EAR

ENROLLED ACTUARIES REPORT

The *Enrolled Actuaries Report* is a quarterly publication of the American Academy of Actuaries.
www.actuary.org

VOL.37 NO.2 SUMMER 2012

TOM TERRY

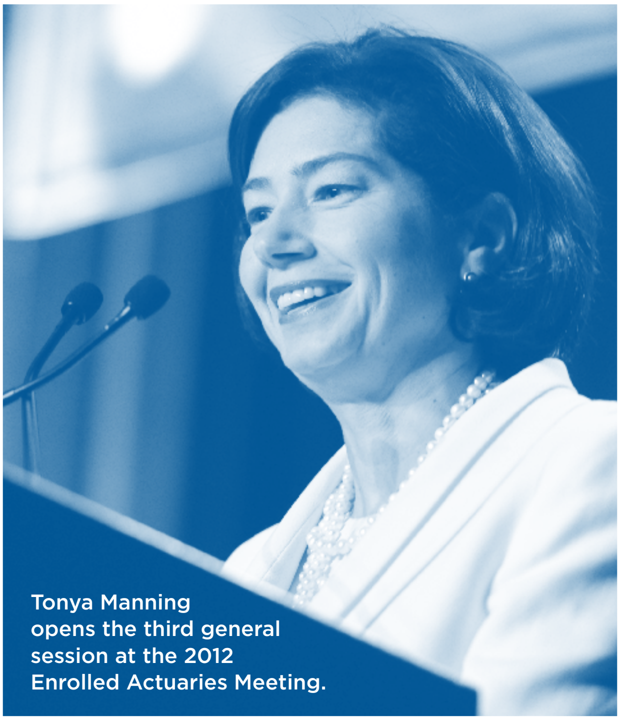
Laser View on Longevity

LONGEVITY RISK. Longevity improvement. Longevity risk mitigation. Like a constant drumbeat, longevity and lifetime income predominated at the 2012 Enrolled Actuaries Meeting and Pension Symposium.

Annuitization as a means for settling defined benefit (DB) pension obligations was the focus of Session 705. Only about 10 insurance companies currently write annuity policies, said Ed Root, vice president and actuary for MetLife in New York. This is a sharp change from 30 years ago—when interest rates were extraordinarily high and the annuity marketplace was robust.

The U.S. GAAP and statutory reserving requirements of annuity companies have influenced insurance companies' desire or capacity to sell annuities today, Root explained. What's more, annuity premium purchases are almost always greater than the corresponding DB liability held by the plan sponsor. Purchasing annuities for retirees, for example, might be from 105 to 115 percent of the plan's Pen-

LONGEVITY, PAGE 8 ⇢



Tonya Manning opens the third general session at the 2012 Enrolled Actuaries Meeting.

Inside this issue

DIANE STORM AND LAURENCE PINZUR

New Scale Offers an Updated Snapshot of Life Expectancy

AN EXPOSURE DRAFT of ***Mortality Improvement Scale BB*** released in March by the Society of Actuaries' (SOA) Retirement Plans Experience Committee (RPEC) provides an up-to-date snapshot of life expectancy in the United States. Scale BB is an interim alternative to Scale AA, which many pension plans currently use to project base mortality rates into the future. The RPEC first developed two-dimensional tables of gender-specific rates that treat mortality improvements as a function not just of age but also of calendar year. The RPEC released Scale BB—a one-dimensional scale derived from the full set of 2-D mortality improvement rates—in a format that can be used immediately with existing pension valuation systems. Most pension software currently cannot easily accommodate 2-D mortality improvement scales.

Scale BB was developed using the Social Security Administration's experience data prior to 2007 and a relatively new projection model. The RPEC also analyzed data provided by the Office of Personnel Management for retirees covered by the Civil Service Retirement Act and Federal Employees Retirement System from 1984 to

SCALE BB, PAGE 10 ⇢

Viewpoint

PAUL W. FOLEY

The 2012 Gray Book

PRESIDENT GEORGE W. BUSH had it right when the Pension Protection Act of 2006 (PPA) was in its infancy: Do away with credit balances. After reviewing the questions addressed during this year's Gray Book session—Session 403 at the Enrolled Actuaries Meeting—it's clear that we don't need funding relief. We need credit balance relief.

The conflict between the proposed and final IRS regulations regarding the amount of prefunding carryover balance required to satisfy a quarterly payment is the focus of Question 11. The proposed regulations credit interest on the prefunding carryover balance until the quarterly due date, while the final regulations credit interest only to the date an election is made. That means that a sponsor that makes an early election to apply a prefunding carryover balance may need a higher prefunding carryover balance (as of the beginning of the year) to satisfy the quarterly payment than if the sponsor waited until the quarterly due date to make the election.

While the IRS did not provide guidance in the 2012 Gray Book on the conflict between the two sets of regulations, several creative solutions were discussed during the session. One suggestion for avoiding this conflict was to make elections based on the "later of" date and apply the full quarterly payment at the beginning of the year. There was general consensus that a standing election for applying a prefunding carryover balance toward the quarterly payment would make this process much easier.

