The Newsletter
of the Society
of Actuaries
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The Actuary

Presidential address

Facing challenges to make SOA mission and vision a reality

by Anna M. Rappaport
1997-98 President
Society of Actuaries
Address at SOA Annual Meeting
Oct. 27, 1997

During 1996, as president-elect and chair of the Strategic Planning Committee, Dave Holland focused on building a new mission and vision statement. In 1997, the Strategic Planning Committee, which I chaired during my term as president-elect, focused on making the mission and vision a reality.

In particular, we emphasized, first, trying to better understand actuaries and their customers and, second, identifying critical success factors for the profession. We felt it was important to look at the key challenges both our customers and the profession face to help set priorities and allocate resources for future programs.

The challenges ahead

Some key challenges facing our customers are:

- Demographics and the affordability and structure of retirement programs and systems
- Globalization of the profession, consulting firms, the insurance industry, and business in general. Today, 25% of our members are employed in 20 large consulting firms, all of which are multinational.
- Insurance industry consolidation, concerns about solvency, new competitors, and a blurring of life insurance and investment products. The foundations of traditional individual insurance are challenged as risk classification is further questioned.
- Restructuring of the health care industry, with the growth of integrated delivery systems and managed care and the emergence of new risk takers. Lines between delivery and risk assumption have blurred.
- Competition and consolidation among consulting firms
- Changing corporate cultures that create challenges for employee benefit plan sponsors

Some of the challenges facing the Society of Actuaries are:

- Broadening the scope of actuarial science
- Helping actuaries maintain and add value with traditional employers
- Building an identity with potential new customers
- Reinforcing professionalism and ensuring that members understand what it is to be a professional
- Competing with other professions
- Declining prevalence of defined benefit plans

How do we implement the mission and vision?

This year, remaining cognizant of these challenges, the Strategic Planning Committee asked practice area representatives to examine the new mission and vision and identify how to apply it within their areas. Each practice area examined its response to our core functions: education and research. They then focused on these functions in their individual planning process.

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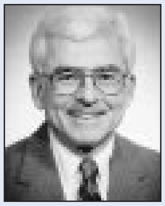

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EDITORIAL

The right thing to do

by Marc Twinney

Last summer, I received an invitation to a seminar on mortality improvement in the NAFTA countries and how their social security systems might be affected. The seminar was to be a multidisciplinary summit meeting seeking a consensus on how to forecast mortality. This subject raises debates among actuaries alone. Add demographers, economists, public policy researchers, and even biomedical experts to the mix, and how could we ever reach a consensus? How good would the various types of research be? Would any of us speak the same professional language?

Then the working papers and other materials began to arrive. The research was first rate, thorough, and focused. My doubts began to ease, and by the time the seminar's first session ended the morning of Oct. 30, I realized: this was the right thing to do. In a time unprecedented for its globalization and potential for lower mortality, bringing together concerned researchers might be the best way to address a critical problem affecting countries that share borders, history, and language.

One of the seminar organizers, Irwin Vanderhoof, details the seminar in an article in this issue on page 6. I believe the seminar's multidisciplinary approach was beneficial for the Society and the profession. We improved our relationships with many people from the academic and government worlds.

Here are some key ideas that made the gathering worthwhile:

- The data and the processes for measuring and projecting mortality have advanced because of better information, increased computing capability, and more sophisticated models.
- The forces driving mortality improvement are relentless; we need to respond more expertly to them and their projected potential.
- We do not agree about what the new information and processes mean.
- The information for older age categories — where we have the most room for improvement — is the hardest to analyze, and its implications are the least clear.
- Projecting mortality by population subgroups and by factors such as education and marital status — each almost as forceful as gender — is important in large systems because of changes in the "mix."
- The potential variation in long-term mortality improvement can be measured more precisely and applied to achieve better understanding of the assumption of risk by social security and private plans.
- While people are living longer, their health status is unclear. Some research says that in many of the cohorts, the people are healthier at specific ages than in the cohorts that have gone before.
- Comparisons by country are useful in gaining understanding of the individual forces that may be at work in many locations.
- Many, but by no means all, of the enhanced processes and data may result in projections of longer life expectancies and higher social security costs.

Focusing on mortality improvement is important now for several reasons. The data and models available have improved greatly over the years. The genetic response to disease is still ahead. Societies around the world would find it helpful to have better techniques to project future benefit and cost information for public, private, and personal retirement plans. And improved techniques would be

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OP-ED

In praise of indexing

by Stephen G. Kellison

The U.S. Social Security system faces a significant long-term financial deficit. Historically, the traditional approach to addressing such shortfalls has been to legislate benefit reductions, payroll tax increases, or both.

However, since benefit reductions and tax increases are politically unpopular, the debate's focal point has shifted to other approaches such as investment of a portion of the trust funds in equities or partial privatization into individual accounts. These concepts were developed into three full-blown proposals by the 1994-96 Advisory Council on Social Security, and they have been widely discussed.

The purpose of this article is to outline a possible alternative framework to help bring financial stability to the system and restore public confidence in it. This framework is indexing — specifically, greater indexing of the system to key economic and demographic variables that drive the system's costs.

Indexing, of course, is nothing new, having been introduced in 1972. Initial benefits at retirement are determined by a complex formula involving preretirement wage indexing, while the benefits thereafter are tied to the Consumer Price Index.

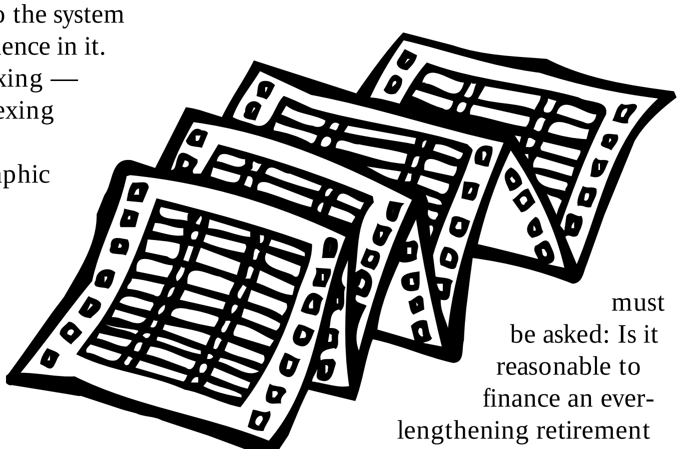
As hoped, these indexing features reduced the frequency of ad hoc changes to the program by Congress and increased the predictability of the benefits the system would provide. They were not specifically designed to stabilize the system's financial structure. To help bring such stability, major amendments were required in 1977 and 1983, and again today the system is out of close actuarial balance.

Toward financial stability

Perhaps greater indexing would stabilize the financial structure of the program as economic and demographic factors change. Conceivably, a structure might even be devised that would virtually place the program on "autopilot" — that is, without requiring Congressional intervention — while preserving the defined benefit nature of the program.

3 avenues to explore

The obvious first candidate would be an index linking the normal retirement age to increases in life expectancy. While many objections would be raised, a fundamental question of social policy must be asked: Is it reasonable to finance an ever-lengthening retirement period through a social insurance program funded by payroll taxes, or should such a program only be asked to provide benefits for a final portion of total life expectancy?



A second candidate for more sophisticated indexing would be the benefit formula itself. The key economic factor in Social Security financing is real wage growth, which is closely linked to productivity increases. If the economy can produce higher productivity gains, then as a society we can afford a richer social insurance program. Conversely, if productivity gains are lower, then a leaner program is needed to preserve intergenerational equity between workers and retirees.

