

Spotlight on Key and Emerging Issues at Annual Meeting and Public Policy Forum

MORE THAN 200 ACTUARIES and public policy leaders gathered for the Academy's very successful [Annual Meeting and Public Policy](#)

[Forum](#) Nov. 3–4 in Washington, D.C. Attendees heard from public officials at plenary sessions, interacted with well-placed regulatory and other stakeholders at practice-

specific breakout sessions, and networked with peers at a celebratory dinner with world-class entertainment. And the Academy conducted its presidential transition, with Bob Beuerlein taking the leadership mantle from Tom Wildsmith.

Learn more about this yearly hallmark event throughout this issue of *Actuarial Update*:

- ➔ [Presidential transition, p. 3.](#)
- ➔ [Annual service awards, p. 3.](#)
- ➔ [Keynote and plenary sessions, pp. 4-5.](#)
- ➔ [Practice-specific breakout sessions, pp. 6-9.](#) ▲



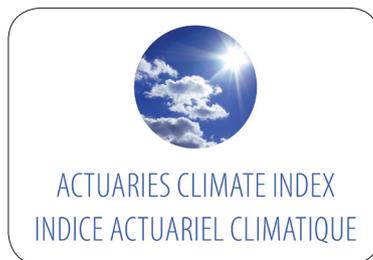
New Academy President Bob Beuerlein (right) accepts congratulations from outgoing President Tom Wildsmith

Actuaries Climate Index Measures Changes in Extreme Weather Events and Sea Level

THE ACADEMY, along with other organizations representing the actuarial profession in the United States and Canada—the Canadian Institute of Actuaries (CIA), the Casualty Actuarial Society (CAS), and the Society of Actuaries (SOA)—launched the [Actuaries Climate Index](#) (ACI), which provides a quarterly measure of changes in extreme weather events and sea levels.

“A lot of people have worked diligently over the past several years to produce the ACI, and we thank them for that,” said Academy President Bob Beuerlein. “This will be a very useful tool for actuaries, public policymakers, and the public that we will be able to utilize in the coming years.”

The index looks at the continental United States, Alaska, and Canada, with higher index values indi-



catating an increase in the occurrence of extreme weather events. Based on historical data drawn from scientific sources, the latest Actuaries Climate Index values confirm a sustained

increase in the impact of extreme effects from climate risk, such as high winds, heavy precipitation and drought.

“The ACI is designed to provide objective data about changes in the frequency of extreme climate events over recent decades,” said Doug Collins, chair of the Climate Change Committee, formed by a partnership of the Academy, CIA, CAS, and SOA. “Actuaries are experienced in the assessment and mitigation of the financial consequences of risk, and we have developed the index for analyzing climate change.”

The ACI is measured in standard deviations relative to the average readings during the reference period of 1961–1990. The data is from neutral,

SEE **CLIMATE**, PAGE 16

2

[Academy Reps Attend IAA meeting](#)

10-11

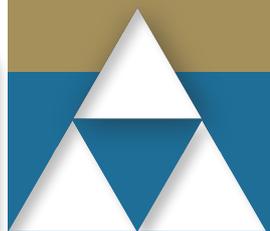
[Annual Meeting Photos](#)

13

[Professionalism Counts: Creating a Culture of Professionalism](#)

15

[New Health LTC Issue Brief](#)



DECEMBER

6-7 2016 Seminar on P/C Effective Loss Reserve Opinions, Chicago

21 Webinar: Can You Hear Me Now? Actuarial Communications Under ASOP No. 41

JANUARY

5 Post-NAIC Webinar

Academy NEWS

Academy Representatives Attend IAA Meeting in South Africa

NEARLY TWO DOZEN Academy volunteers participated as part of the U.S. delegation to the International Actuarial Association (IAA) meeting in Cape Town, South Africa, Nov. 18–21. The meeting attracted more than 250 delegates representing 39 of the 68 IAA full member associations, along with a number of IAA associate members. Academy representatives participate on the IAA Council and Executive Committee and serve as chair or vice chair of nine IAA committees.

Academy representatives participated in the meetings of the Actuarial Standards Committee and its various task forces, as well as in meetings of the committees on accreditation, advice and assistance, nominations, education, enterprise and financial risk, general insurance and insurance regulation, health, insurance accounting, education, pension and employee benefits, and social security.

Among the key issues discussed at the meeting, perhaps the most controversial centered on the role of the IAA in the governance of the global regulatory profession. In the area of standards, the Academy and other representatives of the U.S. delegation have agreed that the efforts to develop model actuarial standards of practice through the IAA are primarily for the benefit of those associations who lack the resources to establish their own actuarial standards of practice.

A similar governance issue concerning the IAA's education syllabus was debated at committee meetings and at the council meeting on the final day of the conference, with Academy President Bob Beuerlein articulating the position that the newly detailed and prescriptive IAA education syllabus should not be imposed on full member associations as a condition of membership. ▲

LHQ Seminar Draws Capacity Crowd

NEARLY 100 PEOPLE attended the Academy's [Life and Health Qualifications \(LHQ\) Seminar](#) this month in Arlington, Va. Now in its 16th year, the seminar is considered the most efficient way for actuaries to acquire required basic education and continuing education (CE) to be qualified to sign statements of actuarial opinion (SAOs) for NAIC Life and Health annual statements, and a popular way to earn continuing education credits under the U.S. Qualification Standards for those who already have the basic education needed to issue SAOs.

In addition to lectures with Q&A sessions,

attendees worked on case studies, including one led by Joeff Williams, the Academy's vice president of professionalism. Williams and seminar faculty members worked together for more than nine months to prepare the curriculum in order to ensure that attendees would receive up-to-date and expertly delivered information to prepare them for the LHQ examination.

"The case studies again this year emphasized the challenges actuaries encounter in real world situations," Williams said. "They illustrate the importance of asking the right questions and understanding the whole picture." ▲

Actuarial Clubs Information Posted on Academy Website

A NUMBER OF actuarial clubs have submitted their information to the Academy, which has been posted on our new clubs page, www.actuary.org/clubs. The page includes a link to submit your club's information—please include your club's name and location, regular

meeting schedule, contact information and website, and practice area(s), as applicable. Alternatively, you may email your club's information to the Academy at clubs@actuary.org. The Academy is providing this page as a service to our members and the actuarial profession. ▲

For a list of all previous and upcoming Academy events, please visit the Academy's online [Events Calendar](#).

To continue receiving the *Update* and other Academy publications on time, make sure the Academy has your correct contact information. Academy members can update their member profile at the member login page on the Academy [website](#).

Annual Meeting

Beuerlein Becomes Academy's President

BOB BEUERLEIN BECAME the Academy's 52nd president, succeeding Tom Wildsmith at the Annual Meeting and Public Policy Forum in Washington this month, and several new members began their terms on the Academy's Board of Directors.

In his [farewell remarks](#), Wildsmith gave a brief history of the Academy's founding, and spoke to the importance of its professional and objective voice on key policy issues to national and state policymakers.

