

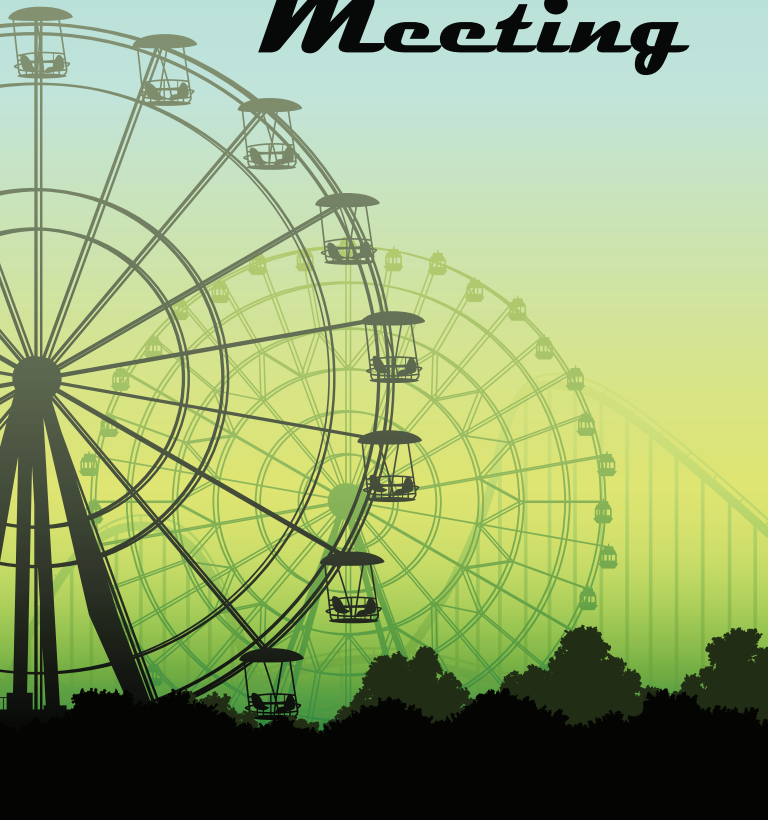
2017

November 5-8, 2017

Hilton Anaheim

Anaheim, CA

Annual Meeting





Expertise. Insight.
Solutions.®

2017 *Annual Meeting*

November 5-8, 2017

Hilton Anaheim • Anaheim, CA

Table of Contents

Overview.....	1
Meeting Schedule.....	12
Exhibitors/Sponsors/Advertisers	20
Featured Speaker	24
General and Concurrent Sessions	27
Hotel Maps	Inside Back Cover

General Information

For more information on the following, please consult the CAS Annual Meeting website, www.casact.org/annual, or the Annual Meeting app on your smartphone or tablet.

Consent to Use of Photographic Images

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

Antitrust Notice

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

For more complete information regarding the CAS antitrust compliance policy, please refer to the CAS Website at <http://bit.ly/20UMw6Z>.

Speaker Opinions

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

Registration Hours

The registration desk will be open as follows at the Ballroom Registration Desk.

- Sunday, November 5 - 4:00 p.m. – 6:30 p.m.
- Monday, November 6 - 7:00 a.m. – 4:30 p.m.
- Tuesday, November 7 - 7:00 a.m. – 11:30 a.m.
- Tuesday, November 7 - 12:45 p.m. – 2:00 p.m.
- Wednesday, November 8 - 7:00 a.m. – 11:30 a.m.

Security Note: When leaving the meeting room for an extended period of time, please take valuables and personal belongings with you. Neither the CAS nor the Hilton Anaheim may be held responsible for lost or stolen items.

The Board of Directors

Nancy Braithwaite.....	President
Brian Brown.....	President-Elect
Stephen Lowe.....	Immediate Past President

Elected Directors

Kendra Felisky	Camille Minogue
Barry Franklin	Claudine Modlin
Jim Guszcza	Chris Nyce
Larry Haefner	Mark Shapland
Mary Hosford	Robert Walling
Leslie Marlo	William Wilder

Appointed Directors

John Lucker
Peter L. Miller
Hemant Shah

Executive Council

Nancy Braithwaite.....	President
Brian Brown.....	President-Elect
Sean McDermott.....	Vice President-Administration
Steven D. Armstrong.....	Vice President-Admissions
Roger Hayne.....	Vice President-International
Shane Barnes.....	Vice President-Marketing & Communications
Justin Brenden.....	Vice President-Professional Education
A. David Cummings.....	Vice President-Research & Development
Cynthia Ziegler.....	CAS Executive Director

*Wireless Access — Sponsored by
Pinnacle Actuarial Resources*

Attendees of the CAS Annual Meeting have access to complimentary Wi-Fi in the meeting rooms.

Wi-Fi Login: pinnacle
Wi-Fi Password: pinnacle

Download the CAS Meeting App



Tweet at the CAS Annual Meeting!

We want to hear from you!
Tweet about the Annual Meeting educational sessions and meeting events using **#CASAnnual**.

Follow the CAS on Twitter @CASact

Social Media

The CAS is on Facebook, Twitter and LinkedIn! Stay informed by following the CAS on social media for exclusive updates on CAS activities! The CAS Facebook, Twitter and LinkedIn pages will feature many different topics including conference updates, online discussions and industry updates. Join and connect with peers and colleagues and discuss issues important to you.

If you cannot access Facebook, Twitter or LinkedIn from your office, please consider signing up to follow us from your personal account at home.

Please visit our website at casact.org and click the social media icons to find our pages!



*Check out our
Annual Meeting snapchat filter!*

We're running a custom filter during the New Fellows Reception on Monday and our Tuesday evening event at Disney California Adventure® Park.

Celebration of New Members

Monday, November 6, 8:00 a.m. – 8:45 a.m., California Ballroom CD

This event includes the Address to New Members given by CAS Past President Al Beer.

Tuesday Buffet Dinner at Disney California Adventure®™ Park

8:00 p.m. – 11:00 p.m.

