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C.L.R.S

September 19-21, 2022 Marriott St. Louis Grand St. Louis, Missouri

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Overview

General Information

For more information on the following, please consult the CLRS website, clrs.casact.org or the CLRS app on your smartphone.

Consent to Use of Photographic Images

Participation at CLRS constitutes an agreement by the registrant for the CAS to use photographic and other images. Please see the CLRS website (clrs.casact.org) for details.

Antitrust Notice

The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. The full CAS Antitrust Compliance Policy (https://bit.ly/3T1D4jK) clarifies prohibited activities and responsibility of all attendees.

Code of Conduct

The CAS is dedicated to providing a harassment-free conference experience for everyone. Registration and attendance at CAS meetings, seminars, webinars and other activities constitutes an agreement to our Code of Conduct. The full Code of Conduct (https://clrs.casact.org/attend#code-of-conduct-for-cas-events) clarifies prohibited activities and responsibility of all attendees.

Speaker Opinions

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

Wireless Access

Attendees of the CLRS have access to complimentary Wi-Fi throughout the hotel.

Network: 2022 CLRS Password: Galecki

Download the CAS Meeting App

More detail about the sessions and speakers is found on the CAS Meeting app. All sessions will be recorded (simultaneously audio, slides), except where indicated.





CLRS Working Group

John Wade, *Chair*Kevin Donnelly, *Vice-Chair*Laura Maxwell, *Vice-Chair*Nora Potter, *Staff Chair*Kathleen Dean, *Staff Chair*Rich Gibson, *AAA*Robert Fischer, *AAA*

Elaine Brunner	Tom Kolde
Alex Chen	Charlie Lei
Paige DeMeter	Chandu Patel
Greg Fears	Anwesha Prabhu
Luna Gu	Rick Ramotar
Lise Hasegawa	Sophia Song
Sara Hemmingson	Steve Talley
Alan Hines	Ethel Wang
Chris Holt	Sylvia Yang
Matt Killough	Rich Zarnik
Debbie King	

Key to	Comp	lexity	of S	Sessions
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No prior knowledge of the subject matter is assumed. Little or no technical content.

 $\bigcap \bigcap$ Intermediate

General knowledge of the subject matter is assumed. Moderate technical content.

 $\bigcap \bigcap \bigcap$ Advanced

Working knowledge of the subject matter is assumed. Moderate to highly technical content.

☐ Checkbox for Personal Attendance Record

Non-Recorded Session

Livestreamed Session

▲ Virtual Speakers

Schedule at a Glance

Please note that all sessions are on the 2nd Level unless otherwise noted.

Monday, Septe	ember 19	
7:00 AM - 1:30 PM	Workshop Registration*	Majestic Ballroom Foyer
7:00 AM - 8:00 AM	Workshop Breakfast*	· · · · · · · · · · · · · · · · · · ·
8:00 AM - 4:00 PM	Full-Day Workshops*	,
9:30 AM - 10:00 AM	Workshop Refreshment Break*	Majestic E
11:30 AM - 12:30 PM	Workshop Luncheon*	
12:30 PM - 4:00 PM	Afternoon Workshops*	,
2:00 PM - 2:30 PM	Workshop Refreshment Break*	Majestic E
2:30 PM - 7:00 PM	CLRS Registration	
4:15 PM - 5:30 PM	GS-1: Risk Manager Perspective —	
	Actuarial Services Beyond Loss Reserves	Majestic D
5:30 PM - 7:00 PM	Welcome Reception with Exhibits	Majestic Ballroom Foyer
Tuesday, Septe	ember 20	
7:00 AM - 6:00 PM	CLRS Registration	Registration & Office (Lobby Level)
7:00 AM - 6:00 PM	Attendee Lounge	
7:00 AM - 8:00 AM	Breakfast with Exhibits	Majestic Ballroom Foyer
7:00 AM - 7:50 AM	Breakfast Roundtable Discussions	
8:00 AM - 9:30 AM	Business Session/Featured Speaker	
	FS-1: Economic Fundamentals and P&C Insurance Performance	eMajestic D
8:15 AM - 4:00 PM	Student ProgramWe	stmoreland/ Kingsbury (Lobby Level)
9:30 AM - 10:00 AM	Refreshment Break with Exhibits	Majestic Ballroom Foyer
10:00 AM - 11:15 AM	Concurrent Sessions 1	
11:45 AM - 1:00 PM	Concurrent Sessions 2	
1:00 PM - 2:00 PM	Luncheon with Roundtable Discussions	Majestic E
2:00 PM - 3:15 PM	Concurrent Sessions 3	
3:15 PM - 3:45 PM	Refreshment Break with Exhibits	Majestic Ballroom Foyer
3:45 PM - 5:00 PM	Concurrent Sessions 4	
5:00 PM - 6:00 PM	Reception with Exhibits	Majestic Ballroom Foyer
Wednesday, Se	eptember 21	
7:00 AM - 2:00 PM	CLRS Registration	Registration & Office (Lobby Level)
7:00 AM - 2:00 PM	Attendee Lounge	
7:00 AM - 8:00 AM	Breakfast with Exhibits	Majestic Ballroom Foyer
7:00 AM - 7:50 AM	Breakfast Roundtable Discussions	
8:00 AM - 9:15 AM	Concurrent Sessions 5	
9:15 AM - 9:45 AM	Refreshment Break with Exhibits	Majestic Ballroom Foyer
9:45 AM - 11:00 AM	Concurrent Sessions 6	
11:30 AM - 12:45 PM	Concurrent Sessions 7	
11:30 AM - 12:45 PM	Speed Networking Session	Majestic A
12:45 PM - 1:30 PM	Box Lunch	
1:30 PM - 2:45 PM	GS-2: Risk is Chaos: History of Risk and Future Innovation	Majestic D

Sponsors and Exhibitors

Thank you to the 2022 Casualty Loss Reserve Seminar sponsors and exhibitors.



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TRAVELERS

WTW

Tuesday Reception Sponsor and Exhibitor

Full-Day Workshops, Monday, September 19, 8:00 a.m. - 4:00 p.m.

lue $\triangle \triangle$ WS-1: Maximizing the Value of Your Actuarial Report and Opinion

Room: Majestic A

Your actuarial opinion and reports are reviewed and analyzed for appropriateness to different stakeholders, including company management, auditors, regulators, court officials and jurors. Each group has different needs for information and you will want to be able to communicate effectively to all.

This workshop will deepen your expertise on the latest requirements for P&C Statements of Actuarial Opinions with a review of actuarial qualification standards, standards of practice and interactive case studies.

The workshop will offer attendees the opportunity to:

- Gain an understanding of regulatory/company/auditor perspectives and expectations.
- Remain up to date on the latest regulations and standards.
- Delve deeper into subjects such as RMAD, ranges, documentation, data and report writing.
- Focus on communicating effectively to various stakeholder groups.

Learning Objectives:

- 1. Develop well rounded, comprehensive, and customized Statements of Actuarial Opinion.
- 2. Broaden understanding of the different perspectives for readers of the Actuarial Report.
- 3. Eliminate common pitfalls.

Moderator/Speaker: Derek Freihaut, Principal and Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Kathleen Odomirok, Principal, EY

Speakers: Mary Frances Miller, Select Actuarial Services

Susan Gozzo Andrews, Property Casualty Actuary, State of Connecticut Insurance Dept.

Full-Day Workshops, Monday, September 19, 8:00 a.m. - 4:00 p.m.

□ △ WS-2: Reserving Boot Camp

Room: Majestic F

What better way to jump start or refresh your loss reserving skill than in this four-part loss reserving bootcamp? This series will enhance your basic and intermediate skills and prepare you for the more advanced loss reserving topics to be presented. Participants will evaluate and estimate reserves, from data organization to selecting the best estimate. Using hands-on learning, participants will work with experienced loss reserving professionals, using realistic loss and expense claims data. Sessions' goals are to build triangles; compute and select loss development factors; perform a variety of loss and loss adjustment expense reserving methods; compare the results of the various methods and their strengths and weaknesses; review additional information and take that into consideration in the methods and estimates; and make final reserve selections. This workshop is appropriate for actuaries as well as non-actuaries.

Learning Objectives:

- 1. Learn traditional reserving methods to build loss triangles, to compute loss development factors, and to "read the data" when making factor selections including tail factors.
- 2. Perform various reserving methods and to understand the limitations of those methods.
- 3. Compare and evaluate final reserve selections using sensitivity analyses.

