Excerpts from the PBGC Actuarial Valuation Report—2001
by Joan M. Weiss

Editor's Note: The 2001 Annual Report of the PBGC and the complete 2001 Actuarial Valuation Report, including additional actuarial data tables, are available from Loretta Berg at the PBGC, (202) 326-4040, upon request.

The 2001 Annual Report of the Pension Benefit Guaranty Corporation (PBGC) contains a summary of the results of the September 30, 2001 actuarial valuation. The purpose of this separate Actuarial Valuation Report is to provide greater detail concerning the valuation of future benefits than is presented in PBGC's Annual Report.

Overview
The PBGC calculated and validated the present value of future benefits (PVFB) for both single-employer and multi-employer programs and of non-recoverable financial assistance under the multi-employer program. For the single-employer program, the liability as of September 30, 2001 consisted of:

• $13.68 billion for the 2,965
• $1.35 billion for the 21 probable terminations

Liabilities for “probable terminations” reflected reasonable estimates of the losses for plans that are likely to terminate in a future year. These estimated losses were based on conditions that existed as of PBGC’s fiscal year-end. It is likely that one or more events subsequent to PBGC’s fiscal year-end will occur, confirming the fact of the loss. In addition, the liability for reasonably possible terminations has been calculated and is discussed in Note 7 to the financial statements on page 39 of PBGC’s 2001 Annual Report. A discussion of PBGC’s potential claims and net financial condition over the next 10 years is presented on pages 17-19 of that report.

For the multi-employer program, the liability as of September 30, 2001 consisted of:

• $4 million for 10 pension plans that terminated before passage of the Multi-Employer Pension Plan Amendments Act (MPPAA) of which the PBGC is trustee.
• $679 million for probable and estimable post-MPPAA losses due to financial assistance to 56 multi-employer pension plans that were, or expected to become, insolvent.

Actuarial Assumptions, Methods, and Procedures
The PBGC continues to review the actuarial assumptions used in the valuation to ensure that they remain consistent with current market conditions in the insurance industry and with PBGC’s experience. The actuarial assumptions that are used in both the single-employer and multi-employer

(continued on page 4)
Articles Needed for the News

Your help and participation are needed and welcomed. All articles will include a byline to give you full credit for your effort. News is pleased to publish articles in a second language if a translation is provided by the author. For those of you interested in working on the News, several associate editors are needed to handle various specialty areas such as meetings, seminars, symposia, continuing education meetings, teleconferences, and cassettes (audio and video) for Enrolled Actuaries, new pension study notes, new research and studies by Society committees and so on. If you would like to submit an article or be an associate editor, please call Dan Arnold, editor, at (860) 521-8400.

As in the past, full papers will be published in *The Pension Forum* format, but now only on an ad hoc basis.

**News is published quarterly as follow:**

<table>
<thead>
<tr>
<th>Publication Date</th>
<th>Submission Deadline</th>
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<tr>
<td>February</td>
<td>January 10</td>
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<td>December</td>
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**Preferred Format**

In order to efficiently handle articles, please use the following format when submitting articles.

Please e-mail your articles as attachments in either MS Word (.doc) or Simple Text (.txt) files. We are able to convert most PC-compatible software packages. Headlines are typed upper and lower case. Please use a 10 point Times New Roman font for the body text. Carriage returns are put in only at the end of paragraphs. The right-hand margin is not justified.

If this is not clear, or you must submit in another manner, please call Joe Adduci, 847-706-3548, at the Society of Actuaries for help.

Please send a hard copy of the article to:

Daniel M. Arnold, FSA
Hooker & Holcombe, Inc.
65 LaSalle Road
West Hartford, CT 06107
Phone: 860-521-8400
Fax: 860-521-3742
E-mail: darnold@hhconsultants.com

Thank you for your help.
As all pension folks know, asset smoothing methods have been around for a long time. The landmark 1968 paper by Jackson and Hamilton (TSA XX) catalogs something like 119 methods, and there are chapters on smoothing methods in all the standard pension mathematics textbooks. Recently there has been a flurry of research and other industry activity on the subject, and the recent market downturn has triggered a heightened level of interest on the part of plan sponsors. Here is a very personal perspective on some of the recent action, with some pointers on what to watch out for.

Let’s start with the research. Your SOA Retirement Systems Practice Advancement Committee’s research wing commissioned a survey on the classification and prevalence of various smoothing methods. The results were published in the August 2001 issue of the Pension Section Forum (volume 13, No.1), along with other research papers on the subject. You can find this, along with a cornucopia of other useful resources, on the Pension Section Web site, at http://www.soa.org/sections/pension.html.

The next piece of research almost got me put into restraints at the San Francisco airport. Before going there, let me note that the regulatory history of asset smoothing methods for qualified plans can fairly be described as tortured. After the laissez-faire era of Rev. Proc. 95-51 (“any acceptable asset valuation method (!)”), Rev. Proc. 95-51 severely limited the choice of methods receiving automatic approval. Some relief came with Rev. Proc. 98-10, but that guidance also included a seemingly benign transitional version of “average value” (Approval #17) that on analysis produced an income recognition pattern resembling an alpine ski jump. Curiouser and curiouser.

During this same post-1995 period, anecdotal evidence indicates that ad hoc approval of algebraically equivalent methods sometimes depended on the particular formulation used in the request. Similarly, you may recall that the 1980 regulations on asset methods described a cumbersome-looking thing called “average value,” mentioned above. Now it turned out that this “average value” method appeared to have a much more algebraically accessible twin. The whole subject cried out for a cohesive, formal analysis, but who has the time, right? Well, my friends, that analysis is now readily available to all of us eager Pension Section members.