Enjoy dinner in the company of other CAS Annual Meeting attendees at the Hollywood Backlot inside Disney California Adventure® Park. The Backlot is located in Hollywood Land; a map will be posted near the CAS Registration Desk. Dinner will be available in the Backlot from 8-10 p.m. with dessert and bar open until 11 p.m. The Theme Park closes at 8 p.m. and once day guests are cleared out, both Monsters, Inc. Mike & Sulley to the Rescue! and the new attraction Guardians of the Galaxy-Mission: BREAKOUT! will be available exclusively to CAS guests. Please dress in casual attire.

Besides access to the private CAS dinner, fully registered Annual Meeting attendees and spouses/guests, along with individuals holding a Tuesday Buffet Dinner ticket will also receive special Theme Park admission. Your zero-value admission ticket permits entry into Disney California Adventure® Park three (3) hours prior to Park closure. You may enjoy the park with the general public beginning at 5 p.m. and make your way to our private event that starts at 8 p.m.

Note: A wristband is required for access and you must be inside our private party area to remain after park closure at 8 p.m. If you wish to enjoy Disney California Adventure® Park before 5 p.m., you must purchase a Theme Park ticket to gain entrance to the Park; the ticket and wristband provided by the CAS WILL NOT serve as a Theme Park admission ticket prior to 5 p.m. Once inside the Park via a purchased ticket, you must show a CAS wristband to gain entry to the CAS dinner.

Tuesday Buffet Dinner Ticket & Wristband Pickup Hours

Disney requires each guest to possess both a ticket for park entry AND a wristband for the CAS dinner at Disney California Adventure® Park on Tuesday evening. These tickets and wristbands will ONLY be distributed from the CAS Registration Desk during the following hours:

(IMPORTANT: One ticket and one wristband will be distributed per every fully registered attendee, spouse/guest, and individual ticket holder. No duplicate or replacement tickets or wristbands will be distributed without additional payment.)

Monday, November 6	1:45 p.m. – 4:30 p.m.
Tuesday, November 7	7:00 a.m. – 11:30 a.m. 12:45 p.m. – 2:00 p.m. (please note this time is BEFORE the Roundtable Discussions)



**Liberty
Mutual.**
INSURANCE

PROUD OF OUR PEOPLE

**Liberty Mutual proudly congratulates our new
Casualty Actuarial Society Fellows and Associates.**

New Fellows

Samantha Andrews
Jonathan Bauman
Megan Callahan
James Chen Chen
Brendon Donahue
Danielle Donnelly
Douglas Fry
Jigar Gada
Matthew Gentile
Kevin Goldsmith
Albert Hsueh
Long Huynh
Seth Jackson
Katelyn Jeffreys
Sayali Joshi
Spencer K'Burg
Scott Kelly
Thomas Lapinski
Yunqin Sissi Li

Angela Padilha
Nicholas Russel
Alexandra Takeva
Ross Tulloch
Corey Vaughan
Kamolphan Weeraklaew
Thomas Wright
Yucen Yin
Justin Zaugg

New Associates

Nicholas Garvin
Kristen Hayes
Jonathan Humphrey
Efua Mantey
William Thomas Purvis
Joseph Rocco
Utsav Shah
Yang Song
Yechao Zhang

libertymutualgroup.com/careers

Liberty Mutual Insurance is an equal opportunity employer. We acknowledge, welcome, and accept the differences that each employee brings to the workplace.

Student Program

Palos Verde AB

The Casualty Actuarial Society is hosting 30 university students from across the country for a one-day student program to be held in conjunction with the Annual Meeting on November 7th. The program offers an important opportunity to plant the seeds for the future of the CAS by connecting with university students in a meaningful way.

Attendees Will:

- Learn more about the CAS and the property and casualty industry
- Connect with CAS members and participate in a speed network session
- Attend professional concurrent sessions and student-specific sessions
- Participate in a career panel and an actuarial escape room activity
- Take professional headshots
- Learn more about the CAS and the property and casualty industry
- Connect with CAS members and participate in a speed network session
- Attend professional concurrent sessions and student-specific sessions
- Participate in a career panel and an actuarial escape room activity
- Take professional headshots

Sessions by Theme

Each concurrent session is grouped by a primary theme, although sessions may cover multiple themes. See session titles on p. 27.

Corresponding Concurrent Sessions and Times

Session Themes	Monday 1:45 p.m. – 3:00 p.m.	Monday 3:30 p.m. – 4:45 p.m.	
Business Skills		C-5	
CAS	C-32	C-20	
Catastrophes	C-2	C-19	
Commercial Lines	C-6	C-18	
Data Management			
Emerging Issues	C-2, C-6	C-1, C-18, C-19	
ERM			
Financial	C-22	C-17	
Health Care			
International	C-22	C-17	
Innovative		C-1	
Personal Lines	C-8	C-24	
Predictive Modeling	C-23, C-33	C-9, C-24	
Pricing			
Professionalism	C-26	C-20	
Regulatory			
Research			
Reserving		C-9	
Workers' Comp	C-33		

Corresponding Concurrent Sessions and Times

	Tuesday 10:00 a.m. – 11:15 a.m.	Tuesday 1:15 p.m. – 2:30 p.m.	Wednesday 8:00 a.m. – 9:15 a.m.
	C-25, C-30	C-3, C-15, C-30B	
	C-28, C-37	C-3, C-36	C-20B, C-35
	C-12, C-27		
		C-11, C-31	
	C-12	C-1B, C-11, C-29	
	C-7		C-14
	C-7	C-34	C-10, C-14
			C-21
	C-16		
		C-1B, C-29	
	C-16, C-27		
	C-23B		C-13B, C-21
		C-31	
	C-26B	C-36	C-20B
		C-34	C-4
			C-10
			C-4

