

CASUALTY · LOSS · RESERVE · SEMINAR

# CLRS

September 13-15, 2021

Jointly Sponsored by:



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## Antitrust Notice

The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars 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 seminars be used as a means for competing companies or firms to reach any 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 seminar 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 Website at <http://www.casact.org/professionalism/policiesProc/index.cfm?fa=antitrust>.

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

## Consent to Use of Photographic Images

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.

## Daily Schedule

All Times are in Eastern

### Monday, September 13

|                        |                                   |
|------------------------|-----------------------------------|
| 9:15 - 10:05 AM ET     | Roundtables (optional)            |
| 9:45 - 10:15 AM ET     | Coffee Networking with Exhibits   |
| 10:15 - 10:30 AM ET    | Welcome Message 15 min            |
| 10:30 - 11:45 AM ET    | Keynote 75 min (1)                |
| 11:45 AM - 12:00 PM ET | Transition Break                  |
| 12:00 - 1:00 PM ET     | Diversity Luncheon Session 55 min |
| 1:00 - 2:15 PM ET      | Concurrent Sessions 75 min (5)    |
| 2:15 - 3:00 PM ET      | Exhibit Hall Break (45 min)       |
| 3:00 - 4:15 PM ET      | Concurrent Sessions 75 min (5)    |
| 4:15 - 5:00 PM ET      | Exhibit Hall Break (45 min)       |
| 5:00 - 6:15 PM ET      | Concurrent Sessions 75 min (5)    |
| 6:20 - 7:10 PM ET      | Roundtables (optional)            |
| 6:20 - 7:10 PM ET      | Virtual Reception                 |

### Tuesday, September 14

|                     |  |
|---------------------|--|
| 9:00 - 9:50 AM ET   | Roundtables (optional)   |
| 9:30 - 10:00 AM ET  | Coffee Networking with Exhibits  |
| 10:00 - 11:15 AM ET | Concurrent Sessions 75 min (5)   |
| 11:15 - 12:00 PM ET | Exhibit Hall Break (45 min)  |
| 12:00 - 1:15 PM ET  | General Sessions 75 min (2)  |
| 1:15 - 2:15 PM ET   | Luncheon sponsored by Willis Towers Watson —<br>“Leveraging Machine Learning in Reserving” |
| 2:15 - 3:30 PM ET   | Concurrent Sessions 75 min (5)   |
| 3:30 - 4:15 PM ET   | Exhibit Hall Break (45 min)  |
| 4:15 - 5:30 PM ET   | Concurrent Sessions 75 min (5)   |
| 5:30 - 6:20 PM ET   | Roundtables (optional)   |
| 6:00 - 8:30 PM ET   | Free Cocktail Reception for CAS Members - Midtown Manhattan                                |

### Wednesday, September 15 - Workshops

|                    |   |
|--------------------|---|
| 9:00 AM - 5:30 PM  | Reserving Bootcamp (8-hours)  |
| 10:00 AM - 5:00 PM | Maximizing the Value of Your Actuarial Report and Opinion (6-hours) |
| 9:00 AM - 12:30 PM | IFRS17 Workshop (AM)  |
| 1:30 - 5:00 PM     | Triangles Reimagined (PM)   |
| 1:30 - 5:00 PM     | Writing R Packages (PM)   |

# 2021 Casualty Loss Reserve Seminar

September 13-15, 2021

This year the Casualty Actuarial Society and the American Academy of Actuaries will present the Casualty Loss Reserve Seminar, September 13-15, 2021. This virtual meeting has opportunities for education, networking, and meeting with exhibitors, all in an immersive environment designed to make you feel like you are at an in-person meeting --all with no travel, no additional expenses, and from the convenience of your own desk.

The CLRS Planning Committee is putting on this three-day event with:

- Keynote Speaker
- Two General Sessions
- 30 Concurrent Sessions
- Full and Half-Day Workshops
- 15+ Roundtables
- Virtual Reception

## Program Committee

John Wade, *Volunteer Chair*

Kathleen Dean, *Staff Chair*

Nora Potter, *Staff Chair*

Rachel Dolsky, *Volunteer Vice-Chair*

Kevin Donnelly, *Volunteer Vice-Chair*

Justin Ahn  
Devin Boerm  
Peter Brinck  
Alex Chen  
Paige DeMeter  
Greg Fears  
Richard Gibson  
Bill Hansen  
Nicole Harrington  
Lise Hasegawa

Sara Hemmingson  
Alan Hines  
Chris Holt  
Matt Killough  
Debbie King  
Charlie Lei  
Laura Maxwell  
Josh Merck  
Chandu Patel  
Anwesha Prabhu

Rick Ramotar  
Sophia Song  
Greg Spindell  
Abby Sternberg  
Steve Talley  
Peter Tomopoulos  
Ethel Wang  
Sylvia Yang  
Rich Zarnik

## General Information

### CLRS Virtual Seminar Features

Lobby – This virtual hall will be your hub to all aspects of the event, including:

- Theater – Sessions will take place in a webinar-like theater
- Exhibit Hall – Connect with virtual exhibitors, view their materials, chat one-on-one with company reps, and win a prize in the exhibitor raffle
- Lounge – Network with other attendees at the virtual seminar, chat about specific topics or give your impressions of the sessions
- Resources – Download presentation materials for you to use in your work
- Help Desk – Get all your technical support questions answered at the staffed help desk
- Also, participate in the badge game! Badges are given for being the most engaging attendee at the seminar. Compete with other attendees on the leaderboard!

### Technical Information

Please instruct your employees to review the technical requirements and conduct a system check in advance of the event date.

### Casualty Actuarial Society's Envisioned Future

The CAS will be recognized globally as the premier organization in advancing the practice and application of casualty actuarial science and educating professionals in general insurance, including property-casualty and similar risk exposure.

### Continuing Education

#### CAS

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 CE credits (not including workshops) for the Casualty Loss Reserve Seminar 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.

Note: 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.

#### CPCU

Chartered property casualty underwriters (CPCUs) attending this year's Casualty Loss Reserve Seminar will be awarded a maximum of 15 points (not including Workshops) under the Continuing Professional Development Program for CPCUs. Forms to receive credit will be available at the seminar.

## Virtual Seminar Recordings

Recordings of the seminar are available to attendees for the day they sign up for. They will be available on the platform for 90 days and then on UCAS for five years. Virtual Seminar attendees will get a discount of \$50 for the other days' recordings they did not register to attend live.

For those that do not register for the seminar, recordings will be \$150/day and \$250 for the full event.

## Speaker Opinions

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

### 2021 Casualty Loss Reserve Seminar Rating System



No prior knowledge of the subject matter is assumed.  
Little or no technical content.



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



General or working knowledge of the subject matter is assumed.  
Moderate to highly technical content.

## Contact Information

- For more information on CLRS content, please contact Nora Potter, Professional Education Manager, at [npotter@casact.org](mailto:npotter@casact.org).
- For more information on attendee registration, please email [acs@casact.org](mailto:acs@casact.org).
- For more information on CLRS other than registration or content issues, please email [meetings@casact.org](mailto:meetings@casact.org).
- For more information on other CAS opportunities or administrative policies such as complaints and refunds, please contact the CAS Office at (703) 276-3100 or visit the CAS website.

## We Would Like to Thank Our Sponsors and Exhibitors

Last but not least, we want to thank our exhibitors and sponsors. We could not hold this event without the generous support of our sponsors and exhibitors. Please visit their displays during lunch and networking breaks.