It happens that the SOA recently commissioned what was originally to be a new study note on “Asset Valuation Methods under ERISA.” The authors are Paulette Tino and Edward Sypher, both staff actuaries at the IRS. As is disclaimed in their paper, this analysis “does not necessarily represent the positions of the Internal Revenue Service” but no matter. As a known dabbler in this area I was invited to review the draft note, which I saved for some light travel reading. And there at the Gate 70 waiting area in SFO I found that this was in fact the Holy Grail of algebraic analysis for smoothing methods. I could scarcely contain myself. All the rumored equivalences, the quirks of Approval #17, even extensions to the popular rolling or asymptotic recognition methods, it was all there.

Spared the trouble of having to write the thing, I devoted my labors to expanding its audience beyond our stalwart students. I am pleased to say that this gem is now available on the Pension Section Web site, which is still at http://www.soa.org/sections/pension.html. It will also be published in an upcoming issue of the Pension Forum. Be sure either to download it or to watch for it in the Forum (if you are into this sort of thing), as you may want to keep it with your other favorite reference papers.

(continued on page 5)
## ACTUARIAL ASSUMPTIONS

<table>
<thead>
<tr>
<th></th>
<th>Previous Valuation as of 9/30/00</th>
<th>Current Valuation as of 9/30/01</th>
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<tbody>
<tr>
<td><strong>Interest Rate</strong></td>
<td>Select and Ultimate</td>
<td>Select and Ultimate</td>
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<tr>
<td></td>
<td>• 7.00% for 25 years</td>
<td>• 6.70% for 20 years</td>
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<tr>
<td></td>
<td>• 6.75% thereafter</td>
<td>• 5.25% thereafter</td>
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<tr>
<td><strong>Mortality</strong></td>
<td>• 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 14 years to 2008 using Scale AA.</td>
<td>• 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 15 years to 2009 using Scale AA.</td>
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<tr>
<td><strong>Disabled Lives Not Receiving Social Security</strong></td>
<td>• Healthy Lives Table set forward three years</td>
<td>Same</td>
</tr>
<tr>
<td></td>
<td>• Social Security disability table as described in subpart B of PBGC Regulations on Allocation of Assets in Single-Employer Plans for persons up to age 64, adjusted to parallel the table for disabled lives not receiving Social Security benefits for ages above 64.</td>
<td>Same</td>
</tr>
<tr>
<td><strong>SPARR</strong></td>
<td>Calculated SPARR for fiscal years for which it has been calculated. The most recent calculated SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1998 = 6.84%).</td>
<td>Calculated SPARR for fiscal years for which it has been calculated. The most recent calculated SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1999 = 8.01%).</td>
</tr>
<tr>
<td><strong>Retirement Ages</strong></td>
<td>(a) Earliest possible for shutdown companies</td>
<td>Same</td>
</tr>
<tr>
<td></td>
<td>(b) Expected retirement age (XRA) tables from 29 CFR 4044 for ongoing companies</td>
<td>Same</td>
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<tr>
<td></td>
<td>(c) Participants past XRA are assumed to be in pay status.</td>
<td>Same</td>
</tr>
<tr>
<td></td>
<td>(d) Unlocated participants past normal retirement age (NRA) are phased out over three years to reflect lower likelihood of payment</td>
<td>Same</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>All terminated plans and single-employer probable terminations; 1.18% of the liability for benefits plus additional reserves for cases where plan asset determinations, participant database audits, and actuarial valuations were not completed.</td>
<td>Same</td>
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</tbody>
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(continued on page 5)
Moving on to the Actuarial Standards Board, in December 2001 the ASB issued an exposure draft on the “Selection of Asset Valuation Methods for Pension Valuations.” This standard is to be part three of a four-part suite of practice standards for measuring pension obligations. Even though the comment deadline has passed (May 15, 2002), I recommend it to your attention. Of the several features on which the ASB specifically asked for comments, two got my attention. One was that realized and unrealized gains and losses are to be treated the same. Don’t get me wrong, I think this is the way to go, but it will come as news to some plans I know that have not yet seen this particular light, and are (still) smoothing only unrecognized gains and losses. This would include, for example, methods that take any sort of average of book and market value, either directly, or by using historical ratios of market to book.

A more interesting wrinkle is a requirement in the draft to avoid any systematic bias relative to market value. Sounds innocent enough, but (and this really is just my opinion) a strict reading would proscribe methods that smooth realized and unrealized gains and losses, at least for plans with any substantial equity investments. For example, this would knock out three of the six methods currently eligible for automatic approval under the governing Revenue Procedures. So take a look; you can find the proposed ASB standards at http://www.actuary.org/proposedstnds.htm.

Let me close with a blatant exercise of chairman’s privilege. The IRS’ James Holland and I discussed all this good stuff during Session 76 PD at the recent SOA Spring Meeting in San Francisco. A good time was had by all, tapes are available, and the outline and handouts will be available soon on the SOA Web site. Check them out soon. □

(continued on page 6)
the mortality table used for healthy lives in the 2001 valuation is the 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 15 years to 2009 using Scale AA. The 15 years recognizes the seven years from the 1994 to 2001 plus the eight-year duration of the 9/30/00 liabilities. The 2000 assumption incorporated a 14-year projection, determined as the sum of the six years from 1994 to 2000 and the eight-year duration of the 9/30/99 liabilities.