Meeting Schedule

Sunday, November 5

4:00 p.m. – 6:30 p.m.	Registration.....
5:00 p.m. – 6:30 p.m.	Recognition Reception for New Associates and their Spouses/Guests
	Group Photos of New Associates.....
6:30 p.m. – 7:30 p.m.	Welcome Reception & Exhibits, sponsored by The CAS Institute

Monday, November 6

7:00 a.m. – 4:30 p.m.	Registration.....
7:00 a.m. – 9:00 a.m.	Continental Breakfast & Exhibits.....
8:00 a.m. – 8:45 a.m.	Welcome, New Member Recognition, Celebration of New Members.....
8:45 a.m. – 9:15 a.m.	Refreshment Break & Exhibits
8:45 a.m. – 9:15 a.m.	New Member Group Photo Session
9:15 a.m. – 10:15 a.m.	Featured Speaker
10:15 a.m. – 11:00 a.m.	Presidential Address and Business Session.....
11:00 a.m. – 11:15 a.m.	Transition/Stretch Break.....
11:15 a.m. – 12:30 p.m.	General Session I.....
12:30 p.m. – 1:45 p.m.	Luncheon.....

Meeting Schedule

..... Ballroom Registration Desk

..... Pacific Ballroom B

..... Pacific Ballroom A

..... Pacific Ballroom CD

..... Ballroom Registration Desk

..... Pacific Ballroom CD

..... California Ballroom CD

..... Pacific Ballroom CD

..... Pacific Ballroom

..... California Ballroom CD

..... California Ballroom CD

..... California Ballroom CD

..... California Ballroom CD

..... Pacific Ballroom CD

Meeting Schedule

1:45 p.m. – 3:00 p.m.

Concurrent Sessions 1

Avila AB	California Ballroom A	California Ballroom B	Capistrano AB
C-32	C-23	C-6	C-22

3:00 p.m. – 3:30 p.m.

Refreshment Break & Exhibits

3:30 p.m. – 4:45 p.m.

Concurrent Session 2

Avila AB	California Ballroom A	California Ballroom B
C-18	C-24	C-1

San Simeon AB	El Capitan AB
C-9	C-17

5:00 p.m. – 6:00 p.m.

Officers' Reception for New Fellows and their Spouses/Guests.....

Remainder of evening is yours to enjoy.

Tuesday, November 7

7:00 a.m. – 11:30 a.m.

Registration.....

7:00 a.m. – 9:00 a.m.

Continental Breakfast & Exhibits.....

8:00 a.m. – 9:30 a.m.

General Session II.....

General Session III

8:40 a.m. – 4:15 p.m.

Student Program

Meeting Schedule

	Huntington ABC	Laguna AB	San Simeon AB	El Capitan AB
	C-2	C-26	C-8	C-33

..... Pacific Ballroom CD

	Capistrano AB	Huntington ABC	Laguna AB
	C-5	C-20	C-19

	Manhattan	
	LL-1	

..... Sunset Deck

..... Ballroom Registration Desk

..... Pacific Ballroom CD

..... California Ballroom D

..... California Ballroom C

..... Palos Verdes AB

Meeting Schedule

9:30 a.m. – 10:00 a.m. Refreshment Break & Exhibits

10:00 a.m. – 11:15 a.m. **Concurrent Session 3**

Avila AB	California Ballroom A	California Ballroom B	
C-30	C-26B	C-16	
	Laguna AB	San Simeon AB	
	C-7	C-23B	

11:15 a.m. – 1:15 p.m. Lunch on Your Own

12:45 p.m. – 2:00 p.m. Registration.....

1:15 p.m. – 2:30 p.m. **Concurrent Session 4**

Avila AB	California Ballroom A	California Ballroom B	
C-30B	C-29	C-15	
	Laguna AB	San Simeon AB	
	C-31	C-34	

2:45 p.m. – 4:00 p.m. Concurrent Session 4B (Livestream).....

3:00 p.m. – 4:00 p.m. Roundtables

Avila AB	California Ballroom A	Capistrano AB	Huntington ABC	
RT-1	RT-8	RT-2	RT-4	

Meeting Schedule

..... Pacific Ballroom CD

	California Ballroom C	Capistrano AB	Huntington ABC
	C-27	C-28	C-25

	El Capitan AB	Manhattan
	C-12	C-37

..... Ballroom Registration Desk

	California Ballroom C	Capistrano AB	Huntington ABC
	C-11	C-1B	C-36

	El Capitan AB	Manhattan
	C-3	LL-2

..... C-13 (California Ballroom C)

	Laguna AB	San Simeon AB	El Capitan AB	Manhattan
	RT-6	RT-7	RT-3	RT-5

Meeting Schedule

- 4:30 p.m. – 5:45 p.m. Concurrent Session 4C (Livestream)
- 8:00 p.m.–11:00 p.m. Tuesday Buffet Dinner at Disney
California Adventure™ Park
sponsored by Verisk/ISO

Wednesday, November 8

- 7:00 a.m. – 11:30 a.m. Registration.....
- 7:00 a.m. – 9:00 a.m. Continental Breakfast & Exhibits.....
- 8:00 a.m. – 9:15 a.m. **Concurrent Session 5**

Avila AB	California Ballroom A	California Ballroom B	Huntington ABC	
C-35	C-13B	C-21	C-10	

- 9:15 a.m. – 9:45 a.m. Refreshment Break & Exhibits
- 9:45 a.m. – 11:15 a.m. General Session IV
- 11:15 a.m. – 11:30 a.m. Adjournment.....

Meeting Schedule

..... C-29B (California Ballroom C)

..... Ballroom Registration Desk

..... Pacific Ballroom CD

	Laguna AB	San Simeon AB	El Capitan AB	
	C-20B	C-4	C-14	

..... Pacific Ballroom CD

..... California Ballroom CD

..... California Ballroom CD

Exhibitors/Sponsors/Advertisers

The CAS appreciates the support of the 2017 Annual Meeting Sponsors.