Moderator/Speaker: Jane Taylor, Consulting Actuary, Huggins Actuarial Services, Inc.

Speakers: D. Scott Lamb, Senior Vice President, McKee Risk Management

R. Scott Cederburg, Director, BDO

Afternoon Half-Day Workshops, Monday, September 19, 12:30 - 4:00 p.m.

 \square \triangle \triangle WS-4: Loss Reserving with R

Room: Majestic H

This workshop will provide instructions to generate loss reserve estimates using R. We will talk through basic data manipulation, and exploratory data analysis. We will then fit several predictive models to aggregate triangles and talk through selection of an appropriate model. We will project estimates of ultimate loss and conclude with a discussion about using individual claims in reserving.

Attendees should have a basic understanding of R. They should have R installed and be able to install new packages. The workshop will focus on the tidyverse suite of packages, particularly ggplot2 and dplyr. The instructor cannot provide technical support. Attendees with any technical/installation concerns are encouraged to familiarize themselves with RStudio Cloud.

R Installation Microlearning Series: https://www.pathlms.com/cas/courses/9242

Learning Objectives:

- 1. Understand how aggregate loss reserving data may be stored, manipulated, and visualized.
- 2. Build a generalized linear model and assess how well it fits. Also use the ChainLadder package to build other models like the Clark growth curve model. Use those models to project ultimate losses.
- 3. Attain an introductory understanding of the data structure of individual claims. See how this may be used to form data to apply cross validation of aggregate methods.

Moderator: Chris Holt

Speaker: Brian Fannin, Research Actuary, Casualty Actuarial Society

Afternoon Half-Day Workshops, Monday, September 19, 12:30 - 4:00 p.m.

 \square \triangle \triangle WS-5: Triangles Reimagined

Room: Majestic G

This workshop will focus on the use of Actuarial Case Reserves to solve many of the problems with triangle development (changes in mix, settlement rate, and case adequacy). By using predictive modeling techniques to develop objective algorithms for these reserves, reserving triangles can be re-built to be much more reliable and transparent (think Berquist-Sherman, but with a scalpel instead of a chainsaw). While the approach makes use of individual claim development models, framing the results back into triangles provides demonstration of the resulting algorithm's effectiveness and stability. Benefits of using these algorithmic reserves extend not only to creating estimates of total reserve need, but to actuarial pricing work as well.

While the focus of this half-day workshop will be on the creation and use of Actuarial Case Reserves, we will also discuss the concept of Policy-Level IBNR reserves as an additional triangle layer, reflecting estimated not-yet-reported claims.

No prior predictive modeling experience is necessary, but there will be two hours of pre-work to maximize the effectiveness of time spent during the workshop itself. Users will be provided access to temporary Azure workstations for a week prior to the workshop until a week after the workshop so that they can continue to explore these concepts with the sample data and tools provided.

Learning Objectives:

- 1. Understand the value of using algorithmic claim-level case reserves and policy-level IBNR reserves within traditional actuarial reserving and pricing techniques.
- 2. Understand the basics of building an actuarial case reserve algorithm using detailed claim and policy data.
- 3. Understand how to apply an actuarial case reserve algorithm to historical data and to use it in actuarial practice.

Speakers: Chris Gross, CEO, Cognalysis

Steven Lacke, Consultant,

Kristan McGraw, Gross Consulting

Featured Speaker

Business Session/Featured Speaker, Tuesday, September 20, 8:00 - 9:30 a.m.

☐ FS-1: Economic Fundamentals and P&C Insurance Performance

Room: Majestic D

This session will provide an analytical framework to translate and quantify the relationship between macroeconomic fundamentals, such as GDP and CPI, and specific insurance metrics, such as premium growth and replacement costs. The presentation will be structured in four sections, looking at GDP and P&C growth, CPI and P&C replacement costs, economic and insurance metrics correlation, and P&C industry performance.

Michel Léonard, PhD, CBE

Chief Economist and Data Scientist, Head of the Economics and Analytics Department

Dr. Michel Léonard, CBE, leads the Triple-I's Economics and Analytics Department. He is responsible for providing analysis and insight on industry economics and business performance, as well as other forward-looking, data driven insurance insights.

Michel brings more than twenty years of insurance experience to Triple-I, including senior and leadership positions as Chief Economist for Trade Credit and Political Risk at Aon; Chief Economist at Jardine Lloyd Thompson; Chief Economist and Data Scientist at Alliant; and Chief Data Scientist at MaKro LLC. In these roles, he worked closely with underwriters, brokers and risk managers to model risk exposures for property-casualty and specialty lines such as credit, political risk, business interruption and cyber.

Michel also currently serves as adjunct faculty at New York University's Economics Department. Previous academic appointments include Adjunct Faculty in NYU's Center for Data Science and Adjunct Faculty at Columbia University's Data Science Institute and Statistics Department. He was the recipient of a grant from the Spencer Educational Foundation to develop a course in data analytics for insurance. In these capacities, Michel provides a key link between the Triple-I, its Non-Resident Scholars and academia.

Michel holds a Bachelors of Arts from McGill University, a Masters of Theological Studies from Harvard University, and a Masters of Arts and Doctorate of Philosophy in Political Economy from the University of Virginia, focusing on qualitative and quantitative risk modeling. He is a member of the Insurance Research Council Advisory Board., CBE, leads the Triple-I's Economics and Analytics Department. He is responsible for providing analysis and insight on industry economics and business performance, as well as other forward-looking, data driven insurance insights.

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Moderator: John Wade

Speaker: Michel Leonard, Vice President, Senior Economist and Data Scientist, The Insurance Information

Institute

General Sessions

Opening General Session, Monday, September 19, 4:15 - 5:30 p.m.

□ △ GS-1: Risk Manager Perspective – Actuarial Services Beyond Loss Reserves

Room: Majestic D

This interview with Paul Piazza - Honeywell's Corporate Risk Manager, will explore how large international corporations manage their property and casualty exposure and then discuss analytics actuaries can perform to help risk managers evaluate and mitigate these risks. This session will highlight some of the typical risk management activities underlying a successful self-insured program and it will also explore some of the relatively new and emerging risks such as covid, cyber, inflation and investment risk that companies are dealing with. Time will be available at the end of the presentation for audience comments and questions.

Paul Piazza is the Assistant Treasurer & VP of Risk Management for Honeywell International Inc., a diversified technology and manufacturing company serving customers worldwide with over 138,000 employees in over 100 countries and revenues of over \$30B. Paul manages the Corporate Risk Management Department overseeing the global property and casualty program and is the President of two captive insurers (Vermont & Bermuda). He also oversees aviation liability, nuclear liability, environmental, marine/transit coverage and the representation and warranty programs.

Moderator: Alan Hines

Speaker: Paul Piazza, Assistant Treasurer Vice President Risk Management, Honeywell International Inc.

Closing General Session, Wednesday, September 21, 1:30 - 2:45 p.m.

☐ GS-2: Risk is Chaos: History of Risk and Future Innovation

Room: Majestic D

The world of geo-spatial imagery, information, and data has grown exponentially over the past two decades including the technology used to synthesize it. In this session Andrew will take an encompassing view of how risk calculation has formed over time and where the line between future projection and current reserving estimates based off real time data is becoming more uniform. Using computer vision, chaos theory modeling, and 7 billion lines of geospatial data, kettle can get a far more accurate and better understanding of how losses will develop post event and even before.

Moderator: Steve Talley

Speaker: Andrew Engler, Co-Founder and CEO, Kettle

Roundtables, Tuesday, September 20, 7:00 - 7:50 a.m.

RT-1: A Dialogic Approach to Building Effective Meetings

Room: Majestic H

Our calendars are full of meetings- virtual, in-person, and over the phone. We spend so much of our workday in meetings, we've lost the time to strategize, brainstorm, and get creative with our workload. I've studied more effective ways to build meetings that pave the way for true dialogue and discussion. Sometimes this means less time in the zoom room, and more time brainstorming.

Facilitator4: Hannah Haley, Marketing Manager, Oliver Wyman Actuarial

Roundtables, Tuesday, September 20, 7:00 - 7:50 a.m.

☐ RT-11: Professionalism Case Studies

Room: Majestic F

Roundtable to discuss professionalism situations that arise in every day practice and how to address them. Please come willing to share from your own experience (leaving names and specifics behind) and eager to participate in an active and lively conversation.

Facilitator: Rachel Dolsky, Director, KPMG, LLP

Roundtables, Tuesday, September 20, 7:00 - 7:50 a.m.

