendations, findings, or opinions based upon actuarial considerations.” Members who are or could be subject to the continuing education requirements of a national actuarial organization can meet the requirements of the CAS Continuing Education Policy by satisfying the continuing education requirements established by a national actuarial organization recognized by the Policy.

This activity may qualify for up to 16.8\* CE Credits for the Annual Meeting for CAS members. Participants should claim credit commensurate with the extent of their participation in the activity. CAS members earn 1 CE Credit per 50 minutes of educational session time not to include breaks or lunch.

*\*The amount of CE credit that can be earned for participating in this activity must be assessed by the individual attendee. It also may be different for individuals who are subject to the requirements of organizations other than the American Academy of Actuaries.*

## Consent to Use of Photographic Images

A photographer will be present at the CAS Annual Meeting. Registration and attendance at, or participation in, CAS meetings, seminars and other activities constitutes an agreement by the registrant to CAS’s use and distribution (both now and in the future) of the registrant or attendee’s image or voice in photographs, videotapes, electronic reproduction, and audiotapes of such events and activities.

## Antitrust Notice

The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Meetings conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings. Under no circumstances shall CAS meetings be used as a means for competing companies or firms to reach an understanding—expressed or implied—that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition. It is the responsibility of all meeting participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

For more complete information regarding the CAS antitrust compliance policy, please refer to the CAS Web Site at <http://www.casact.org/professionalism/policiesProc/index.cfm?fa=antitrust>.

## Speaker Opinions

The opinions expressed by speakers at this event are their own and do not necessarily reflect the positions of the CAS.

## Casualty Actuarial Society Centennial Goal

The CAS will be recognized globally as a leading resource in educating casualty actuaries and conducting research in casualty actuarial science. CAS members will advance their expertise in pricing, reserving, and capital modeling, and leverage their skills in risk analysis to become recognized as experts in the evaluation of enterprise risks, particularly for the property and casualty insurance industry.

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## CAS Annual Meeting App

Download the free CAS Meeting app to your smartphone or tablet and make the most of your time while you're with us at the meeting. Get real-time schedule and speaker updates, the most current version of the list of attendees, maps of the hotel property and meeting space, and more! You can also follow the Annual Meeting Twitter feed and join the conversation.



**iPhone and iPad** users—search “casualty actuarial society” on the Apple App Store.

**Android** users—search “casualty actuarial society” on the Google Play Store.

**Blackberry, Windows, others**—go to this address on your smart phones (omit www): [cas.gatherdigital.com](http://cas.gatherdigital.com)

One of the features of the mobile app is that you and other attendees will have the option to send messages to each other through the app. It's a great way to network with fellow attendees up to and during the event. You may also create a profile of yourself that other event attendees can view. To enable this optional feature, open the app, go to More and then My Account to establish a password. Please use the email that you used to register for the conference.

## Suggested Attire

Business casual attire is suggested for the meeting sessions and receptions. It is best to wear layered clothing as meeting rooms tend to fluctuate in temperature. Please dress in casual attire and comfortable shoes for the Tuesday evening event at Nickelodeon Universe at Mall of America.

## Celebration of New Members

### **Monday, November 4, 8:00 a.m.– 8:45 a.m., Minneapolis Grand Ballroom Salon ABC**

All meeting attendees are invited and encouraged to attend this session - come celebrate the achievements of new CAS members and listen to the Address to Members, presented by Past CAS President, Chris Carlson.

## CAS & You Breakfast for New Fellows

### **Wednesday, November 6, 7:00 a.m. – 8:00 a.m., Symphony III/IV (2nd Floor)**

The CAS is the organization that has provided New Fellows with development and learning opportunities through the examination process. Do you know the mission of the CAS, its history, or governance structure? Are you familiar with the member services available from the CAS? Here you will find information about the additional personal development and enrichment available through the many CAS volunteer opportunities.

Speaker: Shane Barnes, Assistant Actuary, The Hartford Insurance Co.

## American Academy of Actuaries Annual Meeting and Awards Luncheon with Featured Speaker Stephen Dubner

Monday, November 4, 11:30 a.m. – 1:30 p.m.

### Meeting Room: Minneapolis Grand Ballroom Salon DEFG

The 2013 American Academy of Actuaries Annual Meeting and Awards Luncheon will include a luncheon starting at 11:30 a.m., followed by the presentation of Academy awards. Featured at the luncheon will be keynote speaker Stephen Dubner, co-author of *Freakonomics* and *Superfreakonomics*, followed by installation of Tom Terry as the Academy's new president and the welcoming of those new Academy regular directors elected online over the summer. In addition, the Academy will present several prestigious awards:

- The 2013 Jarvis Farley Service Award will go to an actuary whose volunteer efforts on behalf of the Academy have made a significant contribution to the advancement of the profession.
- The 2013 Robert J. Myers Public Service Award will honor an actuary who has made an exceptional contribution to the common good.
- The 2013 Awards for Outstanding Volunteerism will honor Academy volunteers who over the last year have made a single, noteworthy volunteerism contribution that is above and beyond what is reasonably expected of an Academy volunteer.

## FEATURED SPEAKER

### Stephen Dubner, Best-Selling Co-Author, *Freakonomics* and *Superfreakonomics*

An award-winning author, journalist, and radio and TV personality, Stephen J. Dubner is the co-author of the international bestsellers, *Freakonomics* and *Superfreakonomics*. Originally published in the United States in 2005, *Freakonomics* instantly became a cultural phenomenon. Hailed by critics and readers alike, the book remained on *The New York Times* bestseller list seven years, having sold more than 4 million copies around the world, in more than 35 languages. Through forceful storytelling and wry insight, Dubner shows how economics is, at root, the study of incentives—that is, how people get what they want, or need, especially when other people want or need the same thing. Dubner and his co-author, the University of Chicago economist Steven Levitt, have appeared widely on television, and maintain the popular *Freakonomics* blog, which has been called “the most readable economics blog in the universe.”



# EXHIBITORS/SPONSORS/ADVERTISERS

The CAS appreciates the support of the 2013 Annual Meeting sponsors.



## TOTE BAG SPONSOR, INTERNET CAFÉ SPONSOR, ADVERTISER

### PAULINE REIMER/PRYOR ASSOCIATES EXECUTIVE SEARCH

*"It Takes One To Know One... An Actuary Placing Actuaries"*

Named a top recruiting firm by Dun & Bradstreet, Pryor has 40 years of insurance (P&C, Health, Life, Pensions & Investments) experience.

Pauline Reimer, ASA, MAAA, has headed the Actuarial Placement Division since 1986, after working as an actuary in insurance and consulting firms. Proudly the CAS's first Platinum Partner, she is also on the SoA's Entrepreneurial Section Council, the Executive Board of ASNY, and the Advisory Boards of both Columbia University's MS in Actuarial Science program and New York University's BS in Actuarial Science program.

Quoted in periodicals and television, Pauline handles each step of every actuarial assignment personally—no client is ever relegated to just an Assistant. Her impressive placement records of 99% retention rate and 100% success ratio in retained searches confirm her status as one of the most successful actuarial recruiters worldwide.



## RECEPTION SPONSOR, EXHIBITOR

### RED MOUNTAIN TECHNOLOGIES

Red Mountain Technologies specializes in reliable automotive data for insurers across the country with AutoCheck's Vehicle History Service. We use the latest technology, to provide our customers insightful and in-depth data to make well informed underwriting and rating decisions about vehicles. The AutoCheck Vehicle History database is the most comprehensive vehicle background check available.

This manifests itself clearly in the superior data quality by acquiring data from thousands of sources, including exclusive accident and structural damage data elements that are important for identifying problem vehicles. Along with providing vehicle history data, Red Mountain is able to assist their customers with technical and analytical support when using AutoCheck Vehicle history as an underwriting/pricing solution.



## BREAKFAST SPONSOR, EXHIBITOR, ADVERTISER

### GROSS CONSULTING

Gross Consulting is a growing actuarial consulting practice with expertise across a wide range of property-casualty issues including reserving, pricing, capital modeling, reinsurance analysis, catastrophe risk management, predictive modeling, and enterprise risk management. Gross Consulting also has innovative software products for use by practicing actuaries:

Cognalysis MultiRate™ is an exciting new predictive modeling tool that easily distills important relationships among variables. It is a valuable tool for actuaries, analysts, and others whose jobs depend on predictive modeling.

Capable of analyzing large datasets, Cognalysis MultiRate utilizes sophisticated technologies, such as automated data grouping and smoothing, Variable Gradient Geospatial Smoothing based on ZIP Code, and more. A variety of tables, charts, and maps are produced during the iteration process and at its completion to assist the user with presentation and understanding of results.

The Cognalysis™ Reserving System is an inexpensive software package to assist the actuary with estimation of loss reserves. It incorporates innovative statistical techniques, reserve ranges, process automation, and insight-provoking graphical output into the traditional loss development framework.



## EXHIBITOR, ADVERTISER

### EZRA PENLAND ACTUARIAL RECRUITMENT

Ezra Penland Actuarial Recruitment was established by Sally Ezra and Claude Penland, ACAS, MAAA, partners with over 35 years of combined industry experience. With the industry's leading actuarial salary surveys and a rapidly growing actuarial recruiting staff, our goal is to be the top actuarial recruitment firm in the world while serving the long-term needs of clients and actuaries.

Our educated, knowledgeable and highly-trained staff will always exhibit business ethics, integrity, empathy and strong listening skills to help you reach your business goals. Ezra Penland works on both retained and contingent searches at all levels of actuarial analysts, credentialed actuaries and senior roles.

Each attendee receives a copy of the ALL NEW, UPDATED 2013 Ezra Penland US Property & Casualty Actuarial Salary Surveys. These four surveys are split by Consulting, Reinsurance, Insurance/All Other, and All Employers Combined. Attendees will also receive a handy Ezra Penland notebook to jot down notes throughout the Annual Meeting.



## EXHIBITOR, ADVERTISER

### ACTUARIAL CAREERS, INC.

*Actuarial Careers, Inc.*® is a highly specialized executive recruiting firm exclusively dedicated to the placement and advancement of Chief Actuaries, Fellows, Associates and pre-Associates on a worldwide basis with salaries ranging from \$50,000 to \$1,000,000.