Finally, the third major variable driving the cost of the system is the fertility rate. In fact, the current financial threat is largely attributable to the baby boom being followed by the baby bust. Historically, U.S. fertility rates have varied a fair amount, but they have been relatively low and stable since the 1970s. The financial risk to Social Security would rise if U.S. fertility declined to levels seen in several European countries. Finding an acceptable indexing approach for this variable would pose a challenge. A key question would be whether the dependency ratio should include only retirees or children as well as retirees. Failure to account for declining fertility trends means either higher taxes or lower benefits for future generations.

The advisory council's proposals contain several innovative concepts that have prompted a healthy public debate about this most important intergenerational social contract called Social Security. These concepts and proposals deserve careful consideration. As the public debate on the U.S. Social Security system continues, indexing deserves consideration as well.

Stephen G. Kellison is a public trustee on the federal boards overseeing Social Security and Medicare. He is vice president and chief actuary of VALIC, Houston. His e-mail address is *73422.1061@compuserve.com*.

SOA mission and vision (continued from page 1)

In some practice areas, only fine tuning of current activities is required. In others, however, such as finance and investment, greater challenges exist. For example, the mathematics used today to price financial products is much different than the mathematics most of us learned a few (and more than a few) years ago. In fact, the change is major, and it will be a substantial challenge to learn and apply it. The new text *Financial Economics: With Applications to Investments, Insurance, and Pensions* will be an important tool in this educational process. The finance and investment practice areas will also be developing continuing education programs to help members bridge this gap.

Actuarial employment in key market segments

While practice area representatives were developing their strategic directions, the planning committee also looked at several segments of actuarial employment, including large consulting firms, life insurance companies, the health care industry, small consulting firms, academia, and regulators. Our intent was to focus more specifically on the needs of different market segments among members. This research, which will provide ongoing market analysis, will continue under a new Market Research and Analysis Committee, chaired by Jay Jaffe.

Our early research indicated:

- Some larger organizations in industries actuaries traditionally serve are low users of our expertise. We will be conducting additional research to determine why.
- Consultants are split between very large and very small firms, with little in the middle. We are focusing on understanding the needs of both SOA member segments.
- Recruiting the right people into the actuarial profession is a major concern among employers. We will conduct a feasibility study to review different recruiting strategies for the profession.

To realize the vision of actuaries being recognized as the leading professionals in the modeling and management of financial risk and contingent events, the Society of Actuaries also needs to focus on doing the right things effectively. To this end, two additional activities were initiated over the last year. A task force assessed our research effectiveness, and it will complete its work shortly. Secondly, a consulting firm that specializes in association management reviewed our operations and compared them to best practices in similar organizations. The Board of Governors will use the information collected from these initiatives to improve overall effectiveness. We will also solicit input from both members and users of actuarial services.

A plan for 1997-98

Work on both basic and continuing education is well underway. In addition, this next year I plan to emphasize the following:

- Bring even more life to the mission and vision. This is the basis for our practice area plans.
- Continue market analysis. It is important to look at both existing customers and larger organizations in our traditional areas of practice, particularly those companies offering insurance or health care that are not large users of actuaries.
- Further develop multidisciplinary joint ventures with other professional associations and academia, including facilitating the exchange of ideas between academics and practitioners.
- Increase our focus on technology and its use to support our activities.
- Help actuaries become more effective in serving customers' needs.
- Determine whether there are different things to do for pension actuaries. This group, more than others, is served by multiple organizations. While we will not focus on reorganizing the profession, we want to rationalize service to pension actuaries and ensure that they are well served.
- Review how our services meet the needs of Canadians.
- Further develop support for actuaries outside North America.
- Seek opportunities to increase our effectiveness in everything we do.

Last, but certainly not least, I plan to listen to the membership and work hard to meet your needs. I am delighted to have this opportunity to serve as president. I look forward to working with all of you.

Editor's note: *A story discussing the SOA strategic plan in detail will appear in the February issue.*

The right thing to do (continued from page 2)

necessary to help manage an indexing system for benefit retirement ages if such indexing is chosen to help stabilize the ultimate costs of defined benefits in a social security system.

Editor's note: *We welcome Richard Schreitmueller as an assistant editor of* The Actuary *beginning with this issue. He was a 1994-97 SOA board member, served as 1991-96 editor of the American Academy of Actuaries'* Enrolled Actuaries Report, *and served on many SOA committees.*

Dick brings to the assistant editor role more than 30 years' employee benefits experience in insurance, consulting, government, and teaching. Most recently, he was director of regulatory and legislative services, Aon Consulting, Baltimore, before his retirement at the end of 1997. His role included writing and editing articles for publication.

A first step

New tax law gives defined benefit plans a glimmer of hope

by William J. Sohn

A pension law change included in the Taxpayer Relief Act of 1997 is the first new tax law provision in a decade to support defined benefit plans. However, it is only one of many improvements needed before defined benefit plans can flourish again.

The new act provides for a gradual increase in a defined benefit plan's current liability limitation from 150% in 1997 to 170% for plan years beginning in 2005 and later. What does this obscure and highly technical provision mean?

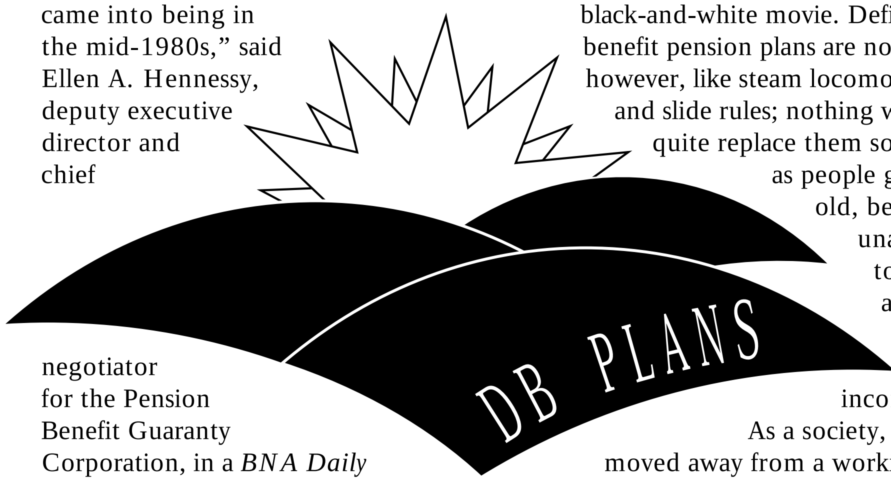
"Current liability" measures the value of pension liabilities accrued to date; the 150% limitation means an employer must stop contributing to the company's pension fund when plan assets amount to 150% of current liability, even if the actuarial cost method based on projected benefits shows an unfunded liability.

The 150% limitation prevents some plan sponsors from putting money into a plan when asset values are high and extra cash is at hand (which is, of course, exactly when contributions are most easily made). The limitation particularly constrains plan sponsors with final-pay plans and young workforces. The net effect is to narrow the range of possible contributions, encourage plan terminations, and discourage the formation of new plans. Many observers working with defined benefit plans would have preferred repeal of the current liability limitation altogether, but the potential loss of revenue led to the provision actually adopted.

Weeding out impediments?