☐ RT-3: Captive Reserving

Room: Majestic G

This session will examine the unique challenges often faced by actuaries when performing loss reserve analyses for captive insurance companies. Topics may include dealing with limited claims data, selecting the most appropriate benchmarks, differences in captive accounting rules and financial statement formats, many other considerations the opining actuary may face.

Facilitator: Robert Walling, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Roundtables, Tuesday, September 20, 7:00 - 7:50 a.m.

□ ∩ RT-4: Chat with the CAS Staff Actuaries

Room: Majestic BC

This session will give attendees a chance to discuss current CAS topics, including recent CAS research, upcoming changes to admission and exams, and other other topic the wish to discuss.

Facilitators: Kendall Williams, Staff Actuary, Casualty Actuarial Society

Brian Fannin, Research Actuary, Casualty Actuarial Society

Roundtables, Tuesday, September 20, 7:00 - 7:50 a.m.

☐ RT-7: Everything is Automated ... Now What Do I Do?

Room: Majestic A

Automation promises to do the mundane tasks so that Actuaries can tackle the 'value add' (or more interesting) tasks. Where has it failed us? Where has it surpassed expectations? Where have we failed to deploy automation to advantage?

Facilitator:

Timothy Pratt, Liberty Mutual Insurance

Luncheon with Roundtables, Tuesday, September 20, 1:00 - 2:00 p.m.

☐ RT-14: Warranty and Extended Service Contracts

Room: Majestic E - Lunch Roundtable 5

This roundtable will be a discussion on warranty and extended service contracts.

Facilitator:

Chris Holt, Actuary, Alfa Mutual Insurance Company

Luncheon with Roundtables, Tuesday, September 20, 1:00 - 2:00 p.m.

☐ RT-5: Deviation from the Norm!

Room: Majestic E - Lunch Roundtable 1

Actuaries are required to document their assumptions and methodologies in their actuarial reports per the Actuarial Standards of Practice. This session will inspire discussions on best practices for documenting and disclosing deviation from traditional methodologies as well as changes from prior analyses. Given perils such as COVID and wildfires, we expect a high level of engagement on contemporary issues.

Facilitator:

Erich Brandt, Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Luncheon with Roundtables, Tuesday, September 20, 1:00 - 2:00 p.m.

□ RT-6: Emerging Mass Torts

Room: Majestic E - Lunch Roundtable 3

Join us to discuss the latest in emerging mass torts, anything ranging from PFAS to opioids, or thoughts on what will be next is open for conversation in this roundtable discussion.

Facilitator:

Dawn Fowle, Senior Manager, EY

Luncheon with Roundtables, Tuesday, September 20, 1:00 - 2:00 p.m.

☐ RT-8: International Reinsurance

Room: Majestic E - Lunch Roundtable 2

Current topics in international reinsurance reserving.

Facilitator: Stephen Talley, Lead Actuary - Legacy Pricing, Randall & Quilter Investment Holdings Ltd

Luncheon with Roundtables, Tuesday, September 20, 1:00 - 2:00 p.m.

☐ RT-9: Michigan Auto

Room: Majestic E - Lunch Roundtable 4

The changes to Michigan PIP have led to new requirements from the Michigan regulator. For year-end 2021, a Michigan Appendix to the actuarial report for the Statement of Actuarial Opinion was required. Additionally, filing requirements for auto rate revisions referred back to the Michigan Appendix. In this roundtable, reserving actuaries will discuss best practices in completing these requirements.

Facilitator: Lise Hasegawa, Head of Actuarial Reserving - FWS, Farmers Insurance Group

Roundtables, Wednesday, September 21, 7:00 - 7:50 a.m.

 \square \triangle \triangle \triangle RT-12: Professionalism Implications of Peer Review

Room: Majestic F

This roundtable is intended for seasoned, experienced Peer Reviewers. Our focus will be on professionalism aspects and responsibilities that are inherent to a professional peer review, and not "how to" checklists. CAS and AAA literature does not dive deep into this topic, and we are all left with the common situation of determining for ourselves whether or not we are meeting professional perceptions, guidelines, expectations, and our own comfort levels.

We will have a couple of warm-up scenarios to get the juices flowing. From there, focus questions/topics might include:

What qualifications should the Peer Reviewer meet?

Who is the intended recipient? To what extent does the Principal benefit from the peer review?

When should the Peer Reviewer also be signing the Report?

To what extent can the actuary rely on the peer review?

Does an informal discussion constitute a peer review?

When something goes wrong, what is the Peer Reviewer responsible for?

What complications or enhancements to professionalism issues have been brought about by the virtual work environment?

Facilitator: John Wade, Chair, CLRS Working Group

Roundtables, Wednesday, September 21, 7:00 - 7:50 a.m.

☐ RT-13: Understanding Reserving Through Behavioral Approaches

Room: Majestic BC

This roundtable discussion centers on the paper "A Behavioral Approach to Understanding Loss Reserves" for the CAS Committee on Reserving, Call For Papers, authored by Uri Korn. From the Abstract: "This paper takes a deep dive into historical loss reserves. Using Schedule P company filings, it is shown that reserves are very slow to react to emerging losses, much slower than the most accurate approach would dictate. There are other concerns besides for accuracy, such as stability and avoiding deficient reserves. But attempting to explain the discrepancy in this manner alone would require a level of risk aversion that is unrealistic. Instead, it is shown that the corporate environment causes increased conservatism, and when coupled with narrow framing is able to explain company practice." With the increasing focus on Bias with Continuing Education, this is a great opportunity to merge actuarial and statistical concepts with bias considerations, which should lead to a lively interactive dialogue.

Facilitator: George Levine, Director, KPMG, LLP

Roundtables, Wednesday, September 21, 7:00 - 7:50 a.m.

☐ RT-15: Workers' Compensation

Room: Majestic H

Current events impacting Workers Compensation.

Facilitator: Timothy Mosler, Pinnacle Actuarial Resources, Inc.

Roundtables, Wednesday, September 21, 7:00 - 7:50 a.m.

☐ RT-2: Ask a Regulator

Room: Majestic G

Curious what a regulatory actuary's work is like? Rate review, financial exams, model reviews, NAIC committees and more. Stop by for breakfast and we'll discuss what you'd like to know and NAIC topics you may want more information about.

Facilitator: Susan Gozzo Andrews, Property Casualty Actuary, State of Connecticut Insurance Dept.

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

☐ RT-10: New Development in the Sharing Economy with a Focus on RV Sharing

Room: Majestic A

The hosts will discuss a few new entrants in the Sharing Economy space. The hosts will also discuss program structure and necessary data to develop a robust reserving process. The participants are invited to be part of the conversation and bring their own examples on various Sharing Economy programs or reserving techniques.

Facilitators: François Morissette, Partner, S & F Actuarial Consultants

Yuanshen Zhu, Actuarial Supervisor, Capital Insurance Group

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

☐ SN-1: Speed Networking Session

Room: Majestic A

Are you ready for a highly engaging and fun speed networking activity? Sharpen your soft skills, connect with other CLRS attendees, and get CE credit, all while being challenged by a clock! Everyone will be broken into small groups, given a chance to respond to prompts at each table, then rotate between tables after a timer buzzes. This event will keep you on your toes and provide an opportunity to interact with colleagues in a dynamic way.

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

 $lue{}$ $\triangle \triangle$ LOB-3: Modern Strategies to Handle Legacy Claims

Room: Majestic H

Latent exposures continue to give rise to claim activity, and legacy claims such as asbestos, black lung, glyphosate, talc, sexual misconduct, opioid usage, amongst others still burden the industry. Corporations are looking to transfer these legacy risks to mitigate the unknown and provide balance sheet stability. On the other side of the market, there are many new and established entrants ready to acquire runoff liabilities to employ improved claims management strategies and creative deal structures that can lead to long-term investment gains.

Legacy claim transactions often prove to be valuable for both parties. Quantification of latent liabilities requires non-standard actuarial methods and experts who can interpret underlying characteristics of the book. Sellers typically do not possess this specialized expertise or latent claims are only a small portion of the overall balance sheet liabilities. Meanwhile, some acquirers solely handle run-off liabilities or have experts who work with these types of claims every day. This creates an advantageous partnership that motivates both sides to work towards a mutually beneficial transaction.