Our blend of advanced technologies and a unique team approach has made *Actuarial Careers, Inc.*® the fastest growing recruiting firm exclusively serving the actuarial community. Our dedicated Property & Casualty team is continuously surveying the market for top candidates and exciting new opportunities.

The entire professional staff of *Actuarial Careers, Inc.*® is committed to providing the finest service in the industry. Our institutional clients include insurance companies, consulting firms, investment banks as well as other sector employers offering traditional and non-traditional employment opportunities for actuaries. *Actuarial Careers, Inc.*® provides its services on both a contingency and retainer basis.

## EARNIX

## EXHIBITOR, ADVERTISER

### EARNIX

Predict. Perform.

Earnix is a leading provider of pricing and customer value optimization software solutions for insurers and banks. Used by leading financial services companies worldwide, Earnix

Optimizer provides an integrated platform that enables insurers to maximize the value of customer relationships and drive significant improvements in profitability, lifting bottom line performance by 1-5% of gross written premium.

The company was founded by insurance executives who sought a practical solution to the limitations of traditional pricing methods used by financial services providers. Joining forces with experts in statistics, econometrics, and optimization technology, they formed Earnix to help insurers improve performance through better customer segmentation, advanced demand analysis, and optimized pricing. Earnix is privately held and funded by prominent venture capital firms.

For more about Earnix insurance pricing and customer value optimization solutions, please visit [www.earnix.com](http://www.earnix.com).

# EXHIBITORS/SPONSORS/ADVERTISERS



## EXHIBITOR, ADVERTISER

### MILLIMAN

Milliman's new Arius system is the next step in the evolution of reserve analysis solutions. Arius combines our 20+ years of experience providing the most widely used deterministic tools with our industry-leading research into using multiple models to simulate loss distributions and reserve variability.

Arius gives you the best of both worlds. Its full spectrum of exhibits and projection methods, and the flexibility to build your own, help eliminate tedious number crunching and reduce review time. Arius' stochastic tools provide a number of different models for estimating distributions of possible outcomes. You are no longer limited to a basic simulation, but can evaluate several different models, using the ones that most reliably simulate your specific situation.

Arius is customizable. You can set up your analysis to support your preferred work flow, rather than having to live with the system's pre-defined approach. And with deterministic and stochastic tools working from the same data, all your work papers and analyses are now finally in one place.



## EXHIBITOR, ADVERTISER

### ACTUARIAL FOUNDATION

Founded in 1994 with education as its cornerstone, The Actuarial Foundation a 501(c)(3) nonprofit organization, promotes math and financial literacy through a multitude of programs and resources for everyone from young students to retirees. The Foundation believes that education is the key to unlocking learning potential and demonstrates this through the programs we create, disseminate and support in educating students and adults about math and financial issues. Our programs are a key to minimizing risk through maximizing education. The vision of The Actuarial Foundation is an educated public in pursuit of a secure financial future and this vision is made possible through the generosity of the actuarial profession and our donors. We are dedicated to unlocking the learning potential in our schools and in our communities, and we need you to join us in our continuing efforts. Be the KEY that unlocks learning potential.



AMERICAN ACADEMY  
of ACTUARIES

## EXHIBITOR

### AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a 17,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.





## EXHIBITOR

### CARFAX BANKING AND INSURANCE GROUP

CARFAX has built the most comprehensive vehicle history database ever assembled with over 10 billion records covering virtually all cars, light trucks, and SUVs manufactured in the U.S. since 1981. We provide vehicle data from more than 34,000 data sources, including all state DMVs and many police departments, service facilities, and collision centers.

More than 50 insurance companies have now evaluated the significance of using CARFAX vehicle history data to predict future claim frequency and severity. Of these carriers, dozens are currently using CARFAX data within their daily operations - underwriting, rating, and renewal. CARFAX data allows insurers to take an in-depth look at each vehicle rather than looking at the "average" vehicle in a class according to a symbol. Our clients attract and retain the best customers while mitigating substantial risk, simply by utilizing detailed vehicle history. Currently, 43 states have approved the use of CARFAX vehicle history information for underwriting and/or rating.

More information leads to better decisions so contact us at 800-789-6232 or visit our website to learn more about specific applications for your business and to take advantage of our discounted corporate rates.



## ADVERTISER

### DW SIMPSON GLOBAL ACTUARIAL & ANALYTICS RECRUITMENT

The mission of DW Simpson Global Actuarial & Analytics Recruitment is to be the premier executive recruiting firm specializing in the placement of actuaries and risk professionals; to be recognized for the service, integrity and forthrightness that the firm brings to each and every business relationship; and to be willing at all times to sacrifice short-term gain for the long-term good and prosperity of our clients, our candidates and, as a result, our organization as well.



## EXHIBITOR

### GUY CARPENTER

Guy Carpenter & Company, LLC is the world's leading risk and reinsurance specialist and a member of Marsh & McLennan Companies. With more than 50 offices worldwide, Guy Carpenter creates and executes integrated risk management and reinsurance solutions that deliver capital value for clients across the globe. Guy Carpenter's MetaRisk® is the industry's most transparent risk and capital decision tool. A truly integrated model, MetaRisk delivers comprehensive underwriting, reserve, catastrophe, credit and investment risk capabilities and enables users to prepare for the rigorous demands of Solvency II and ERM. Visit [www.MetaRisk.info](http://www.MetaRisk.info).



## EXHIBITOR

### ICA 2014

The 30th International Congress of Actuaries will be held 30 March to 4 April 2014 in Washington, D.C. The Congress is a quadrennial function of the International Actuarial Association (IAA) and welcomes actuaries from all disciplines and from around the world. In 2014, the Congress is being hosted and organized by the five actuarial associations in the United States: American Academy of Actuaries, American Society of Pension Professionals and Actuaries, Casualty Actuarial Society, Conference of Consulting Actuaries, and Society of Actuaries.

The theme of the 2014 Congress is Learn, Interact, Grow. All facets of the Congress are being designed to give delegates and their guests a variety of opportunities to do exactly that. Attendees will:

- Learn about the latest ideas in actuarial practice,
- Interact with actuaries and other risk professionals through the educational and social events, and
- Grow from the stimulating educational sessions and from engagement with professionals from countries and cultures around the world.

Mark the dates on your calendar – 30 March through 4 April 2014 – and plan to join us in Washington, D.C. for wonderful professional and personal opportunities to learn, interact, and grow. We look forward to hosting you, and we look forward to your participation.



## EXHIBITOR

### THE INSTITUTES

The Institutes are the leader in delivering proven knowledge solutions that drive powerful business results for the risk management and property-casualty insurance industry. The Institutes' knowledge solutions include the CPCU designation program; associate designation programs in areas such as claims, risk management, underwriting, and reinsurance; introductory and foundation programs; online courses; research; custom solutions; assessment tools; and continuing education (CE) courses for licensed insurance professionals and adjusters through their CEU.com business unit.



## EXHIBITOR

### LEXISNEXIS

LexisNexis® Insurance Solutions has an unmatched combination of unique data, tools, and services. Our solutions allow insurers to uncover unseen information patterns so they can maximize the value of their customer base as well as quickly evaluate and validate the effectiveness of your customer strategies while identifying market opportunities.

LexisNexis insurance analytics customers include a majority of the leading Property and Casualty insurers who utilize our analytics solutions to gain deeper strategic insight to help improve pricing, sales, and marketing decisions. The InsurQuote SM and InsurViewSM data and visualization tools allow carriers to compare their competitive positions while the Optimal Decisions Toolkit allows carriers to identify the rates, sales paths, and marketing actions to best meet financial objectives.

## MOODY'S ANALYTICS

### ADVERTISER

#### MOODY'S ANALYTICS

Moody's Analytics helps capital markets and risk management professionals worldwide respond to an evolving marketplace with confidence. The company offers unique tools and best practices for measuring and managing risk through expertise and experience in credit analysis, economic research and financial risk management. By providing leading-edge software, advisory services and research, including proprietary analyses from Moody's Investors Service, Moody's Analytics integrates and customizes its offerings to address specific business challenges. Moody's Analytics is a subsidiary of Moody's Corporation (NYSE: MCO), which reported revenue of \$2.7 billion in 2012, employs approximately 6,800 people worldwide and has a presence in 28 countries. Further information is available at [www.moodyanalytics.com](http://www.moodyanalytics.com).



verisk

Insurance Solutions

### EXHIBITOR

#### VERISK INSURANCE SOLUTIONS

Verisk Insurance Solutions is a leading source of information about property/casualty insurance risk. To serve our clients, we draw upon our vast experience in data management and our expertise in predictive modeling. We analyze data and present information in formats our customers can use. And we develop practical tools that integrate into our customers' workflow. Through our ISO unit, we offer products and services that help customers define, measure, and manage risk. For more information, visit [www.verisk.com/insurance](http://www.verisk.com/insurance)

## TRAVELERS

### ADVERTISER

#### THE TRAVELERS COMPANIES, INC.

The Travelers Companies, Inc. (NYSE: TRV) is a leading property casualty insurer selling primarily through independent agents and brokers. The company's diverse business lines offer its global customers a wide range of coverage in the auto, home and business settings. A component of the Dow Jones Industrial Average, Travelers had 2012 revenues of approximately \$26 billion and total assets of approximately \$105 billion. The company employs approximately 30,000 individuals in 220 locations across the country, including its main offices in Hartford, Conn., New York City and Saint Paul, Minn.

Travelers prides itself on offering students and new graduates enriching career opportunities through a variety of internship, development and leadership programs in areas that include actuarial science, finance, human resources, information technology, operations, product management and underwriting. For more information, visit [travelers.com/Careers](http://travelers.com/Careers).



### EXHIBITOR

#### TRUE MILEAGE, INC.

The next evolution of usage-based insurance (UBI) has arrived.

True Mileage is the only entity offering a complete UBI program from a single partner including vehicle devices, data transfer, and recommended discounts. We offer insurers the technology and/or analytics needed for a profitable UBI program. The technology and associated methodology we invented significantly reduces the cost and privacy issues holding back programs today. Our unique national data sets and sophisticated analytics result in the most reliable recommended UBI discounts in the industry and are available to our insurer partners from day one.

Please contact us for more information at 510.344.5698, [info@truemileage.com](mailto:info@truemileage.com), or visit [www.truemileage.com](http://www.truemileage.com).