Taken by itself, the revised limitation is of minor importance. It will be helpful to a few larger companies in cyclical industries and others that will be able to make larger tax-deductible contributions; a much smaller number of companies might actually establish new defined benefit plans. Some small companies that maintain pension plans only for the tax deduction will continue to do so a little longer.

What is much more interesting is that a pension law change has finally come along that offers any incentive at all to form defined benefit plans. "This is all incremental in terms of trying to eliminate things that came into being in the mid-1980s," said Ellen A. Hennessy, deputy executive director and chief negotiator for the Pension Benefit Guaranty Corporation, in a *BNA Daily Tax Report* story on Aug. 26, 1997. "We've been trying to weed away those things that people told us were impediments. In the same way that those built up over the years, this is a process of taking them out one by one."



What are the next steps?

To all but the largest plan sponsors, the costs of compliance with ERISA including PBGC premiums make the maintenance of a defined benefit plan an expensive proposition indeed. If we want a viable defined benefit system, we need to strike at the huge administrative overhead. Areas ripe for simplification include the funding rules, the accrual of benefit rules, and the nondiscrimination regulations. Restructuring the PBGC premium so that only sponsors of underfunded plans are required to pay premiums also would do wonders to make defined benefit plans competitive with 401(k) plans.

But even if Congress does the right thing by defined benefit plans, it will take years for the universe of plan sponsors to shift its focus back to designing plans that, by their terms, provide adequate income in retirement. The very idea of a defined benefit plan now seems a bit quaint, rather like a black-and-white movie. Defined benefit pension plans are not, however, like steam locomotives and slide rules; nothing will ever quite replace them so long as people grow old, become unable to work, and need retirement income.

As a society, we have moved away from a working, if flawed, defined benefit model toward a model centered on 401(k) and other capital accumulation plans. These have flourished in the booming stock market. Their adequacy has not been tested in a weak market, let alone a bear market. Only the very young or the very foolish think that giving all our wage earners individual pots of money to invest as they see fit will alone suffice to generate the income needed, when it is needed, to keep millions of old people from falling into poverty.

William J. Sohn is a benefits consultant with Buck Consultants, Inc., New York. He can be reached by e-mail at *bsohn@buckconsultants.com*.

Social security "summit"

NAFTA project seeks consensus on how to project mortality

by Irwin T. Vanderhoof

In some disciplines, such as medicine, consensus meetings are regular occurrences. The purpose is to find areas of agreement among experts on an important issue where information and knowledge are still evolving. Such meetings seem less common in actuarial matters.

One of these rare attempts to reach consensus on an actuarial issue was held on Oct. 30, immediately following the Society of Actuaries' annual meeting in Washington, D.C. The subject of the seminar was mortality improvement in the NAFTA countries and the impact of such improvements on the financing and benefit adequacy of the countries' individual social security systems. The gathering of about 80 researchers from a variety of disciplines served as a type of summit meeting on the NAFTA countries' mortality projections.

The seminar was Phase 2 of a three-phase SOA research project, "Impact of Mortality Improvement on Social Security: Canada, Mexico, and the United States." The project is intended to provide some guidance for appropriate governmental bodies to use in determining future financing and benefit needs for social security. It is sponsored by the SOA, The Actuarial Foundation (formerly the SOA Foundation), the Retirement Research Foundation, the American Society of Pension Actuaries, the social security administration of each NAFTA country, and the Pension Research Council.

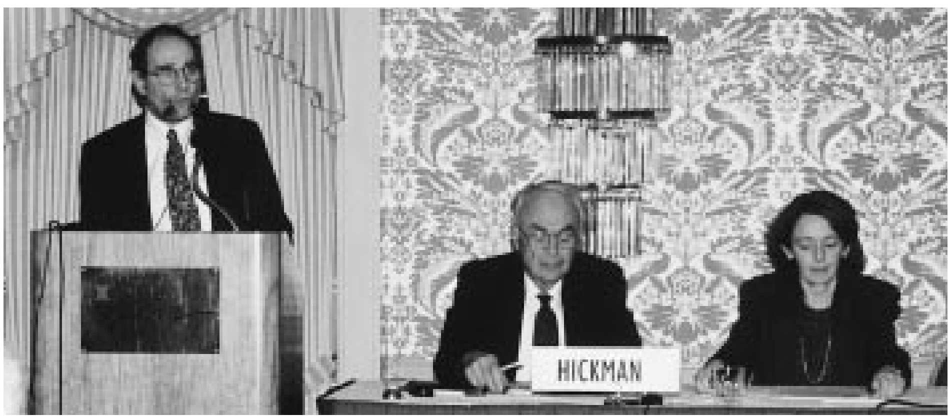
The impact of longer human life spans is likely to be different for each country. Canada is committed to a continuation of the current tax-based system, Mexico has moved to a privatized system, and the United States uses a tax-based system but is talking about partial privatization. If decreases in mortality rates are underestimated, the burden may fall on the taxpayers and beneficiaries in the case of a public system and on the capital of private insurance companies and private plan sponsors in the case of a private system.

Planning for a new model

Phase 1 of the project was a review of the current knowledge on the issue. This took the form of a series of research reports presented at the Phase 2 seminar. These presentations included a summary of a review of the existing literature on related research, work summaries of the mortality experience of the countries, and discussions of the insights provided by biological research and the work of demographers on this subject.

The presentation of Phase 1 material culminated during the final session of the seminar, when those present were asked a series of questions. Both the answers given and the seminar presentations showed much consensus on the methodology used but also pointed to some uncertainty about the projected improvement rates.

Phase 3 will be an attempt to create a model consistent with the consensus methodology and assumptions, apply it to the systems in the three countries, and report the results. As a first analysis of the input of the alternatives identified at the Phase 2 seminar, the social security administrations of Canada and the United States will test the impact of the alternatives on the long-range financial status of the social security systems. Such a report will not only attempt to show expected results but also highlight the risks implicit in errors in such calculations. The results of this analysis will be announced at a three-hour symposium on Feb. 17, 1998, at the 150th anniversary meeting of the American Association for the Advancement of Science in Philadelphia.



Warren Luckner introduces Jim Hickman and Olivia Mitchell, who led seminar participants through a survey. Results will serve as the basis for testing the impact of current and suggested mortality rates' on the NAFTA countries' social security systems.

Discussions based in demography, medicine, actuarial science

The Oct. 30 seminar was dedicated to the late Sergio Camposortega Cruz, a highly regarded Mexican actuary and one of the scheduled presenters. The session was opened by Michael Sze, chair of the project's oversight group, and Anna Rappaport, 1997-98 SOA president. The remarks emphasized the importance of the work yet to be done.

The first presentation was made by social science researcher Shripad Tuljapurkar. His work, supported by SOA research grants, was to unearth, list, and summarize existing literature and research on mortality projections for the NAFTA countries and to discuss mortality projections in general. (The mortality history and projections for the three countries also were discussed in a paper submitted by Steve Goss of the U.S. Social Security Administration, Bernard Dussault of the Canadian Public Insurance and Pension Programs, et al.)

The next series of papers focused on NAFTA mortality issues as viewed by demographers. Sam Gutterman, SOA past president, moderated a panel consisting of demographers Michael Wolfson commenting on Canada, Jose Gomez-de-Leon on Mexico, and Sam Preston on the United States. Canada seemed to exhibit the lowest mortality rates, but Mexico, with considerably higher rates, seemed to show the most rapid mortality improvements.