 <p>D.W. Simpson Diamond Partner, Exhibitor</p>	<p>D.W. Simpson Diamond Partner, Exhibitor</p>
 <p>Ezra Penland Actuarial Recruitment Diamond Partner, Exhibitor</p>	<p>Ezra Penland Actuarial Recruitment Diamond Partner, Exhibitor</p>
 <p>Milliman Diamond Partner, Giveaway Item Sponsor, Exhibitor</p>	<p>Milliman Diamond Partner, Giveaway Item Sponsor, Exhibitor</p>
 <p>Pryor Associates Executive Search Diamond Partner, Giveaway Item Sponsor, Exhibitor</p>	<p>Pryor Associates Executive Search Diamond Partner, Giveaway Item Sponsor, Exhibitor</p>

Exhibitors/Sponsors/Advertisers

 <p>PINNACLE ACTUARIAL RESOURCES, INC.</p>	<p>Pinnacle Actuarial Resources</p> <p>Platinum Partner, WiFi Sponsor, Exhibitor</p>
 <p>ISO Verisk Insurance Solutions</p>	<p>Verisk/ISO</p> <p>Platinum Partner, Tuesday Night Dinner Sponsor, Exhibitor</p>
 <p>Willis Towers Watson</p>	<p>Willis Towers Watson</p> <p>Platinum Partner, Mobile App Sponsor</p>
 <p>ACTUARIAL CAREERS, INC.®</p>	<p>Actuarial Careers, Inc.</p> <p>Gold Partner, Giveaway Item Sponsor, Exhibitor</p>
 <p>CARFAX Banking & Insurance Group MORE INFORMATION. BETTER DECISIONS.™</p>	<p>CARFAX</p> <p>Gold Partner, Exhibitor</p>

Exhibitors/Sponsors/Advertisers

 <p>Red Mountain TECHNOLOGIES</p>	<p>Red Mountain Technologies</p> <p>Gold Partner, Exhibitor</p>
<p>TRAVELERS </p>	<p>The Travelers Companies, Inc.</p> <p>Silver Partner, Room Key Sponsor</p>
 <p>AMERICAN ACADEMY <i>of</i> ACTUARIES</p>	<p>American Academy of Actuaries</p> <p>Exhibitor</p>
 <p>The Actuarial FOUNDATION</p>	<p>The Actuarial Foundation</p> <p>Exhibitor, Advertiser</p>
 <p>A^M BEST®</p>	<p>A.M. Best</p> <p>Exhibitor</p>

Exhibitors/Sponsors/Advertisers

 <p>The logo for the CAS Institute features the letters 'CAS' in white inside a blue circle, with a small orange dot above the 'A'. Below the circle is a blue ribbon banner with the word 'INSTITUTE' in white capital letters.</p>	<p>The CAS Institute Sunday Reception Sponsor, Giveaway Item Sponsor, Exhibitor</p>
 <p>The logo for Insight Decision Solutions Inc. consists of a blue circle containing a white lowercase 'i', followed by the text 'Insight Decision Solutions Inc.' in a serif font.</p>	<p>Insight Decision Solutions, Inc. Exhibitor, Advertiser</p>
 <p>The logo for The Institutes features a stylized triangle composed of blue, red, and yellow segments above the text 'The Institutes' in a serif font. Below this, in smaller capital letters, is 'RISK & INSURANCE KNOWLEDGE GROUP'.</p>	<p>The Institutes Exhibitor</p>
 <p>The logo for Liberty Mutual Insurance features a blue silhouette of the Statue of Liberty's head and crown on the left. To the right, the words 'Liberty Mutual' are written in a large serif font, with 'INSURANCE' in a smaller sans-serif font below them.</p>	<p>Liberty Mutual Advertiser</p>
<p>Oliver James associates</p>	<p>Oliver James Associates Exhibitor</p>

Featured Speaker

David Horsager

□ *F-1: The Trust Edge™: How Top Leaders and Organizations Drive Business Results Through Trust*

**Monday, November 6, 9:15 a.m. - 10:15 a.m.,
California CD**

Trust is a fundamental, bottom line issue. Without it, leaders lose teams, salespeople lose sales, and organizations lose reputation, good employees, relationships and revenue. But with trust, individuals and organizations enjoy greater creativity, productivity, freedom and results. Through his industry-leading research, *The Trust Outlook™*, and his firsthand experience working with the world's highest-performing organizations, Horsager reveals how top leaders and organizations drive business results to become the most trusted in their industry.

Key Takeaways:

- The actionable framework you can use immediately to build trust and solve your biggest challenges.
- The HOW-HOW-HOW process to spark momentum, see immediate results and inspire trust.
- The newest research on how to develop trust individually, in your team and in your organization — or go extinct in the new economy.

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

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.

2017 Annual Meeting — Key to Complexity of Sessions



Basic. No prior knowledge of the subject matter is assumed.

Little or no technical content.



Intermediate. General knowledge of the subject matter is assumed.

Moderate technical content.



Advanced. Working knowledge of the subject matter is assumed.

Moderate to highly technical content.



Checkbox for Personal Attendance Record



Recorded Session



Livestreamed Session



In Partnership with The Institutes

Become a Certified Specialist in Predictive Analytics (CSPA)

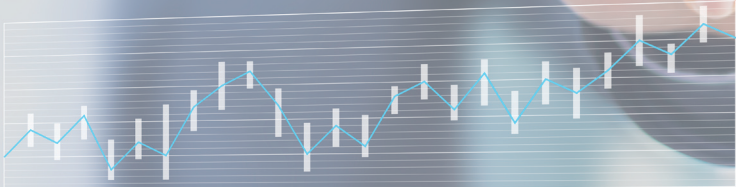
CAS Annual Meeting

What is iCAS Up To?

Wednesday, November 8
8 a.m.
Avila AB

Visit us at
Exhibit Booth #5

62%



Learn more at TheCASInstitute.org

The CAS Institute is a subsidiary of the Casualty Actuarial Society (CAS) providing specialized credentials to quantitative professionals in the insurance industry.