The legacy markets are currently extremely active due to the:

- Interest rate environment
- Number of new buyers entering market
- · Large corporates looking for legacy risk resolutions

Dealing with latent liabilities can sometimes be a daunting task and many don't know where to start. The goal of this session is to mitigate those concerns by providing important background on this ever-growing market, including the types of major players, primary considerations before approaching a transaction, and a brief overview of several of the solutions available for companies to more effectively manage or transfer their legacy exposures.

Learning Objectives:

- 1. Run-Off basics.
- 2. What types of firms are active in this space and what do some of the solutions look like?
- 3. Role of the Actuary

Moderator/Speaker: Rita Zona, Head of APH Reserving, Enstar Insurance Group

Speaker: Travis Grulkowski, Consulting Actuary, Milliman

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

 \square LOB-6: The Road to Vehicle Automation from an Insurance Perspective

Majestic BC

IIHS-HLDI researchers have recently completed groundbreaking research that significantly expands our understanding of the impact of advanced driver assistance systems (ADAS) and driving automation on highway safety and auto insurance. Currently, the most advanced vehicles for sale in the US have Level 2 automation, but the effect on claim frequency is mixed for these systems. The impact of these systems on repair costs and collision claim severities is complex. The enabling sensors can be expensive when damaged becasuse in addition to being replaced, they often need to be recalibrated. However, a deep look at the affected claims has revealed that at least some of the changes in claim severities are due to mean shifting related to the operational speeds of the systems. Finally, the variability in effectiveness of advanced driver assistance systems by vehicle age, driver age, mileage, and registered vehicle density will be examined.

Learning Objectives:

- 1. Differentiate between different levels of automation and the insurance loss results associated with these technologies, as well as understand the types of crashes that automation can and cannot prevent.
- 2. Assess collision and PDL severities for different technologies to determine if they are caused by the technology itself or a shifting of the average.
- 3. Recognize that insurance loss results for advanced driver assistance systems vary by vehicle age, driver age, mileage, and registered vehicle density.

Moderator: Elaine Brunner

Speakers: Kay Wakeman, Director of Insurance Outreach, IIHS-HLDI

Matthew Moore, Senior Vice President, Highway Loss Data Institute

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

□ △ LOB-7: Unpacking Title Insurance - Past, Present ... and What's Next?

Room: Majestic A

The title insurance market, a large component of the property and casualty market, grew at unprecedented levels in 2020 and 2021. And, although homeowners are required to secure title insurance as a requisite to home purchase, few understand title insurance or its policy provisions. Pinnacle Principal and Consulting Actuary Art Randolph, Consulting Actuary Chris Schubert and Associate Actuary Matt Meade will explore the historical financial results of the industry and investigate correlations between title underwriting experience and broad economic metrics. The session will also consider how the title industry may be impacted by the COVID-19 pandemic, inflation and InsurTech competitors.

Learning Objectives:

- 1. Understand the differences between title insurance and P&C insurance coverages.
- 2. Learn how macroeconomic forces have historically impacted the title market and understand how recent changes in the housing market and the economy (inflation) are impacting the title market.
- 3. Investigate how insurtech can potentially disrupt the title industry.

Moderator: Laura Maxwell

Speakers: Arthur Randolph, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Chris Schubert, Consulting Actuary, Pinnacle Actuarial Resources, Inc. Matthew Meade, Associate Actuary, Pinnacle Actuarial Resources, Inc.

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

 \square \cap PD-4: The Actuary as an Expert Witness

Room: Majestic F

One of the most challenging roles an actuary can take on is that of an expert witness. The level of precision required and the contentious nature of most hearings and trials increase the scrutiny of the actuarial work product and of the oral testimony. This session will discuss the variety of types of expert witness, the phases of a trial, and provide some advice for actuaries in expert witness situations. These tips are based on professional guidance and years of experience as experts.

This session will have a virtual speaker.

Learning Objectives:

- 1. Present background on the types of expert witness situations and typical phases of cases.
- 2. Discuss professional guidance assisting experts.
- 3. Provide experience-based advice for actuarial experts.

Moderator/Speaker: Robert Walling, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Speakers: Bob Miccolis (Virtual Speaker), Managing Principal, Miccolis Consulting LLC

Steve Kinion, Captive Insurance Director, Delaware Insurance Department

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

 \square $\triangle \triangle$ RM-3: Reserving Methodologies to Account for Inflation

Room: Majestic D

The presentation will discuss recent economic drivers of inflation, including major inflation indices. Along with this, we will discuss key considerations when estimating the relationship between economic inflation and claims inflation, discussing inflation series, coverages, limits, and attachments. Additionally, we will discuss how to amend traditional methods to adjust for historic and future claims inflation, both deterministically and stochastically and use the Fischer-Lange Method to reflect specific inflation scenarios.

Learning Objectives:

- 1. Amend traditional methods to adjust for historic and future claims inflation, both deterministically and stochastically.
- 2. Identify key considerations when estimating the relationship between economic inflation and claims inflation.
- 3. Use the Fischer-Lange method to reflect specific inflation scenarios

Moderator: Chandu Patel

Speakers: Ashley Wohler, Director, WTW

Jonathan Sappington, Consultant, WTW

Concurrent Sessions 1, Tuesday, September 20, 10:00 - 11:15 a.m.

 \square \triangle ST-4: How to Hybrid

Room: Majestic G

A Gallop poll indicated that 53% of companies will use a hybrid work approach in 2022 and beyond, while 24% expect to be exclusively remote and 23% exclusively on-site. How are insurers stacking up and what does that mean for reserving teams? During this panel discussion you'll hear from industry peers about their specific approaches – both via the moderated panel discussion and audience polls, with a focus on technology as an enabler.

Learning Objectives:

- 1. Discuss potential solutions to the challenges presented by remote/hybrid working.
- 2. Understand how technology's benefits are more critical in remote/hybrid environments.
- 3. Benefit from the experiences of peers.

Moderator/Speaker: Tina Gwilliam, Senior Director, WTW

Speakers: Simon Day, Senior Vice President & Chief Actuary, AEGIS Insurance Services

Kristen Bessette, Chief Actuary, Data, & Analytics Officer, QBE North America

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square $\triangle \triangle$ AR-1: Disrupting the Actuarial Function?

Room: Majestic G

Business news headlines proclaim how new breeds of companies, e.g., Uber and AirBnB, have been disrupting industries, e.g., transportation and hospitality, that have been around for decades. The easy path for actuaries is to just remain steadfast in the belief that this type of disruption is not possible for the actuarial function, just like executives in the transportation and hospitality industries did in the early days of these startups, but is it the right path? Actuaries have already been under pressure to reduce costs while increasing productivity, so in this session we will explore ways actuaries can use current models to increase productivity and add more value.

Learning Objectives:

- 1. Demonstrate the benefits of using stochastic back-testing.
- 2. Manage actuarial resources more efficiently.
- 3. Expand the effectiveness of enterprise risk management.

Moderator: Kevin Donnelly

Speaker: Mark Shapland, Associate Actuary, Auto Club Group

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square $\triangle \triangle$ FR-4: Perspectives From Chief Reserving Actuaries

Room: Majestic D

Practicing actuaries aren't always privy to the big picture. The session will focus on the results of WTW's survey of chief reserving actuaries.

Learning Objectives:

- 1. Discuss the changes in chief actuaries' priorities over recent years.
- 2. Describe the key challenges that chief actuaries are preparing for in the upcoming years.
- 3. Interpret recent trends in M&A activity.

Moderator: Anwesha Prabhu

Speaker(s): Daniel Nishimura, Manager, WTW

Lise Hasegawa, Head of Actuarial Reserving - FWS, Farmers Insurance Group

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square \cap PD-2: Coffee Klatch for Opinion Writers

Room: Majestic BC

So, you have a few questions about your upcoming or recent opinion. You probably won't find a better place to get your answers than this session. Or maybe you have resolved an interesting issue in your opinion. Come and share your knowledge and help your fellow practitioners avoid similar problems. Need help making a better presentation to your board or senior management? These panelists are sure to have helpful insight, along with your fellow attendees. The same can be said about interacting with regulators, auditors and even lawyers. Bring your questions and take advantage of the collective experience that will be in this session.

Learning Objectives:

- 1. Address specific areas of concern of the audience pertaining to the scope and disclosures of the Actuarial Opinion.
- 2. Open the eyes of attendees to issues faced by peers so attendees can consider if they are facing similar issues or share possible solutions.
- 3. Learn of changes to NAIC 2022 requirements.

Moderator: John Wade

Speakers: Kathleen Odomirok, Principal, EY

Derek Freihaut, Principal and Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Julie Lederer, Property & Casualty Actuary, Missouri Department of Commerce and Insurance

Margaret Tiller Sherwood, President, Tiller Consulting Group, Inc.