When it comes to adding excess contributions to credit balances, Questions 15 and 16 underscore the attractiveness of having such elections in the form of a standing election. Question 15 reminds us that using a standing election provides the additional flexibility to make an early election and revoke such election, if need be.

For excess contributions made between Sept. 15 and Dec. 31 of a year (calendar year plan year), Question 16 reminds us that such contributions cannot be added to the prefunding balance until Jan. 1 of the following year. If a standing election is not in place, a sponsor may make this election no earlier than when the contribution is made.

Questions 17 and 29 facilitate the credit balance election process. It is comforting to know, through Question 17, that the credit balance election can be as simple as an email with no electronic signature. The correspondence needs to identify only the date, sender, and recipient.

Question 29 gives us a default election to reduce credit balances—but only if such reduction avoids benefit restrictions—even, for instance, when a valuation liability changes because of a data error or there is a subsequent decision to change actuarial assumptions.

With the recent interest in revocable annuity buy-ins, Question 6 raises the issue of how to appropriately value liabilities and the related annuity contract for retirees covered under such an arrangement. The answer creates a possible disconnect between the liabilities and assets—which would not be the intent of the buy-in. In addition, there seems to be some concern about using Revenue Procedure 2006-13 to value the annuity contract versus, for example, using an insurance company market quote. It is clear that there is a need for more guidance on valuing assets and liabilities after an annuity buy-in.

Given the prevalence of frozen defined benefit plans, many of which have a special exemption from the benefit restriction rules, Question 34 provides guidance on whether this exemption is lost for a plan that updates or improves its actuarial equivalence basis. Such an amendment is not considered to provide additional benefit accruals, so the special exemption would not be lost. This amendment would need to be tested under Section 436(c), however, to determine whether it can take effect.

Question 36 is of interest, or perhaps concern, from a fiduciary perspective. It reminds us that there are proposed regulations regarding disclosure of any plan provisions that could "reasonably be expected to materially affect a participant's decision to defer receipt of a distribution." The effect of a material change in

GRAY BOOK, PAGE 10

PBGC Trends and Perspective

WHILE THE BOTTOM MAY BE FALLING OUT OF defined benefit plans, it is not happening as fast as we thought. That was the consensus of the representatives from the Pension Benefit Guaranty Corp. (PBGC) who served on the panel for Session 205, PBGC Update, at the Enrolled Actuaries Meeting. Dave Gustafson, chief policy actuary, Amy Viener, associate actuary, Sara Eagle, assistant chief counsel, and Jennifer Messina, acting director of corporate finance and restructuring, shared their perspective on the future of defined benefit (DB) plans, offered advice on things to avoid during a PBGC audit, and updated attendees on new features available on the PBGC website.

DB-Plan Trends

More than 75 percent of active participants in single-employer DB plans are still accruing benefits—and most nonfrozen plans are open to new entrants. These are surprising facts that the PBGC wants you to know. When discussing the prevalence of plan freezes, just looking at the number of plans can be misleading. While roughly 30 percent of single-employer DB plans are hard frozen, those plans cover only 12 percent of active participants, with the remaining active participants covered in other plans.

The number of single-employer DB plans has declined dramatically over the past decade, with standard terminations affecting 15,000 plans. Participant counts, however, have remained fairly constant over that period. The reality is that standard terminations primarily are affecting the small plan business, with less than 1 percent of DB plan participants affected each year. The PBGC expects that trend to continue.

Common Errors Found During Audits

The panelists reviewed a number of common errors that plan sponsors should avoid to help reduce the consequences of required corrections upon audit by the PBGC during standard termination. Errors often occur when calculating accrued benefits such as vesting percent, service or compensation determination, breaks in service, plan amendments, and top-heavy provisions. Errors also occur with lump sum calculations, including using incorrect assumptions for interest and mortality. Common administrative errors, such as failure to obtain appropriate elections and consents or failure to send the total value of missing participant benefits to the PBGC, can also lead to required corrections upon audit.

Record Deficit

The PBGC is facing its highest deficit in history: $25 billion. With the bulk of historical claims coming from three major industries (airline, steel, and auto), and an exposure to claims in the manufacturing industry at an all-time high, the PBGC hopes to work with Congress to find effective solutions for stemming this trend.

Tools for Mitigating Risk

The PBGC's Corporate Finance and Restructuring Department (CFRD) is focusing on minimizing risk to the pension insurance program and maximizing recoveries from failed companies, Messina said. The CFRD recommends that plan sponsors seek guidance from the PBGC in the early stages of the bankruptcy process. This worked well in the case of American Airlines, which filed for bankruptcy protection on Nov. 29, 2011. The airline originally announced it would seek to terminate all four of its pension plans. The plans covered nearly 130,000 participants and were underfunded by $10 billion. The PBGC became involved, and American Airlines ultimately froze three plans instead, and agreed to work with the PBGC and others to preserve the fourth. If all four of these large plans had been terminated, the effect would have been significant.