After receiving the presidential medal from Wildsmith, Beuerlein delivered his [inaugural address](#), referencing the story of the boulder of Sisyphus from Greek mythology—Sisyphus's eternal task was to roll a large boulder to the top of a mountain—as a metaphor for the lifelong effort of actuaries to acquire and enhance a continuously

changing set of professional skills. "As some skills become perfected, other new skill requirements will appear," he said.

"I believe this means recognizing that the era of actuary as mere technician is over," Beuerlein said. "More than ever, actuaries need to apply advanced business skills and deep understanding of current developments—not just technical expertise—in dealing with clients, stakeholders, and the public."

He also challenged actuaries to become "more like thermostats than thermometers"—with the ability to change the temperature as needed, rather than merely gauge it. "We have the ability to be like thermostats in our business environment," he said. "By understanding complex issues, we



Beuerlein

can choose to influence the environment regarding these issues and thus impact the outcome of situations. We must avoid being like thermometers that understand the issues but do not influence the environment with this understanding." ▲

Volunteer, Service Award Recipients Honored

THE ACADEMY PRESENTED its prestigious [annual service and volunteer awards](#) at the Annual Meeting and Public Policy Forum, with Wildsmith bestowing the honors.

Robert Meilander received the Jarvis Farley Service Award for making significant contributions in the life and risk management and financial reporting practices, at the international level, and on the Actuarial Standards Board's ongoing work related to public pension plan issues.

Joan Weiss received the Robert J. Myers Public Service Award in recognition of her extraordinary contributions to the public good as a dedicated public servant at the Pension Benefit Guaranty Corp. and the

Joint Board for the Enrollment of Actuaries. She has also served on the Academy's Social Security Committee, the Committee on Actuarial Public Service, and on the Actuarial Standards Board's Pension Committee.

Both Meilander and Weiss stressed the value and benefits of their years-long volunteer work, both for themselves and for those who have relied on their work.

Donna Claire, **Barbara Klever**, and **Kathleen Odomirok** were recognized with Outstanding Volunteerism Awards, which honor Academy volunteers who have made a single, noteworthy volunteerism contribution in the previous year that is above and beyond what is reasonably expected of an Academy volunteer. ▲



Joan Weiss accepts the Robert J. Myers Public Service Award



Bob Meilander (left) accepts the Jarvis Farley Service Award

Annual Meeting

Speakers Share Insights at Keynote, Plenary Sessions

THE ANNUAL MEETING AND PUBLIC POLICY FORUM is the only actuarial meeting that focuses exclusively on legislative and regulatory affairs and developments likely to affect actuaries' day-to-day work. Attendees heard from high-profile speakers from various federal and state agencies, who offered their unique perspectives on key policy issues.

CMS' Slavitt Outlines Health Challenges

Andy Slavitt, acting administrator of the Centers for Medicare & Medicaid Services (CMS), gave the opening [plenary address](#), providing a straightforward and comprehensive look at the effects of and challenges facing ongoing implementation of the Affordable Care Act (ACA). His remarks, which were aired live by [C-SPAN3](#), focused on the “new normal” of the ACA and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), both of which also were covered in breakout sessions (see page 7).

In addition to speaking about the millions of people who gained access to health insurance through the ACA—and its guaranteed issue to people with pre-existing conditions—Slavitt focused on some of the major factors that are driving up the cost of health care. The most obvious way to provide more people with coverage is to expand Medicaid everywhere, he said: “Millions of people, health outcomes, state budgets, and health care finances will all instantly improve as they have around the country.

“Very few people outside of this room know what actually goes into their premium, what factors cause them to increase, and how rates are set,” he said. “Hospital profits in many cases are double or more what they were before the ACA. Drug costs are growing at record levels. And there are more endemic issues like the costs of untreated chronic diseases like diabetes or the large ‘tax’ the fee-for-service system imposes on us when care isn’t coordinated or when bad quality is delivered. While people may not equate these costs or inefficiencies to the premiums they pay each month, we



Slavitt

need to make those connections clear that this is where the real work needs to happen.”

He noted CMS is in the “early stages of a very new set of rules and just now beginning to see data on care patterns, costs, and opportunities,” and that, like Medicare, a series of policy decisions are typically going to be necessary to improve it. Those include “risk adjustment, state-based waivers, [and] the impact of third-party provider payments. Put politics aside—there will come a time for adjustments, whether at the state or federal level, and all things should be considered in order to get them right,” Slavitt said.

Sen. Chris Dodd on Financial Reform

Former Sen. Christopher Dodd described, with vivid and personal details, the U.S. economy’s financial crisis that came to a head shortly before the 2008 presidential election and led to the federal government’s Troubled Asset Relief Program (TARP) and ultimately the Dodd-Frank financial reform law.

He noted that in September 2008, then Federal Reserve Chairman Ben Bernanke told a group of lawmakers, “Unless you act, the entire financial system will melt down.” That revelation, Dodd added, was met by stunned silence. Recognizing the urgency to act, the TARP measure passed several weeks later, on Oct. 1, 2008, with the Senate approving it by a 75-24 vote. He said the crisis demanded action, and that it would not have been able to have been passed before or after that time.

Work on the subsequent bill bearing his name that eventually became law—Dodd-Frank—“was like herding sheep,” Dodd said, in getting a bipartisan coalition of lawmakers to support it. Ultimately, that measure was signed into law in 2010. He added that “I’m very worried what we might see coming ... [with] some of the rhetoric” to repeal the law. “To repeal the whole thing would be ludicrous,” he said.

PBGC’s Reeder on Pension Plans’ Solvency

Pension Benefit Guaranty Corp. (PBGC) Director Tom Reeder clearly identified the financial picture for single-employer and multiemployer defined benefit (DB) pension plans, and expressed great appreciation for the Academy’s new issue brief on the difficult choices ahead for multiemployer plans. His plenary address was televised live on [C-SPAN2](#) and posted to [C-SPAN’s website](#).

While the majority of Americans are not and have not been covered by a DB plan, on the other side of the coin there are about 10 million employees who are actively accruing benefits under such plans, Reeder said.

Those employers “often looked to defined benefit plans as a positive way to attract and retain a quality workforce,” he said. “We can’t turn our backs on those employers and those employees who have accrued those benefits. I think the DB plan is the best way to accrue lifetime income that you can’t outspend and you can’t

CONTINUED ON **PAGE 5**

Annual Meeting

CONTINUED FROM PAGE 4

outlive.” PBGC’s projection report to Congress on single employer and multiemployer plans showed that single plans—which cover about 30 million people—are likely to improve in the next 10 years, even though they are currently running a \$25 billion deficit.

The multiemployer plan system covers about 10 million but has a deficit more than double that of the single-employer and “is more likely than not to be insolvent within 10 years,” he said. But “in Washington, 10 years is a geologic era,” given political term lengths, Reeder said.

One of the reasons for the deficit is that “premiums have been so low for so long,” he said. And even the passage of the Multiemployer Pension Reform Act of 2014, which many thought would take care of the problem, only added about two years of solvency to the multiemployer program, he said.

CBO’s Hall on Federal Budget, Deficits

Congressional Budget Office (CBO) Director Keith Hall discussed the pivotal role the CBO, as a nonpartisan, objective legislative branch agency, plays in providing budget estimates and scoring existing and proposed legislation for Congress in the annual federal budgeting process. His slide presentation is posted on the [CBO website](#).