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square \cap RM-1: Can't Stand the Heat: Climate Change, Measuring Physical Risk and Financial Disclosures

Room: Majestic F

With climate risk rising and attention to climate risk by policymakers, regulators and companies rising even faster, this panel will examine risk management issues related to climate change from three angles:

First, we will examine the measurement of the changing risk, exemplified by the Actuaries Climate Index and the Actuaries Climate Risk Index measures of climate extremes. We will focus this discussion on changes being contemplated in these indices as the sponsoring actuarial associations move towards revised versions of both.

Second, we will examine climate-related financial disclosures and the opportunities they present for enhancing risk management. We will also focus on ways in which the current generation of disclosures, built around the Task Force on Climate-related Financial Disclosures (TCFD) framework, might be improved.

Finally, we will discuss both the measurement of risk and climate risk disclosures from the perspective of companies seeking to improve their risk management practices with respect to climate change.

This session will have two virtual speakers.

Learning Objectives:

- 1. Learn about the actuaries' climate indices, their history, current status and plans for future improvements.
- 2. Examine climate-related financial disclosures and potential improvements to be made in the TCFD disclosures.
- 3. Discuss the measurement of climate risk from the company perspective.

Moderator: Steven Jackson, Assistant Director for Research (Public Policy), American Academy of Actuaries

Speakers: Stephen Kolk (Virtual Speaker), President, Actuary & Data Scientist, Kolkulations LLC

Peter Ott (Virtual Speaker), Swiss Re

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square \triangle ST-5: IFRS 17: What's the Punchline?

Room: Majestic H

IFRS 17 doesn't directly impact me now, but I still need to know the punchlines - what are they?

This presentation will summarize the key methodologies and requirements under IFRS 17, which becomes effective for many internationally reporting insurers on January 1, 2023. We will then introduce the challenges, how actuaries are getting involved, and some key aspects of the emerging operational practices.

Learning Objectives:

- 1. Provide an introduction / refresher of measurement objectives within the guidance.
- 2. Introduce key challenges / interpretations of the guidance.
- 3. What is going to expected from the P&C reserving actuary.

Moderator: Chris Holt

Speakers: Armin Yousefi, Actuarial Manager, PwC

Marc Oberholtzer, Principal, PwC

Concurrent Sessions 2, Tuesday, September 20, 11:45 a.m. - 1:00 p.m.

 \square \triangle ST-6: The Russia/Ukraine Conflict's Impact on P/C (Re)Insurers and S&P's Ratings in the Sector

Room: Majestic A

This session will review S&P's current ratings outlook for the U.S. Property/Casualty and Global Reinsurance sectors, including the direct and indirect impacts of the Russia/Ukraine conflict on the earnings and capitalization of the insurers in these sectors.

Learning Objectives:

- 1. Understand the key factors and trends supporting S&P's insurer financial strength in these sectors.
- 2. Understand the key factors and trends supporting S&P's insurer credit ratings in these sectors.
- 3. Understand the S&P outlook for rating actions over the next year.

Moderator: Elaine Brunner

Speaker: John Iten, Senior Director, S&P Global Ratings

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

 \square $\triangle \triangle$ AR-3: Same Dog, New Tricks: A New Reserving Method

Room: Majestic BC

This session will dive into a new reserving method for Workers' Compensation. Existing techniques could be improved upon by relating estimated unpaid liabilities to the current closure rate position rather than being based on time/maturity. The ability to secure transaction-level payment and case reserve files, coupled with the ability to assemble summarized financial and claim count values using a programming language instead of a spreadsheet package, allows triangles to be created with closure rate on one axis vs months of development/maturity.

Learning Objectives:

- 1. Construct triangles which are independent of time/maturity.
- 2. View loss development through an alternative lens.
- 3. Estimate reserves using an alternative approach in an environment of changing claim closure rates.

Moderator: Natasha Dimitrienko

Speakers: Tad Womack, Oliver Wyman Actuarial Consulting

Jose Joaquin Camara, Oliver Wyman Actuarial Consulting

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

lue \cap FR-1: Emerging Climate Change Regulations and Disclosures

Room: Majestic A

Regulation on climate related reporting is rapidly developing both within the US and globally. During this session, we will discuss upcoming requirements that life insurers may be subject to, and provide examples of relevant global regulation. While the focus will be on US regulation, such as the guidance from the NYDFS on managing financial risk, NAIC climate risk disclosure survey, and proposed SEC guidance, this session will also provide examples of regulation in mainland Europe and the United Kingdom, where regulation around climate disclosures is more mature and may provide an example of what is to come. The session will also provide examples of ways to respond to regulation, discuss current climate disclosure frameworks such as Task Force on Climate-Related Financial Disclosures (TCFD), cover the growing expectation of climate disclosure from investors, and consider where the future of climate regulation may be heading.

Learning Objectives:

- 1. Understand the current climate change regulation requirements for insurers in the United States.
- 2. Obtain the knowledge necessary to adequately respond to climate change regulation within your business, both from a legal and regulatory perspective and from an investor demands perspective.
- 3. Gain perspective on the potential future of climate change regulation by examining other countries and current best-practice regulation frameworks.

Moderator: Alan Hines

Speakers: Maggie Brickner, Senior Associate, PwC

Hannah Clouser, Manager, PwC

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

 \square \triangle \triangle HWM-4: Workers' Compensation - Market Update

Room: Majestic F

This session will provide a current view of the US workers compensation market from various perspectives. The session will include highlights from the NCCI's Annual Issues Symposium, discussion of recent developments related to COVID-19, and recent analysis of excess loss development for workers compensation

All speakers during this session will be virtual.

Learning Objectives:

- 1. Provide highlights from NCCI's Annual Issues Symposium.
- 2. Discuss recent developments related to Covid-19.
- 3. Discuss recent analysis of excess loss development.

Moderator: John Wade

Speakers: Brett King (Virtual Speaker), Director of Actuarial Research, New York Compensation Insurance

Rating Board

Lisa Walsh (Virtual Speaker), SwissRe

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

□ △ LOB-2: Florida Homeowners: A Market in Crisis

Room: Majestic G

The Florida homeowners market is in a state of crisis after several years of worsening results. 2021 and 2022 have seen multiple insolvencies, skyrocketing rate levels and extraordinary growth in Citizens Property Insurance Corporation, the insurer of last report. This session will discuss the history of this complex and dynamic market, including reasons for the unique nature of insurers serving the market, and trends & events that have shaped the market such as: • Steady population and exposure growth • Litigation trends • Assignment of Benefits (AOB) which has impacted Florida much more than other states • The Florida Hurricane Catastrophe Fund • Growth of Citizens Property Insurance Corporation (the insurer of last resort). This session will also discuss the solutions being proposed to address the current issues and reserving considerations.

Learning Objectives:

- 1. Acquire knowledge of the Florida homeowners insurance market.
- 2. Learn how the Florida homeowners market is impacted by litigation trends and the legislative environment.
- 3. Obtain insights on how to consider the dynamics of the Florida homeowners insurance market in reserve work.

Moderator/Speaker: Trevar Withers, Director, WTW

Speakers: Klayton Southwood, Senior Director, WTW

Melissa Shelley

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

□ ∩ PD-1: ASOP 20

Room: Majestic H

Rob Walling, the head of the ad hoc committee drafting the revision of ASOP 20 on Discounting of Claim Estimates will present an overview of the key changes, comment on input received as of the session and address questions that the audience has regarding the updates to the standard.

Learning Objectives:

- 1. To present changes to ASOP 20 included in the exposure draft.
- 2. Gather input on the exposed draft.
- 3. Discuss comments previously received during the comment period.

Speaker: Robert Walling, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Concurrent Sessions 3, Tuesday, September 20, 2:00 - 3:15 p.m.

 \square \triangle ST-3: Beyond Excel: A Critical Examination of the Actuarial Toolkit

Room: Majestic D

It is well known in the insurance industry that Microsoft Excel is wildly popular amongst actuaries. However, its widespread usage is difficult to explain on the basis of cost, analytic feature set, or performance; spreadsheets are outclassed on one or more of those metrics by many different tools. Instead, Excel is often chosen as the result of operational decisions meant to accommodate non-actuarial stakeholders. When seen in this light, it's possible for an organization to think critically about alternate solutions. We explore several options which enable actuaries to construct more powerful, informative models, while preserving the user experience for other constituencies. Presentation will reference results from the First Annual CAS Actuarial Technology Survey, which had over 1,200 respondents provide insight into their preferred technology tools, including self-reported proficiency levels, technology barriers, preferred techniques, and areas of improvement.