Since the number of reportable event filings and plan terminations remains high, and bankruptcy size and complexity are increasingly significant, effective tools for mitigating risk are vital. The early warning program is used to prevent losses before they occur by negotiating with companies to provide additional protection for the pension plan. If an event (e.g., a leveraged buyout) is deemed problematic, the PBGC can work with a plan sponsor to tailor a settlement after the initial inquiry and analysis. Plan sponsors also are required to follow PBGC 4062(e) when there is more than a 20 percent reduction of participants due to cessation of operations.

By focusing on increasing the funding level of DB plans and staying on top of plans that seem likely to be coming to the PBGC, the CFRD is working to accomplish its mission to minimize risk to the PBGC insurance program.

New Refund Policy Reaffirmed

The PBGC historically has provided refunds upon re-characterization of contributions. Question 2 in the 2012 Blue Book, however, clarifies that, in the future, plans generally will not be granted premium refunds based on a re-characterization of contributions. The PBGC's response is consistent with the policy statement it issued on Dec. 22, 2011 (76 Fed. Reg. 79714), and confirms its position that re-characterization of contributions is not an appropriate reason to request a refund.

Online Tools

The PBGC has updated its website (www.pbgc.gov) in response to practitioners' suggestions. The website now provides easy access to interest rates, mortality tables, and retirement assumptions. And the enhanced My PAA feature issues a warning message if an incorrect standard or alternative method or segment rate is entered. The website also features a PBGC blog and provides access for interested pension practitioners to sign up for its Twitter feed.

CYNTHIA RUDNICKI *is a senior manager at Deloitte Consulting in Stamford, Conn., and* **JIAN FANG** *is a specialist master at Deloitte Consulting in Parsippany, N.J.*

ELLEN FOGARTY

Plan Termination: End or Beginning?

TERMINATING A PLAN CAN BE A LONG, difficult process for plan sponsors, taking up to two years to complete. Even so, according to an informal poll taken during Session 505, Large Plan Termination Issues, at the EA Meeting, more than half of attendees had been involved in a plan termination in the past three to five years—and most expected they also would be involved in one in the coming three to five years. During the session, panelists Ellen Kleinstuber, a managing consultant at the Savitz Organization in Philadelphia, Fred Peterson, vice president and senior actuary at Aon Hewitt in Raleigh, N.C., and Bela Palli, program manager, standard termination compliance division, insurance programs office at the Pension Benefit Guaranty Corp. (PBGC), offered insights into the arduous process of terminating large single-employer plans:

There were more than 700 registered attendees at the 2012 Enrolled Actuaries Meeting in March.

Plan Amendments

To terminate a plan, amendments are needed to freeze participation and accruals. A voluntary lump sum distribution option often is added. Required provisions may need to be updated throughout the year of termination to qualify or clarify language for consistency with administrative practices. It also may make sense to consider amending or removing provisions—such as redundant optional forms or benefits of de minimis value to participants—that may be challenging for annuity providers to administer or burdensome to the plan sponsor.

Providing Lump Sums to Participants

When a plan is terminated, it's common to offer a voluntary lump sum option to active and deferred vested participants and to offer retirees only an annuity. Lump sums are attractive to participants and currently may prove less expensive than annuitization through an insurance company. Plan administrators, however, should be aware that providing lump sum distributions also may have inherent soft dollar costs due to election forms and payment processing.

Determination Letters

While an IRS determination letter technically is not required to terminate a plan, plan sponsors are encouraged to file for a determination to document that the plan is qualified upon termination when all assets are fully distributed. This process also may help identify issues prior to distribution and is considered particularly important for plans with excess assets. Determination letter requests for terminating plans are not given priority by the IRS; the process may take more than a year.

Annuity Placement

Plan sponsors should ensure that data are ready for the insurance company and should develop plan specifications to be used for pricing in advance. It's common to request a preliminary bid to obtain a realistic estimate of the cost of the annuity purchase for planning purposes and then follow up with a final bid, since the decision must be made quickly. Post-placement activities, such as transfer of payment data, submission of final census, and execution of final contracts and certificates, may take several months.

Ongoing Administrative Requirements

Minimum funding standards apply until the end of the plan year containing the plan termination date. Schedule SB must be filed through the plan year of termination, and Form 5500 must be filed through the plan year of final asset distribution. Annual funding notices are required until the deadline for sending the notice falls after the date all assets have been distributed.

Standard Termination Audits

The PBGC will audit all plans with more than 300 participants, as well as a random sample of smaller plans. Compliance audits also will be conducted when there is indication of a problem, such as a complaint from a participant or practitioner. The audits will focus on determining whether participants received proper distributions. Common errors include improper vesting, incorrect lump sum valuation, inappropriate elections or spousal consents, omission of some of the forms for optional benefits, and incomplete accounting to PBGC of the total value of benefits for missing participants.

ELLEN FOGARTY *is a senior manager at Deloitte Consulting in New York.*

BRUCE GAFFNEY

Tales From Beyond Normal Retirement

THE RECENT RECESSION AND SLOW ECONOMIC RECOVERY have changed the definition of retirement in the United States—perhaps drastically. People are working longer, which has ramifications in many areas. A big part of our work as enrolled actuaries involves assisting plan sponsors in the design, management, and funding of pension plans. When a participant in a defined benefit pension plan works past that plan's normal retirement age, there can be thorny actuarial issues and complicated administrative challenges as the plan sponsor attempts to provide the correct benefit value to the participant while satisfying the requirements of the Internal Revenue Code and regulations.