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

☐ GS-1: Data Science and Behavioral Science — A Cognitive Collaboration

California CD

Join us in an interactive session with the audience in discussing some of these questions and explore how data science and behavioral science can work together in our continued evolution and collaboration of artificial intelligence and human decision-making.

Panelists: Kudakwashe Chibanda; James Guszczka;
David Ingram

Concurrent Sessions

Monday, November 6, 1:45 p.m. - 3:00 p.m.

☐ C-2: The Actuarial Climate Indices

Huntington ABC

Intro and discussion on the actuarial climate risk index (ACRI) and the broader actuarial climate index (ACI).

Panelist: Douglas Collins

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ C-6: Benchmarking Unpaid Claim Distributions

California B

Unpaid claim distributions are a critical component of many different risk management applications. Extensive research based on over 30,000 triangles of industry data over a 10-year span has provided new insights into benchmarking all models, including deterministic ranges and correlation. These insights have important implications for all uses of reserve variability modeling, including capital modeling and ERM.

Panelist: Mark Shapland

□ C-8: Caution! Assigned Risk Plans: Changes Ahead

San Simeon AB

This session will explore the background behind a new proposal on personal auto Assigned Risk Plans, review the industry input received, and lay a foundation for what the future may look like. Particular emphasis will be placed on how a company can manage through the potential future changes in how they fulfill their residual market obligations.

Panelists: James Rowland; Charles Kwolek

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

-  C-22: *Ogden Rates: Issues/Concerns to Consider When Moving to a Negative Long Term Discount Rate* 

Capistrano AB

In February 2017, the long-term discount rate in U.K., known as the Ogden Rate, was reduced to -0.75% from 2.5% of lump sum payments in personal injury cases. This session will explore the impacts of this change as well as the industry's response.

Panelists: Keith Allen; Peter Cordell

-  C-23: *Operations Research and Actuarial Science: Blending the Disciplines* 

California A

Repeated on Tuesday at 10:00 a.m.

Explore the connections between operations research (developing optimal business processes) and actuarial science (using statistical concepts to quantify financial and insurance risk) within a P&C insurance context.

Panelists: Craig Sloss; Jeffrey Baer

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

□ C-26: Professionalism in the Age of Trump

Laguna AB

Repeated on Tuesday at 10:00 a.m.

Interactive session analyzes political prediction processes, draws insurance analogies and debates appropriate professional considerations for actuaries.

Panelists: Jim Weiss; Daniel Moskala

□ C-32: University Actuarial Programs and the P&C Industry — CAS University Award Winners Share Their Insights and Best Practices

Avila AB

A representative from each recipient of the 2017 CAS University Award will discuss how they are incorporating P&C topics into their curriculum, research, industry engagement initiatives and innovations.

Moderator: Tamar Gertner

Panelists: Peng Shi; Albert Beer

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

-  C-33: Using Statistical Modeling to Update NCCI's Table M 

El Capitan AB

Overviews of retro rating and 2017 changes to retro rating offered as well as discussion of the creation of the Table of Aggregate Loss Factors (formerly insurance charges).

Moderator: Tom Daley

Panelists: Kirk Bitu; Yen-Chieh Tseng

Concurrent Sessions

Monday, November 6, 3:30 p.m. - 4:45 p.m.

-  C-1: Actuaries in Nontraditional Roles 

California B

Repeated on Tuesday at 1:15 p.m.

Three actuaries in nontraditional roles discuss career paths and how actuarial training and knowledge aid them in their current roles.

Panelists: Dustin Loeffler; Howard Kunst; Stacey Gotham; Susan Bermender

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ C-5: Applying Brain Rules for Effective Presentations

Capistrano AB

Interactive session applying an adult learning theory to explore specific rules that apply to presentations and collaboratively diagnose enhancements to a number of sample slides.

Panelists: Beverly Phillips; Stephanie Rabin

□ C-9: Correlations Between Lines of Business — Are They Real or Illusory?

San Simeon AB

A presentation of two papers: Avanzi, Taylor, Wong’s “Correlations Between Insurance Lines of Business: An Illusion or a Real Phenomenon? Some Methodological Considerations” and Meyers’ “Dependencies in Stochastic Loss Reserve Models.”

Panelists: Benjamin Avanzi; Greg Taylor; Bernard Wong; Glenn Meyers

□ C-17: IFRS 17 Insurance Contracts — The Final Standard Is Here!

El Capitan AB

A summary of IFRS 17 and its related impacts on P&C insurance and reinsurance companies.

Panelists: Adam Kallin; Lela Patrik; Dawn Fowle

□ C-18: The Importance of Actuaries in Captive Insurance

Avila AB

Discussion of the of actuary's role in captive formation, pricing and reserving, and review of funding models, ERM captives, risk distribution and ongoing tax concerns.

Panelists: Robert Walling; David Liptz; Chris Nash

□ C-19: Is It Time to Revisit How to Address Natural Hazard Risks?

Laguna AB

Revisit how governments and the private sector are addressing risk from natural hazards, a growing problem in the Western world. Are property owners, governments and insurers doing enough to proactively mitigate the risk before disaster strikes?

Panelists: H. Joseph Coughlin Jr.; Peter Dailey;
Jason Harger

□ C-20: Lights! Camera! Professionalism!

Huntington ABC

Repeated on Wednesday at 8:00 a.m.

Enjoy the acting of some fine fellow actuaries taking on professional dilemmas. You will have a better understanding of ASOPs and codes of conduct and how to apply them in your own professional ethical dilemmas.

Panelists: Peter Royek; Brandon Shain; Kendall
Williams; Michael Chen; Rebecca
Williams; James Bedford

C-24: Predictive Modeling of Property Risks

California A

Examine property risks using a dependent modeling approach, focusing on situations where risks are correlated in certain ways and the identification of such dependence among risks is essential to the prediction.