Learning Objectives:

- 1. Through the results of the CAS technology survey, grasp the extent to which actuaries rely on spreadsheets as a "golden hammer" to address all of their analytic needs.
- 2. Understand some of the issues with spreadsheet operational risk, including some very costly failures
- 3. Explore options to augment spreadsheets with additional options like APIs, and use of scripting tools.

Moderator: Leslie Marlo

Speaker: Brian Fannin, Research Actuary, Casualty Actuarial Society

Concurrent Sessions 4, Tuesday, September 20, 3:45 - 5:00 p.m.

 \square \triangle \triangle AR-2: Modeling for Inflation-Driven Reserving Cycles

Room: Majestic D

This session will discuss the modeling of inflation driven reserving cycles using the mathematics of waves. Actuaries will learn how it can be done, why wave methods are important and how actuaries can visualize and explain them. Emphasis will be placed on the visualization and explanation, since our literature lacks even basic descriptions of waves. The reserving topic of inflationary cycles is advanced, but the presentation will assume that attendees are unfamiliar with wave methods.

Learning Objectives:

- 1. Organize reserving data in a periodic form.
- 2. Interpolate the periodic data with waves.
- 3. Separate the interpolating waves into the payment pattern, inflation cycle and noise.

Moderator: Kevin Donnelly

Speaker: James Ely, President, Convolved, Inc

Concurrent Sessions 4, Tuesday, September 20, 3:45 - 5:00 p.m.

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Room: Majestic A

The presentation explores the application of deep learning (subset of machine learning), to estimate ultimate losses. The architecture explored in the presentation will be Long Short Term Memory (LSTM), a form of deep learning that finds patterns in temporal data. The results using the LSTM architecture are compared to the results of the chain ladder method. The illustrations and examples will make this presentation useful to actuaries who want to understand deep learning and how it could apply to reserving.

Learning Objectives:

- 1. Explore deep learning and the techniques that exists within this framework.
- 2. Apply deep learning to the task of reserving, using available datasets.
- 3. Measure and interpret results, including limitations of the technique.

Moderator: Brian Fannin

Speaker: Lahiru Somaratne, Actuarial Exam Coder, University of Nebraska–Lincoln

Concurrent Sessions 4, Tuesday, September 20, 3:45 - 5:00 p.m.

 \square \triangle \triangle FR-2: It's Not a Yellow Book! Non-NAIC Reserve Analyses

Room: Majestic BC

This session will explore several key considerations in performing loss reserve analyses for non-NAIC regulated companies. The presenters will focus on specific program structures , professionalism standards and state-law considerations. A regulator from Delaware will discuss what they like to see in loss reserve analyses and what they look for in ensuring the solvency of their domiciliary programs.

Learning Objectives:

- 1. Understand several program structures typical of Non-NAIC Reserve Analyses.
- 2. Apply professionalism considerations in Non-NAIC Loss Reserve Analyses.
- 3. Gain insight into a regulator's expectations from their actuaries loss reserve analyses.

Moderator: Greg Fears

Speakers: Erich Brandt, Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Darcie Truttmann, Consulting Actuary, Pinnacle Actuarial Resources, Inc. Steve Kinion, Captive Insurance Director, Delaware Insurance Department

Concurrent Sessions 4, Tuesday, September 20, 3:45 - 5:00 p.m.

 \square \triangle IAI-1: AI: Claim Change Modeling and Customer Management for Insurance

Room: Majestic H

AI offers a variety of solutions and value drivers for insurance customer management, applying techniques such as computer vision, virtual agents or chat bots, and predictive models. These solutions create impact by accelerating claims processing, discovering opportunities to upsell or cross-sell customers, predicting attrition, and creating leverage for customer support teams. Applied responsibly and ethically, these technologies enable increased capacity in any organization, by relieving employees of menial tasks and focusing their time and effort on more complex customer needs. However, AI can sometimes exhibit bias toward protected groups, which can damage the reputation and legitimacy of the organization that employs it. There are, however, mitigation strategies to head off bias, starting with a solid, vetted internal governance process. We will present an example of such an internal governance process that can be employed by any firm of any size.

Moderator: Paige DeMeter

Speakers: Rob Bernard, Director, Climate Risk Modeling, PwC

Tara McCafferty, Digital Transformation and AI Leader, Slalom, LLC

Concurrent Sessions 4, Tuesday, September 20, 3:45 - 5:00 p.m.

 \square \triangle \triangle IAI-2: Parametric Insurance for Severe Convective Storm

Majestic F

Severe Convective Storm (SCS) has become increasingly stronger in recent years in the U.S. The main perils include flooding, hail, tornado, and derecho. Historically while flooding got a lot of attention in the insurance community, models and products for other perils have been lacking. In this session we will take a deep dive into SCS, including the meteorological knowledge and loss history. Then discuss how to improve data and modeling for hail, tornado and derecho to design parametric insurance programs to better manage the associated risk.

Learning Objectives:

- 1. Understand the basics of SCS and parametric insurance.
- 2. Review the loss history and damages caused by SCS.
- 3. Learn data and modeling techniques for hail, tornado and derecho.

Moderator: John Wade

Speaker: John Qiang Su (Virtual Speaker), Director of Insurance R&D, Arbol

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

 \square \triangle \triangle HWM-2: Healthcare Professional Liability: It's All About Severity...Except When It Isn't

Room: Majestic F

In the current environment, the conversation around Healthcare Professional Liability tends to focus on the issue of Claim Severity given the headline-grabbing "Nuclear Verdicts" which have become more prevalent in recent years. How common are these Nuclear Verdicts and how does the possibility of such an outcome influence the overall claims settlement process for Healthcare Professional Liability? Should we be concerned with Claim Frequency as much as Claim Severity? What other forces are influencing the overall cost of Healthcare Professional Liability in the current environment? Join us for a panel discussion on the current state of the Healthcare Professional Liability market and the associated reserving implications. Our three panelists will discuss the current state of the market from three distinct perspectives based on their own professional backgrounds - claims professional, actuary, (re)insurance broker.

Moderator: Steve Talley

Speakers: Stephen Koca, Principal & Consulting Actuary, Milliman

Philip Reischman, EVP, Alliant Insurance Services

Robert Blasio, Managing Director, Gallagher Bassett Specialty

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

□ △ LOB-4: State of Commercial Automobile Insurance

Room: Majestic BC

The commercial automobile insurance industry has experienced significant changes over the past few years. This session will discuss historic financial results, the current market & trends, commercial automobile challenges, recent events and future considerations. These current trends will include but not be limited to COVID-19, social inflation and new technology. Different perspectives will be considered, including a consulting actuary, an auditor and a commercial insurer actuary.

Learning Objectives:

- 1. Understand the historical perspective of trends in the commercial automobile market.
- 2. Learn how these historical trends and the current environment are impacting the commercial automobile market, including a discussion of reserves and rating.
- 3. Hear projections on the short- and long-term future trends in the commercial automobile market.

Moderator: Chandu Patel

Speakers: Gregory Fears Jr., Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Michael Brannon, Assistant Vice President and Manager, GWRM, Great West Casualty Company

Christian Tieman, Director, Armanino LLP

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

□ △ PD-5: The Revised USQS: A Primer for P&C Actuaries

Room: Majestic G

The US Qualifications Standards (USQS) was amended effective in 2022. This session will describe the USQS with an emphasis on the amendments that impact property/casualty actuaries. As an added bonus, the session will talk about best practices for maintaining Continuing Education Records. The session will be topped off with some polling questions to spark some discussion.

Learning Objectives:

- 1. Provide information regarding the recent changes to the USQS.
- 2. Provide guidance regarding the various USQS requirements.
- 3. Share best practices for maintaining Continuing Education records.

Moderator: Ken Williams

Speaker: Lisa Slotznick, Retired

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

☐ \(\triangle \text{RM-2: Ceded Reserving - It's Not as Simple as Subtraction}\)

Room: Majestic D

This session will be a discussion of the pros and cons of various approaches to estimating ceded loss reserves. We will cover various data organization approaches as well as various actuarial techniques and what potential shortfalls may come from utilizing these methods. Finally, this session will help you tackle some of the more "difficult-to-quantify" loss sensitive features of reinsurance including aggregate deductibles.