## 📌 🌐 FS: Global Warning: How the New Rules of Innovation Can Transform Businesses, Propel Nations to Greatness, and Tame the World's Most Wicked Problems

**Keynote Speaker and Welcome, Monday, Sept 15, 10:15 - 11:45 AM**

Vijay V. Vaitheeswaran, award-winning author and Energy & Climate Innovation Editor of *The Economist*, will deliver a provocative keynote address that surveys the megatrends reshaping the 21st century global economy, from the prospects for future pandemics to the disruptive and widespread impacts of climate change. Global warming in particular poses enormous challenges, and if left unchecked, could devastate significant parts of the global economy, turn low-lying and vulnerable parts of the world uninhabitable, spread disease and famine and fuel refugee crises. However, a much more open, accelerated and ambitious approach to climate innovation could also produce many solutions over the next decade as every industry in every geography is forced to respond to this existential threat.

Moderator: Peter Tomopoulos

Speaker: Vijay V. Vaitheeswaran

U.S. business editor for *The Economist* and leading specialist on China, business and technology, innovation, and emerging markets

Vijay Vaitheeswaran is the US Business Editor of *The Economist*, its former China Business Editor & Bureau Chief, is an award-winning writer. He served as an advisor on sustainability and innovation to the World Economic Forum/Davos. Vaitheeswaran is a leading authority on China, global health, international trade, pharmaceuticals and biotechnology.

With a career that has taken him from Mexico City and London to Shanghai, Vaitheeswaran brings an impressive depth of expertise to topics and issues ranging from politics and economics, the business and technology of energy and the environment, and China's dynamic and in-innovative private sector. As *The Economist's* former Healthcare Editor, he gained valuable experience covering the health and economic impacts of pandemic outbreaks.

Financial Times declared Vaitheeswaran to be "a writer to whom it is worth paying attention." His latest book is *Need, Speed and Greed: How the New Rules of Innovation Can Transform Businesses, Propel Nations to Greatness, and Tame the World's Most Wicked Problems*. Kirkus Reviews declared it to be "a perfect primer for the post-industrial age" and Amazon named it a "Selection of the Month." His previous books have also garnered accolades, ranging from lengthy reviews in *The New Yorker* to short listing for the "Financial Times Business Book of the Year" prize. He wrote *The World is Not Flat*, a timely and provocative Special Report in *The Economist* on the disruptive future for globalization, multinational firms and supply chains.

He led the editorial team that launched *Economist Global Business Review*, a successful app that is the first bilingual product offered by *The Economist* in its 175-year history.

Vijay is a Life Member at America's Council on Foreign Relations, served as a member of the Economic Club of New York and on the Adjunct Faculty at New York University. At the invitation of the Dean, he created and taught the first interdisciplinary class on Energy & Environment offered at the Stern School of Business.

His opinion pieces have appeared in leading publications, including *The Wall Street Journal*, *The Financial Times*, *The New York Times* and *Foreign Policy*, and he frequently appears on CNBC, Bloomberg, MSNBC, BBC and NPR. He has addressed groups ranging from the US National Governors' Association and the UN General Assembly to the TED and Aspen Ideas conferences. He also serves as chairman of a provocative series of Innovation Summits organized by *The Economist*, held annually in Chicago, Hong Kong and London.



## ☐ 🌍 DV-1: Acknowledging and Addressing Invisible Struggles Within Diverse Teams

**Diversity Luncheon, Monday, Sept 13, 12:00 - 1:00 PM**

The actuarial profession strives to function as a meritocracy, but barriers impacting some groups more than others often prevent us from achieving that ideal. Even for credentialed actuaries, being the only person like you in a meeting or among senior leaders presents unique challenges that may be hard for people from the majority to understand. These barriers can hinder their sense of belonging, ability to contribute fully, and limit opportunities for advancement. In this session, we will share data on representation in the actuarial profession, discuss key issues faced by underrepresented groups within the profession, and share strategies that both impacted individuals and allies can employ to address these issues.

Moderator: Kendra Letang

Speakers: Jessica Leong, FCAS, Lead Data Scientist, Zurich North America  
 Daniel Fernandez, FCAS, Vice President & LOB Specialist, Partner Re  
 Simone Walker, ACAS, Actuarial Managing Director - Reserving Analytics, CNA Insurance Companies  
 Jacob Akstins, ACAS, Actuarial Consultant, Nationwide Insurance  
 Mallika Bender, FCAS, Diversity, Equity & Inclusion Staff Actuary, Casualty Actuarial Society

## General Sessions

### ☐ 🌍 GS-1: General Session on Professionalism: "I didn't know the ABCD does THAT!"

General Sessions, Tuesday, Sept 14, 12:00 - 1:15 PM

The Actuarial Board for Counseling and Discipline (ABCD) is often mistakenly perceived as solely the disciplinary arm of the U.S. actuarial profession. In fact, ABCD members spend the majority of their time in that role responding to requests by fellow actuaries to engage in informal discussions regarding professionalism issues that they confront each and every day. It is not surprising that, as the breadth of issues in which actuaries are involved continues to dramatically expand, this aspect of ABCD work has increased significantly over the past few years. One area that will be specifically touched upon in this session is the applicability of the Actuarial Standards of Practice and the Code of Professional Conduct to actuarial practice in emerging practice areas. In this session, current and past members of the ABCD will conduct mock counselling sessions to illustrate the value actuaries can derive from this important responsibility of the ABCD.

Moderator: Alan Hines

Speakers: Albert Beer, FCAS, Michael J. Kevaney/ XL Chair, Professor of Actuarial Science, St. John's University  
Michael Toothman, FCAS, President, Actuarial & Risk Consulting Services

### ☐ 🌍 GS-2: Modeling the COVID-19 Pandemic

General Sessions, Tuesday, Sept 14, 12:00 - 1:15 PM

This session will look at modeling the COVID-19 pandemic from the perspective of an infectious disease epidemiologist. The presenter, Professor Deirdre Hollingsworth, uses mathematical models and statistical analyses to study the evolution and transmission dynamics of infectious diseases with the aim of informing the design of more effective control interventions. The session will introduce some of the basic mathematics used in studying COVID-19 transmission within a population. Using live-polling, basic information will be collected from the virtual audience to inform a simple model of COVID-19 transmission within a hypothetical in-person instance of the Casualty Loss Reserve Seminar held during the pandemic.

Moderator: Stephen Talley

Speaker: Deirdre Hollingsworth, Professor, University of Oxford

## Concurrent Sessions

### AR-1: Claim-Level Reserving: From Theory to Practice

Concurrent Sessions 1, Monday, Sept 13, 1:00 - 2:15 PM

In this session we will review individual claims reserving models from their mathematical foundations to their practical use.

We will start by a critical study of the current reserving approach based on aggregate triangles, focusing on the advantages and drawbacks for both pure reserving deterministic estimation and stochastic assessment of the volatility. Then, we will provide an overview of the panel of parametric and non-parametric individual claims reserving models available in the actuarial literature, and discuss the potential gains in using such methods as well as the challenges to implement them in practice. Case studies will be presented on different P&C portfolios. Basic knowledge on standard reserving methods is required.

Moderator: Alex Chen

Speaker: Alexandre Boumezoued, Research & Development Director, Milliman

### AR-2: Credibility Weighting for Reserving via Bayesian MCMC

Concurrent Sessions 2, Monday, Sept 13, 3:00 - 4:15 PM

This session will present a couple of short case studies illustrating how to apply Bayesian MCMC concepts to common reserving problems where credibility weighting can help:

- Estimating reserve need by business unit within a line of business (Annual Statement Line).
- Estimating the reserve need when the data on hand is sparse or incomplete.