# GENERAL AND CONCURRENT SESSIONS

## MONDAY, NOVEMBER 4, 2013

9:00 a.m. – 10:15 a.m.

### G-1: Cycle Management: Theory and Practice

#### Meeting Room: Minneapolis Grand Ballroom Salon ABC

*This session is recorded.*

Why do we have an underwriting cycle? How can actuaries help insurers and reinsurers manage through the cycle? How has the cycle distorted our estimates? And, what can we, as actuaries, do better going forward? This session will review how well actuaries have estimated losses during the high and low points of the past underwriting cycles. Then, the panel will discuss how a business plan can be made to accommodate the cycle utilizing strategies to help grow profitably through the cycle. This session will give you practical ideas to use as a basis for evaluating your own situation.

Twitter hashtag to pose questions during the session: **#CASannual13GS1**.

Moderator/Panelist: Jessica Leong, Lead Casualty Specialty Actuary, Guy Carpenter & Co., LLC

Panelists: Donald Mango, Head of Global Advisory, Guy Carpenter & Co., LLC  
Susan Witcraft, Financial Analysis Director, OneBeacon Insurance Companies

## MONDAY, NOVEMBER 4, 2013

1:30 p.m. – 3:00 p.m.

### C-1: 2011 Thai Floods: Impact and Lessons Learned for Japanese Non-Life Insurers

#### Meeting Room: Marquette IX

*This session is recorded.*

Japanese non-life insurers have experienced many natural catastrophe losses such as earthquakes or typhoons, and most notably, the Great Tohoku Earthquake in March 2011. However, Japanese non-life insurers unexpectedly suffered their greatest insured losses from a natural catastrophe that happened outside of Japan: the Thailand Floods in 2011. This presentation will describe the impact of those floods on Japanese insurers, the background and causes, and the lessons learned from the event finally the actions taken.

Moderator: Cathy Hwang, Principal and Consulting Actuary, Milliman Ltd.

Panelists: Tomohiro Yokota, Deputy Manager, Nipponkoa Insurance Co., Ltd.  
Tomomi Kawakami, Deputy Manager, The Fuji Fire and Marine Insurance Co., Ltd.  
Kenichi Horie, Manager, Mitsui Sumitomo Insurance Company, Limited

## C-7: Brace Yourself for Direct Sales to Small-business Insurance Consumers!

### Meeting Room: Marquette IV

*This session is recorded.*

Direct online distribution has already revolutionized personal lines insurance. The next wave of direct sales has arrived in the small-commercial market, and carriers need to be prepared regardless of whether or not they intend to take the plunge. Speakers will present new research documenting buyers' appetites, needs and concerns, while addressing operational implications for analytics, underwriting, pricing and agency distribution. This session is designed both for carriers considering a direct strategy as well as those looking to develop a defensive strategy against competitors that make the move.

Moderator: Sam Friedman, Insurance Research Leader, Deloitte Center for Financial Services

Panelists: Donna Schlegel, Director, Deloitte Consulting LLP  
Tim Attia, SVP Sales and Marketing, Bolt Insurance Agency

## C-12: Creative Approaches to Managing Change

### Meeting Room: Marquette II

The speaker will focus on helping professionals develop the skills they need to improvise at work, and build strategic plans from concepts and idea. A demand exists for creative approaches to the problems employees face at work, such as doing "more with less". Mr. Weisberg will help participants develop the skill most needed to build confidence and enthusiasm in that effort: Creativity.

He has a unique approach to the issues of building bridges with people and its impact on all aspects of our work. This session will be fun, informative and immediately applicable.

Moderator: Beverly Phillips, Associate Actuary, United Services Automobile Association

Panelist: Andy Weisberg, Professional Speaker, Consultant, Trainer, Coach, SpeakToMeNow.com

## C-13: Credit Risk Special Interest Section

### Meeting Room: Marquette VI

*This session is recorded.*

The Credit Risk Special Interest Section (CRiSIS for short) will be conducting its annual in-person meeting at the 2013 CAS Annual meeting. Current members as well as non-members with an interest in credit risk are welcome to join us for this session. CRiSIS was formed to promote discussion and the exchange of ideas on the subject of credit risk evaluation, to provide forums for such discussions to take place, and to advance the knowledge of actuarial science as applied to credit risk through both original research and surveys of members' and subscribers' collective knowledge.

At this meeting, the leaders from CRiSIS will discuss the Section's recent activities, to develop: 1) a comprehensive web-based resource for casualty actuaries dealing with credit risk, and 2) a description and model of approaches commonly used by casualty actuaries to evaluate and manage credit risk.

Panelists: Mathieu Boudreault, Professor, University of Quebec at Montreal  
Michael Schmitz, Principal and Consulting Actuary, Milliman, Inc.

# GENERAL AND CONCURRENT SESSIONS

## C-14: Economic Scenario Generators: Usage and Trends in the P&C Industry

### Meeting Room: Marquette VIII

*This session is recorded.*

Economic scenarios and economic scenario generators (ESG) are increasingly being used in the P&C insurance industry as one of the central quantitative tool for effective enterprise risk management (ERM). After an introduction to economic scenarios, this session will focus on the various uses of economic scenarios within an ERM program for P&C insurers and reinsurers.

Moderator/Panelist: Loic Grandchamp, P&C Product Manager, Moody's Analytics

Panelist: Jonathan Mossman, Investment Operations, Towers Watson

## C-20: An Introduction to Predictive Modeling

### Meeting Room: Marquette V

*This session is recorded.*

Learn about the basic steps of building, validating, and implementing a predictive model from three important viewpoints:

- The practitioner -- how does one specify, refine, and validate a predictive model.
- The manager/executive -- for an actuary managing a modeling project, what are the important questions to ask and important considerations to keep in mind when embarking on a modeling project and evaluating results.
- The regulator -- what do regulators typically look for when evaluating a plan that was constructed using predictive models.

Moderator: Jared Smollik, Manager-Actuarial, Insurance Services Office

Panelists: Dan Tevet, Actuary, Liberty Mutual Insurance Company  
Anand Khare, Actuarial Associate, Insurance Services Office, Inc.  
Linda Brobeck, Principal, Brobeck Analytics Consulting

## C-21: Lights! Camera! Professionalism!

### Meeting Room: Marquette III

Come enjoy the acting of some fine fellow actuaries who will take on several skits involving professional dilemmas. These skits are intended to lead to some lively and educational audience discussions. Attendees will walk away from this session with a better understanding of the ASOPs, Code of Conduct and how to apply them when facing your own professional dilemmas. This session may provide attendees with Professionalism Continuing Education Credits.

Speakers: Emilee Kuhn, VP Underwriting, Arch Insurance Group  
Martin Ménard, Director, PricewaterhouseCoopers  
Melinda Oosten, VP – Personal Lines Pricing, Selective Insurance Group  
Brian Donlan, Senior Actuary, Encompass Insurance Company

## **C-26: Understanding Customers and Agents' Behavior and Their Impact on P&C Insurance Companies' Performance**

### **Meeting Room: Marquette VII**

Facing increasing market challenges, insurance companies are constantly striving to find a competitive edge. With the wealth of data available today, insurers have new opportunities to tap into advanced techniques that allow them to better analyze and predict consumer and agent behavior as well as the impact of their behavior on business performance. In the first part of the session the speaker will provide a short introduction to behavioral economics as it applies to P&C insurance, and will give concrete examples of common findings that may emerge from the analysis of P&C insurer data with a focus on pricing. In the second part of the session the focus will shift to agent behavior. The speaker will describe a method for analyzing the effect of agent behavior on economic measures such as sales, retention, lifetime value and profitability. He will also provide an example of constructing a minimally-disruptive field experiment to measure the impact account managers can exert on agent behavior and performance through their actions.

Speaker: Reuven Shnaps, Vice President of Professional Services, Earnix

## **P-1: Non-Technical Reserves Call Paper Program Session 1 - Workers Compensation Papers**

### **Meeting Room: Marquette I**

*This session is recorded.*

Non - Technical Call Paper Program - Workers Compensation Papers

Lynne Bloom and Lela Patrik - A Methodology for Avoiding the Pitfalls of Excess Loss Development

Michael Shane and Dawn Morelli - Using Life Expectancy to Inform the Estimate of Tail Factors for Workers Compensation Liabilities

Craig Scukas - A Mortality-Based Approach to Reserving for Lifetime Workers' Compensation Claims

## **MONDAY, NOVEMBER 4, 2013**

**3:30 p.m. – 5:00 p.m.**

## **C-3: Allocating Economic Capital to Drive Business Decisions**

### **Meeting Room: Marquette V**

*This session is recorded.*

A methodology for allocating capital based on business segments will be presented and discussed, with broad application across P&C insurance products. In addition, specific examples of applications of the methodology will be presented, with discussion around business decision making impact and executive level acceptance.

Panelists: Donald Mango, Head of Global Advisory, Guy Carpenter & Co., LLC  
Terri Dalenta, Chief Risk Officer, Allstate Protection, Allstate Insurance Company

# GENERAL AND CONCURRENT SESSIONS

## C-5: Avoiding Knee Jerk Reactions to Short Term Natural Catastrophes

### Meeting Room: Marquette IX

*This session is recorded.*

While Insurance companies need to be mindful of current natural catastrophe events and trends, long-term weather patterns should not be ignored. Underwriters and actuaries need to understand the long-term patterns of where events are most likely to occur, even if those events have not occurred in the recent history. This session will examine how Insurance companies can use available Natural Peril historical information to make better decisions, focusing on how to assess the full history of catastrophic events, without overreacting.

Moderator/Panelist: Howard A. Kunst, Chief Actuary, CoreLogic

Panelists: Scott R. Jean, Vice President, Chief Actuary, EMC Insurance Companies  
Ian Asplund, Principal Actuary - Modeling, EMC Insurance Companies  
Matthew Nielsen, Director, Model Product Management, RMS

## C-6: Balancing Work and Home Life

### Meeting Room: Marquette VI

*This session is recorded.*

This session will tap into what the speaker has learned about creating the life every person wants most. This session is based on his book, "Laid Off and Crazy Happy – The Memoirs of a Houseband". Sometimes the way we think about work and play can cause more problems than solutions. Mr. Weisberg will move us to a deeper understanding of time and how we use it, and in the process you will discover that it is easier than you think to create greater balance both at work and at home.