Irwin Vanderhoof moderated the second panel, which consisted of Ron Lee, Jay Olshansky, and Leonard Hayflick. Lee is one of the originators of the Lee-Carter method of demographic mortality projections. This method is a form of the auto-regressive mathematical process known as ARIMA and was strikingly demonstrated by Gomez-de-Leon's work on Mexico. Olshanksky, an actuary and biodemographer, discussed the biological basis for extension of life expectancy. He believes there is a limit to the human life span but that the limit hasn't been determined. Anatomy professor Hayflick, on the other hand, is less optimistic about the extension of the active life span.

The luncheon presentation was given by Bob Myers, former chief actuary for the U.S. Social Security Administration, whose discussion centered on the idea that the strength of the U.S. Social Security system rests in its flexibility. The seminar continued in the afternoon with presentations by chief actuaries for the NAFTA countries and the United Kingdom. The subject was the methodologies used by the various systems for mortality projections. Moderated by Warren Luckner, SOA director of research, the session offered discussions by Chris

(continued on page 8)

Speakers represent range of disciplines

The NAFTA mortality seminar brought together experts from diverse disciplines. Speakers and topics were:

- *Christopher Daykin, A.S.A., F.I.A.,* government actuary, United Kingdom; how mortality is projected in the United Kingdom
- *Bernard Dussault, F.S.A., F.C.I.A.,* chief actuary, Canadian Public Insurance and Pensions Programs; how mortality is projected in Canada
- *Jose Gomez de Leon, Sc.D., M.Sc., M.A.,* general secretary for the National Population Council of the Program of Education, Health, and Nutrition, Mexico; demographic characteristics and mortality trends in Mexico
- *Stephen C. Goss, A.S.A.,* deputy chief actuary, U.S. Social Security Administration; how mortality is projected in the United States
- *Leonard Hayflick, Ph.D.,* professor of anatomy, University of California School of Medicine; the biological basis for continued mortality improvement
- *Ronald Lee, Ph.D.,* professor of demography and economics, University of California — Berkeley; the Lee-Carter method and uncertainty in mortality projection
- *Robert J. Myers, F.S.A., F.C.A.S., A.I.A., E.A.,* former chief actuary, U.S. Social Security Administration; how mortality has been projected in the past for the United States
- *S. Jay Olshansky, Ph.D., A.S.A.,* associate professor, Department of Medicine, Center on Aging, Health, and Society and Population Research Center, University of Chicago, member of the American Academy of Actuaries; the biological aspects of mortality and a study on causes of death
- *Virgilia Partida,* director of demographic research, National Population Council (*CONAPO*), Mexico; Mexican mortality evolution and its impact on the Mexican social security system
- *Samuel H. Preston, Ph.D.,* director, Population Studies Center, University of Pennsylvania; demographic characteristics and mortality trends in the United States
- *Shripad Tuljapurkar, Ph.D.,* president, Mountain View Research, Inc., Los Altos, Calif.; Phase 1 working drafts, "Mortality Change and Forecasting: How Much and How Little Do We Know?" and "Forecasting Mortality Change: Questions and Assumptions"
- *Michael C. Wolfson, Ph.D.,* director general, Institutions and Social Statistics Branch, Statistics Canada; demographic characteristics and mortality trends in Canada

Moderators and other key speakers were:

- *Sam Gutterman, F.S.A., F.C.A.S., F.C.A.,* director and consulting actuary, Price Waterhouse LLP, consultant to the Social Security Administration and active in the actuarial profession's international activities
- *James C. Hickman, Ph.D., F.S.A., F.C.A.S.,* emeritus professor and dean, University of Wisconsin School of Business
- *Warren Luckner, F.S.A.,* director of research, Society of Actuaries
- *Olivia S. Mitchell, Ph.D.,* International Foundation of Employee Benefit Plans Professor of Insurance and Risk Management, The Wharton School, University of Pennsylvania, and executive director, Pension Research Council
- *Anna M. Rappaport, F.S.A., F.C.A., E.A.,* president, Society of Actuaries, and principal, William M. Mercer Incorporated, Chicago
- *Michael M.C. Sze, Ph.D., F.S.A., F.C.I.A., E.A.,* chair of "Impact of Mortality Improvement" project oversight group, 1994-97 SOA board member, president of Sze Associates, Ltd., Willowdale, Ontario
- *Irwin T. Vanderhoof, Ph.D., F.S.A., A.C.A.S., A.I.A., E.A.,* member of "Impact of Mortality Improvement" project oversight group, clinical professor at New York University's Stern School of Business

How to learn more about the NAFTA project

Seminar papers are being distributed by the Society of Actuaries.

Mountain View Research and representatives from the U.S. and Canadian social security administrations produced the papers for Phase 1, a study of past experience and an analysis of current literature on mortality improvement in the NAFTA countries. The demographers, economists, medical researchers, and actuaries involved in the Oct. 30 seminar, Phase 2, considered mortality forecasting methodologies, factors affecting mortality change, and mortality assumptions. Phase 2 handouts and papers also are available.

The cost for the Mountain View Research working drafts, a major paper giving an overview of the NAFTA countries' social security systems by Steve Goss, et al., and a seminar summary is $25. The binder containing the entire seminar package is $75. For more information, contact the SOA Books Department (phone: 847 / 706-3526; fax: 847 / 706-3599; e-mail: *bhaynes@soa.org*).

Phase 3 results, the creation of a model consistent with the consensus methodology and assumptions and the application to the systems in the three countries, will be presented during a symposium at the American Association for the Advancement of Science (AAAS) Annual Meeting, Feb. 12-17, Philadelphia, Pa. Registration and meeting information is available on the AAAS Web site (*www.aaas.org/meetings/meetings.htm*) or by contacting Kim Parker at the AAAS (phone: 202 / 326-6410).

Daykin on the U.K., Bernard Dussault on Canada, Steve Goss on the United States, and Virgilio Partida on Mexico. The final session was the filling out of a questionnaire by participants under the guidance of Jim Hickman and Olivia Mitchell. The questionnaire surveyed participants on forecast methodology, factors affecting mortality improvement, and quantitative assessments about the percentage of future mortality improvements.

Participants in the seminar expressed great satisfaction at its multidisciplinary nature and the quality of the presentations.

Many actuaries attending noted that the same methods used for social security purposes also could apply to more purely actuarial concerns, such as projection of annuitant mortality for impaired life annuities.

Several papers presented at the seminar will be submitted to the *North American Actuarial Journal*. (For availability of seminar materials, see story at left.)

Irwin T. Vanderhoof, an organizer of the NAFTA mortality project, is clinical professor of finance, Stern School of Business, New York University.

Demographics and mortality trends of the NAFTA countries were discussed by (L-R) Samuel Preston, Michael Wolfson, and Jose Gomez de Leon. Sam Gutterman (background) moderated the panel.

PRC plans conference on retirement

The Pension Research Council (PRC) will address a crucial topic for the next century at a conference, "Forecasting Retirement Needs and Retirement Wealth," April 27-28, 1998, at The Wharton School of the University of Pennsylvania.

Presenters will discuss research that explores the links between retirement, health, and wealth. The research draws on a new data set known as the Health and Retirement Study (HRS), a longitudinal and nationally representative survey of retired Americans and those approaching retirement. The conference will focus on what the research reveals about how people can better prepare to take more individual responsibility for their own retirement.

Anna Rappaport, SOA president, is an organizer of the conference.