Moderator: Paige DeMeter

Speaker: Michael Larsen, FCAS

### AR-3: Smarter Segmentation for the Lazy Actuary

Concurrent Sessions 3, Monday, Sept 13, 5:00 - 6:15 PM

Segmentation in reserving is often informed and limited by time pressures, resource constraints, and “classic” definitions of segmentation. By using advanced modeling techniques, actuaries can identify different cohorts of claims – those most likely to develop poorly – and reserve for them separately. This session will look at how machine learning approaches can allow a reserving team to improve their reserve estimates, not by segmenting more, but by segmenting smarter.

Moderator: Shawn Balthazar

Speakers: Kacie Kiel, ACAS, CNA Insurance Companies  
Serhat Guven, FCAS, Managing Director, Willis Towers Watson

## ☐ 🌍🌍 AR-4: The Actuary and IBNR Techniques: A Machine Learning Approach

Concurrent Sessions 4, Tuesday, Sept 14, 10:00 - 11:15 AM

Significant time is spent adjusting triangles and selecting parameters when calculating IBNR reserves. However, these choices are often made using subjective “expert judgement” with limited to no scientific basis and no measure of predictive accuracy. In this session, we will demonstrate how machine learning techniques can be used to provide an automated, scientific, and rigorous basis on which to choose parameters that maximize predictive accuracy and stability of reserves. We demonstrate this framework on several real-world triangles and show that it improves predictive accuracy while ensuring reserves are adequate.

Moderator: Chris Holt

Speakers: Ronald Richman, AIG  
Caesar Balona, Assistant Actuarial Manager, QED Actuaries & Consultants

## ☐ 🌍 AR-5: Measuring Changes in Inflation: A Non-Technical Discussion of Two Techniques

Concurrent Sessions 5, Tuesday, Sept 14, 2:15 - 3:30 PM

The session will present two approaches to modeling inflation and its variability. One approach uses a spline to smooth a severity index. The other approach measures the variability in a triangle associated with cyclical changes in the severity trend.

Moderator: Greg Fears

Speakers: David Clark, Senior Actuary, Munich Re America Services, Inc.  
James Ely, FCAS, President, Convolved, Inc  
Chao Guo, Data Scientist, Munich Re America Services, Inc.

## ☐ 🌍 CP-1: Estimating Loss and ALAE Reserves in the Challenging World of Construction Defects (CD) Risks by Consideration of Closed Payment Segmentation

**Concurrent Sessions 1, Monday, Sept 13, 1:00 - 2:15 PM**

Accurately estimating future CD liabilities is often more challenging than estimating other commercial lines due to the complexity of construction, the nature of the litigation, and the number of parties involved, and evolving and changing contract terms and conditions throughout the building process. This presentation will include an interactive discussion including the descriptive background of various challenges and techniques, highlighting key findings and methodologies as presented and published in the 2020 CAS Reserving Call Paper Program. The Excel worksheet accompanying the published abstract will accompany the presentation itself, and findings from the audience members are expected to be shared at the presentation as well as following.

Moderator: Chandu Patel

Speakers: James Kahn, FCAS, Vice President, Actuarial Leader, The Riverstone Group  
Bradley Tumbleston, FCAS, Actuarial Manager, The Riverstone Group  
Wilson Townsend, VP and Director of Services Operations, RiverStone Resources LLC

## ☐ 🌍 FR-1: Reserving and Financial Reporting for Non-Insurance Company Entities

**Concurrent Sessions 2, Monday, Sept 13, 3:00 - 4:15 PM**

In this session you will learn about the differences that exist for reserving and reporting for non-insurance company entities.

Moderator: Lise Hasegawa

Speakers: George Levine, Director, KPMG, LLP  
Eszter Polecsak, Senior manager, KPMG LLP

## ☐ 🌍🌍🌍 FR-2: Scalars: Aggregating Capital Requirements Across Regulatory Frameworks

Concurrent Sessions 3, Monday, Sept 13, 5:00 - 6:15 PM

Scalars are a central part of efforts to develop capital adequacy measures for financial groups that operate businesses in more than one country and/or more than one industry. They provide a way to effectively “translate” capital requirements that are not strictly comparable and vary across jurisdictions into a common regulatory framework. In this session, we will discuss the American Academy of Actuaries’ recently released research paper on scalar methodologies to aggregate capital requirements across regulatory frameworks. The Academy’s research describes four families of scalar methodology and assesses them based on four independent, general criteria. During the session, we will review several of the major results presented.

Moderator: Matt Killough

Speakers: Steven Jackson, Assistant Director for Research (Public Policy), American Academy of Actuaries  
Maryellen Coggins, FCAS, Managing Director, PricewaterhouseCoopers

## ☐ 🌍 FR-3: Company Specific Risk Factor Disclosures

Concurrent Sessions 4, Tuesday, Sept 14, 10:00 - 11:15 AM

This session will explore the company-specific risk factor disclosures in the Statement of Actuarial Opinion (SAO) with a focus on current practice and how the profession is documenting uncertainty caused by the COVID pandemic. The information in these disclosures is used by several stakeholders including company management, members of the board, auditors and regulators as they assess a company’s reserve position. The panel will discuss current background and practices regarding company-specific risk factors as documented in the SAO with several slides comparing this information over time. An Insurance Company auditor will be providing insight into how CPAs view these disclosures and how they interpret and view materiality of significant exposures

Moderator: Alan Hines

Speakers: Greg Fears, FCAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Erich Brandt, FCAS, Senior Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Carolyn Rice, Partner, Johnson Lambert & Company

## ☐ 🌍🌍 FR-4: IFRS 17: I can't hide from it anymore, so what do I need to know?!

**Concurrent Sessions 6, Tuesday, Sept 14, 4:15 - 5:30 PM**

This session will provide guidance on the areas that an actuary will be called upon by accounting and finance in the preparation of IFRS 17 financial statements. In particular:

- 1) How the financial statements come together;
- 2) The questions you could be asked to answer (e.g., drivers of changes in estimates, disclosures on methods & assumptions, reasons for distortions in the profit emergence);
- 3) The types of disclosures that will be needed and the information that you will need to draw from.

Moderator: Chandu Patel

Speakers: Ernest Wilson, FCAS, Senior Corporate Actuary, Munich Re America, Inc.  
Lela Patrik, FCAS, Actuarial Consultant, PricewaterhouseCoopers  
Isabelle Guerard, FCAS, Desjardins Groupe d'assurances Generales

## ☐ 🌍🌍 HC-1: Healthcare Trend Monitoring and Forecasting

**Concurrent Sessions 5, Tuesday, Sept 14, 2:15 - 3:30 PM**

Healthcare expenditures have been rising in the United States at what has been described as “unsustainable” levels for a sustained length of time. In 1960 in the United States 5% of GDP, or only about \$27 Billion, was spent on Healthcare. In 1995, the US went over \$1T in healthcare expenditures for the first time which was then 13.4% of GDP. A mere 10 years later and we topped \$2T. In 2019, we were at \$3.8T, which is almost 18% of GDP! How do we make sense of it, plan for it, and remediate?

Join Erin Wessling, Bryan Kwiatkowski, and Max Krueger from Optum's Trend Analytics team as they give the background on how we've arrived where we are today. They will dive into methods for monitoring and measuring trends, as well as methods for forecasting future trends and intersection with reserving. The effects of COVID-19 are present throughout trend monitoring, measuring, and forecasting and the discussion will include COVID-19 observations and considerations. Finally, most important!