He outlined the nonpartisan agency’s overview of 10-year and 30-year budget projections, noting that CBO expects that, between 2016 and 2046, gross federal spending on major health care programs as a share of gross domestic product will increase by 4 percentage points, from 6.1 percent to 10.1 percent.

Of that total, 2.2 percentage points come from excess cost growth, meaning that spending per beneficiary, adjusted for demographic changes, will grow more quickly than potential GDP per capita, while the other 1.8 percentage points will come from the aging of the population, mostly because aging makes more people eligible for Medicare and increases costs per enrollee.

He also signaled growing spending on federal programs such as Medicare and Social Security as the U.S. population ages, and cited projections for higher federal debt in the next 30 years.

Oregon Insurance Commissioner Highlights Big Data Panel

A Big Data plenary session featured Oregon Insurance Commissioner Laura Cali, who provided perspective on and the approach of the NAIC Big Data (D) Working Group—which she chairs—which was established to identify regulators’ concerns and needs about the type and uses of Big Data across all practice areas. Her presentation kicked off a professionalism panel that discussed laws, standards, and ethical challenges that actuaries face working with Big Data.

In her plenary address leading into a panel discussion, Cali gave an overview of state regulatory issues—and challenges—regarding the subject, and said the Big Data Working Group was created under NAIC’s Market Regulation Consumer Affairs Committee, which is not associated with any direct line of business but encompasses property/casualty, life, and health issues, and is focused generally on market regulation and protecting consumers.

“As we look toward better understanding of the universe of Big Data and how we should be approaching this, we also need to be thinking about [whether] we need to be interpreting the existing tools we have differently, or [whether] we need new tools that enable us to do our jobs more effectively,” she said.

In a Q&A following the session presentation, Cali said that if Big Data can help consumers better understand how their rates are determined, and things they can do proactively to affect their rate for the better, it can help “deliver a better experience to the consumer. ... I do think actuaries have a role in that.”

One questioner asked about practices such as genetic testing of children, which could raise more difficult questions for doctors and health insurers. “I’ll be frank that those are exactly some of the concerns we have about Big Data—how far does it go?” Cali said. “I think that’s exactly why if I put on my regulatory hat, and not just my actuarial hat, [that’s] why it’s a matter of public policy.”

Bob Beuerlein, the Academy’s new president, introduced the panel, noting that Big Data has drawn much attention at recent NAIC meetings. Also participating on the panel were Catherine Murphy-Barron, outgoing vice president of the Academy’s Health Practice Council; and Jim MacGinnitie, the Academy’s senior casualty fellow.

“Devices of all kinds collect volumes of data, in amounts and with granularity that was unthinkable just a few years ago,” Beuerlein said. “Telematics collect information about driving performance, wristbands collect lifestyle information, online and brick-and-mortar stores collect data on consumers and their habits. Every day Big Data is getting even bigger, and more questions arise about data, including the appropriate use of it by actuaries.”

It also raises questions related to actuarial professionalism, such as what is the appropriate role of the actuary who solely or in a team setting encounters Big Data; and how can actuaries apply the Code of Professional Conduct, actuarial standards of practice, and other professionalism tools to address issues that may arise when working with Big Data, Beuerlein said. ▲



Reeder



Annual Meeting

Breakout Sessions Focus on Key Issues

Attendees of the Annual Meeting and Public Policy Forum took in a packed program of sessions tailored for specific practice areas—breakout tracks covered property/casualty, health, life, and pension issues.

Casualty

How Congress Could Reshape the NFIP: A Dialogue

Just 40 percent of flood-insurance policyholders say they are satisfied with their policies, and since 2010 there has been a 10 percent decrease in the number of policies in force, said David Maurstad, assistant administrator for federal insurance at the Federal Emergency Management Agency. The true risk for any given property currently is hidden by broad rating categories and indirect subsidies, he said, and called for a shift to structure-based, property-specific rates. “There is plenty of the room in the market” for private insurers selling flood coverage, Maurstad said.

Carolyn Kousky, a research fellow at Resources for the Future, talked about possible alternative models for the National Flood Insurance Program (NFIP), which must be reauthorized by Congress by late 2017. The NFIP never had a realistic mechanism for repaying money borrowed from the Treasury to cover truly catastrophic events like Hurricane Katrina or Superstorm Sandy, she said. Noting that some state programs for hurricane and earthquake catastrophe buy reinsurance, she called for consideration of pre-financing some potential catastrophe losses.

To a question about requiring that flood insurance coverage should be offered as a part of other policies, Shawna Ackerman—the panel moderator and chief actuary at the California Earthquake Authority, and outgoing vice president of the Academy’s Casualty Practice Council—noted that California requires earthquake coverage offerings but has seen only a 10 percent take-up rate. Session attendee Laura Cali, Oregon insurance commissioner, said the take-up rate was about the same in her state. Panelists agreed that low take-up rates for flood and earthquake coverages present a danger of adverse selection, with purchase only by those at greatest and most obvious risk.

The Many Faces of Cyber Risk

Cyber risk insurance is growing rapidly, with an estimated 85 percent increase since 2011 in annual premiums collected, although that still represents less than 1 percent of all property/casualty premium revenue, said panelist Michael Newman, senior policy analyst at the Treasury Department’s Federal Insurance Office. Last year, 120 insurance groups reported that they had collected a total of \$1 billion in premiums, but this is a “low-end estimate” and reflects only explicit named peril coverages by domestic insurers.

“Cyber insurance” is a very broad descriptor and the Treasury Department has identified 19 different types of coverage that are available, he said. There should be a common glossary so that there is no confusion about what is covered and what is not. Cyber risk is different from other perils because of what Newman called the concentration effect, a situation where a cyber attack on one busi-

ness or service can have an adverse effect on many other businesses.

The nature of the cyber risk is constantly evolving, and the problem of “ransomware” extortion has been exploding lately, said panelist Darin McMullen, cyber practice leader at risk management firm Aon. Cyber security losses at any one firm are relatively modest—usually in

the tens of thousands of dollars—and frequently fall below the loss retention threshold and remain under reported in insurance records, he said. The big question for firms is: “What are your business partners doing? Do they have their houses in order?”

Kevin McDonald, a security expert and CEO of the Greystaff Group, was another panelist in the session that was moderated by Rade Musulin, the incoming vice president of the Academy’s Casualty Practice Council.

Big Data = Big Changes

There are a lot of big questions surrounding Big Data, including who owns or controls data collected by companies, such as telematics information that auto insurers have been gathering, said panelist Harold Weston, professor of risk management at Georgia State University. If a driver wanted to change insurance companies, for instance, who has access to the information that has been compiled about that driver? Consumer advocates and insurance agent groups have raised questions lately about who owns or controls the telematics data that auto insurers have collected, he said. Other issues arise when insurers draw personal data into the regulated world of rate filings.