Learning Objectives:

- 1. Gain a basic understanding of the different types of reinsurance contracts.
- 2. Understand the basics of ceded reserving.
- 3. Understand the impact of contract features.

Moderator: Debbie King

Speakers: Rachel Dolsky, Director, KPMG, LLP

Joseph Milicia, Chief Reserving Actuary, QBE Insurance Group

Concurrent Sessions 5, Wednesday, September 21, 8:00 - 9:15 a.m.

 \square $\triangle \triangle$ ST-2: Best Practices for Actuarial Departments

Room: Majestic H

Best in class actuarial departments not only provide high quality actuarial work, they also communicate useful, understandable and actionable information to management so that management can make better business decisions. We collected data from several chief actuaries, asked several insurance executives for comments and relied on our review of several actuarial departments to outline some best practices. This session will cover the best practices.

Learning Objectives:

- 1. Learn best practices in communication with Senior Management.
- 2. Learn best practices in managing an actuarial department.
- 3. Enhance knowledge of training of staff.

Moderator: Kevin Donnelly

Speakers: Brian Brown, Consulting Actuary, Milliman

Lori Julga, Principal & Consulting Actuary, Milliman

James Merz, Chief Actuarial and Analytics Officer, Westfield Insurance

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

□ △ AR-4: Smoothing Splines for Trend

Room: Majestic H

Traditionally, insurance loss trends have been estimated using log-linear regression fit to historical loss severities. This works well when inflation is constant, but it can be misleading if trends are changing due to things like social inflation or pandemic disruption. This session will present one technique – smoothing splines - for smoothing out historical data without requiring an assumption that trends do not change. We will outline the concept behind smoothing splines and offer practical examples showing their use on real data.

Learning Objectives:

- 1. Understand the use of smoothers to remove "noise" from volatile data series.
- 2. Understand the business importance of recognizing changes in inflation (and other) trends.
- 3. Understand how smoothers can help identify changes in insurance trends.

Moderator: Chris Holt

Speakers: David Clark, Senior Actuary, Munich Re

Sinead Cummins, Actuary Senior, Munich Re

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

 \square $\triangle \triangle$ FR-3: Making Your (Statement of Actuarial) Opinion Count!

Room: Majestic BC

In this session we'll discuss all types of communications around the Statement of Actuarial Opinion, both before and after it is signed. Start with internal discussions with groups such as pricing, underwriting, then be sure to include claims and reinsurance. The communication fun doesn't stop there! Be sure to make the most of your time with Company management and the Board of Directors. We'll cover all the required communications, but also highlight where there are other opportunities for discussions that will improve the quality of your Opinion and make sure you get your message to all the parties that need to hear it.

Learning Objectives:

- 1. Learn about the mandatory communications regarding the Actuarial Opinion.
- 2. Optimize communication and input before the opinion is signed.
- 3. Optimize communication and results sharing after the actuarial opinion is signed.

Moderator: Greg Fears

Speakers: Dawn Fowle, Senior Manager, EY

Lise Hasegawa, Head of Actuarial Reserving - FWS, Farmers Insurance Group

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

☐ △ HWM-1: Exploring Recent Trends in Health Care

Room: Majestic G

Speakers will explore recent trends in healthcare including unit costs, utilization, and telehealth.

Learning Objectives:

- 1. Explain recent unit cost and utilization trends in healthcare.
- 2. Identify types of telehealth and in the impact of the Covid-19 pandemic on telehealth utilization.
- 3. Describe how telehealth today impacts the perspective of the workers compensation insurer, insured employer, and insured employee.

Moderator: Kevin Donnelly

Speaker(s): Josh Hammerquist, Vice President & Principal, Lewis & Ellis, Inc.

Traci Hughes, Vice President & Consulting Actuary, Lewis & Ellis, Inc.

Anthony Bustillo, Safety National

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

 \square \triangle \triangle HWM-3: Medical Professional Liability Tort Reforms, Times They Are A-Changin' (Again!)

Room: Majestic A

The passage of AB 35 in California will have reverberations for years to come. This session will review historical tort reforms across the country along with the history of MICRA and how AB 35 came to be in California. We will discuss estimating the direct impacts of increasing non-economic damage caps and also potential indirect impacts from changing behaviors of parties to a claim of which the MPL reserving actuary should be cognizant.

Learning Objectives:

- 1. Review historic Tort Reform in the US.
- 2. Impact of AB35 in California.
- 3. Direct and non-direct impact of increasing non-economic damage caps.

Moderator: Chandu Patel

Speakers: Stephen Koca, Principal & Consulting Actuary, Milliman

Leah Windt, Associate Actuary, Milliman

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

lue \triangle LOB-1: Decoding Cyber Risk

Room: Majestic D

The cyber market has been growing rapidly over the past decade. In this session, we will provide insights into the current state of the cyber market and an overview of the types of insurance coverages offered. Given the changing risk landscape, we will discuss common approaches to assessing risk on an individual and aggregated portfolio basis. Finally, we will discuss considerations for catastrophe risk within cyber.

Learning Objectives:

- 1. Understand the current landscape of the cyber market.
- 2. Understand the types of cyber insurance products offered.
- 3. Use methodologies in assessing cyber risk.

Moderator: Charlie Lei

Speakers: Jess Fung, Managing Director, Guy Carpenter & Co. LLC

Mou Jian ("MJ") Teo, Guy Carpenter & Co. LLC

Carol Aplin, Senior Vice President, Principal Cyber Modeler, Marsh McLennan

Concurrent Sessions 6, Wednesday, September 21, 9:45 - 11:00 a.m.

 \square \cap RM-4: When Enough is Enough – Capital Adequacy for Risk Bearing Entities

Room: Majestic F

Accurately assessing the adequacy of a company's capital position is often more challenging than reserving and pricing exercises due to the complexity of underwriting, as well as asset, risk. This session will explore considerations in producing a capital adequacy analysis, including guidance from a number of Actuarial Standards of Practice. By considering risk from a holistic point a view, an actuary can determine when a company has sufficient capital to support its operations and, if it does, potential uses of free capital.

Learning Objectives:

- 1. Become familiar with the risks considered in capital modeling.
- 2. Become familiar with the ASOPs related to capital modeling.
- 3. Understand various deterministic and stochastic benchmarks in an evaluation of capital adequacy.

Moderator/Speaker: Laura Maxwell, Director & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Speaker: Daniel Linton, Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

 \square \triangle \triangle \triangle CP-1: Making Bootstrap Reserve Ranges More Realistic

Room: Majestic H

Back testing suggests that bootstrapping approaches lead to reserve ranges that may be too narrow. To improve the current methods, we relax England and Verrall's assumption that each cell in the incremental development triangle is independent by introducing a correlation structure in the resampling of the bootstrap. Back testing with Schedule P data suggests that this approach yields reserve ranges that are more reasonable.

Learning Objectives:

- 1. Understand the current Bootstrapping methodologies and the results produced by these methodologies, including back testing of the results.
- 2. Describe a new variation to the current techniques that involves relaxation of independence amongst resampling data.
- 3. Learn the application of the new technique and reviewing the results.

Moderator: Brian Fannin

Speakers: David Clark, Senior Actuary, Munich Re

Hang Ding

Andy Feng, Capital Modeling Actuary, TransRe

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

 \square $\triangle \triangle$ FR-5: Update of the Risk Transfer Practice Note

Room: Majestic G

In this session, you will learn about recent updates to the Risk Transfer Practice Note.

Learning Objectives:

- 1. What is Risk Transfer.
- 2. What are the current best practices for identifying if risk is transferred.
- 3. Document risk transfers.

Moderator: Chandu Patel

Speakers: Ernest Wilson, Senior Corporate Actuary, Munich Re America Services, Inc.

Derek Freihaut, Principal and Consulting Actuary, Pinnacle Actuarial Resources, Inc.

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

 \square \triangle \triangle LOB-5: The D&O Cycle: Wash, Rinse and Repeat

Room: Majestic F

It is becoming painfully clear that despite a massive inventory of open SCA claims, the evolving threat of derivative litigation, and quickly worsening economic conditions. any hope for a market stabilization period is being dashed. The rate pendulum in Public D&O is swinging back and picking up steam. Driven by a confluence of events, but at its core it is a story of "supply and demand". Too much capacity chasing demand growth that is failing expectations.

Learning Objectives:

- 1. Understand D&O Market rate and loss trends.
- 2. Current Risk issues in the D&O Market.
- 3. Understand current IPO/SPAC market conditions.