More information is available from the PRC (phone: 215 / 898-7620; fax: 215 / 898-0310).

BOOK REVIEW

Traveling the world of pensions before ERISA

by Howard Young

While it may be hard for younger people to believe and older ones to remember, there was a lot of pension plan activity in the private sector before ERISA. Steven Sass, editor of the Federal Reserve Bank of Boston's *Regional Review*, has provided us with a very readable and informative history, *The Promise of Private Pensions: The First Hundred Years* (Harvard University Press, 1997).

For this reviewer, the most interesting aspect of pension history is that current matters of debate and contention have deep roots — for example, contributory versus non-contributory participation (and hence voluntary versus compulsory), defined-benefit versus defined-contribution plans, and the emphasis on retirement income (mandatory annuitization) versus savings goals (lump sums available). Anyone concerned about the design or operation of private pension plans will learn much about their history and have a broader perspective after reading *The Promise of Private Pensions*.

Sass discusses employment practices in the late 1800s. He tells us that "the private pension institution emerged as a by-product of these employer efforts to establish a more stable and efficient employment relationship with labor." Railroads were the first major industry to adopt plans; the goals were to provide incentive for younger employees to remain with the firm and to have a generally accepted method for getting rid of older ones.

By 1919, there were more than 300 plans, and 15% of the workforce was covered. Chapter 4, "The Hard Actuarial Realities," covers the problems that began to arise in the 1920s. The importance of actuarial guidance — provided by consultants such as George Buck and insurers led by Metropolitan Life — gained recognition. Nevertheless, economic forces, especially the 1930s depression, caused the federal government to establish Social Security and to begin regulating private plans through the tax code.

The post-World War II role of labor unions is described, especially the contrast between plans negotiated by the United Auto Workers and the Teamsters. Coverage expanded and benefits increased for blue-collar workers, and plans covering managers became even more favorable. The widespread interest in fringe benefits put pensions at or near the top of the priority list.

Chapter 7, "The Pension Industry Reorganizes," gives considerable information about the changing roles within the insurance industry and the growth of trust funds and consulting firms. By the 1960s and 1970s, pension plans were no longer just another aspect of the employment relationship; they had become the object of public policy debate and attention. Thus, in 1974 ERISA was enacted, and it established a totally different environment.

Sass concludes the history at that natural break point, but the epilogue discusses some later trends and future prospects. The author's 253 pages of text, followed by extensive notes, is a valuable and concise history. Unlike texts about recent and current pension developments, this book will not be outdated by ongoing pension activity. Thus — like pension plans themselves — it is a worthwhile long-term investment of time and money for any benefit practitioner or policy maker.

Howard Young is an adjunct professor at the University of Michigan, Ann Arbor. His e-mail address is *hyoung@umich.edu*.

Pension books of interest

The Promise of Private Pensions is available from Harvard University Press (phone: 800 / 448-2242; Web site: *www.hup.harvard.edu*).

Other books published recently by the Pension Research Council include *Positioning Pensions for the 21st Century* and the seventh edition of *Fundamentals of Private Pensions*. Both are available from the University of Pennsylvania Press (phone: 800 / 445-9880).

Excerpts from *The Promise of Private Pensions*

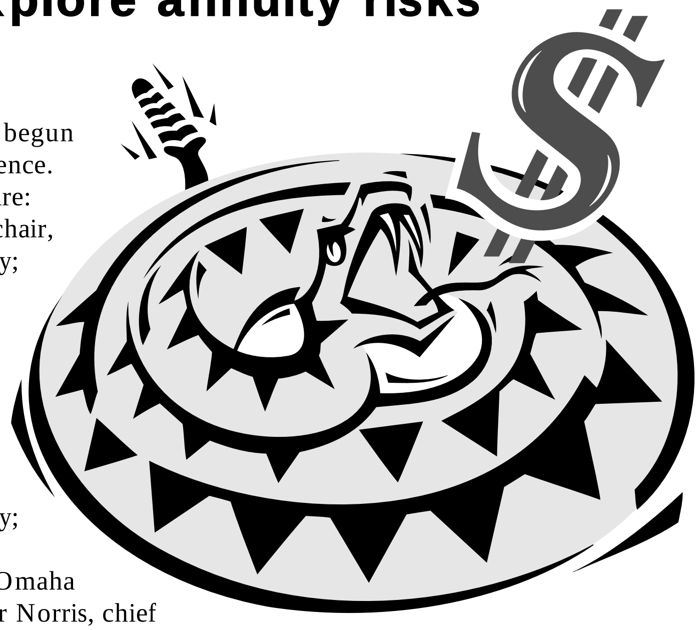
"When the Carnegie Foundation for the Advancement of Teaching offered free pensions to professors at universities without secular affiliations and adopted Carnegie's standardized admissions requirements, professors at nonqualifying institutions threatened everything from lawsuits to mass resignations until their schools complied. So powerful was the pressure that the Carnegie pension offer, leading to standardized college admission requirements, it has been called the most effective instrument of educational reform in the 20th century ... ." — Page 47

"The pension turned out to be far more complex than originally thought. The efficient management of a pension program demanded skills in actuarial analysis, plan design, marketing, and investment that far exceeded the standard capacity of even giant business enterprises." — Page 86

Before the snake bites

Study and conference will explore annuity risks

by Irwin Vanderhoof



Although the greatest risk might not be found in the largest block of business, that may be the best place to start to look. This is one way to characterize the approach of a new study, "Risk of Accumulation Products," to be sponsored by The Actuarial Foundation (formerly the SOA Foundation).

Traditionally, life insurance companies have depended on individual whole life insurance policies for their growth in assets. This has changed in recent years. Now, annuities — particularly individual annuities — have become the largest part of new individual premiums. Companies have responded by issuing a plethora of imaginative products. These are often founded on a variety of recently developed financial instruments, such as derivatives.

However, while these new, complex products are already on the market, the study of such products' risks has not kept pace. One way to discover the problems is to wait for companies to get into trouble. However, we, as actuaries, have a responsibility to count our snakes before they hatch and recognize the problems before they bite our employers.

THE ACTUARIAL FOUNDATION
Preparing for tomorrow's possibilities

In light of the dramatic need to correct this situation and with substantial financial support from the Nationwide Insurance Companies, the Foundation will sponsor a study of the risks of these new products and the new financial instruments underlying them. The study will culminate in a scientific conference in New York in December 1998.

A committee has begun planning the conference. On the committee are: Irwin Vanderhoof, chair, New York University; Dennis Carr, ARM Financial Group Inc.; Steven Craighead, Nationwide Life Insurance Co.; Martin Gruber, New York University; Steven Miller, Mutual / United of Omaha Insurance Co.; Peter Norris, chief investment officer, Equitable Life Assurance Society; and Tim Pfeifer, Milliman & Robertson.

The conference will be built around five topics:

- Catastrophic market risks and market failures, such as the failure of portfolio insurance in 1987.
- The effect of distribution channels on policyholder behavior and persistence.
- Long-time liabilities, options, and guarantees. The last includes interest rate guarantees that extend into the distant future.
- Transfer risk models
- Practical aspects of managing annuity blocks of business

Each topic is expected to have at least one invited paper to lead the discussion.

One step toward the conference already has been taken. Nino Boezio, active in finance-related committees of the SOA and the Canadian Institute of Actuaries, has been commissioned to provide an annotated bibliography, along with copies of the pertinent papers, of existing material on the behavior of individuals in response to changes in the economic environment.