Moderator: Kevin Donnelly

Speakers: Maxwell Krueger, Actuarial Manager, Optum Advisory Services  
Bryan Kwiatkowski, Actuarial Manager, UnitedHealth Group  
Erin Wessling, VP Actuarial Consulting, Optum Advisory Services

## ☐ 🌍🌍 IAI-1: The Future of Intelligent Claims

**Concurrent Sessions 1, Monday, Sept 13, 1:00 - 2:15 PM**

Claims operations will be emerging from a post-COVID world facing a number of unrelenting challenges. Insurtechs are accelerating the evolution of digital claims experiences. Insurers face increased pressure to manage operating costs and loss ratios. Competitive pressures are accelerating the use of AI to cover blind spots in subrogation, salvage and fraud. Join our claims experts for discussion on how leading insurers are settling claims faster, and unifying siloed information to arrive at newfound insights that help automate workflows across departments.

Moderator: William Hansen

Speakers: Tom Korach, Safekeep  
Mark LeMaster, Chief Claims and Customer Service Officer, Root Insurance  
Jeffrey Capobianco, Chief Claim Officer, Safekeep

## ☐ 🌍🌍 IAI-2: Trends in Reserving Methodologies in the Sharing Economy

**Concurrent Sessions 6, Tuesday, Sept 14, 4:15 - 5:30 PM**

Intro to reserving challenges in the sharing economy, including individual claim reserving for a delivery company.

Moderator: Francois Morissette

Speakers: François Morissette, FCAS, Partner, S & F Actuarial Consultants  
Jessica Zhu, FCAS, Actuarial Manager, Lyft, Inc.  
Katrina Jennings, FCAS, Founder & Lead Actuary, Litany Consulting

## ☐ 🌍🌍 LOB-1: State of the Market for Directors & Officers Liability Insurance

**Concurrent Sessions 1, Monday, Sept 13, 1:00 - 2:15 PM**

Directors & Officers Liability is a dynamic market experiencing large rate increases in recent years. This session will delve into the key drivers behind this, why it may continue and what challenges lay ahead.

Moderator/Speaker: Ricardo Ramotar, FCAS, Vice President, Actuary, QBE Re

Speaker: Peter Brinck, FCAS, Director, Willis Towers Watson



## ☐ 🌍 🌍 LOB-2: State of the Commercial & Personal Auto markets

Concurrent Sessions 2, Monday, Sept 13, 3:00 - 4:15 PM

The automobile insurance industry has experienced significant changes over the past 18 months. This session will discuss how the events of 2021, including the COVID-19 pandemic and the social justice movement, have impacted personal and commercial lines insurance.

For personal lines insurance, the discussion topics will include:

- The impact of COVID-19 on driving behavior
- New “normal” driving behavior
- The impacts of social distancing and remote work on insurance company operations
- How environmental and operational changes have impacted rates and loss reserves
- Big data: insurance company use and regulatory focus

For commercial lines insurance, we will discuss:

- History of the market (loss ratio, frequency, and severity trends)
- Insureds shift to alternative risk financing (risk retention groups, captives, self-insurance)
- The uneven impact of COVID-19 on commercial miles driven (delivery drivers vs. taxi drivers)
- Social inflation
- The impact of attorney adver

Moderator: Stephen Talley

Speakers: Roosevelt Mosley, FCAS, CSPA, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
 Greg Fears, FCAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
 Dalesa Bady, ACAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.

## ☐ 🌊 LOB-3: After the Wind Blows: Property Reserving in Gulf Coast States

**Concurrent Sessions 3, Monday, Sept 13, 5:00 - 6:15 PM**

The last several years have brought back catastrophes as a major factor in homeowners reserving. While Florida has gotten much of the press, impacts to other Gulf States such as Louisiana and Texas have also been noteworthy. Texas in particular has borne the brunt of Winter Storm Uri, which will redefine expectations of the potential loss impacts from large freeze events.

Combining with these catastrophe challenges are a range of attritional property trends that produce quite a bit of interest in a traditionally short-tailed line of business. In this session, panelists will take an industry-level view of Gulf Coast property reserving, while also diving into its impacts on the primary companies and reinsurance players navigating today's market.

Moderator: Laura Maxwell

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

Aaron Koch, FCAS, Principal and Consulting Actuary, Milliman

Lee Knepler, FCAS, Vice President of Actuarial and Analytics, United Property and Casualty Insurance Company

## ☐ 🌊🌊 LOB-4: State of the Workers Compensation Market

**Concurrent Sessions 3, Monday, Sept 13, 5:00 - 6:15 PM**

CA WC has always been an interesting market. This session will cover the market dynamics and legislative environment moves and their impacts, from a rating bureau, a self-insured entity as well as auditors' perspectives.

Moderator: Ethel Wang

Speaker(s): David Bellusci, FCAS, Executive Vice President, COO and Chief Actuary, W.C. Insurance Rating Bureau of California

Christian Lemay, FCAS, Senior Manager, EY

Mark Priven, FCAS, VP & Principal, Specialty Actuarial, Bickmore Actuarial

## ☐ 🌊 LOB-5: MPL Market Update

**Concurrent Sessions 4, Tuesday, Sept 14, 10:00 - 11:15 AM**

The MPL market is in a state of flux both in terms of financial results and the key drivers underlying these results. This session will provide (Conning's) perspective on challenges MPL insurers are facing, including changes in healthcare that are impacting these insurers, as well a view of what the future might hold for the MPL market.

Moderator: Kevin Donnelly

Speaker: William Burns, ACAS, Director, Conning

## ☐ **LOB-6: Practical Considerations for Reserving for Emerging Mass Tort Exposure**

**Concurrent Sessions 5, Tuesday, Sept 14, 2:15 - 3:30 PM**

The session will summarize recent developments in mass torts (e.g. sexual abuse/molestation, opioids, etc.) as well as explain the challenges that reserving for these events poses due to the lack of credible development history. Also, the session will discuss some methods that the industry is using to leverage information from the claims, legal, and underwriting departments to estimate IBNR for these exposures.

Moderator: Sylvia Yang

Speakers: Eric Pince, FCAS, EY  
Dawn Fowle, FCAS, Senior Manager, EY

## ☐ **LOB-7: Impact of COVID 19 on Workers Compensation and General Liability**

**Concurrent Sessions 6, Tuesday, Sept 14, 4:15 - 5:30 PM**

Modeling/projecting WC losses from COVID infections & an examination of COVID impacts on calendar year 2020 data for WC & GL

Moderator: Anwesha Prabhu

Speakers: Kyle Walker, Senior Analyst, Willis Towers Watson  
Jonathan Sappington, FCAS, Consultant, Willis Towers Watson  
Ashley Wohler, FCAS, Director, Willis Towers Watson

## ☐ **PD-1: Coffee Klatch for Opinion Writers**

**Concurrent Sessions 2, Monday, Sept 13, 3:00 - 4:15 PM**

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.

Moderator: John Wade

Speakers: Joseph Herbers, ACAS, Managing Principal, Pinnacle Actuarial Resources, Inc.  
Kathleen Odomirok, FCAS, Principal, EY  
Michael Toothman, FCAS, President, Actuarial & Risk Consulting Services  
Miriam Fisk, P&C Actuarial Team Leader, Texas Department of Insurance

## ☐ 🌐 PD-2: The Problem with Communication is the Illusion that it has occurred

Concurrent Sessions 5, Tuesday, Sept 14, 2:15 - 3:30 PM

Actuarial work is complicated and difficult to understand and so it is hard for non-actuaries to understand our work. The problem is often exacerbated by actuaries having spent 10,000 or more hours studying technical matters but probably less than 1,000 hours developing communication skills. As actuaries advance in their careers, effective communication becomes more important than analytical work (which can be delegated to capable staff). Also, as actuaries we likely have even less experience in dealing with confrontation which can be critical when communicating bad news. The presenters are writing a paper on this subject.