In Tales from Beyond Normal Retirement (Session 507) at the 2012 Enrolled Actuaries Meeting, panelists Jim Holland, chief research actuary at Cheiron Inc. in McLean, Va., Tom Finnegan, a principal at the Savitz Organization in Philadelphia, and Susan Breen-Held, a consulting actuary at Principal Financial Group in Des Moines, Iowa, explored the special rules relating to "late" retirement and the unusual situations that often occur when a plan participant works beyond the plan's specified normal retirement age.

After reviewing the parameters of "normal retirement age" under qualified defined benefit plans—including the requirement that benefit accrual may not cease because a participant attains normal retirement age—the panelists discussed the rules regarding continued accrual after normal retirement. They also examined the rules for the statutory benefit commencement date, suspension of benefits, minimum required distribution, and how actuarial increases must be determined (if they apply). The panelists then explored some of the administrative challenges late retirement can cause, such as what happens if it is discovered that a participant who has been missing has, in fact, died after the normal retirement date without ever commencing benefits?

The presentation summarized the rules for handling all aspects of late retirements, gleaned from such disparate sources as the Internal Revenue Code, regulations, and the Gray Book.

The panelists emphasized a potential problem in the details of a plan's language regarding the calculation of late retirement benefits. Many plan sponsors choose not to provide the suspension of benefits notice. Common practice in these cases is to provide a late retiree with the greatest of:

- ➜ The benefit accrued to the late retirement date under the plan's formula;
- ➜ The actuarial equivalent of the accrued benefit at normal retirement age; or
- ➜ The actuarial equivalent of the accrued benefit at the beginning of each post-normal retirement date plan year (see Q&A No. 34 of the 2000 Gray Book).

This approach, however, inherently provides for the offset of future accruals by the increase in value of previously accrued benefits—which is not allowed unless a plan ***specifically*** provides for such an offset (see Q&A No. 39 of the 2009 Gray Book for more information).

The latter part of the session was devoted to an in-depth study of scenarios illustrating various situations that can occur when a participant works beyond normal retirement age. The amounts and availability of benefits can differ significantly depending on whether a participant has reached age 70½. The administration of the plan also can differ depending upon the language in the plan. For example, does the plan require a participant to make a positive election to defer benefits after normal retirement age? Or is the election to defer considered to have been made if the participant does not affirmatively elect to commence payments?

Important principles that actuaries should keep in mind when administering late retirement benefits include:

- ➜ Benefits cannot be forfeited under a plan unless they have been suspended according to IRS rules (this can mean that retroactive payments are required, in the case of delayed commencement).
- ➜ Administration of benefits should comply with plan terms to the extent possible (IRS correction programs are available when plan operation cannot be accomplished in accordance with plan language).
- ➜ Restrictive provisions such as Internal Revenue Code Sections 415 and 436 should be considered when administering late retirement benefits.
- ➜ Legal counsel should be involved sooner rather than later.

BRUCE GAFFNEY *is a principal and consulting actuary with the Benefits Consulting Group of Ropes & Gray LLP in Boston and a member of the Joint Program Committee for the Enrolled Actuaries Meeting.*

DAVID COHN

Fiduciary Responsibility: Understanding the Risks

VIRTUALLY EVERY LAWSUIT involving broad-based retirement and health and welfare plans these days will include a claim for "breach of fiduciary duty under the Employee Retirement Income Security Act (ERISA)." During Session 702 at the Enrolled Actuaries Meeting, Michael Holderman, a senior consultant at Towers Watson in Charlotte, N.C., William Belanger, a senior consultant at Towers Watson in Philadelphia, and Keith Mong, an attorney with Buchanan Ingersol and Rooney in Washington, discussed some of the hot topics in fiduciary and governance oversight that currently are bringing increased scrutiny to this area. They also examined the basics of fiduciary compliance and best practices in structuring proper governance.

Background and Context

Prior to ERISA, it was unclear exactly who was the fiduciary for benefits plans. Trust law, at the time, was the only available authority, and Congress used many of those principles to define fiduciary obligations in ERISA. Congress passed ERISA in part to clarify and define fiduciary roles and responsibilities.

While the fiduciary rules apply to health and welfare plans (in addition to retirement programs), they generally do not apply to nonqualified, "top hat" plans (e.g., supplemental executive retirement plans, restoration plans, and nonqualified deferred compensation). Government, church, and church-related plans also are exempt.

ERISA Section 3(21)(A) defines a plan's fiduciary as a person who:

- ➜ Exercises, by function, if not by title, discretionary authority or control over plan management;
- ➜ Exercises authority or control over plan assets, which is particularly important for defined contribution plans;
- ➜ Provides, or has the authority to provide, investment advice for a fee;
- ➜ Maintains discretionary authority or responsibility over plan administration.