The model used to determine the reserve for future administrative expenses was changed in FY 2000 based on a study by an independent consultant.

There was no change in the assumptions for retirement ages.

The Small Plan Average Recovery Ratio (SPARR) assumptions as shown in the table on page 4 were updated to reflect the actual SPARRs calculated for FY 1999 (8.01%). The SPARRs for subsequent years are assumed to equal the FY 1999 SPARR.

We note three major improvements in valuation processing for 2001. As our first major change, we simplified the liability calculations for participants who, as of the valuation date, were still being paid estimated benefits in seriatim plans. The simpler calculation yields results as accurate in the aggregate as the prior methodology, is easier to check, and produces fewer “counter-intuitive” results. We automated the reconciliation of Missing Participants (MP) data between PBGC’s plan level database (CAS) and PBGC’s individual participant database (GENESIS). We expect further changes in methods for handling the MP data in Fiscal 2002. The third noteworthy improvement is the transfer of the PVFB system to formal version control, improving the security of our computer applications.

We continued our ongoing efforts to improve the quality of the seriatim data and, as in other years, made various changes to impose the accuracy, speech and auditability of the calculations and to integrate with the evolving PBGC computer environment.

Statement of Actuarial Opinion
This valuation has been prepared in accordance with generally accepted actuarial principles and practices and, to the best of my knowledge, fairly reflects the actuarial present value of the corporation’s liabilities for the single-employer and multi-employer plan insurance programs as of September 30, 2001.

In preparing this valuation, I have relied upon information provided to me regarding plan provisions, plan participants, plan assets, and other matters.

In my opinion: (1) the techniques and methodology used for valuing these liabilities are generally accepted within the actuarial profession; (2) the assumptions used are appropriate for the purposes of this statement and are individually my best estimate of expected future experience discounted using current settlement rates from insurance companies; and (3) the resulting total liability represents my best estimates of anticipated experience under these programs. 

Joan M. Weiss, FSA, is chief valuation actuary at Pension Benefit Guaranty Corporation in Washington, D.C.
Webcast CD Now Available
Pension Asset Smoothing in a Rough Market: Are Your Current Approaches Meeting Your Goals?

Whether you missed the webcast or just want a permanent record, you can get the 120-minute audio and slide presentation covering the following topics related to asset smoothing:

- Introduction
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- Is this a blip down—with “recovery” soon, or is it a revalue of all assets classes?
- Asset smoothing methods and their goals/effectiveness
- U.S. funding
- Rules and considerations
- Effectiveness of smoothing
- Funded status impact
- Influence of type of plan
- Relationship to funding philosophy
- Short-and long-term impact of recent volatility
- FASB Accounting
- Accounting methods, smoothing options—MRVA, corridor
- Impact of current asset performance
- SEC/accounting firms viewpoint on accounting methods, materiality
- History of changes to asset methods—Lucent, others
- Effect of smoothing methods—projections
- Impact of other assumptions changes discount rate, salary scale, non-disclosed assumptions (turnover, etc.)

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The order form is available on the SOA Web site at www.soa.org/bookstore/pension_webcast_cd.pdf or contact the SOA bookstore at 847-706-3526.

Enrolled Actuaries Continuing Education Credit:
This program is recommended to satisfy 60 minutes of core and 60 minutes of noncore credit for EA CPE requirements. While the sponsors recommend these credits for this program, the final decision rests with the Joint Board for the Enrollment of Actuaries. For EA CPE credit, a questionnaire must be completed and sent back to the SOA.

Professional Development Credit:
This program is approved for two units of PD credit. However, to receive credit, all programs must fit with the candidate’s integrated PD plan and adhere to the educational objectives approved by the advisor and the SOA.
Pension Council Minutes
Hilton Chicago O’Hare
October 1, 2001

Attendees: Bruce Cadenhead, Paul Angelo, Tom Lowman, Marilyn Oliver, Zenaida Samaniego (by telephone), John Wade, Judy Anderson, Lois Chinnock, Sarah Wright, Eric Freden, John Kalnberg and Ian Genno.

1. Bruce Cadenhead opened the meeting with a welcome and a call for any additional agenda items.

2. The minutes of the June 15 meeting and the July 17 and August 22 conference calls were approved with minor changes.

3. The Treasurer’s report was presented by John Kalnberg. It was noted that the reserve was approximately 2.5 times a year's dues, but certain items such as the latest Pension Forum were not yet included. The goal is to have a reserve of one year's dues. A suggestion was made to put out an open request for proposals. (See item 7.)

4. Judy Anderson gave a presentation of the SOA structure, noting the place and role of the Pension Section Council within the structure. This was particularly helpful for the new members attending their first meeting. Judy also distributed a Retirement Systems Practice Area report, including key issues and current activities.

5. Discussion of the future direction of the Pension Basics Course was deferred to a later meeting. Judy Anderson presented a 'demo' of the course.

6. Judy Anderson and Bruce Cadenhead presented an update of the Newsletter, the Pension Forum, and the development of the Web page. It was noted that another Forum should be out later in the year, making two for the year. The newsletter is being mailed to all Section members and is being put on line at the same time. Both members and nonmembers have access to the on-line version. The deadline for the December issue of the newsletter is November 10. Judy presented a proposed new Web page. The Council approved putting it on-line as soon as possible. John Kalnberg was appointed as the Web liaison.