Insurers get their own data wrong in some rate filings, so what happens when they start importing lots of data from outside, asked panelist Michael McKenney, a regulator from Pennsylvania and chair of the NAIC’s Casualty Actuarial and Statistical Task Force. “Data accuracy is one of the bigger issues, one that’s not getting enough attention,” he said. Some third-party data sources ought to be considered advisory organizations and subjected to regulatory oversight, he said. Referring specifically to personal lines insurance, he said that when Big Data analyses result in what he calls micro-territories, then insurers are inviting scrutiny.

Jim MacGinnitie, senior casualty fellow at the Academy and a frequent speaker on Big Data, moderated the panel discussion. ▲



A casualty session panel talks about cyber risk

Annual Meeting

Health

MACRA—Where We Are and Where We're Going

At a session on the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), three panelists discussed what it might mean for Medicare Advantage plans, and what the implications are for the broader delivery system. Shari Westerfield, the new vice president of the Academy's Health Practice Council, moderated the session.

Molly MacHarris, the program lead at the Centers for Medicare & Medicaid Services (CMS) of the Merit-based Incentive Payment System (MIPS), started with explanations of what the Quality Payment Program is and how it works, with further clarifications about who can participate. She also reiterated how the 2017 ratings will affect 2019 payments and how the assessment of MIPS affects the quality payment program. She said CMS was hopeful about the new system and that it will succeed where past models have failed.

The Urban Institute's Robert Berenson said MACRA got it right when it promoted alternative payment models as an objective in the move from volume to value and repealed the sustainable growth rate. What it got wrong was the intense complexity that hurts small practices and the overly ambitious timelines. He gave CMS credit for the final rule of MACRA that provided a transition year for clinicians to let them experience the process, and also provided policymakers time to evaluate how it's working.

Medicare Access (MA) plans are currently changing their payment agreements with provider groups to move service delivery from volume to value, and those plans are also expanding value-based, risk assumption provider agreements to reward high-value care, said former Rep. Allyson Schwartz, D-Pa. Currently, over 50 percent of seniors have multiple chronic conditions and MA plans can help those seniors with care, said Schwartz, who is now president of the Better Medicare Alliance.

Rx Cost Growth—Controlling the Costs

With prescription drug costs soaring, panelists engaged in a discussion that partly focused on Medicare Part D and bundled payments with alternative proposals such as allowing Medicare to set prices in addition to reference pricing and arbitration for part B drugs. The fact that the "value of a drug" has never been defined was also an emphasis of panelists Gerard Anderson, a professor of health policy and management at Johns Hopkins University Bloomberg School of Public Health, and Len Nichols, director of the Center for Health Policy Research and Ethics at George Mason University.

A California ballot initiative was discussed, Proposition 61, which would have allowed the state's public programs to purchase drugs at prices paid by the U.S. Department of Veterans Affairs (VA). This raised a more fundamental question in the panelists' minds about why should different government entities

pay different prices for the same drug. At the federal level, the departments of Defense and Veteran Affairs, Medicare, Medicaid, and other programs have different systems for purchasing drugs and pay very different prices.

Despite the publicity surrounding high prescription drug prices, the California ballot measure ended in defeat by a 54-46 margin.

The highly interactive session was moderated by Audrey Halvorson, chairperson of the Academy's Health Care Delivery Committee.

Update on ACA Implementation

A pre-election discussion on the latest updates and regulatory changes for the Affordable Care Act (ACA) provided an overview of certain proposed 2018 Payment Notice proposals, the draft 2018 Actuarial Value (AV) Calculator, and the draft 2018 Unified Rate Review Submission. This session was moderated by Catherine Murphy-Barron, the outgoing vice president of the Academy's Health Practice Council, and included panelists Alfred A. Bingham Jr., of the Center for Consumer Information and Insurance Oversight (CCIIO), Centers for Medicare & Medicaid Services (CMS); and Brent Plemons, Jeff Wu, and Allison Yadsko, all of CCIIO.

Changes to the draft AV calculator and algorithm are still being made, and the panelists noted that actuarial input has always been invaluable to them. The integration of the AV calculator with plans and benefits template currently use the integrated version. The ability to enter an actual index rate also is available. The panelists said that the Unified Rate Review Template (URRT) instructions will become available in mid-January or early February. They also shared that the risk adjustment rate has been the hardest to develop in this whole process. ▲



A health breakout session on the Affordable Care Act

Annual Meeting

Life

The Genetic/Data Mining Connection—Ethical Considerations of Life Underwriting

Panelists discussed the growing availability of genetic testing information that raises concerns over consumer antiselection for life insurance at a session on the ethical considerations of genetic testing and data mining. The group specifically raised questions of what could and should be the ethical limits of data mining in support of the underwriting process.

Stacey Gill, executive vice president at MIB Group, discussed the difference between insurance underwriting versus public health mortality analysis, and explored predictions of mortality, longevity, and the influence of genetic mutations as possible deterministic factors. Brenda Cude, professor in the financial planning, housing and consumer economics department at the University of Georgia, discussed consumer perspectives relating to privacy concerns, and the insurance industry's potential obligations in being conscious of and responding to these concerns, particularly with genetic information and transparency and impact of Big Data.

Leslie Jones, consulting actuary at Risk & Regulatory Consulting, addressed the regulators' role in the industry for both consumers and the marketplace, and highlighted the NAIC model unfair trade practices act and applicable actuarial standards of practice (ASOPs). She also discussed some evolving practices in life underwriting and the connections to principle-based reserving (PBR). Randall Stevenson, chairperson of the Academy's Principle-Based Reserves Review Procedures Work Group moderated the session.

Framing Longevity Risk

Panelists discussed how federal and state regulatory frameworks are trying to make adjustments that account for longevity risk and the latest efforts to improve them. At the state level, regulators are working on pension risk transfers and new insurance products, while in Washington, D.C., the Department of Labor is considering new approaches to consumer education and promoting longevity solutions, panelists said.

Phillip Barlow, associate commissioner of the District of Columbia Department of Insurance, Securities and Banking, discussed the NAIC's work on longevity risk, including retirement security, consumer outreach and protection, the adoption of the model law request to revise the Standard Nonforfeiture Law for Individual Deferred Annuities, reporting options, and insights into other jurisdictions handling of longevity risk. Moreover, the NAIC works with the Academy's Longevity Risk Task Force to look at issues regarding longevity risk, like possible calibration methods and quantification of mortality improvement for capital.

Thomas Hindmarch, senior employee benefits law specialist at the Employee Benefits Security Administration, discussed implications of the Department of Labor's Annuity Selection Safe

Harbor Regulation for Defined Contribution Plans and Field Assistance Bulletin 2015-02. He also shared information on certain target date funds invested in unallocated deferred annuity contracts under qualified default investment alternative rules, and lifetime income illustrations in defined contribution plan benefit statements.

The Bipartisan Policy Center's Sylvester Schieber spoke about the U.S. retirement system and various public policy goals that could improve retirement security. He discussed potential challenges to retirement security and personal savings, highlighting potential solutions of benefit structuring, plan sponsorships, and financing as considerations to potential savings and security improvement initiatives. The session was moderated by Noel Abkemeier, co-chairperson of the Academy's Lifetime Income Risk Joint Task Force.