Panelist: Peng Shi

Learning Lounge 1

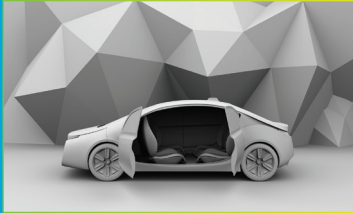
Manhattan

Join in an interactive audience participation session where the panelists will illustrate a real life but disguised case study that considers ERM standards of practice, actuarial standards of practice, and code of professional conduct.

Panelists: Bob Wolf; David Ingram

Be a part of The Actuarial Foundation's *Modeling the Future (MTF) Challenge*

- *MTF Challenge* is an actuarial competition for high school students. The 2017-2018 *Challenge* topic is autonomous vehicles.
- It's an opportunity for students to model how new technologies may change the future.
- Volunteer or sponsor the *MTF Challenge* today!



A Program of The Actuarial Foundation

Modeling the Future Challenge

www.mtfchallenge.org

General Session 99 & 999

Tuesday, November 7, 8:00 a.m. - 9:30 a.m.

☐  *GS-2: Are We Ready for the Future of Hail?* 

California D

Discussions on the volatility in frequency and severity of hail losses, changes in hail loss experience, the impact of climate change and methods to reduce property losses.

Moderator: Linda Brobeck

Panelists: Arindam Samanta; John Allen

☐  *GS-3: Innovation in Commercial Lines: An Oxymoron?*  

California C

Commercial insurers have not fully benefited from the advent of data analytics and the connected economy. With loss, expense and combined ratios trending up across many lines, the industry must innovate, reassessing the way we conduct business to underwrite with better insight and more precision and in an operationally efficient manner.

Panelists: Greg Massey; Maroun Mourad;
Elizabeth Casas Leano; Marya Propis

Concurrent Sessions

Tuesday, November 7, 10:00 a.m. - 11:15 a.m.

☐   *C-7: Capital Allocation: Concepts and Controversies* 

Laguna AB

Basic concepts and definitions are covered, as well examining alternative formulas and metrics, and presenting results for an example having both underwriting and reserve risk for three LOBs. Audience members will be asked to discuss specific areas of controversy, e.g., should risk be measured on a one-year or ultimate basis?

Panelists: Ira Robbin; Daniel Bauer; Nicholas Pastor

☐  *C-12: Cyber for Small to Midsize Enterprises (SMEs)* 

El Capitan AB

SMEs demand a simplified and quick application process and a low price point, which creates unique considerations when pricing and underwriting. This session outlines SMEs' specialized coverage needs for cyber and some of the pricing and underwriting challenges.

Panelist: Nicholas Irwin

□  *C-16: The Future of Auto Insurance: A Vision From Japan* 

California B

An introduction to the Japanese auto insurance market and discussion on the future of auto insurance in Japan.

Panelists: Nana Kato; Keisuke Nakajima; Shun Motegi; Hirokazu Hirai; Masashi Hiratsuka; Tomohiro Itabashi

□  *C-23B: Operations Research and Actuarial Science: Blending the Disciplines* 

San Simeon AB

Explore the connections between operations research (developing optimal business processes) and actuarial science (using statistical concepts to quantify financial and insurance risk) within a P&C insurance context.

Panelists: Craig Sloss; Jeffrey Baer

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ C-25: Presenting Your Data Graphically

Huntington ABC

Best practices for representing data graphically covered. Discussions of good and bad presentations — how and why they fail or succeed.

Panelists: Aaron Hillebrandt; Meyer Lehman

□ C-26B: Professionalism in the Age of Trump

California A

Interactive session analyzes political prediction processes, draws insurance analogies and debates appropriate professional considerations for actuaries.

Panelists: Jim Weiss; Daniel Moskala

□ C-27: Rising Auto Insurance Costs : What and Why

California C

Discussion on rising personal auto costs, and, general trends affecting this industry, as well as drill down into nonstandard v standard personal auto.

Panelists: Benoit Carrier; James Lynch; David Blades

□ C-28: Technology-Based Exams

Capistrano AB

CAS Admissions discusses initiatives — implementing technology-based exams (TBEs), restructuring the Admissions department and related volunteer opportunities, responding to suggestions from the candidate working group and other priorities for the coming year. Candidates are welcome to attend and interact.

Panelists: Michelle Iarkowski; Steven Armstrong

□ C-30: They Just Don't Understand! Getting Through Without Giving Up, or Giving In

Avila AB

Repeated on Tuesday at 1:15 p.m.

Understand your own communication style and how others receive you. Energetic presentation challenges participants to examine their approaches to communication and leadership.

Speaker: Ron Hurst

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

C-37: Focus on New Fellows: Volunteering, Millennials and the Growing CAS

Manhattan

Interactive session, led by the CAS New Members Committee, discusses the committee's role in the CAS and that of millennials and volunteers. New FCAS can learn about the member services available and share thoughts and ideas on the future of the CAS.

Moderator: Shelby Wolff

Panelists: Kim Guerriero; Rebecca Reich; Bryan Takvorian; Jennifer Aschenbrenner

Concurrent Sessions

Tuesday, November 7, 1:15 p.m. - 2:30 p.m.

C-1B: Actuaries in Nontraditional Roles

Capistrano AB

Three actuaries in nontraditional roles discuss career paths and how actuarial training and knowledge aid them in their current roles.

Panelists: Dustin Loeffler; Howard Kunst; Stacey Gotham; Susan Bermender

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ C-3: Addressing Unconscious Bias in the Workplace

El Capitan AB

Diversity within the workplace and how to address unconscious bias.

Panelists: Keith Allen; Alejandro Ortega; Kezia Charles

□ C-11: Cyber and Data Security: Coverage and Compliance Considerations

California C

A conversation on common concerns regarding cyber liability insurance policies, e.g., pitfalls when purchasing such products, and will explore issues arising from the recent breach at Equifax, and what others can learn from the fallout.