7. The status of several research projects was updated. Two papers are being funded on 30-year Treasuries, with an emphasis on current liability. One paper is finished, subject to possible changes after review. A draft of the second paper has recently been delivered. When the papers are completed, it is expected they will be made available to all interested parties.

   The project of updating the Statistics for Employee Benefit Actuaries was discussed. It has been difficult to update some of the tables of economic statistics due to copyright and other issues. Marilyn Oliver is contacting outside firms about the possibility of providing the information. She expects to have a more concrete proposal by the next conference call.

   An open call for proposals will be published in coordination with the Retirement Systems Practice Area. This will likely be done in January. Judy Anderson will circulate a draft for review.

8. Judy Anderson provided an update of the pension sessions to be presented at the annual meeting. She stated that the preliminary results of the Retirement Risk Survey will be presented.

9. Elections were held for officers of the Council for the upcoming year. Paul Angelo
was chosen as Chairperson, Marilyn Oliver as Vice-Chairperson, John Kalnberg as Treasurer, and Eric Freden as Secretary. The Council also recognized its retiring members, Bruce Cadenhead, Adrien LaBombarde, and Sylvia Pozezanac, and expressed appreciation for their contributions and dedication.

10. The status of seminars was discussed. John Kalnberg reported that the Experience Analysis seminar was a success. It will be added to the SOA virtual campus, with some interactive aspects. There will not be a charge for the on-line seminar, but there will be a charge for receiving EA credit from it.

   The Executive Compensation Seminar which was scheduled for the latter part of 2001 has been postponed until 2002.

   Two other seminars that are planned are EGTRRA and the Retirement Implications of Demographic and Family Change.

11. Topics were chosen for the Spring meeting, and recruiters were assigned. Zenaida Samaniego will coordinate the Section activities with the Society. Sixteen sessions are planned, subject to change. A joint luncheon with the Investment Section and a joint reception with the Health Section are under consideration and will be investigated further.

12. Lois Chinnock will contact Section members to arrange the next conference call. □

New On-line CE Program Asks: Are You Experienced?

by John Riley

This July, the SOA Virtual Campus adds a new on-line training course titled “Experience Analysis and Actuarial Assumptions: Practical Applications.” This program was developed from a live seminar conducted last year by John Kalnberg of Mellon HR Benefit Solutions, Stuart Schulman of Buck Consultants and Douglas Johnson of Mercer. This production was made possible by the Pension Section, and members and non-members will be able to view the course at no charge.

The course introduces and defines experience studies; covers the relevant Actuarial Standards of Practice; explains what steps to take to perform a study; distinguishes between types of assumptions; and covers pertinent client presentation issues. The program uses Shockwave software, which is downloadable at no charge from the SOA site and provides streaming audio, text transcripts and full-color graphics. There are also some multiple-choice questions within the program to test the student’s knowledge of material presented earlier. With nearly 300 slides in the seminar, this course is recommended to satisfy five hours of core continuing education credit for Enrolled Actuaries. While the SOA recommends topics to satisfy core and non-core continuing education credit, the final decision as to meeting those requirements rests with the Joint Board for the Enrollment of Actuaries.

Anyone can view the seminar by signing up through the SOA Virtual Campus, but there is a fee to obtain the course questionnaire and certificate of completion from the SOA Continuing Education department. A questionnaire to verify completion of the material is a requirement for individual study programs. The questionnaire processing fee is $250 for non-members of the Pension Section, $150 for members of the Pension Section, and $75 for anyone who is enrolled in the Pension/EA Distance Learning Subscription Program. Instructions for obtaining the questionnaire will be posted under the course catalog per Web site section at the Virtual Campus as soon as the program is available. A portion of the fees generated by the questionnaires will be returned to the Pension Section to defray the cost of producing the seminar on-line. □

John Riley is managing director of the Continuing Education Department and works in the Society office in Schaumburg. He can be reached at jriley@soa.org.
The Joint Board is now looking for applicants for two-year appointments to its Advisory Committee on Actuarial Examinations.

Who is the Advisory Committee and What Do They Do?
The Committee is responsible for reviewing, editing and finalizing the EA examination questions that have been submitted in draft form by item-writers on the EA examination committees. In addition to editing the questions, the Advisory Committee also reviews the statistical results of the examinations and recommends appropriate pass marks to the Joint Board. Finally, they assist in developing the syllabus and make recommendations on other issues related to the EA examination process. Final decisions rest with the Joint Board itself, and where appropriate, the other sponsoring organizations (the SOA and ASPA).

Every two years the Joint Board formally renews the Advisory Committee. Pursuant to an agreement among the three cosponsors, the Advisory Committee is made up of two SOA-sponsored members, two ASPA-sponsored members and five members-at-large. The current term expires November 1, 2002. Accordingly, the Joint Board is now seeking applications from enrolled actuaries who are willing to volunteer substantial time and effort on behalf of the enrolled actuary community.

Applicants should be experienced enrolled actuaries who are thoroughly familiar with the topics on the three EA examinations, as described in the Joint Board Examination Program available at www.soa.org/enacted/eande_booklet.pdf. Applicants must be willing to attend four intensive meetings a year, single-day meetings in April and October and two-day meetings in early January and early July. The latter two meetings are held in Washington D.C., while the single-day meetings are generally held in other major cities. The government, subject to certain reasonable limits, reimburses lodging and meal expenses and transportation. In addition to the meetings, approximately 75-125 hours of preparation time per year are required. Finally, several Advisory Committee members also contribute by maintaining the examination questions and program booklet drafts as they go through the review process.