Every ERISA plan must have one or more fiduciaries, either explicitly named in the plan (and designated as a "plan administrator") or as a benefit-related committee. Investment managers also are plan fiduciaries as long as they agree to this in writing.

Regulatory Initiatives

The Department of Labor (DOL) currently is focusing many of its resources on defined contribution plans. The DOL has issued final regulations for fees/service disclosures (originally effective April 1, 2012, now pushed back 90 days) and for dealing with the provision of investment advisory services to plan participants. Service providers, including actuaries, paid directly by the plan are exempt from these new disclosure rules. Organizations should follow best practices, which include periodically initiating a request-for-proposal process for their plans and benchmarking to confirm that fees are reasonable.

The DOL also has proposed regulations for the disclosure of "target date funds" and a revised definition of an "investment advice" fiduciary, which originally was written in 1975.

Recent Court Activity

As noted in the 2011 Supreme Court decision *Cigna v. Amara*, plan sponsors would be well served to ensure consistency in plan documentation (e.g., significant panel decisions and benefit summaries) and to avoid holding back on bad news, such as cash balance conversion wear-aways. On the fees and investment management side of fiduciary responsibilities, the trend is for courts to have a pro-employer slant. But organizations should continue to ask probing questions and document their prudent processes for setting and monitoring plan costs and investments.

Key Roles and Actions of Fiduciaries

To avoid the risk from a breach of fiduciary duty, it's essential to understand the key roles and actions fiduciaries must take to keep their plans compliant. Fiduciaries have four main tasks:

1. Appointing or selecting parties that carry out fiduciary (and nonfiduciary) duties and responsibilities;
2. Exercising authority or control over plan assets;
3. Interpreting plan provisions (beware of the "accidental fiduciary");
4. Communicating to employees in a correct and timely manner.

ERISA's overarching duty of loyalty typically is defined as the "prudent man" standard of care, which stipulates the fiduciary will act:

- ➜ For the exclusive purpose of providing plan benefits and defraying reasonable expenses;
- ➜ To provide services in a careful, skillful, prudent, and diligent manner;
- ➜ To ensure plan investments are diversified (which is difficult to prove in court);
- ➜ To document consistently;
- ➜ To avoid causing the plan to engage in prohibited transactions.

Most cases involving breach of fiduciary duty have focused on the lack of a decision-making process rather than the substantive result (although the result is not irrelevant). While not technically required, an investment policy can assist fiduciaries in meeting their responsibilities by demonstrating a prudent and documented process. In addition, fiduciaries should have specific, prudent, and documented procedures for the selection and monitoring of all plan service providers.

FIDUCIARY RESPONSIBILITY, PAGE 9 ⇢

JOHN POTTS

Working With Auditors

AS AN ACTUARY, working with auditors can be challenging. It's not always clear why some questions are being asked or what role the reviewing actuary (as defined in Actuarial Standard of Practice (ASOP) No. 21, *Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas*) is playing. Deadlines typically are tight, so timing is critical.

Attendees at Session 802, Working With Auditors, were treated to a sample phone conversation between a responding actuary (played by Stephen Alpert, a principal at Mercer in New York) and a reviewing actuary (played by John Stokesbury, a director at Deloitte Consulting in Parsippany, N.J.) that highlighted some of the common issues actuaries face when plans are being audited.

Audit work is subject to scrutiny from many different parties, the reviewing Stokesbury explained, most notably the U.S. Securities and Exchange Commission (SEC) and the Public Company Accounting Oversight Board (PCAOB). The SEC focuses on investor protections, such as meaningful disclosures and information, while the PCAOB establishes auditing standards for registered public accounting firms to follow. Documentation is a key part of an audit, Stokesbury said, adding that documentation must be sufficient for an experienced auditor with no previous connection to the engagement to understand the conclusions reached (among other things). Stokesbury said that even though he, as a reviewing actuary, may have a good idea as to why there was an actuarial gain or loss, he is still required to ask certain questions and properly document the responses.

There are many sources of guidance an actuary looks to when preparing work product for his or her clients, the responding Alpert said. These include the Code of Professional Conduct, the Qualification Standards (for statements of actuarial opinion), and the relevant ASOPs:

- ➜ ASOP No. 4, ***Measuring Pension Obligations and Determining Pension Plan Costs or Contributions***
- ➜ ASOP No. 6, ***Measuring Retiree Group Benefit Obligations***
- ➜ ASOP No. 21, ***Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas***
- ➜ ASOP No. 27, ***Selection of Economic Assumptions for Measuring Pension Obligations***
- ➜ ASOP No. 35, ***Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations***
- ➜ ASOP No. 41, ***Actuarial Communications***
- ➜ ASOP No. 44, ***Selection and Use of Asset Valuation Methods for Pension Valuations***

If an actuary's work product does not meet the requirements detailed in these sources, Alpert cautioned, it is likely to lead to follow-up questions from the auditors.