Lessons from ORSA Implementation

Own Risk and Solvency Assessment (ORSA) is moving quickly and 40 states have adopted the NAIC model law, according to panelists on a session on ORSA implementation to date, and ORSA will become an accreditation standard at the beginning of 2018. Elisabetta Russo, enterprise risk management (ERM) adviser at the NAIC, offered insights on what types of problems ORSAs have uncovered, reporting best practices, and the appropriate role of actuaries in informing and influencing the ORSA development process.

Speakers noted that some focus areas for state departments of insurance included the main lines of defense against risk within insurance groups and how risk owners are rewarded, along with the controls that have been tested during internal audits. Life and Health Actuarial Examiner Rhonda Ahrens of the Nebraska Department of Insurance shared information on what regulators with ORSA oversight believe makes a good ORSA presentation, what details they are looking for—and not looking for—and how they use ORSA reports.

Jeff Schlinsog, the vice president of the Academy's Risk Management and Financial Reporting Practice Council, moderated the session. ▲

Annual Meeting

Pension

Retirement Goes Goldilocks: The DB'ing of DC Plans and the DC'ing of DB Plans

Experts discussed the challenges facing retirement plans, especially issues surrounding defined benefit (DB) pension plans. In redesigning or reregulating pensions, strong leadership is a must as well as honest discussions about underlying DB problems and the ability and willingness to fund them, said W. Paul McCrossan, an actuary and former member of Canada's Parliament. In Canada, a key strategy in revamping pension plans was not to "kick the can down the road" by transferring costs to future generations of beneficiaries or taxpayers, he said.

Risk management is very important, and one method of redesigning a retirement plan is to split off base benefits from ancillary ones such as inflation adjustments or other supplements, said Conrad Ferguson, a partner at Morneau Shepell. Benefits could be matched to open group funding ratios on a yearly basis, and benefits could be increased or contributions lowered in years when the ratio is above 105 percent, he said. In years below 100 percent, past ancillary rates could be decreased, contributions increased, or other steps could be taken depending on severity, Ferguson said.

Defined contribution (DC) plans are nearing 50 percent of global pension assets, although programs differ by country, said Stacy Schaus, executive vice president and defined contribution practice leader at Pimco. Plan sponsors also are showing increased interest in retaining retired participants' assets, and retiree assets are growing quickly in target-date strategies, according to a Pimco survey of retirement plan consultants. In-plan insurance options are seeing a lack of active promotion compared to other offerings, Schaus said. Eric Keener, chairperson of the Academy's PPC Forward Thinking Task Force, moderated the panel.

Fixing the Retirement Stool: Reinforce or Reinvent?

Each of the three legs of the retirement stool—Social Security, employer-based retirement plans, and personal savings—is facing challenges that could threaten retirement security for millions of Americans, according to a panel discussion on retirement security.

Social Security is the strongest of the three legs but faces asset depletion in 2034, after which it could only pay promised benefits of 79 percent, said panelist Steve Goss, chief actuary at the Social Security Administration. The main culprits are increasing longevity and lower birth rates. The solutions include lowering the program's costs—raising the retirement age, or lowering the cost-of-living adjustments or benefits for higher earners—increasing revenues from higher payroll or other taxes, or some combination of the two. Goss said that Congress must and will act to make changes as it has done in the past to modify Social Security.

A big hurdle to retirement plans is that many employees still don't have access to them, especially part-time workers, said John Scott, director of retirement savings at the Pew Charitable

Trusts. A second issue is affordability, although participation rates generally increase for plans where employers make contributions, he said.

Megan Gerry, vice president of compensation and benefits at Smithfield Foods, said the company offers its employees a 401(k) plan and some salaried workers a

pension as well as part of its compensation package. The average 401(k) participant pretax deferral rate at Smithfield is 4.8 percent and average balance is slightly less than \$20,000, she said. Ted Goldman, Academy senior pension fellow, moderated the session.



Retirement breakout session panelists

What's Next for Multiemployer Pension Plans?

While many agree that something must be done to protect benefits for the 10 million participants covered under multiemployer pension plans, experts are still divided on how to do so. The regulatory regimes created by the departments of Treasury and Labor and the Pension Benefit Guaranty Corp. under the Multiemployer Pension Reform Act of 2014 (MPRA) won't solve the long-term problems of distressed multiemployer plans, said Sandy Rich, executive director at New York City Board of Education Retirement System. Like bankruptcy proceedings, market-clearing mechanisms are needed to fix plans that are unsustainable rather than the current practice of delays in making tough decisions, he said.

Karen Friedman, executive vice president and policy director at the Pension Rights Center, agreed that MPRA isn't the solution. But all parties could come together and share in the responsibilities to resolve unsustainable multiemployer plans, she said. A "grand bargain" was reached in Detroit during its bankruptcy that involved compromises by stakeholders and outside infusions of money to shore up the city's pension plans.

Congress has a window to enact new legislation on multiemployer plans next year, said Kendra Kosko Isaacson, senior pensions counsel for the Democrats at the Senate Committee on Health, Education, Labor & Pensions. Committee Ranking Member Sen. Patty Murray supports a comprehensive plan as opposed to a composite one, such as the one being considered in the House, Kosko Isaacson said.

Other possibilities include small pension insurance payments made by beneficiaries or changing pension plan priorities in bankruptcy proceedings, said Alex Pollock, distinguished senior fellow at the R Street Institute. Josh Shapiro, vice chairperson of the Academy's Multiemployer Plans Subcommittee, moderated the session. ▲

Annual Meeting

Academy President Bob Beuerlein's inaugural address



Barbara Klever accepts her Outstanding Volunteer Award



Donna Claire accepts her Outstanding Volunteer Award



CBO Director Keith Hall



AMERICAN ACADEMY of ACTUARIES ANNUAL MEETING AND PUBLIC POLICY FORUM

Former Sen. Chris Dodd



Annual Meeting

The Capitol Steps entertained meeting attendees and guests with timely political satire at the Nov. 3 dinner



The Academy's literature rack on display



Academy member Janet Barr asks a question



A casualty panel discusses the National Flood Insurance Plan



CMS Acting Administrator Andy Slavitt gives his plenary address



Academy NEWS Briefs

Recently Released

IN THE NOVEMBER/DECEMBER issue of *Contingencies*, the cover story “Generational Shift” discusses how aging Millennials will challenge U.S. health and retirement systems—and transform them in the process. Other features investigate the risk considerations of New York’s new paid family leave program; a look at the opportunities and challenges of accelerated underwriting; plus an exploration of how the Actuarial Standards Board helps support the infrastructure of U.S. actuarial professionalism.

The November *HealthCheck* recaps Centers for Medicare & Medicaid Services’ Acting Administrator Andy Slavitt’s keynote address at the Academy’s Annual Meeting and Public Policy Forum in Washington; and covers recent state and federal rules and approvals.