Why join the Advisory Committee on Examinations?
There are many reasons. It is an excellent way to stay familiar with the technical side of pension practice, particularly given its many nuances and ever-changing nature. Committee service also provides a strong sense of accomplishment in a way that is directly relevant to our professional work. It is an opportunity for camaraderie and fellowship with other experienced actuaries in private industry as well as in the federal government. Finally, the Joint Board grants 18 core hours of continuing education credits for each year of participation on the Advisory Committee.

If you are interested in this great opportunity, send a letter stating your interest and qualifications to:

Joint Board for the Enrollment of Actuaries
c/o Internal Revenue Service
Attn: Executive Director N:C:SC:DOP
1111 Constitution Avenue, N.W.
Washington, DC 20224

The deadline for accepting applications is August 19, 2002.

Any questions may be directed to the Joint Board’s Executive Director at 202-694-1891. □
The SOA has restructured the Retirement Needs Framework Task Force into a new committee, the Committee on Post-Retirement Needs and Risks. The Committee and the associated interested parties include a variety of expertise. In addition to actuaries, the group includes economists, experts in survey research, policy experts, and attorneys. Anna Rappaport is chairing the new committee.

Past accomplishments of the Retirement Needs Framework Task Force include the Retirement Needs Framework call for papers, symposium and monograph, and the research on Post-Retirement Risks completed late last year. In addition the Task Force communicated with LIMRA and provided some input on concerns about post-retirement risk, and we also communicated with the group managing the Health and Retirement Study. There were two issues of The Actuary devoted to the aging society. Both looked at the aging society from a cross-practice perspective. The Task Force developed a Web page offering links on post-retirement risk. The original idea at the time of the first paper call was that the papers and symposium would be about data and modeling, and that after the symposium we would understand both of these topics well and know where to get data. That idea proved to be much too optimistic. We found that there were more questions than we had anticipated and much more future work to do. The new committee will be carrying on and expanding that work.

The new committee held its first meeting on May 29, 2002 and started to work on an agenda going forward. During the discussion the Committee exchanged information about work that is being done by the organizations represented by the committee members. There are active projects in several organizations. The Committee will be updating the Web site to offer links to more work, and to offer access to recent developments. The items selected for the initial agenda are as follows:

- Discussion paper on disconnects—areas where public perception of post-retirement risk is out of step with reality. An earlier SOA study on public perceptions documents gaps in understanding post-retirement risk. LIMRA has also done a recent study. The two studies have overlapping findings and are generally compatible but cover different universes and issues. AARP and EBRI studies also show such disconnects.

- Chart on post-retirement risks. This will be an update of one of the charts in the Framework monograph.

- Focus on the definition of retirement. In the discussion, it became very clear that many people are working part-time in retirement. This is also confirmed by research. There are no consistent definitions of retirement used in cross research studies. Furthermore, as people work in retirement, there is no general understanding of what retirement is. A small group is going to start addressing this issue.

- Look at issues relative to annuities and wealth. A subgroup will be formulating a proposed project for the committee to consider.

- Do a second and expanded retirement risk survey in 2003. □
It’s been two years since the Education and Examination (E&E) program of the SOA changed to a large pension examination—Course 8, Retirement Benefits. However, E&E volunteers are hard at work updating the syllabus and readings for the examination to keep it relevant.

This study note corner features a new study note, an updated study note and a note that further discusses considerations in selecting fundamental actuarial assumptions. First the new study note on the syllabus.

Current Issues in Social Security
by Steve Mc Kay

“This study note is intended to summarize current social insurance issues in the United States, Canada, and selected other developed countries. Over the next 30 years, the retirement of the baby-boom generation (the large group born between 1946 and 1964) will pose challenges for social insurance (and private retirement systems) throughout the developed world. There has been ongoing discussion since the 1970s about how to deal with the challenges, and some actions have already been taken.

This note begins with a description of the nature of social security funding. Because social security is a nationwide program, macro-economic issues come into play in a way that they do not when discussing the pension plan of an individual company, or the savings plans of individuals.”

The note goes on to address advance funding of Social Security and issues surrounding private retirement accounts such as: transition from defined benefit, administrative costs, annuities, risks and guarantees. It also discusses the financial status of a number of different programs around the world, each with their own particular characteristics. It addresses a variety of fundamental issues such as equitable treatment of men vs. women, treatment of low vs. high earners, appropriate retirement ages, the computation period, cost-of-living adjustments and issues related to payroll taxes.

Mortality Tables for Pension Plans
by Donald Grubbs and Marilyn Oliver

The study note reviews this most fundamental assumption made by the life actuary. Its discussion of mortality includes a review of current levels, both past and future trends and variations across different characteristics and segments of the population. It also provides, in a single reference, the relevant background for published tables from the GA-51 through the development of the RP-2000 Table. The context for this assumption is not omitted as the study note begins with a discussion of the uses of mortality tables for valuation, determination of benefits as well as in the insurance company environment.

Valuation of Pension Benefits for Disabled Participants
by Edward Sypher

“The mortality rates for a pension plan’s disabled participants are substantially greater than the mortality rates for the healthy participants. Experience data from some large plans shows that the disabled participants can be subject to mortality rates that are two or three times as great as those for the non-disabled. Because of this, many pension actuaries choose to use separate mortality tables for their disabled populations. This paper discusses some of the considerations involved in choosing such a table. It starts with a brief review of fundamental concepts and terminology used in actuarial discussions of disability. Following this, there is a discussion of common disability tables, as well as other sources of disability data (including the disability experience of the Social Security program). Finally, the paper addresses several questions that a pension actuary should consider when valuing disability benefits.