Moderator: Laura Maxwell

Speaker: Gregory Spore, COE Leader, Financial Lines, Guy Carpenter & Company, LLC

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

 \square \cap PD-3: Notable Changes in the ASOP 36 Exposure Draft

Room: Majestic BC

Actuarial practice has evolved since the current version of ASOP 36 became effective in 2011. This timely session will review the changes proposed in the current exposure draft (comment deadline is September 30, 2022).

Learning Objectives:

- 1. To present changes to ASOP 36 included in the exposure draft.
- 2. Gather input on the exposed draft.
- 3. Make appointed actuaries aware of potential changes.

Moderator: Rich Gibson

Speakers: Margaret Tiller Sherwood, President, Tiller Consulting Group, Inc.

Mary Frances Miller, Select Actuarial Services

Michelle Iarkowski, Senior Manager, Deloitte Consulting LLP

Concurrent Sessions 7, Wednesday, September 21, 11:30 a.m. - 12:45 p.m.

 \square \triangle \triangle ST-1: A Good Graph is Worth a Million Dollars

Room: Majestic D

While advanced techniques and automation are enabling actuaries to perform ever more complex analysis, often we do poorly in communicating even the basics of the work that we already do. At best, this can lead to 'friction' in the communication of reserve estimates, and at worst it can result in a lack of transparency and miscommunication. This session will explore how graphs and diagnostics can be used to identify trends in our data; more clearly explain key assumptions; and help tell a narrative that lays out why our overall reserving position is what is it. We'll discuss the challenges of working with traditional technical data; consider how new approaches will make this challenge of communication potentially even greater; and we'll also touch upon new graphical toolkits that reserving actuaries might consider.

Learning Objectives:

- 1. Identify and prioritize the key metrics relevant to their stakeholders.
- 2. Leverage new visualizations to rationalize reserve selections.
- 3. Communicate key assumptions more confidently.

Moderator: Charlie Lei

Speaker: James Mackay, Director, WTW

Full-Day Workshops

Monday, September 19 — 8:00 AM – 4:00 PM (7.8 CE)

WS-1	Maximizing the Value of Your Actuarial Report and Opinion	Majestic A
WS-2	Reserving Boot Camp	Majestic F

Half-Day Workshops

Monday, September 19 — 12:30 – 4:00 PM (3.9 CE)

WS-4	Loss Reserving with R	Majestic H
WS-5	Triangles Reimagined	Majestic G

Opening General Session

Monday, September 19 — 4:15 – 5:30 PM (1.5 CE)

	GS-1	Risk Manager Perspective — Actuarial Services Beyond Loss Reserves	Majestic D	
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Morning Roundtables

Tuesday, September 20 — 7:00 – 7:50 AM (1 CE)

RT-7	<u>¥</u>	Everything is Automated Now What Do I Do?	Majestic A
RT-4	L	Chat with the CAS Staff Actuaries	Majestic BC
RT-11	7	Professionalism Case Studies	Majestic F
RT-3	1	Captive Reserving	Majestic G
RT-1	½	A Dialogic Approach to Building Effective Meetings	Majestic H

Featured Speaker

Tuesday, September 20 — 8:15 – 9:30 AM (1.5 CE)

□ FS-1 Economic Fundamentals and P&C Insurance Performance Maje

Concurrent Session 1

Tuesday, September 20 — 10:00 – 11:15 AM (1.5 CE)

LOB-7	Δ	Unpacking Title Insurance — Past, Present and What's Next?	Majestic A
LOB-6		The Road to Vehicle Automation from an Insurance Perspective	Majestic BC
RM-3		Reserving Methodologies to Account for Inflation	Majestic D
PD-4		The Actuary as an Expert Witness	Majestic F
ST-4	Δ	How to Hybrid	Majestic G
LOB-3	$\triangle \triangle$	Modern Strategies to Handle Legacy Claims	Majestic H

Concurrent Sessions 2

Tuesday, September 20 — 11:45 AM – 1:00 PM (1.5 CE)

ST-6		The Russia/Ukraine Conflict's Impact on P&C (Re) Insurers and S&P's Ratings in the Sector	Majestic A
PD-2		Coffee Klatch for Opinion Writers	Majestic BC
FR-4		Perspectives From Chief Reserving Actuaries	Majestic D
RM-1		Can't Stand the Heat: Climate Change, Measuring Physical Risk and Financial Disclosures	Majestic F
AR-1	ΔΔ	Disrupting the Actuarial Function?	Majestic G
ST-5	Δ	IFRS 17: What's the Punchline?	Majestic H

Lunch Roundtables

Tuesday, September 20 — 1:00 – 2:00 PM (1 CE)

RT-5	1	Deviation from the Norm!	Majestic E – 1
RT-8	L	International Reinsurance	Majestic E – 2
RT-6	1	Emerging Mass Torts	Majestic E – 3
RT-9	L	Michigan Auto	Majestic E – 4
RT-14	A	Warranty and Extended Service Contracts	Majestic E – 5

Concurrent Sessions 3

Tuesday, September 20 — 2:00 – 3:15 PM (1.5 CE)

FR-1	Δ	Emerging Climate Change Regulations and Disclosures	Majestic A
AR-3		Same Dog, New Tricks: A New Reserving Method	Majestic BC
ST-3		Beyond Excel: A Critical Examination of the Actuarial Toolkit	Majestic D
HWM-4		Workers' Compensation — Market Update	Majestic F
LOB-2	\triangle	Florida Homeowners: A Market in Crisis	Majestic G
PD-1	\triangle	ASOP 20	Majestic H

Concurrent Sessions 4

Tuesday, September 20 — 3:45 – 5:00 PM (1.5 CE)

CP-2		Ultimate Loss Reserve Forecasting Using Bidirectional LSTMs	Majestic A
FR-2		It's Not a Yellow Book! Non-NAIC Reserve Analyses	Majestic BC
AR-2		Modeling for Inflation-Driven Reserving Cycles	Majestic D
IAI-2		Parametric Insurance for Severe Convective Storm	Majestic F
IAI-1	Δ	AI: Claim Change Modeling and Customer Management for Insurance	Majestic H

Morning Roundtables

Wednesday, September 21 — 7:00 – 7:50 AM (1 CE)

RT-13	7	Understanding Reserving Through Behavioral Approaches	Majestic BC
RT-12	L	Professionalism Implications of Peer Review	Majestic F
RT-2	%	Ask a Regulator	Majestic G
RT-15	7	Workers' Compensation	Majestic H

Concurrent Sessions 5

Wednesday, September 21 — 8:00 – 9:15 AM (1.5 CE)

RT-10	Ā	New Development in the Sharing Economy with a Focus on RV Sharing	Majestic A
LOB-4	\bigcirc	State of Commercial Automobile Insurance	Majestic BC
RM-2	OA	Ceded Reserving — It's Not as Simple as Subtraction	Majestic D
HWM-2		Healthcare Professional Liability: It's All About Severity Except When It Isn't	Majestic F
PD-5		The Revised USQS: A Primer for P&C Actuaries	Majestic G
ST-2	ΔΔ	Best Practices for Actuarial Departments	Majestic H

Concurrent Sessions 6

Wednesday, September 21 — 9:45 – 11:00 AM (1.5 CE)

HWM-3	ΔΔ	Medical Professional Liability Tort Reforms: Times, They Are A-Changin' (Again!)	Majestic A
FR-3		Making Your (Statement of Actuarial) Opinion Count!	Majestic BC
LOB-1		Decoding Cyber Risk	Majestic D
RM-4		When Enough is Enough — Capital Adequacy for Risk Bearing Entities	Majestic F
HWM-1	Δ	Exploring Recent Trends in Health Care	Majestic G
AR-4	Δ	Smoothing Splines for Trend	Majestic H

Concurrent Sessions 7

Wednesday, September 21 — 11:30 AM – 12:45 PM (1.5 CE)

SN-1	L	Speed Networking Session	Majestic A
PD-3		Notable Changes in the ASOP 36 Exposure Draft	Majestic BC
ST-1		A Good Graph is Worth a Million Dollars	Majestic D
LOB-5	$\triangle \triangle$	The D&O Cycle: Wash, Rinse and Repeat	Majestic F
FR-5	$\triangle \triangle$	Update of the Risk Transfer Practice Note	Majestic G
CP-1	$\triangle \triangle \triangle$	Making Bootstrap Reserve Ranges More Realistic	Majestic H

Closing General Session

Wednesday, September 21 — 1:30 – 2:45 PM (1.5 CE)

Hotel Map