Among the November *ASB Boxscore* coverage are the Actuarial Standards Board’s (ASB) recently adopted final revision of Actuarial Standard of Practice (ASOP) No. 21, Responding to or Assisting Auditors or Examiners in Connection with Financial Audits, Financial Reviews, and Financial Examinations, which was promulgated in 2004; ASB’s approval of an exposure draft on a proposed ASOP, Proposed Capital Adequacy Assessment; and the ASB’s new committee chairpersons. ▲

IN THE NEWS

The Academy’s Annual Meeting and Public Policy Forum received major media attention this month:

Andy Slavitt, acting administrator at the Centers for Medicare & Medicaid Services (CMS), presented an opening plenary address at the Academy’s Annual Meeting and Public Policy Forum that was posted to *C-SPAN*’s website, televised live on *C-SPAN3*, and previewed in a story by *The Hill*, which discussed the ACA’s extended enrollment period for coverage in 2017. A daily Politico newsletter that focuses on health care cited Slavitt’s remarks, which were posted in their entirety on the *CMS Blog*. A *Health Exec* story also cited Slavitt’s opening plenary address.

In his plenary address—televised on *C-SPAN2* and posted to *C-SPAN*’s website—Pension Benefit Guaranty Corp. Director Tom Reeder discussed the financial picture for single employer and multi-employer defined benefit pension plans. *C-SPAN3* rebroadcasted Reeder’s plenary address on Friday, Nov. 18. A *Transport Topics* story on the session quoted Academy Senior Pension Fellow Ted Goldman

on the challenges of finding the right level at which to set premiums.

A *Bloomberg BNA* story focused on the long-term budget outlook for government health care spending in Congressional Budget Office (CBO) Director Keith Hall’s closing plenary address from the Academy’s annual meeting. *CBO posted Hall’s slides* on its website.

A *Bloomberg BNA* subscriber-only story reported on Oregon Insurance Commissioner Laura Cali’s comments at the annual meeting regarding deliberations on a regulatory option to limit insurers’ use of Big Data.

The annual meeting was also recognized in a weekly *Roll Call* newsletter.

In other news coverage this month:

Academy Senior Health Fellow Cori Uccello discussed the potential consequences of premium rate increases on nonsubsidized ACA plan holders in a *Wall Street Journal* story. Separately, Uccello provided an actuarial perspective on the impact of loosening the age-rating band

ratio from 3:1 to 5:1 under the Affordable Care Act in a subscriber-only story in *AIS Health*.

A *CNN Money* story on retirement income strategies cites as its No. 1 recommendation understanding longevity risk using the *Actuaries Longevity Illustrator*, developed jointly by the Academy and the Society of Actuaries. The story was reprinted by *Real Deal Retirement*. In a *Fox Business* story, Academy Senior Pension Fellow Ted Goldman discussed planning for retirement around longevity as a spectrum of possible outcomes rather than one number, while also citing the illustrator.

A *Health Payer Intelligence* story about plans for the 115th Congress to take up legislation to privatize Medicare quoted Michael Thompson, chairperson of the Academy’s Medicare Subcommittee, on the options available to policymakers for ensuring Medicare Part A’s long-term sustainability.

A *McKnight*’s story cited the Academy’s 2013 *issue guide* on the potential implications of shifting Medicare to a premium support program. ▲

Academy Dues Renewal

ACADEMY IMMEDIATE Past President Tom Wildsmith announced that it is time for members to renew your Academy membership for 2017. Wildsmith highlighted the Academy’s mission-critical work in 2016 in “*The Meaning of Your Membership*,” which features key issues the Academy has addressed in public policy and professionalism in the past year, as well as Academy publications, the eLearning Center, and other significant initiatives.

After five consecutive years of no increases, the Academy Board approved a \$10 increase in dues for 2017, bringing the full regular member rate to \$615. This will ensure that our *financial position remains strong* as the Academy continues to provide objective, nonpartisan actuarial analysis to policymakers in the United States, Wildsmith said.

Members may [log in](#) to pay and make changes to your account. If you have questions about your membership, please contact the Academy’s Membership Department at 202-223-8196, or membership@actuary.org. ▲

Creating a Culture of Professionalism

BY JOEFF WILLIAMS

Vice President, Professionalism

INGRAINED CULTURAL TRADITIONS are found in many regions of the nation. Having lived in the South my whole life, the refreshing taste of sweet iced tea with real sugar, the blossoms of dogwoods and azaleas in the spring, and the sound of “y’all” in every other sentence form the backdrop of daily life. When I was growing up, another mainstay was manners: You address your elders as “ma’am” and “sir,” and you always say “thank you” and “please.” Such patterns of speech become so ingrained, you don’t even think about them. It’s just who you are. It’s the culture of the South.

So what does this have to do with the challenges of actuarial professionalism? As I begin my role as Academy vice president, professionalism, and chairperson of the Council on Professionalism (COP), I would like to promote a professionalism “culture” that enhances the way professionalism is integrated into the daily practice of actuaries. The U.S. profession already has tools that support this goal. The Actuarial Board for Counseling and Discipline’s request for guidance process and the



COP’s mission. Several of my predecessors also served as Academy president, namely Jack Turnquist (president in 1994), Larry Johansen (2001), and Dan McCarthy (2002). Because these and other leaders recognized that the Academy is the home of actuarial professionalism for the entire U.S. profession, the COP is a liaison body representing all of the U.S. actuarial organizations. The hard work of earlier leaders has created a rich professionalism history, and their vision for how the COP should operate has paved the way for the current COP to consider new initiatives to fulfill that mission.

The COP’s mission—fostering members’ desire to maintain professionalism in daily practice and providing them the tools to do so—is closely related to the Academy’s current Strategic Plan, which calls for inspiring and enabling

members to attain and keep a high level of professionalism in their work. The challenge ahead for the COP is to focus on how we can help instill a culture of actuarial professionalism into everyday practice. Some ideas that the COP may explore include

- ➔ Encouraging more-experienced actuaries to model good professionalism for less-experienced actuaries;
- ➔ Encouraging more-experienced actuaries to communicate the rich history of actuarial professionalism;
- ➔ Recognizing and honoring actuaries who “do the right thing” from a professionalism perspective in order to celebrate the profession’s successes;
- ➔ Looking for opportunities to reinforce professionalism at transition points in actuaries’ careers, such as when an actuary becomes a manager of other actuaries;
- ➔ Engaging directly with students and younger actuaries through local actuarial clubs to stress the importance of professionalism in daily work;
- ➔ Reaching out to older actuaries to ensure they are aware of professionalism developments; and
- ➔ Looking for opportunities to explain the role and importance of the Academy in the development, maintenance, and promotion of actuarial professionalism to ensure that actuaries understand how the Academy fits into their professional life.

I look forward to working with the COP over the next two years to create a culture that instills core professionalism values in Academy members. The actuarial profession will be well served by actuaries to whom “doing the right thing” comes as naturally as “y’all” does to a Southerner. ▲

The challenge ahead for the COP is to focus on how we can help instill a culture of actuarial professionalism into everyday practice.

Committee on Qualifications’ [FAQs on the U.S. Qualification Standards](#) are prime examples. (And those who cannot find an answer to their question in the FAQs may send questions to the Committee [via the Academy website](#).) Our challenge is to determine what new tools the COP can develop to make professionalism a part of actuaries’ daily habits.