Moderator: Matthew Killough

Speakers: Brian Brown, FCAS, Consulting Actuary, Milliman  
Bradley Kiscaden, FCAS, President & CAO, Markel Corporation  
Katherine Antonello, FCAS, EVP and Chief Actuary, Employers Holdings, Inc  
Steve Wilson, Consultant, Freelance  
Katherine Pipkorn, Actuarial Associate, Milliman

## ☐ 🌐 RM-1: Pandemic Risk Management: Resources Contingency Planning and Allocation

Concurrent Sessions 1, Monday, Sept 13, 1:00 - 2:15 PM

Repeated history of pandemics such as SARS, Swine flu, Ebola, Zika and COVID-19 have shown that contingency planning for pandemics is a necessary component of risk management for all organizations in modern society. Today's technology allows us to use epidemiological models to predict the spread of infectious diseases in the similar way that meteorological models are used to forecast weather. Taking advantage of epidemic models, we can project the dynamics of demand and supply for medical resources at different phases of a pandemic. Such predictions provide quantitative bases for decision makers of healthcare systems to understand the potential imbalance of supply and demand, and to address disparities of access to critical medical supply across different subsidiaries.

Moderator: Joshua Merck

Speakers: Runhuan Feng, Professor and Director of Actuarial Science Program,  
University of Illinois  
Linfeng Zhang, University of Illinois at Urbana-Champaign  
Alfred Chong, Associate Professor, Heriot-Watt University

## ☐ 🌍🌍 RM-2: The Dynamics of Actuarial Reserving Departments – Past, Present and Future

Concurrent Sessions 4, Tuesday, Sept 14, 10:00 - 11:15 AM

The presenters will discuss the key categories in evaluating an actuarial reserve department, current reserving practices, interactions with others, common reserving challenges and red flags as well as how the reserving department is viewed. We will provide our thoughts on Best Practices and tips on how a company can improve its reserving function.

Moderator: Debbie King

Speakers: Lori Julga, FCAS, Principal & Consulting Actuary, Milliman  
James Merz, FCAS, Chief Actuarial and Analytics Officer, Westfield Insurance  
Brian Brown, FCAS, Consulting Actuary, Milliman  
Jieqiu Fan, ACAS, Senior Financial Analyst, A.M. Best

## ☐ 🌍🌍 RM-3: State of the Reinsurance Market

Concurrent Sessions 6, Tuesday, Sept 14, 4:15 - 5:30 PM

An overview of the current events and recent shifts in the reinsurance market. A high-level overview will be discussed across both property and casualty lines, with a deeper dive into Florida homeowner insurers.

Moderator: Laura Maxwell

Speakers: Erick Mortenson, ACAS, CSPA, Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Nicholas Alicea, ACAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.

## ☐ 🌍 ST-1: Application of Blockchain and Smart Contracts in Parametric Insurance

Concurrent Sessions 2, Monday, Sept 13, 3:00 - 4:15 PM

Data quality and accessibility are at the core of parametric insurance. In this session, Sid Jha, founder & CEO of Arbol, an insurtech specializing in parametric protection will discuss its data-first approach in developing and executing parametric products. Sid will explain how Arbol uses IPFS, a fully distributed data infrastructure to create tamper free datasets and how Arbol executes smart contracts using Chainlink technology that allows feeding of off-chain data into on-chain data.

Moderator: Chris Holt

Speakers: Siddhartha Jha, CEO, Arbol Inc.  
Hong Guo, Chief Insurance Officer, Arbol Inc.

## 📅 🌍 ST-2: Social Inflation

**Concurrent Sessions 3, Monday, Sept 13, 5:00 - 6:15 PM**

The topic of this session is the drivers of social inflation and the impact on casualty results. Panelists will approach this issue from several different perspectives. The first panelist will review evidence of increased social inflation and the socio-economic drivers. It will include a review of the trends in court statistics and in jury verdicts. He will then discuss drivers including increased legal advertising, developments in litigation financing, and income inequality. The second panelist is an attorney and reinsurance claims department leader. Based on her experience working on large cases, she will discuss the increased effectiveness of the plaintiff's bar and some of the tactics they have been employing to drive their success; thereby, causing strong challenges to the insurance industry. The third panelist is a Chief Actuary who will examine the impact of social inflation as it manifests within industry data for the Commercial Auto Liability line. He will go on to discuss ho

Moderator: Stephen Talley

Speakers: William Wilt, FCAS, CFA, President, Assured Research, LLC  
William Finn, FCAS, Senior Vice President & Chief Actuary, Hanover Insurance Group  
Dana Franzetti, Head P&C Reinsurance Claims, Swiss Re

## 📅 🌍 ST-3: Significant Transactions - How an Actuary can Drive the Truck

**Concurrent Sessions 4, Tuesday, Sept 14, 10:00 - 11:15 AM**

A case for how and why actuaries should involve themselves in strategic decisions including novations, other reinsurance transactions, sales and acquisitions, and even restructuring within an organization.

Moderator: Paige DeMeter

Speakers: Keith Palmer, FCAS, Partner, PricewaterhouseCoopers  
Melissa Holt, FCAS, VP - Analytics Manager, PricewaterhouseCoopers  
Alice Czajkowski, Deals Director, PricewaterhouseCoopers LLP

## ☐ ST-4: Reserving for Loyalty Programs

Concurrent Sessions 5, Tuesday, Sept 14, 2:15 - 3:30 PM

Loyalty Programs issue points or miles to members, rewarding them for being loyal to their Hotel Brands and Airlines. These points/miles serve as a currency and represent an obligation to the programs that need to cover the cost of a potential award stay or flight into the future. Estimating future redemption rates is a non-trivial exercise; for programs that do not have expiration rules, members can redeem today points/miles that were earned 20+ years ago.

For actuarial models to accurately estimate the liability associated with Loyalty programs they need to properly reflect changes in members' redemption behavior over time, in light of programs evolution and rapidly changing external economic conditions. Our session will describe at a high level the structure of Loyalty programs, and present different models that can be used to assess these estimates, from simple to complex.

Moderator: Rachel Dolsky

Speakers: Emmanuel Bardis, FCAS, Director, Willis Towers Watson  
Alexander Turrell, FCAS, Consultant, Willis Towers Watson

## ☐ ST-5: Way of Working: How the Pandemic has Changed How Actuaries Work

Concurrent Sessions 6, Tuesday, Sept 14, 4:15 - 5:30 PM

The pandemic has impacted insurance prices, products, processes and its people. Ways of working during the pandemic shifted – but where will it head in the future? During this moderated discussion, industry leaders will discuss how actuarial departments will function in the future with the aim of raising awareness to changing “ways of working” so that individuals and companies can be best prepared. The discussion will focus on three areas: organization of teams, talent management, use of technology, and will include audience polling to hear from you and gauge broader industry views.

Moderator/Speaker: Christina Gwilliam, FCAS, Senior Director, Willis Towers Watson

Speakers: James Merz, FCAS, Chief Actuarial and Analytics Officer, Westfield Insurance  
Philip Baum, VP - Chief Actuary, Grange Mutual Casualty Group

## Roundtables

### ☐ 🌞 RT-1: "Look Ma, No Hands!" A Discussion of Successful Uses of Automation for Reserving Processes

Monday AM Roundtables, Monday, Sept 13, 9:15 - 10:05 AM

Many reserving teams are using automation for mundane tasks to free up valuable actuarial resources to focus on value added activities. This roundtable discussion will be a moderated discussion about successful applications of automation, giving participants a forum to share their successes.