Panelists: Benjamin Zellner; Lori Nugent; Fred Karlinsky; Robert Parisi

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

☐ 💡 C-15: First Steps With Integrating R & RStudio Into Actuarial Workflow 🎤

California B

Hands-on session with a demo of an individual claim simulation model implemented in R. Familiarity with basic programming concepts helpful. Must bring a laptop and install R, R Studio and TeX Live PRIOR to attending the session (detailed instructions provided to registered participants).

Panelists: Thomas Hartl; Jean-François Greeff

☐ 💡 C-29: Tesla vs. Google: What if Uber and ZipCar Had a Baby 🎤

California A

Repeated on Tuesday at 4:30 p.m.

Take a peek into the not-too-distant future. Explore the potential benefits for highly automated cars and car services, as well as the impact of ownerless/driverless cars on risk management and insurance.

Panelists: David Snow; Martin Frappolli; David Aylor; Jared Smollik

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

-  *C-30B: They Just Don't Understand!
Getting Through Without Giving Up or Giving In* 

Avila AB

Understand your own communication style and how others receive you. Energetic presentation challenges participants to examine their approaches to communication and leadership.

Speaker: Ron Hurst

-  *C-31: UBI Data Possibilities* 



Laguna AB

UBI adoption rates continue to creep up slowly, but can tech and the infrastructure now form the basis for an entire suite of new auto insurance possibilities?

Panelists: Roosevelt Mosley; Geoffrey Werner; Bill Everett; Gary Wang

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

-  *C-34: What Does the Updated AM Best Rating System Mean for the Insurance Industry?* 

San Simeon AB

This session will examine the credit fundamentals of the U.S. P&C-sector, identify the critical rating drivers and highlight the impact of the new BCRM on financial strength ratings. There will also be an in-depth review of the enhancements to the BCAR model, focusing underwriting, reserving, investment and credit.

Panelists: Raju Bohra; Stefan Holzberger; James Gillard

-  *C-36: Who Wants to Be an Actuary?*

Huntington ABC

This session will NOT be recorded.

Trivia game on the code of conduct and ASOPs, helps determine what you know and what you might want to review. Who said professionalism can't be fun?

Panelists: Peter Royek; Brandon Shain; Michael Speedling

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ LL-2: Learning Lounge 2

Manhattan

Join in an interactive audience participation session where panelists illustrate a real life but disguised case studies where the audience will be asked to evaluate a specific series of circumstances where an Appointed Actuary reserve review was deemed in hindsight to be over 25% materially deficient 3 years later.

Panelist: Bob Wolf

Livestream

Tuesday, November 7, 2:45 p.m. - 4:00 p.m.

□ C-13: Easy Tree-sy: An Overview of Decision Trees

California C

Repeated on Wednesday at 8:00 a.m.

Introductory session illustrates decision tree fundamentals, including mechanics, high-level theory behind them, benefits and drawbacks, model fit assessment and predictive power improvement.

Panelists: Linda Brobeck; Kudakwashe Chibanda



Congratulations to Travelers' newly credentialed CAS actuaries.

ACAS

Taylor Caligaris Dominic Lee Mary Liao

FCAS

Dan DiMugno Jacqueline Dufficy Erik Guffy Jonathan Parad

We are proud of you and your accomplishments!

Connect
with us:



travelers.com/Careers



linkedin.com/company/travelers/careers



facebook.com/travelerscareers



twitter.com/trv_careers

TRAVELERS
It's better under the umbrella®

travelers.com

© 2017 The Travelers Indemnity Company. All rights reserved. Travelers and the Travelers Umbrella logo are registered trademarks of The Travelers Indemnity Company in the U.S. and other countries. M-18233 New 9-17

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

Roundtables

Tuesday, November 7, 3:00 pm - 4:00 p.m.

RT-1: Technology-Based Exams Roundtable

Avila AB

Join leaders from the Admissions area of the CAS for a discussion on current initiatives under development within the CAS Basic Education system.

Panelists: Steven Armstrong; Michelle Iarkowski

RT-2: Flood Working Party

Capistrano AB

Flood and natural hazard risks in general are a growing problem in the Western world, and three major parties are impacted: property owners, governments and insurers. Global warming and sea level rise are the newest factors to impact some of the risks.

Panelist: Frank Gribbon

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ *RT-3: How to Prepare Your First Research Call*

El Capitan AB

Are you interested in but have never responded to a call paper program? Would you like to know how to be successful in your submissions? At this roundtable, two successful call paper authors will share their secrets and encourage dialogue. This roundtable is open to 25 people.

Panelists: Lynne Bloom; Brian MacMahon

□ *RT-4: Personal Auto Pricing at the “VIN Build Level”*

Huntington ABC

Join us for a discussion on recent advances in automotive technology that have insurers asking themselves whether and how they can price at the level of an individual VIN build.

Panelist: Jimmy Engstrom

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

□ *RT-5: The New Associate's Perspective: Advancing Your Career Through the CAS*

Manhattan

New Associates discuss their decisions to pursue careers in P&C and offer the CAS advice on positioning itself as the best career path for aspiring actuaries, improving its connection to exam candidates and better engaging new members in the CAS community. Limited to New Associates only.

Moderator: Shelby Wolff

Panelists: Kim Guerriero; Rebecca Reich; Helen Simonett; Wes Griffiths; Daniel Moskala

□ *RT-6: Captive Insurance Company*

Laguna AB

Share your experiences on the evolving role of the actuary and best practices in forming, pricing and reserving for captive insurance companies. Other topics include funding models, enterprise risk captives, risk distribution and ongoing tax concerns.

Panelist: Rob Walling



**Liberty
Mutual.**
INSURANCE

LIFE HAPPINESS LIBERTY

At Liberty Mutual, we embrace all that fulfills and inspires our employees. That's why we create a workplace that gives them more room to stretch. To raise their voice. To make a real difference in the world. We're proud to be a company that champions our employees' pursuits — both at work and in life.

libertymutualgroup.com/careers



Liberty Mutual Insurance is an equal opportunity employer. We acknowledge, welcome, and accept the differences that each employee brings to the workplace.