After reviewing the background of why certain questions are asked, the presenters focused on the need for proper planning and communication to avoid problems arising at the last minute as a client is trying to issue audited financials. Alpert and Stokesbury agreed that it would be helpful to have a planning meeting prior to the end of the fiscal year to address issues such as plan changes, significant head count changes, interim remeasurements, curtailments or settlements, and assumption setting. And while certain assumptions, such as the discount rate, could not be set until after the fiscal year-end, the methodology being proposed could be discussed and agreed to beforehand.

Materiality is a topic that comes up a lot in conversations with auditors, Alpert and Stokesbury said. It is important for actuaries to understand that a change in the obligation or expense they think may not be material could be very material from an auditor's viewpoint. What is material depends on the type of audit. For example, something that was immaterial for the audit of the company's financials could be material when the audit of the pension plan is done. There also is a much lower threshold than materiality called "clearly trivial." If a change in the obligation or expense is above this threshold, it is noted as a passed adjustment to the audit committee and signals that there is a disagreement between the auditors and management. Actuaries should keep this in mind when considering whether their recommended changes to methods or assumptions should be discussed with their client's auditors.

As the session concluded, both actuaries reiterated the need for proper planning and communication to make the audit process go more smoothly. They also recommended that those interested in learning more about the audit process look to the Academy Pension Accounting Committee's 2011 practice note, ***Working with Pension Plan Auditors***.

JOHN POTTS *is a specialist leader at Deloitte Consulting in Parsippany, N.J.*

sion Protection Act (PPA) liability, while purchasing annuities for deferred benefits might be between 110 and 125 percent of PPA liabilities, Root said.

Many plan sponsors are considering offering lump sums to employees and/or retirees to avoid the more expensive annuity purchase settlement alternative. Root cautioned that from the perspective of insurance company underwriters, a retiree population will be presumed to have greater-than-average life expectancy if the group has previously been offered a lump sum—and this will result in a higher cost of annuitization.

The new "buy-in" structure features a full transfer of the pension risk, Root explained, but the plan still owns the liabilities. Unlike the more traditional buyout structure, there is no settlement of the obligations in the buy-in structure.

Completing an annuity purchase takes enormous planning and advance preparation, said Ellen Kleinstuber, a managing consultant at the Savitz Organization in Philadelphia. Once participant data have been assembled and transmitted to prospective carriers, the initial bid process can take up to six weeks. "Refresh bids," however, can be prepared within a few days. Employers and their advisers need to be extraordinarily careful and strategic about the preparation and ongoing bid-management process, Kleinstuber emphasized, particularly if they want to optimize the annuity placement process.

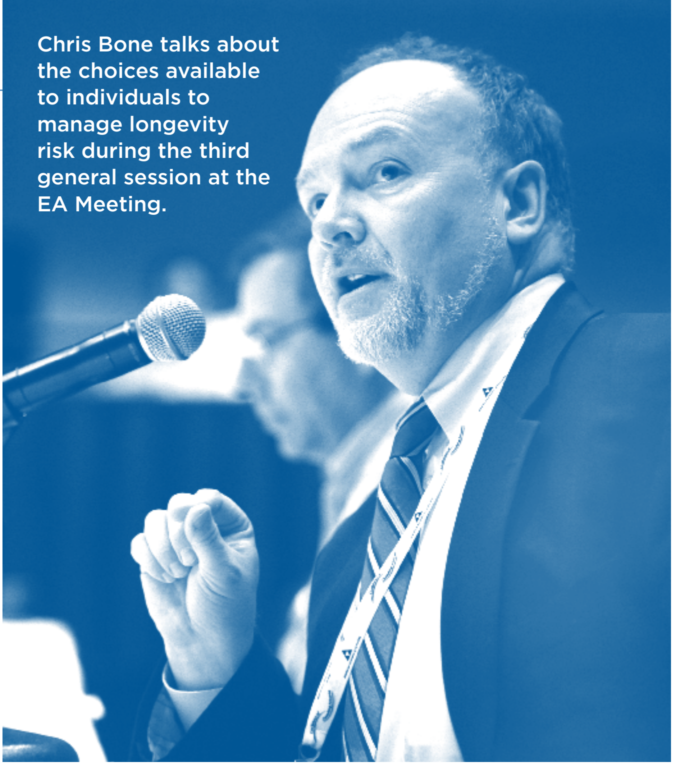
The capacity of the annuity marketplace in the United States is unknown, Root and Kleinstuber said. Premiums from annuity sales in recent years have been only $1 billion to $3 billion. Players in the marketplace will be watching whether these sales increase over the next several years.

Measuring and Managing Longevity Risk

Tonya Manning, an actuary at the IRS and president-elect of the Society of Actuaries (SOA), set the stage for the EA Meeting's third general session by reviewing the relevant practice standards that U.S. actuaries must follow when setting and disclosing actuarial assumptions.

Actuarial Standard of Practice No. 35, ***Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations***, directs the actuary to consider adjustments to mortality both before and after the measurement date to show longevity improvements not reflected in the underlying published table, Manning said. She also reminded actuaries that the existence of uncertainty about the occurrence or magnitude of future mortality improvement does not, by itself, mean that an assumption of zero future improvement is a reasonable premise.