Facilitator: Christina Gwilliam, FCAS, Senior Director, Willis Towers Watson

### ☐ 🌞🌞 RT-2: Auto Data + COVID-19 = ???

Monday AM Roundtables, Monday, Sept 13, 9:15 - 10:05 AM

This roundtable discussion will be focused on aspects, including ASOPs, that actuaries should consider when dealing with auto data that has been impacted by the COVID-19 pandemic when performing their reserving and ratemaking activities.

Facilitator: Greg Frankowiak, FCAS, CSPA, Assistant Vice President & Actuary, State Farm Insurance Companies

### ☐ 🌞🌞 RT-3: Mergers and Acquisitions

Monday AM Roundtables, Monday, Sept 13, 9:15 - 10:05 AM

M&A, two letters that can have a lasting impact on your company. Mergers and acquisitions are becoming a normalcy across the insurance industry, creating numerous growth and diversification opportunities.

Seizing these opportunities can be one of the greatest challenges faced by organizations.

Whether you are an expert or a novice at M&A, join us for a collaborative discussion. Those in attendance can expect a robust conversation on topics such as:

- What is M&A
- How to handle being acquired
- What to do when you acquire
- Getting to know the other side
- Benefits and drawbacks
- How to address both cultural and strategic issues

Facilitators: Nicole Harrington, ACAS, Actuarial Manager, Progressive Insurance Company  
Lise Hasegawa, ACAS, Vice President & Reserving Actuary, MetLife Auto & Home



## ☐ 🌍 RT-4: "Hey Ma, I flunked" A Discussion about New Techniques that Didn't Pan out and the Value of Failing Fast

Monday PM Roundtables, Monday, Sept 13, 6:20 - 7:10 PM

Thomas Edison said, "I have not failed. I've just found 10,000 ways that won't work." As the pace of innovation within reserving practices accelerates, failures are inevitable. The CLRS concurrent sessions are filled with success stories, but the value of our failures are often overlooked - it is an opportunity to learn! This roundtable will be a moderated discussion about participants failures to extract learnings from the efforts.

Facilitators: Christina Gwilliam, FCAS, Senior Director, Willis Towers Watson

## ☐ 🌍 RT-5: COVID-19's Business Interruption and DIC Claim Impact

Monday PM Roundtables, Monday, Sept 13, 6:20 - 7:10 PM

In this roundtable session, we will discuss Business Interruption and Difference In Conditions claims resulting from the COVID-19 pandemic. Included in the discussion will be claims experience that has been observed, potential claims that might not have been covered (and why), how these policies might change moving forward as a result of the pandemic, and other general actions taken by insurers as a result of the pandemic.

Facilitators: Jordan Paszek, ACAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Nicholas Gurgone, FCAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.  
Greg Fears, FCAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.

## ☐ 🌍 RT-6: Diversity: The Conversation Continues

Monday PM Roundtables, Monday, Sept 13, 6:20 - 7:10 PM

This roundtable will be a forum to continue the conversation from the Diversity general session, Acknowledging and Addressing Invisible Struggles Within Diverse Teams. Participants should bring an open mind and a willingness to share their personal perspectives as we discuss improving representation in the actuarial profession and strategies that both impacted individuals and allies can employ to become part of the solution. Presenters from the earlier general session will be on hand to also answer any additional questions you have that were not previously addressed.

Moderator: Kendra Letang

Speakers: Mallika Bender, FCAS, Diversity, Equity & Inclusion Staff Actuary, Casualty Actuarial Society  
Jessica Leong, FCAS, Lead Data Scientist, Zurich North America  
Jacob Akstins, ACAS, Actuarial Consultant, Nationwide Insurance  
Daniel Fernandez, FCAS, Vice President & LOB Specialist, Partner Re  
Simone Walker, ACAS, Actuarial Managing Director - Reserving Analytics, CNA Insurance Companies

## ☐ 🌍 RT-7: Surviving a State Financial Exam

**Monday PM Roundtables, Monday, Sept 13, 6:20 - 7:10 PM**

Is there a risk-focused financial examination in your future, or have you recently been through one and survived? This roundtable discussion, facilitated by regulatory actuary, will focus on how you (as a company actuary, consultant, Appointed Actuary, or regulator) can help the examination process go smoothly and efficiently. Join us to share your experiences from past examinations or to learn what you can expect and how to prepare for one in the future.

Facilitator: Miriam Fisk, P&C Actuarial Team Leader, Texas Department of Insurance

## ☐ 🌍 RT-8: Data Issues: Frequent Problems and Your Solutions

**Tuesday AM Roundtables, Tuesday, Sept 14, 9:00 - 9:50 AM**

When performing reserve analyses, we often encounter data issues. In this roundtable, we will discuss how we work through them.

Facilitators: Trenton Lipka, ACAS, Senior Actuarial Analyst, Pinnacle Actuarial Resources, Inc.  
Darcie Truttmann, FCAS, Consulting Actuary, Pinnacle Actuarial Resources, Inc.

## ☐ 🌍 RT-10: Professionalism Case Studies

**Tuesday AM Roundtables, Tuesday, Sept 14, 9:00 - 9:50 AM**

In this interactive session, we will discuss the CAS Code of Conduct and apply it to several different business scenarios. Discussion will include which parts of the Code of Conduct would apply to the situations, and what steps to take if you feel you or another CAS member is having trouble interpreting the Code of Conduct.

Moderator: Chris Holt  
Speakers: Kendall Williams, Staff Actuary, Casualty Actuarial Society  
Martin Menard, FCAS, Director, PricewaterhouseCoopers

## ☐ 🌍 RT-11: Underwriting and Reserving Cycles: Causes and Cures

**Tuesday AM Roundtables, Tuesday, Sept 14, 9:00 - 9:50 AM**

Not long ago we heard that underwriting cycles were a thing of the past. Today we are again seeing cyclical patterns in loss ratios, price movement and prior years' reserve changes. Our roundtable will look at the numbers and discuss some of the causes of cycles and how we, as actuaries, can measure and steer through them.

Facilitator: David Clark, Senior Actuary, Munich Re America Services, Inc.

## ☐ 🌍 RT-12: A&E Trends Update

**Tuesday PM Roundtables, Tuesday, Sept 14, 5:35 - 6:25 PM**

Discussion of recent asbestos and environmental financials/trends including trends with other mass torts. We will discuss the YE 2020 Industry statistics and roundtable participants' observations of how COVID lockdowns may or may not have impacted Industry experience.

Facilitators: Sandra Santomenno, Senior Director, Willis Towers Watson

Terri Kremenski, ACAS, Consulting Actuary, Willis Towers Watson

## ☐ 🌍 RT-13: ABCD Roundup

**Tuesday PM Roundtables, Tuesday, Sept 14, 5:35 - 6:25 PM**

This round table discussion is intended to allow the participants to ask their questions and have the experts on professionalism provide guidance on how actuaries can use the ASOPs and Code of Conduct to resolve their professionalism concerns. The attendees should prepare their own issue to be discussed and explored during the session.

Moderator: Alan Hines

Speakers: Michael Toothman, FCAS, President, Actuarial & Risk Consulting Services

Albert Beer, FCAS, Michael J. Kevaney/ XL Chair, Professor of Actuarial Science, St. John's University

## ☐ 🌍 🌍 RT-14: The Potential of Rate Filings: Industry Benchmarking and Considerations for Reserving Actuaries

**Monday PM Roundtables, Monday, Sept 13, 6:20 - 7:10 PM**

This session will show how rate filings can be useful to reserving actuaries for benchmarking purposes. A coverage search demonstration and discussion of various considerations, resources and items to look out for will open the session, followed by a discussion of professionalism considerations when using this benchmark data.

Facilitator: Brittany Henrich, ACAS, Associate Actuary, Pinnacle Actuarial Resources, Inc.