Speaker: Andy Weisberg, Professional Speaker, Consultant, Trainer, Coach, SpeakToMeNow.com

## C-9: Catastrophe Reinsurance - Traditional vs. Collateralized vs. Cat Bonds

### Meeting Room: Marquette VII

Non-traditional reinsurance (collateralized, cat bonds) have been gaining popularity in the catastrophe reinsurance market in recent years. The first speaker will explain the differences between traditional reinsurance, collateralized reinsurance and cat bonds. The second speaker will discuss the pros and cons of each reinsurance method from a cedant's point of view.

Moderator: Benoit Carrier, Managing Director, Aon Benfield

Panelists: Erin Lakshmanan, Associate Director, Aon Benfield Securities  
John P. Lebens, Vice President, Corporate Risk Mgmt & Reinsurance, Nationwide Insurance Company



# GENERAL AND CONCURRENT SESSIONS

## C-15: Emerging Homeowners and Personal Auto Exposures

### Meeting Room: Marquette VIII

*This session is recorded.*

Learn about new exposures for homeowners and personal auto. Hear about various emerging topics on homeowners risks including net metering, electric car charging stations, driveway/house sharing, homeowners leasing land for fracking, mineral rights, cyber-risk, effects of the economic downturn, and other trends affecting Homeowners claim costs. Attendees will also learn about autonomous cars, electric/hybrid vehicle repair, infotainment systems, driver distractions, car-sharing, the effects of safer cars on claims results, and other issues affecting the cost of personal auto insurance.

Moderator/Panelist: Robert Curry, AVP & Actuary - Personal Property Actuarial Div., ISO

Panelists: Kevin Christy, Vice President - Chief Actuary, Western National Insurance Group  
Phillip Vigliaturo, Actuary, Minnesota Department of Insurance

## C-23: Personal Lines Modeling

### Meeting Room: Marquette IV

Panelists discuss modelings as it pertains to Homeowners Building Characteristics, the Chinese Personal Auto Market, and Motorcycles.

Moderator: Dan Tevet, Actuary, Liberty Mutual Insurance Company

Panelists: Peter Wu, Director, Deloitte Consulting LLP  
Anand Khare, Actuarial Associate, Insurance Services Office, Inc.

## C-24: Professionalism, Qualification Standards, Continuing Education & Recordkeeping

### Meeting Room: Marquette III

This session will cover:

–Qualifications Standards and Continuing Education (CE) Requirements

- AAA vs. CAS
- General vs. Specific
- Which applies to you?

–Recordkeeping

–CAS CE Compliance Attestation

–Examples to facilitate a group discussion

Moderator: Dorothy Magnuson, Actuary, The Travelers Companies, Inc.

Panelist: Kyle Falconbury, Actuary, The Travelers Companies, Inc.

# GENERAL AND CONCURRENT SESSIONS

## C-25: The Path to a Successful Implementation of Price Optimization in North America

### Meeting Room: Marquette II

A growing number of insurance companies in North America recognize the need to advance their pricing sophistication in order to adapt to the new business environment stemming out of the latest financial crisis. Insurance price optimization combines the best of each of the three traditional pricing approaches (cost plus, value-based, and market-based). At the same time a successful implementation of price optimization in North America requires a robust process and technological solutions that can cope with some key challenges insurance companies face along the journey – lack of competitor data, adhering to strict pricing rules and rating structures, time to market, inability to create random control group to measure impact of pricing decisions are a few examples of such challenges. This session will review these key challenges and propose some effective and field-tested ways of dealing with them.

Moderator/Panelist: Reuven Shnaps, Vice President of Professional Services, Earnix

Panelist: Yves Colomb, Consultant, Towers Watson

## C-27: University Engagement: Building the Pipeline of Future CAS Members

### Meeting Room: Marquette I

*This session is recorded.*

A robust and comprehensive university engagement strategy is critical to the future of the CAS in today's competitive environment. This session will discuss the CAS's goals related to university engagement and how members can help the CAS achieve those goals.

- Hear an academic's perspective on how strong relationships between academics and practicing actuaries are mutually beneficial, while advancing the CAS and actuarial profession.
- Learn the specific tactics and messaging that you can employ in your outreach to academics and university students.
- Discover how the CAS is engaging university students and academics through its network of Regional Affiliates.
- Be inspired by the success stories of a CAS University Liaison who has built a connection with a local university to the benefit of his employer and the CAS.
- And finally, share personal anecdotes of your own university outreach efforts.

Moderator: J. Michael Boa, Director of Communications and Marketing, Casualty Actuarial Society

Panelists: Wesley Griffiths, 2VP and Actuary, The Travelers Companies, Inc. and Chairperson, CAS University Engagement Committee

Rick Gorvett, Director of the Actuarial Science Program and State Farm Companies Foundation Scholar in Actuarial Science, University of Illinois at Urbana-Champaign, and Member of the CAS University Engagement Committee

Mark Shapland, Consulting Actuary, P&C Insurance Software Solutions, Milliman, CAS University Liaison and President, Central States Actuarial Forum

Loren Nickel, Regional Director and Actuary, Aon Global Risk Consulting, CAS University Liaison and President, Casualty Actuaries of the Bay Area

# GENERAL AND CONCURRENT SESSIONS

**TUESDAY, NOVEMBER 5, 2013**

**8:00 a.m. – 9:30 a.m.**

## **C-4: Autonomous Vehicles and the Impact on the Insurance Industry**

### **Meeting Room: Marquette VI**

The National Highway Transportation Safety Administration estimates that of the crashes that result in over 30,000 fatalities each year in the US over 90% are due at least in part to human error. Consequently, the opportunity offered by self-driving cars, to “remove” the human from that equation, represents an incredible opportunity to improve the safety of our nation’s highways.

However, such a change also represents a significant challenge to the way we regulate our highways, as nearly all laws and regulations presume a human is responsible for the safe operation of the vehicle. As we move from operation based upon drivers’ responding to the environments they observe to operation where machines respond to data they record, how this data will be handled and used is a large and currently unresolved question. For the insurance industry, this data provides an opportunity improve the fairness and accuracy of rate setting and liability determination, but questions regarding location tracking and secondary markets for this data could prevent realization of this benefit. This panel will discuss these technical opportunities, the political and legal risks, and suggest some guidelines for moving forward in this “brave new transportation world.”

Moderator/Panelist: Michael Stienstra, AVP Actuary, QBE North America

Panelists: Frank Douma, Research Scholar, University of Minnesota  
Robert Peterson, Professor of Law, Santa Clara University

## **C-8: Calibration of Non-Life Underwriting Risk Charges and Dependency Structure from U.S. “Annual Statement” Data with Applications to Risk-Based Capital (Standard Formulas), ORSA and ERM**

### **Meeting Room: Marquette II**

*This session is recorded.*

In this session the report authors will present highlights from the work done by the CAS Risk-Based Capital Dependency and Calibration Working Parties (DCWP). DCWP research activity was initiated because of NAIC interest in reviewing the RBC formula related to its Solvency Modernization Initiative. Some DCWP results are already published in the CAS E-Forum. One report is submitted, but not yet published. Several others are in various stages of drafting. For some, the research is underway but the write-ups have not reached draft status. The body of work described in this outline should be completed by December 2013. DCWP efforts are extensive. They will describe the DCWP approach, identify the research papers, and focus on the most interesting results and refer the audience to the underlying Reports for details.

Moderator/Panelist: Allan Kaufman, Managing Director, FTI Consulting

Panelist: Ashley Reller, Associate Actuary, Federated Insurance Companies

# GENERAL AND CONCURRENT SESSIONS

## C-10: The Challenges of Usage Based Insurance Analytics

### Meeting Room: Marquette VII

Many insurance companies spend considerable amount of time and energy building their UBI product and collecting data only to find that the data they have accumulated is inadequate. During this session, panelists will discuss UBI data strategy, focusing on how to determine the best level of data to collect, expectations for data quantity and common issues with data quality.

Moderator/Panelist: Len Llaguno, Consultant, Towers Watson

Panelists: Jeff Stempora, Founder & CEO, Advanced Insurance Products & Services

## C-11: The Continuously Evolving Examination Process

### Meeting Room: Marquette VIII

*This session is recorded.*

The exam process continues to evolve and adapt to the needs of the time, whether that means reflecting advancements in actuarial methodology and theory into the syllabus, modifying the examination structure to address the needs of future fellows and associates, or refining existing procedures in an ongoing effort to provide high quality exams. This session will assess the impact of recent enhancements to the exam process, highlight current initiatives and discuss future challenges.

The CAS benefits greatly from its own members who volunteer to serve on various committees, and its success as an organization depends upon the feedback and insight it receives from those volunteers. In light of this, a member of the examination committee will also be presenting at this session, relating their first-hand experience volunteering for the committee and offering unique observations and insights of the exam process.

Moderator/Panelist: Steven Armstrong, Managing Director of Product, Plymouth Rock Assurance Corporation

Panelists: Ali Ishaq, Principal, Analytikus LLC

Chris Loyd, Actuary, The Travelers Companies, Inc.

## C-14: Economic Scenario Generators: Usage and Trends in the P&C Industry

### Meeting Room: Marquette V

(See Monday at 1:30 p.m.)

## **C-16: Exploring Ranges of Ultimates and Reserves and Their Relationship to Loss Emergence Patterns**

### **Meeting Room: Marquette III**

Actuaries often talk about the proverbial range of reasonable estimates, for instance, in relation to reserves for financial reporting purposes. Actuaries and stakeholders are also interested in the distribution of possible outcomes, for instance, in the context of enterprise risk management. In this session, the speakers will facilitate a discussion around: (1), the relationship of uncertainty estimates of ultimate loss and of reserves, considering the effect of the loss payment pattern; (2), how the uncertainty of the estimates decreases as the exposure period matures; (3), retrospective testing of assumptions used in actuarial valuations; (4), the expected range (distribution) of estimates/outcomes in a 1-year horizon; and (5), the assessment of new information on last year's analysis and picks. Implications on the estimates of the current exposure period, for business re-forecasting and for reserving, and also for a start-up company, will be highlighted. Examples will be presented to illustrate the concepts and facilitate an interactive discussion.