There should be some relationship between mortgagors' decisions to refinance and annuitants' decisions to surrender their contracts. Boezio's compilation of data on this aspect of behavioral economics should have value for actuaries and other professionals interested in finance. This information is expected to start to become available in March 1998. Boezio will continue to compile and release data during the year to individuals preparing papers for the conference.

Call for papers

A detailed call for papers will be issued early in 1998. Anyone interested in developing a paper or presentation should contact Joseph Abel, Ph.D., the Foundation's director of marketing and development, to register for the mailing list for additional information. He can be reached at the Society office (phone: 847 / 706-3557; fax: 847 / 706-3599; e-mail: *jabel@soa.org*).

Foundation has new name, new trustees

As of Jan. 1, 1998, the name for the public charitable arm of the actuarial profession changes from the Society of Actuaries Foundation to The Actuarial Foundation.

The name change for the Foundation, incorporated in 1994, reflects the expanding possibilities for this 501(c) (3) organization's research, education, and communication initiatives. "The Society of Actuaries had the vision and the commitment to begin the Foundation," said Jim Tilley, former chair of the Foundation Trustees. "The SOA took the start-up risk. The Foundation grew, and it won acceptance, with SOA members among the first to contribute toward the mission of using the skills of actuaries to help understand and resolve social and financial problems."

Current chair Cecil Bykerk said, "With the Actuarial Education and Research Fund's move to affiliate with the Foundation, we are optimistic that all members of the profession will become more aware of what can be done for the public good through Foundation grants."

As a grants-giving entity, the Foundation has already funded several innovative programs:

- A math mentoring program involving actuaries as volunteers in 10 schools across the United States
- Two U.S. consumer education initiatives on the financing problems facing Social Security and Medicare
- Two ground-breaking seminars — one in Washington, D.C., on the impact of mortality improvement on social security in the NAFTA countries (see story, page 6) and one in New York on the implications of genetic testing on the insurance industry
- A textbook on financial economics cosponsored with Lincoln National

Some notable accomplishments in funding were made in the first three years:

- The initial fund-raising campaign, *Preparing for Tomorrow's Possibilities: The Leadership Investment*, led by Ian Rolland, met its $1 million goal three months early through contributions from pledged individual "charter investors," corporate donors (including 15 with matching gift programs), and special events.
- The first donor-advised fund of $100,000 was established with Milliman & Robertson.

"Our next step toward becoming a self-sustaining entity is to establish annual giving and major gift programs," said Joe Abel, Foundation director of development and marketing.

Chuck Rohm, a new Trustee, will be leading the annual giving effort. He's a Fellow of the SOA and a member of the American Academy of Actuaries, and he was executive vice president of The Principal Financial Group until his recent retirement. Other new 1997-98 Trustees are:

- Sam Gutterman, member of the American Academy of Actuaries and past president of the SOA. He is a Fellow of the SOA, Casualty Actuarial Society, and Conference of Consulting Actuaries (CCA), and Honorary Overseas Fellow of the Institute of Actuaries (U.K.). He is a director with Price Waterhouse LLP, Chicago.
- Jack Turnquist, past president of the Academy and the CCA, a Fellow of the SOA, and owner of Dallas consulting firm Totidem Verbis.
- Marc Twinney, retired as director of pensions at Ford Motor Company, an FSA, Enrolled Actuary, and member of the Academy and the CCA

Continuing as Trustees are actuaries Walter Rugland (vice chair), Morris Chambers (secretary / treasurer), Jim Hickman, David Holland, Curtis Huntington, Barbara Lautzenheiser, Ian Rolland, Bob Shapiro, Jim Tilley, and Bob Winters. Nonactuary trustees are James Annable, chief economist, First Chicago NBD; Roland Baker, president, First Penn-Pacific Life Insurance Co.; Ed Bales, consultant, Learning, Training & Education; and Arnold Zellner, professor emeritus, Graduate School of Business, University of Chicago.

For more information on The Actuarial Foundation, contact Joe Abel (phone: 847 / 706-3557; e-mail: *jabel@soa.org*).

THE ACTUARIAL FOUNDATION
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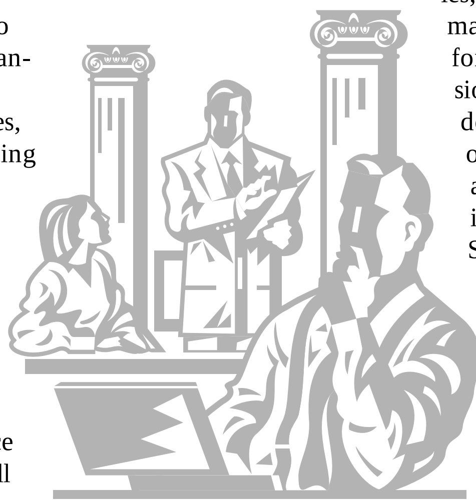
Annuity conference planned for wide range of practitioners

Three major organizations have joined to develop "The Annuity Conference," expected to be the first conference on this topic to attract a wide range of financial services professionals.

The Society of Actuaries, the Life Insurance Marketing and Research Association International (LIMRA), and the Life Office Management Association (LOMA) are cosponsoring the conference, which will be held April 1-3, 1998, in Orlando, Fl. Conference organizers, representing all three organizations, have designed the conference for their members — actuaries, marketers, and managers — and for other professionals who develop, market, or administer annuity plans in the United States and Canada.



The organizers estimate "The Annuity Conference" will attract some 200 financial services professionals. Sessions will focus on issues related to income annuities, qualified plans, product design, product management, conservation, and more. The conference will include a two-hour general session and five 90-minute concurrent sessions covering 19 topics.

Until March 1, registration fees are $675 for members of SOA, LIMRA, or LOMA and $975 for nonmembers. Fees go up $75 after that time.

A list of specific sessions and other information are available on the SOA Web site (*www.soa.org*) or from Sue Berg at the SOA office (phone: 847 / 706-3545; fax: 847 / 706-3599; e-mail: *sberg@soa.org*).

Spring exam prep seminars to be offered

Temple University, Philadelphia

Two sessions of intensive review seminars for the spring 1998 exams will be offered in Philadelphia beginning in March.

Seven sessions will be offered by Temple University Actuarial Institute: Course 140, April 18-19; Course 150, April 15-19; Course 151, April 2-4; Course 160, April 18-19; Course 200, March 25-29; and Course 230, March 28-29.

Casualty Actuaries of the Mid-Atlantic Region will offer six sessions: Course 100, March 28-31; Course 110, March 19-22; Course 120, April 16-18; Course 135, April 19-20; Course 4A, March 22-25; and Course 4B, April 6-8.

More information is available from Bonnie Averbach at Temple University (phone: 215 / 204-8153).

ASM, New York

A three-day intensive workshop for the EA1B exam will be held April 25-27 in New York by Actuarial Study Materials (ASM). Details are available in the SOA study notes package or from Harold Cherry (phone: 516 / 868-2924).

Information on ASM Study Helps is available through ASM's Web site (*www.webcentre.com/asm*), e-mail (*asm@webcentre.com*), toll-free number (888 / ASK 4 ASM), and fax (516 / 868-6595).

Austin 150 seminar, Austin, Texas

James W. Daniel will conduct an eight-day intensive seminar on Course 150 from March 28 to April 4 in Austin, Texas. The registration deadline is Feb. 27, and enrollment is limited to 15 participants. More information is available from Dr. Daniel (phone and fax: 512 / 343-8788).