Before I expand my vision for the “culture” of actuarial professionalism, I want to take a moment to thank Ken Kent for his leadership of the COP for the past two years. It was a pleasure to serve with him, and I appreciate his support of the Academy. I would also like to recognize the other past vice presidents of professionalism who have volunteered countless hours and shown a deep dedication to the



Professionalism Outreach

ACADEMY IMMEDIATE PAST PRESIDENT Tom Wildsmith presented on “Developments in Actuarial Professionalism 2016” to more than 250 attendees of the annual meeting of the Actuarial Society of New York on Nov. 9 in New York City. He discussed the basic structures and key elements of U.S. actuarial professionalism, developments in actuarial professionalism, and tools and resources that are available to help actuaries keep up to date on professionalism.

Also on Nov. 9, at a meeting of the Actuaries Club of Boston, Academy Secretary/Treasurer and Committee on Qualifications member Tom Campbell delivered a professionalism presenta-

tion with a focus on changing, or qualifying for emerging, practice areas as well as the Academy’s U.S. Qualification Standards Attestation Form.

Actuarial Board for Counseling and Discipline member David Driscoll spoke at the Actuaries’ Club of Hartford & Springfield in Hartford, Conn., on Nov. 10, the same day that Academy General Counsel and Director of Professionalism Paul Kollmer-Dorsey provided a professionalism update at the Middle Atlantic Actuarial Club’s fall meeting outside of Baltimore. Kollmer-Dorsey also presented an update to the Iowa Actuarial Club in Des Moines on Nov. 29. ▲

ASB Adopts Final Revision of ASOP No. 21

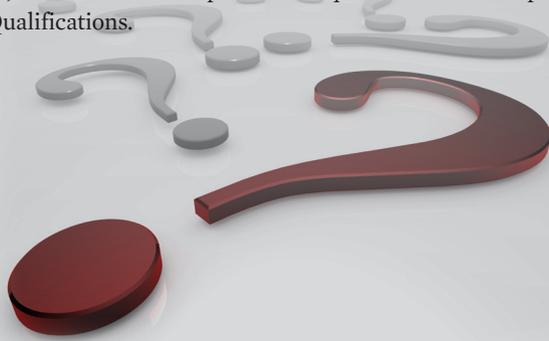
THE ACTUARIAL STANDARDS Board (ASB) adopted a final revision of Actuarial Standard of Practice (ASOP) No. 21, [Responding to or Assisting Auditors or Examiners in Connection with Financial Audits, Financial Reviews, and Financial Examinations](#), which was

promulgated in 2004. A key change reflected in the revision includes expanding and clarifying the applicability of the ASOP to financial audits, financial reviews, and financial examinations relative to current practices, especially the risk-focused and prospective view used

in these financial audits, financial reviews, and financial examinations. ASOP No. 21 will be effective for any actuarial work in connection with a financial audit, financial review, or financial examination for fiscal periods beginning on or after Dec. 15, 2016. ▲

Committee on Qualifications Adds New FAQs

TO FURTHER ASSIST the profession’s understanding of the requirements of the U.S. Qualification Standards (USQS), the Committee on Qualifications has added two new questions to the robust set of [Frequently Asked Questions \(FAQs\) on the USQS](#). The first (now Question 10) addresses actuaries changing practice areas. The second (now Question 19) deals with the experience required under the Specific Qualifications. ▲



CASUALTY BRIEFS

- ➔ **Anthony Bustillo** has joined the Casualty Practice Council.
- ➔ **Manolis Bardis** has joined the Travel Insurance Task Force.

Stay Connected

Get the latest news about our public policy and professionalism work that affects your daily practice.

Connect with the Academy on social media today.



www.facebook.com/actuary.org



twitter.com/Actuary_Dot_Org



Work Group Releases LTC Issue Brief

THE ACADEMY'S LONG-TERM CARE (LTC) Criteria Work Group released an [issue brief](#) on the criteria for LTC financing reform proposals. The increasing growth in state Medicaid budgets due in part to the LTC needs of a growing elderly population, along with the low level of penetration into the potential market by private LTC insurance (LTCDI), have prompted a number of reforms to be made in the way [LTC is financed](#) in the United States. Proposed reforms can be expected to address both public and private financing mechanisms, as well as mechanisms involving both types of financing.

Laurel Kastrup, a member of the work group, [testified Nov. 30](#) before the House Oversight and Government Reform Committee's government operations subcommittee, which held a hearing on the federal LTC insurance program and examined premium increases. Her testimony noted that LTCDI requires a long projection period with assumptions extending more than 50 years into the future, and

that there continues to be high levels of uncertainty and changes in circumstances affecting the levels of premium rates that are needed to ultimately be sufficient.

This issue brief offers an overview of coverage (with reference to how many individuals are covered by the reform), comprehensiveness of benefits, quality of care, understandability and choice, affordability, risk management and cost control, and financial soundness and sustainability.

It notes that some recent attempts at reforming how LTC is financed have failed because they did not adequately consider these essential criteria, noting that the criteria often rely on three activities: adequate education of the consumer; awareness of any alignment or misalignment between the interests of consumers in the program and the interests of those financing the program; and, from an actuarial perspective, sensitivity testing (testing the impact of alternative assumptions). ▲

Work Group Sends Report to NAIC on Stop Loss Factors

THE STOP LOSS FACTORS Work Group [sent a report](#) to the NAIC Health Risk-Based Capital (E) Workgroup reviewing RBC formulas currently used for medical excess of loss business.

In 2009, the NAIC requested the Academy review the risk-based capital (RBC) formulas used for medical excess of loss business and recommend one formula for all carriers writing this business using data

from the Society of Actuaries (SOA). The Stop Loss Work Group developed the report in response, covering data collection, data analysis, marker report highlights, and possible RBC factors. ▲

Earn CE Credit

ONLINE | ANYTIME | ANYWHERE

Actuarial eLearning Center

The new **Actuarial eLearning Center** allows Academy members to earn needed professionalism credit online. Each e-learning module will provide the professional practice information you need to know and assess your understanding of it through a thought-provoking case study approach and a final exam. Access the Actuarial eLearning Center via our website any time.

www.actuary.org



AMERICAN ACADEMY of ACTUARIES

Objective. Independent. Effective.™



Webinar Looks at Alternative Pension Cost

ABOUT 450 PEOPLE attended the Nov. 16 webinar “[Alternative Pension Cost—An Update and Review of Implementation Issues](#),” in which presenters recapped expense methodologies presented in the 2015 issue brief, [Alternatives for Pension Cost Recognition](#), and reviewed additional content that will be summarized in two forthcoming pension issue briefs on the subject.

The webinar was moderated by Ellen Kleinstuber, chairperson of the Academy’s Pension Committee. The presenters were Bruce Cadenhead, vice chairperson of the Pension Committee; Tim Geddes, vice chairperson of the Pension Practice Council; and Jerry Mingione, a member of the Pension Committee.

Following the 2015 issue brief, which explored basic issues and implications of various alternatives to the traditional or aggregated approach to pension cost recognition, a successor issue brief will discuss how alternative recognition methods might be applied to plans that historically set its discount rate using a bond model. “We’re about to cross the finish line on that one and it should be released in the very near future,” Kleinstuber said.