Moderator/Panelist: Mark Littmann, Principal, Pricewaterhouse Coopers

Panelist: Mark Shapland, Consulting Actuary, Milliman, Inc.

## **C-28: Update on Responses to IASB and FASB Exposure Drafts on Financial Reporting Standards for Insurance Contracts**

### **Meeting Room: Marquette IV**

*This session is recorded.*

The IASB and FASB issued their latest exposure drafts in June 2013 with response date of October 25, 2013. This session will provide an update of the responses developed by various committees of actuarial associations, American Academy of Actuaries, Canadian Institute of Actuaries, International Actuarial Association and possibly others. There are many actuarial issues contained in these exposure drafts which will be discussed by the panel.

Moderator/Panelist: Bob Miccolis, Director, Deloitte Consulting LLP

Panelist: Marc Oberholtzer, Principal, PwC

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# GENERAL AND CONCURRENT SESSIONS

## P-5: Variance Papers: Capital Tranching and Sufficient Initial Capital

### Meeting Room: Marquette I

*This session is recorded.*

#### “Capital Tranching: A RAROC Approach to Assessing Reinsurance Cost Effectiveness”

by Donald Mango, John Major, Avraham Adler, and Claude Bunick

The current industry standard approach evaluates reinsurance effectiveness by calculating capital cost savings as the product of a fixed capital cost rate and the required capital that is released. Reinsurance is deemed “value-creating” if the resulting capital cost savings is more than the profit margin ceded to support the purchase—a return on risk-adjusted capital (RORAC) approach. In reality, however, insurers do not typically release capital as a result of a reinsurance purchase. Rather, capital is generally fixed for the planning cycle. Capital cannot be simultaneously fixed and risk-adjusted. Instead of a RORAC measure, a risk-adjusted return on capital (RAROC) can be calculated using fixed capital.

#### “Ruin Probability-Based Initial Capital of the Discrete-Time Surplus Process”

by Pairote Sattayatham, Kiat Sangaroon, and Watcharin Klongdee

This paper studies an insurance model under the regulation that the insurance company has to reserve sufficient initial capital to ensure that ruin probability does not exceed the given quantity  $\alpha$ . The authors prove the existence of the minimum initial capital. To illustrate our results, they give an example in approximating the minimum initial capital for exponential claims.

Moderator: Greg Cote, Actuary, The Travelers Companies, Inc.

Panelists: Watcharin Klongdee, Chair, Actuarial Mathematics Program, Khon Kaen University  
Don Mango, Head of Global Advisory, Guy Carpenter & Co., LLC

## TUESDAY, NOVEMBER 5, 2013

10:00 a.m. – 11:30 a.m.

## C-2: Advances in Predictive Crime Risk Analytics for Ratemaking and Fraud

### Meeting Room: Marquette VI

Many insurers today are focused on mitigating Adverse Selection. Actuaries now have reliable, address-specific risk ratings available for hazards such as flood and earthquake, but not for crime. In this session, learn about the advances in predictive crime risk analytics from which a new, address-specific crime hazard layer has been developed with improved predictive accuracy. Discover applications in underwriting, ratemaking and fraud detection. See the data firsthand through visually engaging maps of various US locations.

Moderator: Howard A. Kunst, Chief Actuary, CoreLogic

Panelists: Andrew Schiller, CEO & Chief Geographer, Location, Incorporated  
Jonathan Glick, Lead Analyst, Location, Incorporated

## C-12: Creative Approaches to Managing Change

### 30 Meeting Room: Marquette III

*This session is recorded.*

(See Monday at 1:30 p.m.)



# GENERAL AND CONCURRENT SESSIONS

## C-15: Emerging Homeowners and Personal Auto Exposures

### Meeting Room: Marquette V

(See Monday at 3:30 p.m.)

## C-17: How Oil Limits and Related Interest Rates Can Be Expected to Affect Insurers

### Meeting Room: Marquette VIII

*This session is recorded.*

Consistently high oil prices are leading toward a long-term contraction of the economy that has not been recognized by most forecasters. Panelists will explain how recent successes in US oil extraction fit into the overall picture, and why there is still reason for concern. Panelists will discuss their expectations for short-term and long-term interest rate environments, and the potential effects this could have on insurance pricing, loss reserves and assets. They will also address the impact that an end to quantitative easing might have on interest rates, stock prices, bond defaults and insurer assets.

Moderator/Panelist: Gail E. Tverberg, Researcher, Our Finite World

Panelist: Joshua Howard, Director of Research, Advanced Capital Group

## C-19: Topics in Commercial Auto Modeling

### Meeting Room: Marquette IV

*This session is recorded.*

Some firms have embarked on a revision of their Commercial Auto trucks, tractors, and trailers classification plans. One company took a step back and thought hard about how it could incorporate all available rating variables (including ones it had never rated on before) into a new multivariate rating structure.

To predict loss cost, the speakers used a relatively new model form—the Tweedie generalized linear model (GLM). Along the way, they encountered and overcame a number of interesting problems, such as how to handle thin data, and how to redefine certain discrete variables as continuous variables. Through our analysis, they discovered that the optimal way to rate this line of business was to segment the current class plan into subplans, and to incorporate some new variable interactions; the final model has over a dozen significant variables and interactions.

They then confirmed that the revised class plan outperformed the current class plan on “holdout data”, through statistical techniques such as the calculation of bootstrapped confidence intervals and Gini indices.

Moderator: Ben Carrier, Managing Director, Aon Benfield

Panelists: Anand Khare, Actuarial Associate, Insurance Services Office, Inc  
Shane Barnes, Director of Applied Research, The Hartford

# GENERAL AND CONCURRENT SESSIONS

## C-21: Lights! Camera! Professionalism!

### Meeting Room: Marquette VII

(See Monday at 1:30 p.m.)

Speakers:                      John Wade, Senior Consultant, Pinnacle Actuarial Resources  
   Michael Chen, Actuary, FBL Financial Group, Inc.  
   Kathryn Walker, Consulting Actuary, Pinnacle Actuarial Resources  
   Dan Tevet, Actuary, Liberty Mutual Insurance Company

## P-2: Non-Technical Reserves Call Paper Program Session 2 - Industry Reserving Papers

### Meeting Room: Marquette II

*This session is recorded.*

Non - Technical Call Paper Program - Industry Reserving Papers

Susan Forray and Zachary Ballweg - Peaks and Troughs: Reserving through the Market Cycle  
Chris Walker and Mark Littman - Applications of Reserve Ranges and Variability in Practice  
Bertram Horowitz - Aggregate Loss Reserve Analysis by Accounting Date

## P-6: Variance Papers: Reinsurance Credit Risk

### Meeting Room: Marquette I

*This session is recorded.*

#### “Reinsurance Credit Risk: A Market-Consistent Paradigm for Quantifying the Cost of Risk”

by Neil Bodoff

Property-casualty insurance companies tend to buy reinsurance; when they do, they must address reinsurance credit risk. This paper advocates that companies should evaluate reinsurance credit risk with a market-consistent paradigm, which manifests two salient features: a probabilistic view of credit risk that assigns costs to low probability events, and a willingness to use market-based instruments for the purpose of quantifying the cost of risk. The proposed market-consistent paradigm facilitates a company's ability and willingness to measure, hedge, and optimize reinsurance credit risk.

Speaker:                      Neil Bodoff, Executive Vice President, Willis Re, Inc.

# GENERAL AND CONCURRENT SESSIONS

**TUESDAY, NOVEMBER 5, 2013**

**1:30 p.m. – 3:00 p.m.**

## **G-2: Is Your Usage-Based Insurance Program Succeeding?**

**Meeting Room: Minneapolis Grand Ballroom Salon ABC**

*This session is recorded.*

Usage-based auto insurance (UBI) for personal and commercial lines has largely focused on measuring the effects of policyholders' driving behaviors, but less attention has been given to measuring the behavior of UBI programs themselves. In this session the speakers will examine different aspects of UBI, including pricing segmentation and the customer experience, and identify quantitative and qualitative measures for performance and timeframes over which to evaluate. Particular attention will be paid to interpreting thin data and negative short-term returns on investment that may initially result from UBI initiatives.

Moderator: Patrick Woods, Assistant Vice President & Actuary, Personal Automobile Actuary, ISO

Speakers: Prof. Udi Makov, Head of Actuarial Research Center, University of Haifa

Robin Harbage, Director, Towers Watson

Gary Wang, Consulting Actuary, Pinnacle Actuarial Resources, Inc.

## **G-3: Recent Extreme Weather Events: Unusual or Unprecedented?**

**Meeting Room: Minneapolis Grand Ballroom Salon D**

Catastrophe losses, by definition, are supposed to be low-frequency, high-severity events. However, in the last several years in the U.S., there have been hurricanes, hundreds of powerful and violent tornadoes, several major wildfires, a prolonged drought in the West, floods and winter storms. Around the world, there have been unprecedented floods and heat waves. Is this simply misfortune, experiencing several back-to-back extreme events? Or, if recent years are not unusual or unexpected, how bad might things get in future extreme events? Panelists will explore perception vs. reality, give their perspectives of what might be expected in the years to come, and discuss the extent to which global climate change could impact the way catastrophe losses are modeled.

Moderator: Beverly Phillips, Associate Actuary, United Services Automobile Association

Panelists: Mark Bove, Senior Research Meteorologist, Munich Reinsurance America, Inc.

Andrew Castaldi, Senior V.P. and Head of Catastrophe Perils, Swiss Re

# GENERAL AND CONCURRENT SESSIONS

**TUESDAY, NOVEMBER 5, 2013**

**3:15 p.m. – 4:15 p.m.**

*ROUNDTABLE SESSIONS—Optional*

## **Roundtable 1: Advancing Your Actuarial Career through the CAS: The New Associate Perspective**

**Meeting Room: Marquette I**

Facilitators: Matthew Caruso, Membership & Volunteer Manager, CAS

New Associates are invited to participate in this roundtable discussion about their decision to pursue a career as a casualty actuary through the CAS. As the CAS pursues an aggressive marketing strategy to attract students to the CAS career path, the input of new Associates will be invaluable. Building on the State of the CAS discussion during the opening general session, we will invite new Associates to share their perspectives regarding how the CAS can position itself as the best career path for aspiring actuaries. In addition, we will discuss how the CAS can improve its connection to candidates sitting for exams and better engage new members in the CAS membership community. This roundtable is limited to new Associates only. All roundtable discussants will be provided with a small token of appreciation for sharing their time and opinions.