The paper addresses only the valuation of benefits to persons who are currently disabled. It does not address the prediction of future rates of incidence. Nor does it address questions of how a plan’s funding method might reflect the value of disability benefits.”

Study notes can be purchased individually from the Society of Actuaries Study Note Coordinator, Aleshia Zionce at (847) 706-3525. All Course 8 study notes are listed in the Fall 2002 Basic Education Catalog, available on line at www.soa.org/eande/fall02_catalog/fall02_catalog.pdf. 

Aleshia Zionce is the publication orders manager and works in the Society office in Schaumburg. She can be reached at azionce@soa.org.
Call for Papers
by Colin Ramsay

Papers may be on any subject related to actuarial science or insurance. Papers do not have to contain original ideas. Preference will be given to practical or pedagogical papers that explain some aspect of current actuarial practice. JAP also accepts technical papers, comments and book reviews. As an international journal, JAP welcomes papers pertaining to actuarial practice outside North America. Papers may be submitted via e-mail in Microsoft Word, WordPerfect or Latex format. All papers are subject to a peer referee (review) process. Deadline for submission is November 30, 2002.

Colin M. Ramsay, Editor of Journal of Actuarial Practice
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Academy Bulletin: Renewal of Enrollment
by Joint Board for the Enrollment of Actuaries

The Joint Board is currently processing applications for renewal of enrollment. Some questions have been raised as to what the enrollment number is for the current cycle, which began on April 1, 2002. The renewal notices that the Joint Board has been issuing are computer-generated, and a zero precedes every four-digit enrollment number. In completing the 2001 schedule B, or any prior year, this zero should be ignored and you should continue to use your four-digit enrollment number, preceded by the prefix “02”.

You may begin using the “02” prefix as soon as you receive the letter from the Joint Board approving the renewal of your enrollment, and it must be used by September 1, 2002. If you have questions, please contact the Joint Board at 202-694-1891.

Factors Affecting Retirement Mortality: New Research

This new research, available on the SOA Web site, considers a variety of possible risk classification factors that could be used in estimating the value of any mortality-based benefit, particularly for retirees. For annuities, very little risk classification is done in the United States and Canada, yet in the U.K. there is a growing market for “impaired life annuities”. The results of this research have a direct application for this potential new market. In addition to refinements in annuity pricing, this research also provides additional insights into selection of mortality assumptions for employee pension plans and even for social security programs. The results relate to both current mortality and to predictions of future improvement.

The research includes reviews and summarizes 45 recent research papers covering a variety of factors affecting retiree mortality, including: age, gender, education, income, occupation, marital status, race and ethnicity, religion and health behaviors. Summaries are then provided for each factor bringing together the views in each of the relevant papers.

This research is available on the Pension home page site at www.soa.org/sections/pension.html. You’ll find it interesting.
At every step of its development, the Baby Boom generation has affected the social, cultural and professional environment by its sheer numbers. As the generation approaches age 60, retirement looms. As a group, they face many family challenges: caring for parents and children they had later in life. Many of them are divorced, single, or in second and later marriages. How will the Boomers impact the economy, the workforce, or the health care system when they retire? Will those systems be prepared for the strain? Will Boomers retire the way their parents did, or invent new ways of leaving the active workforce? Will they present new health care challenges as they live longer lives in retirement? All of these questions and more face Canada, the United States and other nations seeking to prepare for this generation’s retirement years.

The Society of Actuaries, assisted by 17 cosponsors, put out a call for papers to discuss these issues and provide new thought, insight into the ways the aging population and changing family structures are changing retirement today. The authors that responded represent a variety of professions. The authors of 19 papers were brought together for a symposium on June 25 and 26 to present their findings to others and facilitate dialogue. Practitioners, researchers and policymakers all shared in this critical discussion.

The 19 papers presented at the symposium cover a cross-section of concerns related to these issues. They are available as a monograph online at www.soa.org/bookstore/mono.html. If you couldn’t attend the original, this is the next best thing.

Living to 100 and Beyond: Survival at Advanced Ages: Papers Available on the SOA Web Site

In recent years, mortality rates have decreased significantly so that many more people now live to age 100 and older. This increased longevity has pointed to a need for better, more accurate data on advanced age mortality. Research on high-age mortality is very challenging because relatively few people live to advanced ages, and it is difficult to document the accuracy of the data in many cases. Currently, mortality tables in use have relied on a variety of techniques to develop mortality rates at high ages based on a range of different assumptions.

The “Living to 100 and Beyond: Survival at Advanced Ages” Symposium covered current thought on advanced-age mortality research. Twenty-one papers, by actuaries, demographers, gerontologists and others interested in advanced age mortality, were presented and are now available on the SOA Web site at www.soa.org/research/living.html. There are also articles by some of the authors included in the May 2002 issue of The Actuary.
Upcoming Pension Sessions
at Boston’s 2002 Annual Meeting

(For complete session descriptions, please go online at: www.soa.org/conted/boston_summary.pdf)

Monday, October 28
10:30 a.m. – 12:00 Noon    Session 9 PD
Specialty Track: Retirement Systems Practice Area
Noncore Credit: 90 minutes
Public Perceptions Of Post-Retirement Risk [PD]
Moderator: Judy F. Anderson
Panel: Matt Drinkwater *, Mathew Greenwald *, Anna M. Rappaport

Many people do not have a program in place to protect them against post-retirement risks, including outliving assets, loss of a spouse, cost of additional routine care for declining health and unexpected medical costs. Yet few people choose to buy financial products to insure these risks. This session discusses the results of recent studies, one sponsored by the Society of Actuaries, conducted by Mathew Greenwald & Associates and the Employee Benefits Research Institute (EBRI), and another conducted by Life Insurance Marketing and Research Association (LIMRA), focusing on public knowledge and attitudes with regard to post-retirement risks.