Broverman seminars in 3 cities

Seminars for the May 1998 exams will be offered by Professor Samuel A. Broverman, associate professor of actuarial science, University of Toronto.

The seminars will be held in April and May in Chicago and New York for Courses 120, 130, 135, 140, 150, 151, 160, and EA1A / 141 and in Toronto for Course 150. Details are available from Professor Broverman at his *Directory* address (phone: 416 / 978-4453 or 416 / 966-9111; e-mail: *sam@utstat.toronto.edu*). Information is also available on the Web (*www.interlog.com/~actexam*).

Val Act symposium: Share your ideas

The Valuation Actuary Symposium planning committee would like actuaries' input on topics of interest for the 1998 symposium.

Program suggestions should be sent by Feb. 20 to Sheri Abel, SOA continuing education program manager (fax: 847 / 706-3599; e-mail: *sabel@soa.org*).

Actuaries invited to apply for U.N. commissioner posts

Actuaries are among the professionals invited to seek positions on the United Nations Compensation Commission.

The commission has invited the U.S. Department of State to advise it of individuals with expertise in valuation, finance, insurance, and similar areas for potential service as commissioners.

The commission was established by the U.N. Security Council at the end of the Persian Gulf war to adjudicate claims by individuals, corporations, and governments for losses arising out of the war. Commission panels will review claims that often assert losses in the billions of dollars and raise complex issues of valuation. Over the next six years, the commission expects to appoint 10-12 panels.

Among the qualifications for commissioners are:

- An advanced university degree in accounting, economics, engineering, business administration, or other relevant discipline from a leading institution
- For actuaries, Fellowship in a major national actuarial organization, such as the SOA
- Position such as partner, senior director, or chief executive officer and a minimum of 20 years' experience in a leading accounting or loss adjusting firm, property and casualty insurance company, or actuarial consulting firm. Additional experience as a professor in a leading academic institution is welcome.

Commissioners will be compensated for their time, travel, and some or all expenses.

The state department will forward the names of qualified individuals to the commission. Those interested in commission posts can obtain details from Mike Mattler, attorney-adviser, Office of the Legal Adviser, U.S. Department of State (phone: 202 / 776-8438; fax: 202 / 776-8481).

SOA member honored by Swiss actuaries

The Swiss Association of Actuaries recently appointed Elias S.W. Shiu a corresponding member. He is one of only five North Americans to receive this honor.

Corresponding membership is granted for professional excellence and for contributions to the Swiss association.

Shiu is the Principal Financial Group Foundation Professor of Actuarial Science at the University of Iowa, Iowa City. His research has twice earned him the Halmstad Prize, sponsored by the Actuarial Education and Research Fund. Also, he has twice been the scientific director of the International Summer School of the Swiss Association of Actuaries.

Appointed at the same time was Heidi Hutter, chairman, president, and chief executive officer, Swiss Reinsurance America Corp., a Fellow of the Casualty Actuarial Society. She and Shiu join the roster which includes: SOA members James Hickman, emeritus professor and dean, University of Wisconsin School of Business; William Jewell, professor, University of California at Berkeley; and the late Edward Lew, 1973-74 SOA president.

Upcoming SOA meetings and seminars

Feb. 12	New Employee Benefits Changes for 1998 Teleconference	TBA
March 2-3	Emerging Markets for New Senior Citizens	Charleston Hilton, Charleston, S.C.
March 9-11	Strategies for a Changing Workforce	Hotel Del Coronado, Coronado, Calif.
March 15-18	Conducting Insurance Business in China	Waldorf -Astoria, New York
April 1-3	The Annuity Conference	Hyatt Regency, Orlando, Fla.

Additional seminar topics planned for spring 1998 include "Corporate and Chief Actuaries Open Forum," "Medicare / Medigap Insurance," "Investment Spring Training," "Product Development Boot Camp," "Financial Data Warehousing," and "Dynamic Financial Condition Analysis."

For updates on all seminars, watch for future SOA mailings or contact Sue Berg at the SOA office (phone: 847 / 706-3545; fax: 847 / 706-3599; e-mail: *sberg@soa.org)*. Seminar information also is posted on the SOA Web site (*www.soa.org*) under Continuing Education.

Faculty positions at 5 universities announced

Ball State University
Muncie, Ind.

Position: Applications and nominations are being accepted for the Lincoln National Corporation Distinguished Professorship in Actuarial Science in the Department of Mathematical Sciences.

Duties: The position requires exemplary leadership and outreach for the department's actuarial programs, teaching graduates and undergraduates, scholarly activity, advising students, and professional service.

Qualifications: Qualifications include either: a doctorate in one of the mathematical sciences and Associateship in the Society of Actuaries, the Casualty Actuarial Society (CAS), or similar organization; or a master's degree in one of the mathematical sciences and Fellowship in the SOA, the CAS, or a similar organization. Preference will be given to candidates with outstanding credentials in actuarial science from academia or business and a strong commitment to both teaching and scholarship.

Application: Candidates, nominations, and inquiries should be sent to Professor Dale E. Umbach, Chair, Search Committee for the Lincoln National Professorship, Department of Mathematical Sciences, Ball State University, Muncie, IN 47306-0409 (phone: 765 / 285-8640; fax: 765 / 285-1721; e-mail: *dumbach@wp.bsu.edu*).

Drake University
Des Moines, Iowa

Position: A tenure track position in actuarial science is open in the College of Business and Public Administration, to begin in August 1998. Rank will be based on qualifications.

Duties: Teach six courses per year; recruit, advise, and place students; conduct scholarly research; and serve the university and the profession.

Qualifications: A doctorate in actuarial science or a related area along with Associateship in the CAS or SOA is preferred. Applicants with a Fellowship and master's degree will be considered.

Application: Submit a curriculum vitae and arrange for three letters of reference to be sent to Professor Stuart Klugman, Drake University, Des Moines, IA 50311. Applications will be accepted until the position is filled.

Oregon State University
Corvallis, Ore.

Position: A tenure-track position for an assistant professor of financial mathematics is open in the Department of Mathematics at Oregon State University. The position is a full-time academic-year appointment.

Application: A complete job description and other information can be obtained from Dr. Donald C. Solmon, Staff Selection Committee, Department of Mathematics, Oregon State University, Corvallis, OR 97331-4605.

University of Hong Kong

Position: An assistant professorship in actuarial science is open in the Department of Statistics. It is effective Sept. 1, 1998, and lasts between two and three years; renewal is possible.

Qualifications: Fellowship in a recognized professional organization and research experience in the field are preferred. Those at the Associate level and holding a doctorate in a related field also will be considered. Lecturing experience in a degree program also is preferred.

Application: The deadline for applications is Jan. 31, 1998. Forms and more information are available on the Web (*www.hku.hk*) and from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: 852 / 2540-6735 or 852 / 2559-9041; e-mail: *apptunit@reg.hku.hk*). Inquiries may be directed to Professor W.K. Li (fax: 852 / 2858-9041; e-mail: *statist@hkucc.hku.hk*).

University of Toronto

Position: A one-year visiting position in actuarial science will begin July 1998 in the Department of Statistics, University of Toronto.

Duties: Teaching and research in the actuarial science program are expected.