Another forthcoming issue brief will look at other implementation issues that arise with respect to alternative granular methods; among the topics will be the rounding of discount rates, the use of a single rate across multiple plans, the valuation of interest-sensitive lump sums, and special considerations involved in rolling results forward. The Academy is working hard to publish that issue brief by the end of the year, Kleinstuber said, to provide guidance on these issues in anticipation of financial reporting from many plan sponsors.

In his presentation, Mingione said use of a single weighted-average rate is necessary only for disclosure purposes and not required for calculation of the pension benefit obligation (PBO) amount; applying multiple (per year) discount rates is also viewed as an acceptable technique for the development of the PBO.

“If we apply multiple year spot rates instead of the aggregated rate, you could view that as a ‘more precise’ calculation, a characterization that’s been broadly made in this dialogue and is now generally accepted,” he said. He added that there are both positive and negative implications involved in making the change.

Cadenhead said there will be two types of approaches for deriving yield curves from bond model portfolios discussed in the next issue brief. “Once the issue brief is out, it may provide an opportunity to put some of these ideas more explicitly in front of the SEC [Securities and Exchange Commission] and perhaps get some reaction,” he said.

Geddes noted that while the emergence of the granular expense method was “one of the bigger changes that emerged in the accounting arena last year ... the PBO measurement remains the most important thing in the SEC’s view. That’s considered the primary methodology from a measurement perspective.”

Slides and audio are available free of charge to members on the Academy’s [webinar page](#). ▲

PENSION BRIEFS

➔ **Elena Black** and **Aaron Weindling** have joined the Pension Committee.

PPC Vice President Represents Academy at GAO Hearing

PENSION PRACTICE COUNCIL Vice President Bill Hallmark represented the Academy at a daylong expert panel convened by the Government Accountability Office (GAO)

on the state of retirement in America. The purpose of the panel discussion was to help inform a GAO report likely to be issued in the first half of next year. ▲

Climate, continued from page 1

scientific sources, generating objective, evidence-based results on extreme weather events. According to the data analysis, 1.02 is the current five-year moving average value for the ACI. The index value remained below 0.25 during the reference period, reached a value of 0.5 in 1998, and first reached 1.0 in 2013. These values indicate a sustained increase in the frequency of extreme weather occurrences and changes in sea levels.

Recent trends

ACI values for the most recent periods show that:

- ➔ For the United States and Canada combined, the value for winter 2016 (the three months ended February 2016) was 1.46, the sixth-highest level below the peak reached in the fall of 2015. The high value was caused primarily by high temperatures in the northeastern United States and eastern Canada as well as heavy precipitation in many locations.
- ➔ The current highest five-year average values by region are in the Northwest Pacific (British Columbia and Yukon Territory), Northeast Atlantic (New Brunswick, Newfoundland and Labra-

dor, Nova Scotia, Prince Edward Island) and Southern Plains (Kansas, Montana, North Dakota, Nebraska, Oklahoma, South Dakota, Texas, and Wyoming).

Updates for values will be posted quarterly on www.ActuariesClimateIndex.org as data for each meteorological season becomes available.

The organizations are also developing a second index, the Actuaries Climate Risk Index (ACRI), which will measure correlations between changes in the frequency of extreme events as measured by the ACI and economic losses, mortality, and injuries. ▲



Actuarial Update

COMMUNICATIONS REVIEW COMMITTEE

Thomas Campbell, Chairperson
Steve Alpert
Bob Beuerlein
William Hallmark
Jeff Johnson
Rade Musulin
Jeffrey Schlinsog
Shari Westerfield
Tom Wildsmith
Joe Williams

EDITOR

Michael G. Malloy

ASSISTANT DIRECTOR OF COMMUNICATIONS | PUBLICATIONS

Eric P. Harding

DESIGN AND PRODUCTION

[BonoTom Studio Inc.](#)

DESIGNER

Christopher Specht

PUBLICATIONS AND MARKETING PRODUCTION MANAGER

Laurie Young

American Academy of Actuaries

PRESIDENT

Bob Beuerlein

PRESIDENT-ELECT

Steve Alpert

SECRETARY-TREASURER

Thomas Campbell

VICE PRESIDENTS

William Hallmark
Jeff Johnson
Rade Musulin
Jeffrey Schlinsog
Shari Westerfield
Joe Williams

EXECUTIVE DIRECTOR

Mary Downs

DIRECTOR OF COMMUNICATIONS

David J. Nolan

EXECUTIVE OFFICE

The American Academy of Actuaries
1850 M Street NW
Suite 300
Washington, DC 20036
Phone 202-223-8196
Fax 202-872-1948
www.actuary.org

Statements of fact and opinion in this publication, including editorials and letters to the editor, are made on the responsibility of the authors alone and do not necessarily imply or represent the position of the American Academy of Actuaries, the editors, or the members of the Academy.

©2016 The American Academy of Actuaries. All rights reserved.

Academy Makes Presentation to NCOIL on PBR Implementation

ACADEMY SENIOR LIFE FELLOW
Nancy Bennett [gave a presentation](#) on Nov. 18 to the National Conference of Insurance Legislators (NCOIL) National Meeting that provides an update and background on the implementation of principle-based reserving (PBR).

Her presentation noted that different variations of model-based valuation approaches have been considered over the past 15-plus years, with a PBR framework first implemented for variable annuities in the mid-2000s. The PBR approach contained in the

Valuation Manual (VM) is a hybrid between a rule-based and a pure PBR approach; PBR will be implemented gradually with limited scope and constraints on the methodology; PBR is more than valuation, as regulators will have more tools and information than ever; and it will be subject to continuous review and improvement to assure that it works as intended.

Bennett's NCOIL presentation also included a comparison of formula-based and principle-based valuation systems, and various benefits and challenges of PBR. ▲

Groups Submit Comments to NAIC

SEVERAL LIFE PRACTICE COUNCIL groups submitted comments to the NAIC on a variety of issues this month.

The **Life Operational Risk Work Group** [submitted comments](#) to NAIC's Operational Risk (E) Subgroup on proposed operational risk factors and growth charge for the life risk-based capital (RBC) formula.

The **SVL Interest Rate Modernization Work**

Group submitted comments to NAIC's VM-22 (A) Subgroup on [recommended asset bucket weightings](#) and a [historical comparison thereof](#) for the subgroup's exposure draft on the VM-22 maximum valuation interest rates for income annuities.

The **AG 43/C-3 Phase II Work Group** [submitted comments](#) to NAIC's Variable Annuities Issues (E) Working Group on the exposed proposal to revise Actuarial Guideline 43 (AG 43) and C-3 Phase II. ▲



HEALTH BRIEFS

- ➔ **Susan Pantely** is chairperson of the Health Care Delivery Committee and a member of the Health Practice Council.
- ➔ **Scott Mack** has joined the Individual and Small Group Markets Committee.
- ➔ **Brad Spenny** is chairperson of the new Cancer Claims Cost Tables Work Group.
- ➔ **Catherine Murphy-Baron** has joined the LTC Medicaid Subcommittee.

LIFE BRIEFS

- ➔ **Liu Shuo** has joined the SVL Interest Rate Modernization Work Group.

RISK MANAGEMENT AND FINANCIAL REPORTING BRIEFS

- ➔ **Tricia Guinn** and **Jon Wu** have joined the ERM/OSA Committee.