## **Roundtable 2: Usage-Based Insurance**

**Meeting Room: Marquette II**

Facilitators: Len Llaguno, Consultant, Towers Watson

Expanding on the concurrent sessions, the round table will discuss the UBI marketplace, implementation challenges and analyzing Telematics data.

## **Roundtable 3: Autonomous Vehicles**

**Meeting Room: Marquette III**

Facilitators: Michael Stienstra, AVP, Actuary, QBE North America

Individuals fluent in risk management, GLM's, and auto insurance pricing and regulation are invited to share their perspectives on the technological advancements in the automotive industry. This session will build on the discussion from the Autonomous Vehicle discussion, and will focus on the role of actuaries and the insurance industry in the development and application of the testing procedures that will safely bring Autonomous Vehicles to the public.

## **Roundtable 4: Oil and Insurance**

**Meeting Room: Marquette IV**

Facilitators: Gail Tverberg, President, Tverberg Actuarial Services, Inc.

There is at evidence that a slowdown in the growth of oil consumption is leading to a slowdown in economic growth. Long-term, it is even possible that recession may become the norm, rather than the exception. Many areas of insurance and risk management are likely to be affected, if there are many more layoffs, businesses closed, and empty buildings. Individuals from a variety of actuarial areas are invited to offer their insights, based both on changes experienced during the Great Recession, and on potential new risks. This session will build on the discussion from the session "How Oil Limits and Related Interest Rate Changes will Affect Insurance Companies."

## Roundtable 5: How to Weather the New Normal of Natural Catastrophe Losses

### Meeting Room: Marquette V

Facilitators: Mark Bove, Senior Research Meteorologist, Munich Reinsurance America, Inc.

Both socioeconomic trends and climate change are leading to ever-larger losses from natural catastrophes, and both society and insurers will need to adapt to the potential of more frequent extreme events over the coming years. Building upon the extreme weather events session, come and share your ideas for dealing with natural catastrophe risk in this new era and learn how others are addressing the issue.

## Roundtable 6: Validating a Predictive Model

### Meeting Room: Marquette VI

Facilitators: Dan Tevet, Liberty Mutual

Model validation is a very important, though often-overlooked component of the predictive modeling process. In this roundtable, we will share ideas for how to go about the validation process. Possible topics of discussion include:

- Measuring goodness of fit
- Avoiding over-fitting
- Determining the internal stability/robustness of a model
- Assessing model lift

Though actuarial predictive modeling usually involves GLMs, this discussion is not limited to linear models.

## Roundtable 7: Managing the IT Relationship

### Meeting Room: Marquette VII

Facilitators: Mo Masud, National Predictive Analytics Leader – AIMS, PricewaterhouseCoopers

The role of technology and alignment with IT to advance an organization's analytics capabilities and to drive analytics process efficiencies has never been so important. Actuaries working in a role that requires communication and collaboration with IT or are required to perform some IT functions as part of their analytics development efforts are invited to share their perspectives on challenges, successes and best practices when it comes to working with IT in support of actuarial analysis. This roundtable is related to the concurrent session "Need for Speed: Analytics Data Marts" and will discuss more general issues around alignment between actuarial and IT departments.

## Roundtable 8: Price Optimization

### Meeting Room: Marquette VIII

Facilitators: Yves Colomb, Consultant, Towers Watson

Companies implementing price optimization in the insurance industry are confronting significant challenges in data availability, strict constraints on pricing rules, time-to-market needs and an inability to conduct controlled experiments. Individuals who want to dig deeper as an extension to the Price Optimization concurrent session are invited to share their experiences and perspectives on this topic.

# GENERAL AND CONCURRENT SESSIONS

## Roundtable 9: Actuaries as Entrepreneurs

### Meeting Room: Marquette IX

Facilitators: Linda Brobeck, Brobeck Analytics Consulting

Have you recently started your own company or are you currently thinking about going solo? This roundtable is for seasoned and blossoming actuarial entrepreneurs to network and discuss the ups and downs of being out on your own. How do you know if going solo is the right thing for you? What are the risks? The rewards? What are the barriers to success and how can we overcome them? What are the opportunities for smaller businesses? How can we leverage each other? Everyone's situation is different, yet sharing various experiences and perspectives can be interesting and useful. Whether you are new to entrepreneurship or have been doing it for many years, please join us for a robust and possibly rewarding conversation.

**WEDNESDAY, NOVEMBER 6, 2013**

**8:00 a.m. – 9:30 a.m.**

## C-4: Autonomous Vehicles and the Impact on the Insurance Industry

### Meeting Room: Marquette VI

*This session is recorded.*

(See Tuesday at 8:00 a.m.)

## C-17: How Oil Limits and Related Interest Rates Can Be Expected to Affect Insurers

### Meeting Room: Marquette III

(See Tuesday at 10:00 a.m.)

## C-18: IAA Risk Adjustment Monograph

### Meeting Room: Marquette V

*This session is recorded.*

The International Actuarial Association is sponsoring the development of an educational monograph on risk adjustments that are being proposed under the recent exposure draft by the IASB. The CAS is a major sponsor of this monograph. This session will present some of the key chapters of the monograph, focusing on the principles associated with the risk adjustments and the techniques for actuaries to consider in developing risk adjustments. The session will also introduce some of the more difficult technical issues involved, such as ceded reinsurance.

Speaker: Bob Miccolis, Director, Deloitte Consulting LLP

# GENERAL AND CONCURRENT SESSIONS

## C-22: The Need for Speed - Analytics Data Marts

### Meeting Room: Marquette II

*This session is recorded.*

In today's insurance industry, market leaders compete on risk segmentation capability using predictive analytics. However, analytic models are only as good as the data and IT systems supporting them. As predictive analytics becomes more commonplace in insurance, speed to market will be a differentiator. While some insurance companies have realized substantial cost savings and improvements in business agility through IT modernization, others continue to struggle to streamline activities related to processing large volumes of transactional data to have it "analytics ready".

Dedicated Analytics Data Marts (ADM) that are designed for predictive analytics applications are one example of high-impact IT modernization. Access to a dedicated ADM frees costly analytics talent from time consuming and manually intensive data processing tasks to focus on their core mission: developing the next analytics modeling breakthroughs and helping their organization accelerate their analytics speed to market.

Moderator: Aadil Ahmad, Actuarial Director, CNA Insurance Companies

Panelists: Anthony Beirne, Senior Manager, PricewaterhouseCoopers  
Mo Masud, Managing Director, PricewaterhouseCoopers  
Charles Boucek, VP & Actuary, CNA Insurance Companies

## P-3: Non-Technical Reserves Call Paper Program Session 3 - Estimation Methodology Papers

### Meeting Room: Marquette I

*This session is recorded.*

Non - Technical Call Paper Program - Estimation Methodology Papers

David Kaye - Estimating Unpaid Claim Liabilities for Mortgage Insurance

Karen Adams - Chain Ladder Reserving Methods for Liabilities with Per Occurrence Limits

Marc Pearl and Jeremy Smith - An Enhanced On-Level Approach to Calculating Expected Loss Costs

## **P-4: ARIA Prize-Winning Paper Presentation and 2013 Hachemeister Prize Presentation**

### **Meeting Room: Marquette IV**

*This session is recorded.*

One of the recipients of the 2013 ARIA Prize will give a presentation of their winning paper entitled “Are Underwriting Cycles Real or Forecastable?” Speculative efficiency often requires that future changes in a series cannot be forecast. In contrast, series with a cyclical component would seem to be forecastable with decreases, possibly relative to a trend, during the upper part of the cycle and increases during the lower part. On the basis of autoregressive model (AR) estimates, it is now considered that there is strong evidence of cycles in insurance underwriting performance as measured by the premium-to-loss ratio. Indeed, a large literature attempts to explain this documented cyclicity. First we show that the parameter estimates from AR models do not lead to any such inference and that in the contrary, the evidence in the data is consistent with no cyclicity at all. Second, we show that a number of different filters lead to the same conclusion, that there is no evidence of in-sample or out-of-sample predictability in annual insurance underwriting performance in the United States. This means that firm profitability in the property and casualty insurance industry is not cyclical; we only observe profitability going up or down with no meaningful pattern. It consequently follows that pricing in the property and casualty insurance industry is not incompatible with that of a competitive market.

Also one of the recipients of the 2013 Hachemeister Prize will present their paper on “A Game-Theoretic Approach to Non-Life Insurance Markets.” In this paper, the researchers formulate a non-cooperative game to model a non-life insurance market. The aim is to analyze the effects of competition between insurers through different indicators: the market premium, the solvency level, the market share and the underwriting results. Resulting premium Nash equilibria are discussed and numerically illustrated.

Moderator: Benoit Carrier, Managing Director, Aon Benfield  
Panelists: M. Martin Boyer, Professor, HEC Montréal  
Christophe Dutang, Assistant Professor, Université du Maine

## **WEDNESDAY, NOVEMBER 6, 2013**

**10:00 a.m. – 11:30 a.m.**

## **G-4: The Impact of Health Care Reform**

### **Meeting Room: Minneapolis Grand Ballroom Salon ABC**

*This session is recorded.*

At this health care reform session, panelists will discuss the perceived implications of the Patient Protection and Affordable Care Act (PPACA) across a broad spectrum of insurance providers and purchasers. The panel will convey how medical professional liability industry trends preceding PPACA and the implementation of PPACA may affect workers’ compensation coverage, the role and relevance of PIAA companies, and self-insurance program considerations for large health systems.