Session Coordinator: Judy F. Anderson

Monday, October 28
2:00 p.m. – 3:30 p.m. SESSION 33 PD
Specialty Track: Retirement Systems Practice Area/Health Coverage As Part Of Retirement Security: Current Developments [PD]
Panel: Brian Harty *

As the population ages and medical care costs increase rapidly, retiree medical coverage has become increasingly important. At the same time, many limitations to this coverage have emerged:
• Many plan sponsors are dropping or reducing coverage
• Medicare + Choice has not worked well and many plans have left the market and reduced their service areas
• There are uncertainties regarding Medicare reform
• Supplemental policies do not cover prescription drugs, or if they do, coverage may not be adequate

This session covers current challenges with regard to retiree health and the link to retirement security. Attendees learn different methods of financing health care for older Americans, current issues related to these methods and how health coverage integrates into the retirement package.

[ME]
Session Coordinator: Judy F. Anderson

Monday, October 28
2:00 p.m. – 3:30 p.m. Session 34 PD
Specialty Track: Retirement Systems Practice Area/Finance and Investment Practice Area
Noncore Credit: 90 minutes
Methods Used By Software Programs To Address Post-Retirement Risk
Moderator: Anna M. Rappaport
Panel: Betty Meredith *, Anna M. Rappaport, Eric T. Sondergeld

(continued on page 16)
Individuals are faced with greater responsibility for financial management in retirement than ever before. To assume this responsibility effectively, they must have access to suitable methods for understanding their range of options. This session presents the results of a research project, jointly sponsored by the Life Insurance Marketing and Research Association (LIMRA) and the SOA, in collaboration with the International Foundation for Retirement Education (INFRE). This study is part of a larger effort by the SOA to address post-retirement risks. The researchers investigated retirement planning software packages for consumers and professionals that address the post-retirement period. Included in the results are identification of the methodologies used to handle post-retirement risks, the extent and complexity of required software input and scenario testing comparisons.

Attendees learn current software methodologies to address post-retirement risks, potential limitations of retirement planning software packages and methods for communicating with individuals for effective retirement financial planning.

Session Coordinator: Steven C. Siegel

**Tuesday, October 29**
8:30 a.m. – 10:00 a.m. **Session 58 PD**

Specialty Track: Retirement Systems Practice Area
Noncore Credit: 90 minutes

**Responding To Changing Perceptions Of Retirement Security**

Moderator: Daniel P. Cassidy
Panel: Daniel P. Cassidy, Samuel S. Stanley

The media has recently focused on many issues about retirement security, including changes in the design of defined benefit plans and problems in some large defined contribution plans. With media attention, public awareness of retirement security issues will continue to increase.

[<ME>]

**Session Coordinator:** Judy F. Anderson

**Tuesday, October 29**
8:30 a.m. – 10:00 a.m. **Session 64 IF**

Specialty Track:
Retirement Systems Practice Area
Core Credit: 90 minutes

**Professional Lie-ability: A Look At Problems Facing Pension Actuaries**

Moderator: David R. Godofsky
Panel: Lauren M. Bloom *, David R. Godofsky

Attendees participate in a discussion of examples of situations that force actuaries to respond to these issues. They gain a deeper understanding of the complex issues involved in practicing as a professional.

[ME]

**Session Coordinator:** Diane M. Storm

**Tuesday, October 29**
10:30 a.m. – 12:00 Noon **Session 75 PD**

Specialty Track: Retirement Systems Practice Area
Core Credit: 45 minutes/
Noncore Credit: 45 minutes

**LATE-BREAKING DEVELOPMENTS [PD]**

Moderator: Adrien R. LaBombarde
Panel: Ethan E. Kra, Adrien R. LaBombarde

Laws relating to retirement benefits are constantly being “improved” and “simplified.”
Regulations and other forms of official guidance continue to affect our clients and shape our practices. Panelists discuss the most recent developments in these areas and share their views on emerging issues that may affect decisions made by plan sponsors, participants or advisors.

At the conclusion of the session, attendees have a better understanding of the current regulatory environment for retirement systems. This session identifies areas of change that may affect your clients and helps you to provide up-to-date advice.

Session Coordinator: Bruce Cadenhead

Tuesday, October 29
10:30 a.m. – 12:00 Noon Session 77 IF

Specialty Track: Retirement Systems Practice Area
Noncore Credit: 90 minutes

Recap: Retirement Implications Of Demographic And Family Change

Moderator: Judy F. Anderson
Panel: Joseph A. Applebaum, Judy F. Anderson

Retirement and family patterns have changed considerably since the U.S. and Canadian Social Security systems were instituted, and further change is likely. The first of the Baby Boomers are reaching age 55 this year, and the last of them will reach age 65 by 2030. A significant number of individuals are working part-time or intermittently before completely leaving the workforce. Further, the proportion of divorced and single people in the population has increased and the median length of marriage before divorce has gone down. Dual-income families have also become the norm rather than the exception.