## 📅 🌍 CL-1: Evolution of Health Insurance: Including Application of Lessons Learned from Healthcare to P&C Lines of Business

**Monday AM Roundtables, Monday, Sept 13, 9:15 - 10:05 AM**

Join Ryan Cichy from KPMG for a lively conversation on the evolution of health insurance and discuss recent lessons learned from healthcare, and how they can be applied to Property and Casualty lines of business – including workers’ compensation, auto insurance, and structured settlement insurance.

Discussion topics within this session will include:

- Aspirations of healthcare’s triple-aim – lower costs, better care, and improved health – and how misaligned incentives can impact financial and health outcomes.
- The evolution of healthcare payment models – from Fee For Service to Value Based Care – and how this shift is re-shaping traditional insurance operating models.
- Re-thinking workers compensation/auto-insurance medical claim exposure through the use of healthcare “tools” – including targeted provider networks, Social Determinants of Health (SDOH) data, and a re-focus of Utilization Management efforts on quality.
- The usage of new data sources (structured/unstructured) to enhance

Speaker: Ryan Cichy, Senior Associate, KPMG, LLP

## 📅 🌍 CL-2: Reputational Risk

**Monday AM Roundtables, Monday, Sept 13, 9:15 - 10:05 AM**

Reputational Risk is a subject that should be of concern to all practicing actuaries. It not only affects you personally but reflects on your employer and the Casualty Actuarial Society itself. In this session we will start out by presenting guidance provided by the Office of the Comptroller of the Currency on Complex Structured Financial Transactions (CSFT). We will then introduce a brief case study on a reinsurance treaty with a commission that adjusts based on loss experience. Attendees will discuss questions, such as: Is the structure consistent with the CSFT guidance? What are the reserving actuary's responsibilities?

Moderator: Josh Merck

Speakers: Melissa Huenefeldt, ACAS, VP - Analytics Manager, Lockton Companies  
Todd Hess, FCAS, Head Risk Management P&C Reinsurance Americas, Swiss Re

## ☐ 🌍🌍 CL-4: Discussion of Cyber Insurance

**Tuesday AM Roundtables, Tuesday, Sept 14, 9:00 - 9:50 AM**

From the Colonial Pipeline to SolarWinds, cyber-crime and cyber insurance have become daily news items. Today cyber risk impacts just about every line of business to varying degrees and in different ways. It also affects many aspects of actuarial work, from pricing and risk management to product development. A better understanding of cyber risk and the relevant issues will improve understanding of this ever-changing landscape. The panel will discuss some of the more critical issues impacting cyber risk and cyber insurance.

**Moderator/Speaker:** Norman Niami, FCAS, Chairperson, Cyber Risk Task Force, American Academy of Actuaries

**Speakers:** Eduard Alpin, Chief Actuary, Resilience Insurance  
 Samuel Tashima, FCAS, Associate Director & Actuary, Aon  
 Wanchin Chou, FCAS, CSPA, Chief Insurance Actuary, State of Connecticut Insurance Dept.  
 Lewis Guignard, Director of Data Science Solutions, Guidewire Software

## ☐ 🌍🌍 CL-5: Risk Transfer Practice Note: 2021 Updates

**Tuesday AM Roundtables, Tuesday, Sept 14, 9:00 - 9:50 AM**

Various regulatory activities, including new reporting requirements, occurring from 2002 to 2005 have provided the impetus for various papers on risk transfer. The American Academy of Actuaries published two: Risk Transfer in P&C Reinsurance: Report to the Casualty Actuarial Task Force of the National Association of Insurance Commissioners in 2005; and Reinsurance Attestation Supplement 20-1: Risk Transfer Testing Practice Note in 2007. This current update builds on the work done a decade and a half ago and adds to the bases of FAS 113 and SSAP 62R within these papers the requirements of Solvency II, which became effective in 2016, and the anticipated implementation of IFRS 17 in 2023.

**Moderator:** Charles Lei

**Speakers:** Ernest Wilson, FCAS, Senior Corporate Actuary, Munich Re America, Inc.  
 Eduardo Esteve, Partner, Deloitte Mexico  
 Derek Freihaut, FCAS, Principal and Consulting Actuary, Rose-Hulman Institute of Technology

## 📅 🌍 CL-6: Modeling the COVID-19 Pandemic: US Perspectives

**Tuesday PM Roundtables, Tuesday, Sept 14, 5:35 - 6:25 PM**

In this session, Wen Liew, a reserving actuary with UnitedHealthcare, will give a brief presentation demonstrating some publicly available data sources that he has used to help his company anticipate the impact of the pandemic on utilization.

The session is intended to provide an opportunity for follow-up discussion of the General Session by Deirdre Hollingsworth but from a US perspective. Wen has some great anecdotes on where he got things right, as well as the places he got it wrong, over the past year and is happy to share them. But we want to hear from the audience – how are property/casualty actuaries measuring the impact to their businesses? What data sources have you used? Where have you gotten it wrong, and how have analyses improved over the past year? How are you expecting COVID to play out over the next year?

Please come prepared to speak to your experiences, ask questions, and contribute to a lively discussion.

Moderator: John Wade

Speaker: Wen Liew, VP Actuarial Services, United Healthcare

## Workshops

### 📅 🌍 WS-1: Reserving Bootcamp

8-hour Workshop, Wednesday, Sept 15, 9:00 AM - 5:30 PM

Ready to go back to basics and review the fundamentals of reserving? There is no better way to jump start your knowledge or refresh your loss reserving skills than this one day loss Reserving Bootcamp.

This session will enhance your basic and intermediate skills using the traditional methods of reserving. Participants will work with experienced loss reserving professionals, using realistic loss and expense claims data.

The session goals are:

- To build loss 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 evaluate 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. It is recommended to have dual monitors or split screen monitors to more effectively participate in thi

Moderator: Sylvia Yang

Speakers: Jane Taylor, FCAS, Huggins Actuarial Services, Inc.  
R. Scott Cederburg, FCAS, Director, BDO  
D. Scott Lamb, FCAS, Senior Vice President, McKee Risk Management

## ☐ 🌍🌍 WS-2: Maximizing the Value of Your Actuarial Report and Opinion

6-hour Workshop, Wednesday, Sept 15, 10:00 AM - 5:00 PM

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.

Moderator: John Wade

Speakers: Derek Freihaut, FCAS, Principal and Consulting Actuary, Rose-Hulman Institute of Technology  
Kathleen Odomirok, FCAS, Principal, EY  
Michael Toothman, FCAS, President, Actuarial & Risk Consulting Services  
Susan Andrews, FCAS, Property Casualty Actuary, State of Connecticut Insurance Dept.  
Richard Gergasko, FCAS, President and CEO, Texas Mutual Insurance Company

## ☐ 🌍🌍 WS-3: IFRS 17: Measurement and Implementation Complexities

AM Half-Day Workshops, Wednesday, Sept 15, 9:00 AM - 12:30 PM

This workshop will provide a brief overview of the IFRS 17 guidance and then build upon that to do deep dives into key complexities of measurement (including around reinsurance held), additional data/estimation requirements, and operational considerations. While doing so, we will focus on how this will impact P&C actuaries, primarily in reserving roles. Comparisons to current practice will be focused on what is done today under US GAAP.