Larry Pinzur, chairperson of the SOA's Retirement Plans Experience Committee (RPEC), discussed the release of a new, interim mortality improvement projection scale, Scale BB. The new scale is just the first step in the transition to a more comprehensive approach to mortality improvement in the United States, Pinzur said.



Chris Bone talks about the choices available to individuals to manage longevity risk during the third general session at the EA Meeting.

The RPEC has gathered data that include 50 million life-years of exposure from three large public pension plans and 120 private pension plans. The analysis of these data, which is ongoing, is expected to result in the release of an official replacement for projection Scale AA simultaneous with the publication of a replacement of the RP-2000 tables, Pinzur said. Because there is still more than a year and a half of work to do to finalize the new table and projection scale, the RPEC decided to release Scale BB, an interim improvement scale that actuaries can begin using immediately.

Pinzur shared a series of "heat maps" that showed the results of mortality improvements over the past several decades. A key feature of the mortality improvement analysis is the two-dimensional quality: age and year of birth. The 2-D improvement model makes it easier to identify different types of mortality trends, including age, period, and year-of-birth cohort. The 2-D mortality improvement model is similar to that used in the United Kingdom as part of its continuous mortality investigation process.

The RPEC estimates that unit credit pension liabilities may increase approximately 2 to 4 percent when shifting from Scale AA to Scale BB. The results, Pinzur said, will vary according to plan and demographic circumstances.

Human mortality and longevity research are hot topics around the globe, Pinzur observed, and the implications go far beyond the cost of retirement benefits.

Chris Bone, a principal at Edth Ltd. in Flemington, N.J., wrapped up the third general session by offering a comprehensive look at the longevity risk marketplace. He described buyout contracts, buy-in contracts, and longevity swaps, and then compared the U.K. and U.S. markets for each type of transaction. Bone also talked about longevity risk for individuals and the choices available to individuals to manage the risk. Despite all the innovation in annuity product design, Bone reported, the

LONGEVITY, PAGE 9 ›

‹LONGEVITY, FROM PAGE 8

market has remained relatively constant over the past decade. Proposals issued earlier this year by the Obama administration offer some chance for a boost in interest in lifetime income options, he said, but only time will tell.

Lifetime Income—Living With Longevity

The longevity theme continued at the Pension Symposium, which was held immediately after the EA Meeting as part of the Academy's ongoing initiative to examine the challenges of longevity risk, its causes, and potential ways to manage and address it. Fifty interested actuaries engaged in an interactive dialogue on the possibilities and pitfalls of lifetime income and its important role in longevity risk mitigation.

Pinzur and Bone kicked off the symposium by facilitating a discussion of their earlier comments in the third general session on the state of the longevity marketplace in the United States. Symposium participants agreed that while the U.S. retirement system has done a good job of encouraging accumulation of retirement funds, it has not yet figured out how to focus retiring workers on making choices that secure their lifetime income.

The conversation then turned to the retiree decision process, with Mark Warshawsky, director of retirement research at Towers Watson in Washington, Andy Peterson, staff fellow, retirement systems at the SOA, and Frank Todisco, chief actuary for the U.S. Government Accountability Office, leading a discussion that focused on the importance of both consumer education—"changing people to fit programs"—and behavioral finance—"changing programs to fit people." While a robust debate of these challenges ensued, symposium participants agreed that actuaries have an important role to play in shaping solutions to the problem of too little lifetime income.

Possible public policy direction was the focus of the symposium's third session, which was led by Manning and Noel Abkemeier, co-chairpersons of the Academy's Lifetime Income Joint Task Force, and Academy Senior Pension Fellow Don Fuerst. Topics included annuity product design, mandates, defaults, standardized communication of lifetime income options, and greater understanding of the benefits of lifetime income.

The final symposium session, facilitated by Manning, Tom Finnegan, a principal at the Savitz Organization in Philadelphia, and Dave Sandberg, Academy president and vice president and corporate actuary for Allianz Life Insurance Co. of North America in Minneapolis, focused on the role of the actuarial profession in promoting lifetime income solutions. Attendees agreed that the Academy's lifetime income initiative can be the impetus to influence and energize the national dialogue on the issue. They also agreed that the actuarial profession, possibly in conjunction with relevant organizations outside of the profession, should seek to change the retirement landscape fundamentally to one in which lifetime income solutions are both widely available and appropriately used by retiring workers.

TOM TERRY, *president of TTerry Consulting in Chicago, is the chairperson of the Academy's Public Interest Committee and was one of the Pension Symposium facilitators.*

‹FIDUCIARY RESPONSIBILITY, FROM PAGE 6

Fiduciary Liability

ERISA defines both civil and criminal liabilities that apply to breaches of fiduciary duties, including personal exposure for plan losses/profits, excise penalties, and fines up to $100,000 and 10 years imprisonment ($500,000 for plan sponsor entities). The risk of fiduciary liability can be minimized by the following:

- ➜ Being involved, diligent, and consistent in terms of governance;
- ➜ Satisfying ERISA Section 404(c) provisions regarding defined contribution plans;
- ➜ Carrying adequate insurance on internal fiduciaries;
- ➜ Bonding individuals who handle plan assets (to the extent allowed by ERISA Section 412).