Moderator: Arthur Randolph, Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Panelists: Heather McClure, Executive Director of Operations, University of Oklahoma  
John Mize, President & CEO, State Volunteer Mutual Insurance Company  
Kevin Dyke, Chief Actuary, Michigan Department of Insurance and Financial Services



# SPOUSE/GUEST PROGRAM

## Sunday, November 3, 2013

4:00 p.m. – 6:30 p.m.	Registration .....	Red Wing Room
5:00 p.m. – 6:30 p.m.	Recognition Reception for New Associates and their Spouses/Guests .....	The Gallery, Lobby Level
6:30 p.m. – 7:30 p.m.	Welcome Reception & Exhibits .....	Minneapolis Grand Ballroom Foyer

## Monday, November 4, 2013

7:00 a.m. – 5:00 p.m.	Registration .....	Red Wing Room
7:00 a.m. – 9:00 a.m.	Continental Breakfast .....	Minneapolis Grand Ballroom Foyer
8:00 a.m. – 8:45 a.m.	Celebration of New Members .....	Minneapolis Grand Ballroom Salon ABC
5:30 p.m. – 6:30 p.m.	Officers' Reception for New Fellows and their Spouses/Guests .....	The Gallery, Lobby Level

*Remainder of evening is yours to enjoy*

## Tuesday, November 5, 2013

7:00 a.m. – 9:00 a.m.	Continental Breakfast .....	Minneapolis Grand Ballroom Foyer
6:30 p.m. – 10:30 p.m.	Tuesday Evening Event .....	Nickelodeon Universe at Mall of America

Buses depart 11th Street hotel entrance beginning at 6:30 and run in a continuous loop through the evening.

## Tuesday Evening Event at Nickelodeon Universe at Mall of America

Change into casual clothes and join fellow Annual Meeting attendees for a takeover of the Mall of America's theme park: Nickelodeon Universe! Buses will depart the Minneapolis Hilton from the 11th Street entrance beginning at 6:30 p.m. and run in a continuous loop throughout the evening. Upon arrival to the Mall of America, guests will be directed to Nickelodeon Universe to enjoy beverages and hors d'oeuvres while overlooking the park from the Great Room and Terrace. At 7:30 p.m., the park reopens just for Annual Meeting guests when the rides restart and dinner will be served on The Patio.

If you wish to head over to the Mall of America early, there is a Light Rail that runs from downtown Minneapolis to the Mall. Nicollet Mall stop is between Nicollet and Marquette Avenues and is about 6 blocks from the hotel on the blue line. The blue line ends at the Mall of America. Guests arriving on their own may join the group in the Great Room at 7:00 p.m., or directly into the park by way of the West Entrance (next to PEEPS & Company) starting at 7:30 p.m. While there are other entrances to the park, Annual Meeting guests arriving as individuals should approach the West Entrance to receive access.

Helpful links:

Nickelodeon Universe: <http://nickelodeonuniverse.com/>

Mall of America: <http://www.mallofamerica.com/>

Light Rail: <http://www.metrotransit.org/metro-blue-line>

## Wednesday, November 6, 2013

7:00 a.m. – 9:00 a.m.	Continental Breakfast .....	Minneapolis Grand Ballroom Foyer
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# PERSONAL ATTENDANCE RECORD

The Casualty Actuarial Society (CAS) designates this educational activity for a maximum of 16.8 CE Credits. Participants should claim credit commensurate with the extent of their participation in the activity. It is an actuary's responsibility to make a reasonable, good-faith determination of what CE opportunities will enhance his or her ability to practice in a desired field. CAS members earn 1 CE Credit per 50 minutes of educational session time, not to include breaks or lunch.

	Day	Start Time	Attended
<b>Featured Speaker (earn up to 1.0 CE )</b>			
Stephen Dubner	M	11:30 a.m.	_____
<b>General Sessions (earn up to 1.8 CE per General Session)</b>			
G-1 * Cycle Management: Theory and Practice (up to 1.4)	M	9:00 a.m.	_____
G-2 * Is Your Usage-Based Insurance Program Succeeding?	T	1:30 p.m.	_____
G-3 Recent Extreme Weather Events: Unusual or Unprecedented?	T	1:30 p.m.	_____
G-4 * The Impact of Health Care Reform	W	10:00 a.m.	_____
<b>Concurrent Sessions (earn up to 1.8 CE per Concurrent Session)</b>			
C-1 * 2011 Thai Floods: Impact and Lessons Learned for Japanese Non-Life Insurers	M	1:30 p.m.	_____
C-2 Advances in Predictive Crime Risk Analytics for Ratemaking and Fraud	T	10:00 a.m.	_____
C-3 * Allocating Economic Capital to Drive Business Decisions	M	3:30 p.m.	_____
C-4 * Autonomous Vehicles and the Impact on the Insurance Industry	T	8:00 a.m.	_____
	W	8:00 a.m.	_____
C-5 * Avoiding Knee Jerk Reactions to Short Term Natural Catastrophes	M	3:30 p.m.	_____
C-6 * Balancing Work and Home Life	M	3:30 p.m.	_____
C-7 * Brace Yourself for Direct Sales to Small-business Insurance Consumers!	M	1:30 p.m.	_____
C-8 * Calibration of Non-Life Underwriting Risk Charges and Dependency Structure from U.S. "Annual Statement" Data with Applications to Risk-Based Capital (Standard Formulas), ORSA and ERM	T	8:00 a.m.	_____
C-9 Catastrophe Reinsurance - Traditional vs. Collateralized vs. Cat Bonds	M	3:30 p.m.	_____
C-10 The Challenges of Usage-Based Insurance Analytics	T	8:00 a.m.	_____
C-11 * The Continuously Evolving Examination Process	T	8:00 a.m.	_____
C-12 * Creative Approaches to Managing Change	M	1:30 p.m.	_____
	T	10:00 a.m.	_____
C-13 * Credit Risk Special Interest Section	M	1:30 p.m.	_____
C-14 * Economic Scenario Generators: Usage and Trends in the P&C Industry	M	1:30 p.m.	_____
	T	8:00 a.m.	_____
C-15 * Emerging Homeowners and Personal Auto Exposures	M	3:30 p.m.	_____
	T	10:00 a.m.	_____
C-16 Exploring Ranges of Ultimates and Reserves and Their Relationship to Loss Emergence Patterns	T	8:00 a.m.	_____

\* These sessions will be recorded.

# PERSONAL ATTENDANCE RECORD

	Day	Start Time	Attended
C-17* How Oil Limits and Related Interest Rates Can Be Expected to Affect Insurers	T	10:00 a.m.	_____
	W	8:00 a.m.	_____
C-18* IAA Risk Adjustment Monograph	W	8:00 a.m.	_____
C-19* Topics in Commercial Auto Modeling	T	10:00 a.m.	_____
C-20* An Introduction to Predictive Modeling	M	1:30 p.m.	_____
C-21 Lights! Camera! Professionalism!	M	1:30 p.m.	_____
	T	10:00 a.m.	_____
C-22* The Need for Speed - Analytics Data Marts	W	8:00 a.m.	_____
C-23* Topics in Personal Lines Modeling	M	3:30 p.m.	_____
C-24 Professionalism, Qualification Standards, Continuing Education & Recordkeeping	M	3:30 p.m.	_____
C-25 The Path to a Successful Implementation of Price Optimization in North America	M	3:30 p.m.	_____
C-26 Understanding Customers and Agents' Behavior and Their Impact on P&C Insurance Companies' Performance	M	1:30 p.m.	_____
C-27* University Engagement: Building the Pipeline of Future CAS Members	M	3:30 p.m.	_____
C-28* Update on Responses to IASB and FASB Exposure Drafts on Financial Reporting Standards for Insurance Contracts	T	8:00 a.m.	_____
-- Roundtable Discussions (up to 1.2 CE)	T	3:15 p.m.	_____

## Research Paper Presentations (earn up to 1.8 CE per Concurrent Session)

P-1* Non-Technical Reserves Call Paper Program Session 1 - Workers Compensation Papers	M	1:30 p.m.	_____
P-2* Non-Technical Reserves Call Paper Program Session 2 - Industry Reserving Papers	T	10:00 a.m.	_____
P-3* Non-Technical Reserves Call Paper Program Session 3 - Estimation Methodology Papers	W	8:00 a.m.	_____
P-4* ARIA Prize-Winning Paper Presentation and 2013 Hachemeister Prize Presentation	W	8:00 a.m.	_____
P-5* Variance Papers: Capital Tranching and Sufficient Initial Capital	T	8:00 a.m.	_____
P-6* Variance Papers: Reinsurance Credit Risk	T	10:00 a.m.	_____

\* These sessions will be recorded.

# 2013 ANNUAL MEETING SCHEDULE

## Sunday, November 3, 2013

4:00 p.m. – 6:30 p.m.	Registration .....	Red Wing Room
4:00 p.m. – 6:30 p.m.	Speaker Ready Room.....	Directors Row 2
5:00 p.m. – 6:30 p.m.	Recognition Reception for New Associates and their Spouses/Guests .....	The Gallery, Lobby Level
6:30 p.m. – 7:30 p.m.	Welcome Reception & Exhibits .....	Minneapolis Grand Ballroom Foyer
	Sponsored by Red Mountain Technologies	

## Monday, November 4, 2013

7:00 a.m. – 5:00 p.m.	Registration .....	Red Wing Room
7:00 a.m. – 9:00 a.m.	Continental Breakfast & Exhibits.....	Minneapolis Grand Ballroom Foyer
	Sponsored by Gross Consulting	
7:00 a.m. – 12:00 p.m.	Speaker Ready Room.....	Directors Row 2
8:00 a.m. – 8:45 a.m.	Celebration of New Members .....	Minneapolis Grand Ballroom Salon ABC
8:45 a.m. – 9:00 a.m.	Refreshment Break .....	Minneapolis Grand Ballroom Foyer
9:00 a.m. – 10:15 a.m.	<b>General Session:</b>	
	G-1: Cycle Management: Theory and Practice.....	Minneapolis Grand Ballroom Salon ABC
10:15 a.m. – 10:30 a.m.	Networking Break .....	Minneapolis Grand Ballroom Foyer
10:30 a.m. – 11:15 a.m.	Business Session .....	Minneapolis Grand Ballroom Salon ABC
11:30 a.m. – 1:30 p.m.	American Academy of Actuaries Annual Meeting and Awards Luncheon with Featured Speaker Stephen Dubner .....	Minneapolis Grand Ballroom Salon DEFG
1:30 p.m. – 3:00 p.m.	<b>Concurrent Session 1</b>	

Marquette I	Marquette II	Marquette III	Marquette IV	Marquette V
P-1: Non-Technical Reserves Call Paper Program Session 1 - Workers Compensation Papers	C-12: Creative Approaches to Managing Change	C-21: Lights! Camera! Professionalism!	C-7: Brace Yourself for Direct Sales to Small-business Insurance Consumers!	C-20: An Introduction to Predictive Modeling