Moderator: Chris Holt

Speakers: Lela Patrik, FCAS, Actuarial Consultant, PricewaterhouseCoopers  
Nathan Luketin, FCAS, IFRS & SAP Transformation Lead, Zurich North America  
A. Carver Roy, FCAS, Director, PricewaterhouseCoopers  
Adam Kallin, FCAS, Manager, PricewaterhouseCoopers



## ☐ 🌍🌍 WS-4: Triangles Reimagined

**PM Half-Day Workshops, Wednesday, Sept 15, 1:30 - 5:00 PM**

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 pr

Moderator: Debbie King

Speakers: Christopher Gross, ACAS, CEO, Gross Consulting  
Steven Lacke, FCAS, Gross Consulting

## ☐ 🌍🌍 WS-5: Writing R Packages

**PM Half-Day Workshops, Wednesday, Sept 15, 1:30 - 5:00 PM**

An R package enables analysts to share code in a robust and efficient way. This can happen either as part of the global open source community, or it may be deployed privately, within an enterprise. This half-day workshop will give attendees the skills they need to develop their own R packages. We'll talk about how to structure the project directory, write useful documentation, and create unit tests. We'll discuss the basics of the development cycle, and how to utilize platforms like GitHub to manage collaboration and deployment. Attendees will leave with a basic R package that they can modify for their own purposes. Basic familiarity with R is assumed.

Moderator: Greg Spindell

Speaker: Brian Fannin, ACAS, CSPA, Research Actuary, Casualty Actuarial Society

## CE Attendance Log

| Attended                 | Timeslot                    | Session Title  | Max CE |
|--------------------------|-----------------------------|--|--------|
| <input type="checkbox"/> | Monday AM Roundtables       | Mergers and Acquisitions   | 1      |
| <input type="checkbox"/> | Monday AM Roundtables       | Auto Data + COVID-19 = ???   | 1      |
| <input type="checkbox"/> | Monday AM Roundtables       | Reputational Risk  | 1      |
| <input type="checkbox"/> | Monday AM Roundtables       | Evolution of Health Insurance: Including Application of Lessons Learned from Healthcare to P&C Lines of Business                                 | 1      |
| <input type="checkbox"/> | Monday AM Roundtables       | "Look Ma, No Hands!" A Discussion of Successful Uses of Automation for Reserving Processes   | 1      |
| <input type="checkbox"/> | Keynote Speaker and Welcome | Global Warning: How the New Rules of Innovation Can Transform Businesses, Propel Nations to Greatness, and Tame the World's Most Wicked Problems | 1.5    |
| <input type="checkbox"/> | Diversity Luncheon          | Acknowledging and Addressing Invisible Struggles Within Diverse Teams  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 1       | Estimating Loss and ALAE Reserves in the Challenging World of Construction Defects (CD) Risks by Consideration of Closed Payment Segmentation    | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 1       | Claim-Level Reserving: From Theory to Practice   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 1       | The Future of Intelligent Claims   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 1       | State of the Market for Directors & Officers Liability Insurance   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 1       | Pandemic Risk Management: Resources Contingency Planning and Allocation  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 2       | Credibility Weighting for Reserving via Bayesian MCMC  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 2       | Reserving and Financial Reporting for Non-Insurance Company Entities   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 2       | State of the Commercial & Personal Auto markets  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 2       | Coffee Klatch for Opinion Writers  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 2       | Application of Blockchain and Smart Contracts in Parametric Insurance  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 3       | Smarter Segmentation for the Lazy Actuary  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 3       | Scalars: Aggregating Capital Requirements Across Regulatory Frameworks   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 3       | State of the Workers Compensation Market   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 3       | After the Wind Blows: Property Reserving in Gulf Coast States  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 3       | Social Inflation   | 1.5    |

## CE Attendance Log

| Attended                 | Timeslot               | Session Title   | Max CE |
|--------------------------|------------------------|---|--------|
| <input type="checkbox"/> | Monday PM Roundtables  | "Hey Ma, I flunked" A Discussion about New Techniques that Didn't Pan out and the Value of Failing Fast | 1      |
| <input type="checkbox"/> | Monday PM Roundtables  | COVID-19's Business Interruption and DIC Claim Impact   | 1      |
| <input type="checkbox"/> | Monday PM Roundtables  | Diversity: The Conversation Continues   | 1      |
| <input type="checkbox"/> | Monday PM Roundtables  | Surviving a State Financial Exam  | 1      |
| <input type="checkbox"/> | Monday PM Roundtables  | The Potential of Rate Filings: Industry Benchmarking and Considerations for Reserving Actuaries         | 1      |
| <input type="checkbox"/> | Tuesday AM Roundtables | Discussion of Cyber Insurance   | 1      |
| <input type="checkbox"/> | Tuesday AM Roundtables | Risk Transfer Practice Note: 2021 Updates   | 1      |
| <input type="checkbox"/> | Tuesday AM Roundtables | Underwriting and Reserving Cycles: Causes and Cures   | 1      |
| <input type="checkbox"/> | Tuesday AM Roundtables | Professionalism Case Studies  | 1      |
| <input type="checkbox"/> | Tuesday AM Roundtables | Data Issues: Frequent Problems and Your Solutions   | 1      |
| <input type="checkbox"/> | Concurrent Sessions 4  | The Actuary and IBNR Techniques: A Machine Learning Approach  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 4  | Company Specific Risk Factor Disclosures  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 4  | The Dynamics of Actuarial Reserving Departments – Past, Present and Future                              | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 4  | Significant Transactions - How an Actuary can Drive the Truck   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 4  | MPL Market Update   | 1.5    |
| <input type="checkbox"/> | General Sessions       | General Session on Professionalism: "I didn't know the ABCD does THAT!"                                 | 1.5    |
| <input type="checkbox"/> | General Sessions       | Modeling the COVID-19 Pandemic  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 5  | Healthcare Trend Monitoring and Forecasting   | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 5  | Practical Considerations for Reserving for Emerging Mass Tort Exposure                                  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 5  | Measuring Changes in Inflation: A Non-Technical Discussion of Two Techniques                            | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 5  | The Problem with Communication is the Illusion that it has occurred                                     | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 5  | Reserving for Loyalty Programs  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 6  | IFRS 17: I can't hide from it anymore, so what do I need to know?!                                      | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 6  | Trends in Reserving Methodologies in the Sharing Economy  | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 6  | Impact of COVID 19 on Workers Compensation and General Liability  | 1.5    |

## CE Attendance Log

| Attended                 | Timeslot               | Session Title   | Max CE |
|--------------------------|------------------------|---|--------|
| <input type="checkbox"/> | Concurrent Sessions 6  | State of the Reinsurance Market                                 | 1.5    |
| <input type="checkbox"/> | Concurrent Sessions 6  | Way of Working: How the Pandemic has Changed How Actuaries Work | 1.5    |
| <input type="checkbox"/> | Tuesday PM Roundtables | ABCD Roundup  | 1      |
| <input type="checkbox"/> | Tuesday PM Roundtables | A&E Trends Update   | 1      |
| <input type="checkbox"/> | Tuesday PM Roundtables | Modeling the COVID-19 Pandemic: US Perspectives                 | 1      |
| <input type="checkbox"/> | AM Half-Day Workshops  | IFRS 17: Measurement and Implementation Complexities            | 4.2    |
| <input type="checkbox"/> | 8-hour Workshop        | Reserving Bootcamp  | 8.4    |
| <input type="checkbox"/> | 6-hour Workshop        | Maximizing the Value of Your Actuarial Report and Opinion       | 6      |
| <input type="checkbox"/> | PM Half-Day Workshops  | Triangles Reimagined  | 4.2    |
| <input type="checkbox"/> | PM Half-Day Workshops  | Writing R Packages  | 4.2    |

This activity may qualify for up to 16 CE credits (not including workshops) for the RPM Virtual Seminar 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.

Note: 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.

## Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Notes

[illegible]





Casualty Actuarial Society  
4350 North Fairfax Drive, Suite 250  
Arlington, Virginia 22203  
(703) 276-3100  
[casact.org](http://casact.org)