Governance Best Practices

In addition to understanding the role of a fiduciary and the liability that comes with that role, a crucial component of best practices is benefit plan governance—the process of overseeing and managing all aspects of an employee benefit plan's operation. This includes evaluating the structure of the plan (how it's set up), processes and procedures (how it runs), and documentation. Governance generally is investment related or administrative in nature, and starts at the top with the board and then senior management.

The universal best practice for a plan committee is always to assume that its actions someday will be scrutinized in court and to satisfy the prudent man standard of care when documenting its actions. Operationally, committee members should follow the terms of their charter and plan documentation, work to be educated as a fiduciary, prepare for meetings, participate in discussions, have a process for discovering and addressing any conflicts of interest, and document all recommendations, discussions, and decisions of the committee.

With a greater understanding of fiduciary roles, fiduciaries can mitigate potential lawsuits. When the best practices described above are adhered to, these risks are further reduced.

DAVID COHN *is a principal at Sullivan Cotter and Associates Inc. in Atlanta.*

‹GRAY BOOK, FROM PAGE 2

Section 417(e) lump sum rates is one example that would fall under this proposed regulation. The question highlights a 2011 preliminary court finding that allowed claims of a fiduciary breach to proceed because plan sponsors did not disclose the change in lump sum mortality when the PPA was introduced.

For actuaries involved in corporate transactions, Question 41 addresses the logistical issue that often arises during a plan spin-off when the actual asset transfer is completed after the spinoff calculation date. In these cases, it is necessary to track actual investment earnings during this time frame and allocate them appropriately. No simplified alternatives are acceptable. This adds complexity to an already complex calculation.

Many thanks to Maria Sarli, a U.S. retirement resource actuary at Towers Watson in Atlanta, and Bruce Cadenhead, a principal at Mercer in New York, for helping us navigate through the more interesting and complex topics covered by the IRS and Treasury in this year's Gray Book.

PAUL FOLEY *is vice president and senior consulting actuary at Diversified Investment Advisors Inc. in Natick, Mass.*

‹SCALE BB, FROM PAGE 1

2009 as well as data provided by the California Public Employee Retirement System on active and retired participants from 1997 to 2007. The committee decided to base Scale BB on the Social Security data after determining that the mortality improvement experience for the two large public plans was consistent with the Social Security data.

In developing Scale BB, the RPEC first created gender-specific 2-D (by calendar year and age) scales by blending historical Social Security experience with assumptions about future mortality improvement trends. The committee then converted the resulting 2-D scales to more traditional "age-only" scales by determining the age-only mortality improvement rates that, when applied to the RP-2000 Combined Healthy base rates on a generational basis, produced deferred-to-age-62 annuity values that were approximately equal to, but generally slightly less than, corresponding deferred annuities calculated using the full 2-D tables. Given the interim nature of Scale BB, RPEC decided to simplify the overall shape of the resulting age-only rates.

Mortality Improvement Better Than Expected

Scale AA—developed in conjunction with the 1994 group annuity and 1994 uninsured pensioner mortality tables—was based solely on historical data from 1977 to 1993. It was found to be still appropriate when the RP-2000 tables were published. Soon after the RPEC initiated its pension mortality study in 2010, the RPEC Mortality Improvement Sub-team noticed that mortality improvement experience in the United States since 2000 has differed from what was anticipated by Scale AA. In particular, there was a noticeable degree of mismatch between the Scale AA rates and actual mortality experience for ages under 50. In addition, the Scale AA improvement rates were lower than the actual mortality improvement rates for most ages over 55.

Other studies also have shown that Scale AA is not tracking well with recent experience, including a study by Joseph Lu and Wun Wong. Lu and Wong presented their findings, ***Mortality Improvement in the USA: Analysis, Projections and Extreme Scenarios,*** at the 2011 SOA Living to 100 Symposium. At the request of the National Association of Insurance Commissioners' Life Actuarial Task Force (LATF), the joint Academy /SOA Payout Annuity Table Team developed a new mortality improvement scale, the 2012 Individual Annuity Reserving Table. In its September 2011 ***report*** to LATF, the Table Team recommended that a generational mortality table be developed using an updated set of mortality improvement factors.

Two-dimensional Scale Likely to Replace Scale AA

The RPEC is scheduled to complete its pension mortality study in late 2013 or early 2014, at which point the SOA is expected to publish new base mortality tables to replace RP-2000 and new mortality improvement rates to replace Scale AA. Given that the study is still more than a year from completion, the RPEC decided to release the interim improvement Scale BB for the projection of base mortality rates beyond calendar year 2000. The RPEC encourages application of Scale BB on a generational basis.

Since RPEC expects that the ultimate replacement for Scale AA will be two-dimensional, software developers need to start thinking about how to incorporate this more complex methodology into their valuation systems.

Comments on the *Mortality Improvement Scale BB* exposure draft should be submitted to Cindy Macdonald (cmacdonald@soa.org) at the SOA by June 30, 2012.

DIANE STORM *is a member of the RPEC, and* **LAURENCE PINZUR** *is chair of the RPEC.*