These demographic and lifestyle changes create a need for re-examination of the structure of social insurance systems and employer retirement programs. The Society of Actuaries took the lead in putting out a call for papers on these subjects and hosting a subsequent symposium for presentation of the papers and discussion. This session recaps the findings and discussions that took place.

Session Coordinator: Judy F. Anderson

Tuesday, October 29
2:30 p.m. – 4:00 p.m. Session 94 PD

Specialty Track: Retirement Systems Practice Area
Noncore Credit: 90 minutes

Litigation And What It Means To Financial Security Systems

Moderator: David R. Godofsky
Panel: David R. Godofsky

The courts continue to issue important rulings that affect pension and retiree medical plans. Among these are a number of decisions regarding cash balance plans. Panelists discuss recent decisions, highlighting important practical aspects as well as the role of the judiciary in shaping benefits policy. Attendees are presented with expert views on emerging issues that may affect plan sponsors, participants and advisors.

At the conclusion of the session, attendees have a better understanding of the effect of recent decisions on retirement plans. This session identifies areas of change that may affect clients and helps attendees to provide up-to-date advice.

Session Coordinator: Bruce Cadenhead
Tuesday, October 29
2:30 pm – 4:00 p.m. Session 95 PD

Specialty Track:
Retirement Systems Practice Area/Life
Insurance Practice Area
Core Credit: 90 minutes

Living To 100 And Beyond: Implications For Retirement [PD]

Moderator: Sam Gutterman

Panel: Colin England, Alan N. Parikh, Robert J. Pokorski *

In recent years, mortality rates have decreased significantly so that many more people now live to age 100 and beyond. Clearly, this trend of increased longevity has important implications for retirement benefit programs, life insurance, annuities and health insurance. This session is an outgrowth from the January 2002 symposium co-sponsored by the Society of Actuaries that explored current thinking on advanced age mortality. Panelists discuss key societal, business and family questions raised by this topic.

At the conclusion of this session, participants have a greater understanding of the issues and challenges of providing adequate retirement programs and insurance products in light of increased longevity.

Session Coordinator: Steven C. Siegel

Wednesday, October 30
8:00 a.m. – 9:30 a.m. Session 124 PD

Specialty Track:
Retirement Systems Practice Area
Noncore Credit: 90 minutes

Current Issues In Plan Design [PD]

We’ve all heard the news about Enron and their retirement plans. The public is now more aware of the risks that are inherent in defined contribution plans and are suspicious of some features in fancy hybrid defined benefit plans. The volatility of investment returns seems larger than ever. How has the design of retirement benefit plans responded? What new hybrids are being created? What, if any, safety nets are plan sponsors considering for themselves and for the plan participants? How might Choice plans fit in?

[ME]

Session Coordinators: Joseph A. Applebaum, Judy F. Anderson

Wednesday, October 30
8:00 a.m. – 9:30 a.m. Session 125 PD

Specialty Track:
Retirement Systems Practice Area
Noncore Credit: 90 minutes

Approaches To Social Security Financing [PD]

Panel: Courtney Coile *, Stephen C. Goss

In North America and internationally, a major issue is whether social insurance programs should be run on a defined benefit or defined contribution model. This session compares and contrasts the strengths and weaknesses of each approach on both the benefit and financing side.

[ME]

Session Coordinator: Joseph A. Applebaum

Wednesday, October 30
10:00 a.m. – 11:30 a.m. Session 138 PD

Specialty Track:
Retirement Systems Practice Area
Core Credit: 90 minutes

Current Issues In Plan Design [PD]
Regulation Of U.S. Pension Plans: Non-Tax Issues [PD]

Moderator: Joseph A. Applebaum

Panel: Nell Hennessy *, Alan D. Lebowitz *

Recently, questions arising from the manner in which a plan is operated, particularly with respect to handling plan assets, have come to the fore. The fiduciary provisions of ERISA govern these issues. While actuaries do not typically operate as fiduciaries, they should be aware of the constraints and duties under which fiduciaries operate.

[ME]

Session Coordinator: Joseph A. Applebaum

Wednesday, October 30
10:00 a.m. – 11:30 a.m. Session 139 PD

Specialty Track:
Retirement Systems Practice Area
Noncore Credit: 90 minutes

The Saver Summits And U.S. Retirement Income Policy

Moderator: Anna M. Rappaport

Panel: Bridget Flynn *, Mathew Greenwald *, Anna M. Rappaport

In 1997 President Clinton signed into law the “Savings Are Vital to Everyone’s Retirement Act” (SAVER). One feature of this Act is a bipartisan national summit on retirement savings, presided over by the executive and legislative branches, to be held every four years. Summits were held in June 1998 and February 2002. This session presents an overview of the 2002 summit, some perspective on the 1998 summit and discussion of the implications, issues and opportunities that these summits have highlighted.

Session Coordinator: Judy F. Anderson

Wednesday, October 30
12:00 Noon – 1:15 p.m. Session 147 PD

Specialty Track:
Retirement Systems Practice Area
Noncore Credit: 75 minutes

Pension Accounting: Here, There And Everywhere [PD]

This session provides an overview of the different pension accounting standards in use in the United States, Canada and internationally. Speakers compare standards set by various accounting standards boards, including the IASB, CICA, FASB, GASB and CASB, and discuss the different purposes for which these standards are used.

Attendees gain a greater understanding of the appropriate accounting standards to use in different situations, as well as a basic awareness of the calculation methodology used under each of the major standards.

[ME]

Session Coordinator: Lloyd A. Katz