Application: Letters of application with curriculum vitae and three letters of reference are due Feb. 15. They should be sent to Professor Samuel Broverman, Department of Statistics, University of Toronto, 100 St. George Street, 6th Floor, Toronto, Ontario, Canada, M5S 3G3. Questions can be directed to Professor Broverman at *sam@utstat.toronto.edu*. Information on the Department of Statistics and the actuarial science program is available on the Web (*www.utstat.toronto.edu*).

March 13 is deadline for Ph.D. grants

The Society of Actuaries is accepting applications for the 1998-99 Ph.D. grant program. The annual grants of $10,000 each are intended to encourage graduate students to complete research in actuarial science and to pursue an academic career in North America.

Grants are awarded on the basis of individual merit, with preference given to those likely to pursue an academic career in North America. Preference also is given to members or those working toward membership in the SOA or the Casualty Actuarial Society. Also essential is the relevance of the thesis topic to actuarial science.

The completed application and supporting materials must arrive in the SOA office by March 13, 1998. Recipients will be notified by June 15, 1998. For more information or an application, contact Janette Vega at the SOA office (phone: 847 / 706-3559; fax: 847 / 706-3599; e-mail: *jvega@soa.org*).

E&E CORNER

Supervisors needed

The Research Paper Committee needs volunteers to supervise the progress of individual candidates. In most instances, a paper's topic is highly specific, and every effort is made to match the research interests of the candidate and the supervisor.

Exam registration deadlines

The registration deadline is Jan. 15 for the February 1998 examination session and April 1 for the May 1998 session.

Essay questions to be available

Beginning with the November 1997 examinations, the essay questions for Series 300-500 examinations will be available on the SOA Web site (*www.soa.org*) after grades have been released. Candidates failing these examinations will receive a performance analysis; this will indicate the candidate's performance on each essay question based on an acceptable demonstration of adequate knowledge for the question (adjusted for the exam's time constraints). Access to the essay questions should help candidates determine the relative strengths and weaknesses in their performance.

Update on credit conversion

For conversion of credits to the new education system taking effect in 2000, unless otherwise stated in the conversion rules, candidates will retain the original number of credits earned when they passed each course examination. For example, candidates who passed Course 200 when it was 40 credits and Course 210 at 25 credits will receive credit for the new Course 5 plus 10 unassigned credits.

Exceptions to 100-credit policy

There are two exceptions to the previously reported policy stating that candidates must earn 100 credits from SOA courses before registering for Core or Fellowship examinations. Candidates wishing to register for the Enrolled Actuary exams are not subject to the restriction. Also, credits earned for actuarial examinations outside the SOA system but recognized for SOA credit (e.g., credits from exams offered by the Institute or Faculty of Actuaries, Casualty Actuarial Society, or Institute of Actuaries of Australia) will be counted toward the 100-credit requirement. The latter is a clarification of how the restriction would be interpreted for candidates earning credit within the SOA system by virtue of examinations of other recognized actuarial organizations.

IN MEMORIAM

Clarence S. Coates
ASA 1927, MAAA 1965, FCAS 1922

Louis M. Davison
ASA 1944

Om K. Gupta
ASA 1976, MAAA 1978, FIA 1968

Charles A. Siegfried
FSA 1936, MAAA 1965

J. Edward Tornga
ASA 1980, MAAA 1988, EA 1989, MSPA 1992

Peter R. Wilde
FSA 1962

DEAR EDITOR

More readers comment on *Manhart*, *Norris* decisions

I would like to reinforce the comments made by Anna Rappaport in her response to Brian Jones' letter ("Still a secret to some," *The Actuary*, September 1997).

History is littered with unsuccessful attempts to socialize insurance costs in voluntary markets. Just to mention a few:

- The use of age-independent rates for life insurance by assessment associations in the 19th century
- The use of "community" rates by Blue Cross and Blue Shield organizations in the mid-20th century
- More recently, the attempt by some states to limit or eliminate the premium differentials in auto insurance between urban and rural areas

Now some states are attempting to impose the pure "community" rating and guaranteed issue without pre-existing condition limitations on the small group and individual health insurance markets. This is surely a prescription for disaster, as Kentucky, New York, and some other states are finding out.

Modest levels of socialization of insurance costs have proven to be acceptable if the members of the insurance pool are satisfied that the utility of the coverage warrants the price they are paying for it, even if actuarially unjustified. The elimination of racial distinctions in premium rates and underwriting would seem to be a good example of that. But the unsuccessful attempts show the need for caution.

Dwight K. Bartlett, III

* * *

Anna Rappaport asks for opinions on the *Manhart* and *Norris* decisions. She and Brian Jones state that these decisions are based on political expediency and conflict with facts.

I believe our profession best serves our society in the long run if we support what is true rather than what is currently popular; I favor supporting any effort to reverse these unsound decisions.

David H. Raymond

Police officers and priests?

I find certain aspects of Ken McCullum's editorial troubling ("Beyond the numbers," October 1997, *The Actuary*). He appears to believe that actuaries are to act as police officers and priests if they are to fulfill their professional mission. He calls on actuaries to deal with "subjective matters of right and wrong" and to "define an ethical framework for crafting our answers."

I believe this is a mistaken, if noble, view of the role of the actuary. I hold that an actuary has no greater obligation for ethical practice than does any other professional. Why is it the actuary's job "to protect the franchise"? What is there in our training that qualifies us to distinguish between "right" and "wrong"?

The editorial asks: "Are tontines bad?" Bad for whom? What would be the actuarial basis for making a judgment? Few people win big-ticket lotteries; should actuaries take a position against them (and risk being run out of town by both government and players)?

It also asks, "What commitments for nonguaranteed element management do we make to the public?" Are not commitments to the public a responsibility of the insurer's management and board of directors rather than that of an employed actuary?

Another point the editorial raises is, "How do we best fulfill our primary responsibility — insurer solvency — in a competitive market?" Insurer solvency is not an actuary's responsibility — primary, secondary, or other. If it were, actuaries would have to be prepared to pony up for failed companies — an idea that, fortunately, has yet to be pursued by a plaintiff's attorney.

Certainly, I agree that actuaries should act honestly on behalf of their clients or employers, but this is no greater obligation than that placed on any other professional. The fundamental obligation of the actuary is to provide employers and clients with competent professional labor. Issues of "right and wrong" are best left to juries, legislatures, and philosophers.

William Schreiner

Ken McCullum responds:

It's obvious that Bill and I have a difference in perspective. I commend Bill for a strong articulation of his concerns with my thoughts.

But no magic wands

I enjoyed David Holland's article, "What is an actuary?" (*The Actuary*, September 1997). My long-time favorite did not appear, so I offer it now: insurance mathemagician.

Charles M. Underwood II

David Holland responds

I want to thank Charles for his suggestion. I like it a great deal.

Probably not

I had a good laugh when I read Michael Braunstein's article on *The Actuary's Career Planner* ("Coming soon: a guide for your future," *The Actuary*, September 1997). Mike mentioned that he wanted to be a garbage collector when he was five years old. I, too, had a brush with this career path. When I was learning algebra and struggling with those dreaded word problems, my father said that if I didn't like algebra, I could always become a garbageman.

I'm sure his comments were meant to motivate me using good, old-fashioned reverse psychology. However, might there be a stronger connection between trash collectors and actuaries than people realize? I just hope that as Mike goes to the office everyday, he doesn't gaze at his trash can and wonder what might have been.

Melvin J. Laney Jr.

Puzzle fans, please note

The puzzle will return with the February issue.