Marquette VI	Marquette VII	Marquette VIII	Marquette IX
C-13: Credit Risk Special Interest Section	C-26: Understanding Customers and Agents' Behavior and Their Impact on P&C Insurance Companies' Performance	C-14: Economic Scenario Generators: Usage and Trends in the P&C Industry	C-1: 2011 Thai Floods: Impact and Lessons Learned for Japanese Non-Life Insurers

3:00 p.m. – 3:30 p.m.	Networking & Refreshment Break with Exhibitors.....	Minneapolis Grand Ballroom Foyer
3:30 p.m. – 5:00 p.m.	<b>Concurrent Session 2</b>	

Marquette I	Marquette II	Marquette III	Marquette IV	Marquette V
C-27: University Engagement: Building the Pipeline of Future CAS Members	C-25: The Path to a Successful Implementation of Price Optimization in North America	C-24: Professionalism, Qualification Standards, Continuing Education & Recordkeeping	C-23: Topics in Personal Lines Modeling	C-3: Allocating Economic Capital to Drive Business Decisions

Marquette VI	Marquette VII	Marquette VIII	Marquette IX
C-6: Balancing Work and Home Life	C-9: Catastrophe Reinsurance - Traditional vs Collateralized vs Cat Bonds	C-15: Emerging Homeowners and Personal Auto Exposures:	C-5: Avoiding Knee Jerk Reactions to Short Term Natural Catastrophes

# 2013 ANNUAL MEETING SCHEDULE

4:00 p.m. – 5:30 p.m. Speaker Ready Room..... Directors Row 2  
 5:30 p.m. – 6:30 p.m. Reception for New Fellows and their Spouses/Guests ..... The Gallery, Lobby Level  
*Remainder of evening is yours to enjoy.*

## Tuesday, November 5, 2013

7:00 a.m. – 2:00 p.m. Registration .....Red Wing Room  
 7:00 a.m. – 8:00 a.m. CAS Town Hall ..... Minneapolis Grand Ballroom Salon EFG  
 7:00 a.m. – 9:00 a.m. Continental Breakfast & Exhibits .....Minneapolis Grand Ballroom Foyer  
 8:00 a.m. – 9:30 a.m. **Concurrent Session 3**

Marquette I	Marquette II	Marquette III	Marquette IV
P-5: <i>Variance Papers: Capital Tranching and Sufficient Initial Capital</i>	C-8: Calibration of Non-Life Underwriting Risk Charges and Dependency Structure from U.S. “Annual Statement” Data with Applications to Risk-Based Capital (Standard Formulas), ORSA and ERM	C-16: Exploring Ranges of Ultimates and Reserves and Their Relationship to Loss Emergence Patterns	C-28: Update on Responses to IASB and FASB Exposure Drafts on Financial Reporting Standards for Insurance Contracts

Marquette V	Marquette VI	Marquette VII	Marquette VIII
C-14: Economic Scenario Generators: Usage and Trends in the P&C Industry	C-4: Autonomous Vehicles and the Impact on the Insurance Industry	C-10: The Challenges of UBI Analytics	C-11: The Continuously Evolving Examination Process

9:30 a.m. – 10:00 a.m. Networking & Refreshment Break with Exhibitors.....Minneapolis Grand Ballroom Foyer  
 10:00 a.m. – 11:30 a.m. **Concurrent Session 4**

Marquette I	Marquette II	Marquette III	Marquette IV
P-6: <i>Variance Papers: Reinsurance Credit Risk</i>	P-2: Non-Technical Reserves Call Paper Program Session 2 - Industry Reserving Papers	C-12: Creative Approaches to Managing Change	C-19: Topics in Commercial Auto Modeling

Marquette V	Marquette VI	Marquette VII	Marquette VIII
C-15: Emerging Homeowners and Personal Auto Exposures	C-2: Advances in Predictive Crime Risk Analytics for Ratemaking and Fraud	C-21: Lights! Camera! Professionalism!	C-17: How Oil Limits and Related Interest Rates Can Be Expected to Affect Insurers

11:00 a.m. – 1:00 p.m. Speaker Ready Room..... Directors Row 2  
 11:30 a.m. – 1:30 p.m. Lunch on Your Own  
 1:30 p.m. – 3:00 p.m. **General Session: G-2: Is Your Usage-Based Insurance Program Succeeding?** ..... Minneapolis Grand Ballroom Salon ABC  
**General Session: G-3: Recent Extreme Weather Events: Unusual or Unprecedented?**.....Minneapolis Grand Ballroom Salon D  
 3:00 p.m. – 4:30 p.m. Speaker Ready Room..... Directors Row 2

# 2013 ANNUAL MEETING SCHEDULE

3:15 p.m. – 4:15 p.m.	<p>Roundtable Discussions (OPTIONAL)</p> <p>Roundtable 1 – Advancing Your Actuarial Career through the CAS: The New Associate Perspective..... Marquette I</p> <p>Roundtable 2 – Usage-Based Insurance ..... Marquette II</p> <p>Roundtable 3 – Autonomous Vehicles ..... Marquette III</p> <p>Roundtable 4 – Oil and Insurance.....Marquette IV</p> <p>Roundtable 5 – How to Weather the New Normal of Natural Catastrophe Losses..... Marquette V</p> <p>Roundtable 6 – Validating a Predictive Model ..... Marquette VI</p> <p>Roundtable 7 – Managing the IT Relationship..... Marquette VII</p> <p>Roundtable 8 – Price Optimization ..... Marquette VIII</p> <p>Roundtable 9 – Actuaries as Entrepreneurs ..... Marquette IX</p>
6:30 p.m. – 10:30 p.m.	<p>Tuesday Evening Event.....Nickelodeon Universe at Mall of America</p> <p>For transportation information, please refer to page 34 of onsite program.</p>

## Wednesday, November 6, 2013

7:00 a.m. – 11:45 a.m.	Registration.....Red Wing Room
7:00 a.m. – 8:00 a.m.	CAS & You Continental Breakfast for New Fellows .....Symphony III/IV (2nd Floor)
7:00 a.m. – 9:00 a.m.	Continental Breakfast & Exhibits.....Minneapolis Grand Ballroom Foyer
8:00 a.m. – 9:30 a.m.	<b>Concurrent Session 5</b>

Marquette I	Marquette II	Marquette III
P-3: Non-Technical Reserves Call Paper Program Session 3 - Estimation Methodology Papers	C-22: The Need for Speed - Analytics Data Marts	C-17: How Oil Limits and Related Interest Rates Can Be Expected to Affect Insurers
Marquette IV	Marquette V	Marquette VI
P-4: ARIA Prize-Winning Paper Presentation and 2013 Hachemeister Prize Presentation	C-18: IAA Risk Adjustment Monograph	C-4: Autonomous Vehicles and the Impact on the Insurance Industry

9:30 a.m. – 10:00 a.m.	Networking & Refreshment Break with Exhibitors.....Minneapolis Grand Ballroom Foyer
10:00 a.m. – 11:30 a.m.	<p><b>General Session: G-4: The Impact of</b></p> <p>Health Care Reform ..... Minneapolis Grand Ballroom Salon ABC</p>
11:30 a.m. – 11:45 a.m.	Adjournment..... Minneapolis Grand Ballroom Salon ABC

Thank you for taking a few seconds to complete this evaluation of this concurrent session. Your feedback is important. You may tear out the form and leave it in the box at the back of the room or outside the door. This will be the only evaluation of these sessions. You will be emailed a more thorough evaluation online of the General Sessions and of the location and venue. IF YOU WOULD LIKE TO ENTER THE RAFFLE FOR WEDNESDAY MORNING, PLEASE WRITE YOUR NAME LEGIBLY ON THIS FORM. (The raffle is optional. You do not need to be present to win. There will be two prizes awarded.)

Session # \_\_\_\_\_ Session Title \_\_\_\_\_

Rating: 1 = Poor, 5 = Excellent

	Poor	Fair	Good	Very Good	Excellent
Please rate this session overall:	1	2	3	4	5

Please rate the speaker(s):

#1 _____	1	2	3	4	5
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#2 _____	1	2	3	4	5
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#3 _____	1	2	3	4	5
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#4 _____	1	2	3	4	5
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#5 _____	1	2	3	4	5
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If this session were turned into a webinar, would you recommend it to a colleague? (Please circle)      Yes                      No

Why or why not (please use comment field on back).

COMMENTS (ON BACK)

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Session # \_\_\_\_\_ Session Title \_\_\_\_\_

Rating: 1 = Poor, 5 = Excellent

	Poor	Fair	Good	Very Good	Excellent
Please rate this session overall:	1	2	3	4	5

Please rate the speaker(s):

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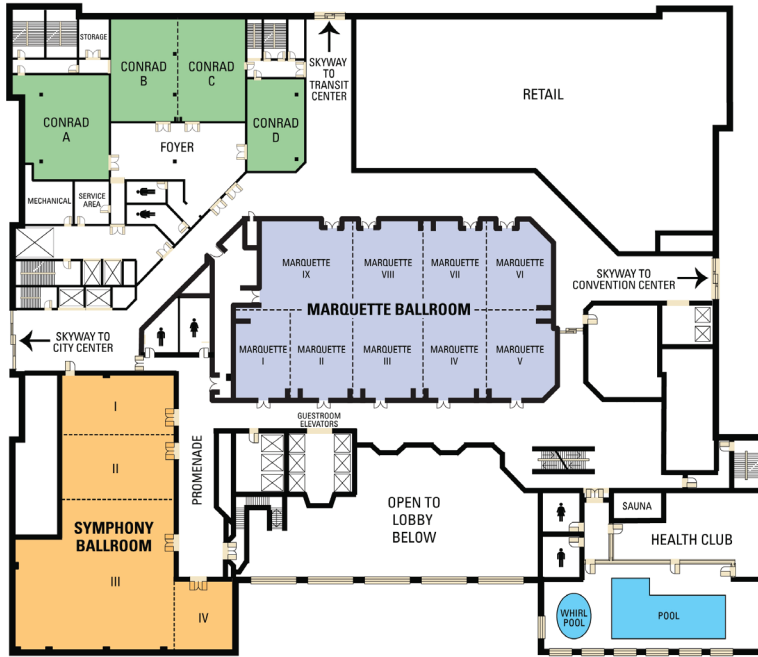
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