□ *RT-7: Avoiding Pitfalls and Biases in Predictive Analytics*

San Simeon AB

Predictive models aren't magic and don't replace every tool in the actuary's toolbox. Used correctly they can provide greater accuracy and lead to useful insights, but they are also prone to misuse. Learn what is and what is not a predictive model and the conditions needed for them to work well.

Panelist: Ira Robbin

□ *RT-8: Actuaries in Nontraditional Roles*

California A

Actuaries trained in long-standing, time-tested methods are now stepping into nontraditional actuarial roles. We'll discuss how the training and knowledge gained through the CAS exams and on-the-job skills have catapulted some actuaries into unconventional jobs.

Panelists: Dustin Loeffler; Howard Kunst

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

Concurrent Sessions

Tuesday, November 7, 4:30 p.m. - 5:45 p.m.

- ☐  *C-29B: Tesla vs. Google: What if Uber and ZipCar Had a Baby*  

California C

Take a peek into the not-too-distant future. Explore the potential benefits for highly automated cars and car services, as well as the impact of ownerless/driverless cars on risk management and insurance.

Panelists: David Snow; Martin Frappolli; David Aylor; Jared Smollik

Concurrent Sessions

Wednesday, November 8, 8:00 a.m. - 9:15 a.m.

- ☐   *C-4: Answers and Questions About the California Workers' Compensation System* 

San Simeon AB

Detailed primer on unique issues and current events driving WC in California. followed by a spirited audience participation round of Jeopardy!

Panelists: Mark Priven; Alex Swedlow

□    C-10: A Cost of Capital Risk Margin Formula for Non-Life Insurance Liabilities 

Huntington ABC

Glenn Meyers shows how to use the MCMC output to (1) calculate the risk margin for an “ultimate” time horizon; (2) calculate the risk margin for a one-year time horizon; and (3) analyze the effect of diversification in a risk margin calculation for multiple lines of insurance.

Panelist: Glenn Meyers

□  C-13B: Easy Tree-sy: An Overview of Decision Trees 

California A

Introductory session illustrates decision tree fundamentals, including mechanics, high-level theory behind them, benefits and drawbacks, model fit assessment and predictive power improvement.

Panelists: Linda Brobeck; Kudakwashe Chibanda

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

□ C-14: Evolution of the ORSA Summary Report

El Capitan AB

The presenters will use their knowledge of ORSAs across large, mid-sized and small companies to explore the significant variation in approach and content that continue to exist among companies.

Panelists: Mike McComis; David Paul; Barry Franklin; Eli Russo

□ C-20B: Lights! Camera! Professionalism!

Laguna AB

Enjoy the acting of some fine fellow actuaries taking on professional dilemmas. You will have a better understanding of ASOPs and codes of conduct and how to apply them in your own professional ethical dilemmas.

Panelists: Peter Royek; Brandon Shain; Kendall Williams; Michael Chen; Rebecca Williams; James Bedford

General and Concurrent Sessions

Join the Conversation on Twitter #CAAnnual

☐  C-21: Modeling Hidden Costs of Infectious Diseases 


California B

The current state of infectious disease modeling and the big data analytics supporting novel insurance product development for mitigating against epidemics.

Panelists:

Cathine Lam; Cody Webb

INSIGHT ENTERPRISE...Business Intelligence for Insurance



The Insight Enterprise allows you to analyze dynamic, interactive run-off triangles and claim estimates as part of a flexible, modular business intelligence system together with policy, claim and financial diagnostics.

For more information, visit our booth during the conference or our website insightdecision.com

 **Insight Decision
Solutions Inc.**

8920 Woodbine Ave., Ste. 205
Markham ON, Canada L3R 9W9
416-479-0384

General and Concurrent Sessions

Join the Conversation on Twitter #CASAnnual

-  *C-35: What Is iCAS Up To? The Certified Specialist in Predictive Analytics (CSPA) Credential* 

Avila AB

The CAS Institute's leaders will share the latest information on the Certified Specialist in Predictive Analytics (CSPA) credential.

Panelists: Brian Brown; Peter Bothwell; Amy Brener; Stephen Stone

General Session IV

Wednesday, November 8, 9:45 a.m. - 11:30 a.m.

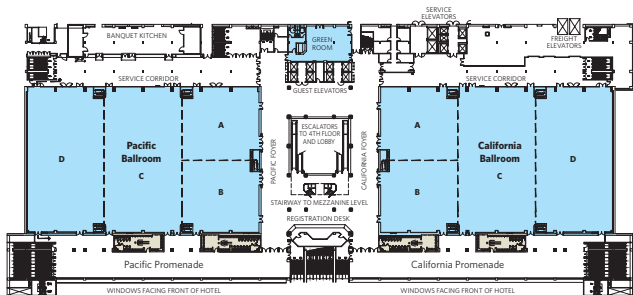
-  *GS-4: Emerging Claim Issues and How to Price & Underwrite Them* 

California CD

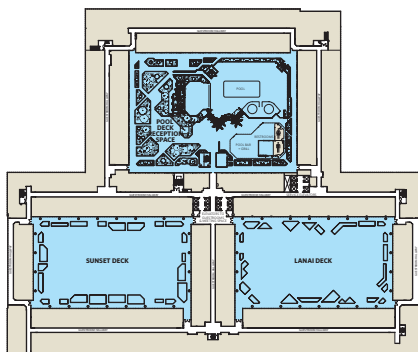
A discussion of the insurance risks evolving from society and technology, including exposures such as cyber crime, social media, marijuana, short-term rental and ridesharing.

Panelists: Benoit Carrier; Karen Landrum; Eric Voigt

BALLROOM LEVEL SECOND FLOOR



POOL DECK FIFTH FLOOR



Diamond Partners



EzraPenland.com



Actuarial Recruitment



*It Takes One to Know One...
An Actuary Placing Actuaries
(and Related Professionals)*

Platinum Partners



Gold Partners



Silver Partners

