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Editorial

Involvement of the actuary

by Sam Gutterman

One of the most important roles that an actuary plays is that of a problem solver.

For us to be successful in that role, three elements must exist:

- 1) **The actuary becomes involved in problem identification and issue design early in the process.** This means overcoming any stereotypes of the actuary as only a technician. It means gaining recognition for the potential value of actuarial methods to quantify and manage risks on a broader level in the preliminary stages of business problem solving.
- 2) **The actuary has in-depth knowledge of the risks involved and of the business to which the risks apply.** An actuary's experience in interpreting large amounts of or inadequate data, predicting potential problems, and setting up comparison standards can be invaluable in helping fashion solutions and long-range perspectives.
- 3) **The actuary effectively communicates the suggested solution.** An actuary who can distill information into a concise, understandable form that not only presents a solution that can be translated into action, but also explains the thinking behind it, successfully performs a value-added service more likely to be called for again.

How do we become more involved?

In both the public and private sectors, actuaries often have become involved only when invited and only in specialized areas in which our reputation has already been established. I believe we can overcome this inertia through increased proactive activity by the American Academy of Actuaries (AAA) and the Canadian Institute of Actuaries (CIA), as well as by individual initiative.

Actuaries' involvement in public policy may be slowly increasing, as demonstrated by recent activities in national health care outlined in Judy Bluder's article in this issue of *The Actuary*. This issue emphasizes health care issues, with major articles on the Canadian health care system, reform activity on the state level, community

rating, and psychiatric disability.

As actuaries come forward in the spirit of President Walt Rugland's campaign, "Ask An Actuary," emerging issues in practice areas other than health lend themselves to actuarial input. One way to begin becoming involved is to personally contact an SOA Vice President in charge of that practice area or an appropriate Section Council chair with ideas of where more research, articles, or papers would be useful. The *1993 Yearbook* lists those leaders, and the *Directory* includes their addresses and phone numbers. I urge you to take action if you want to champion or actively participate in a particular issue through SOA activities.

Another tactic is to prove your usefulness in problems outside your traditional role and increase your visibility within your workplace by addressing practical business issues. You may need to aggressively pursue becoming a part of multi-functional teams being formed in your company.

Involvement means broadening our perspectives

In our roles as advisors to carriers, providers, and purchasers of services, actuaries often are concerned only with the best method of allocating and projecting costs, without questioning whether those costs are too high, either at a micro or macro level. It is easy to accept that such public or business issues are outside the scope of actuarial science.

It is important, however, that we

continued on page 14 column 3

What do you think?

The Actuary wants to print its readers' opinions on health care issues. How do you feel about the issues affecting the actuarial profession, society, and other players in what may be significant changes in our health care delivery/financing system? Please send your letter to the editor by July 1. An insert in the September issue will include your views.

Book review

Many disciplines used in book tracing native Americans

by Robert J. Johansen

The First Immigrants From Asia, A Population History of the North American Indians, A.J. Jaffe with Carolyn Sperber. Published by Plenum Press, 233 Spring Street, New York, NY 10013, 1992, xxiii + 333, ISBN 0-306-43952-2. \$39.50 (\$47.40 outside U.S. and Canada)

Dr. A. J. (Abe) Jaffe calls on the disciplines of demography, anthropology, archeology, geology, geography, ethnology, and statistical and actuarial theory in a panoramic sweep of history and prehistory as he traces the North American native people from their wanderings in Asia across the Bering land bridge to North America.

Without a written history, Jaffe applies his knowledge, experience, and plain common sense to archeological and other data to reconstruct migrations across North America and the transition of many tribes from hunters and gatherers to an agricultural existence. Jaffe uses analyses of skeletal remains to derive estimates of birth and death rates and tribal/family relationships. He notes physiological limits on fertility, the apparent high mortality of primitive people, and that substantial numbers existed when the early colonists arrived from Europe. He justifies his estimates of pre-Columbian vital statistics as compatible with a very slow population growth over millennia. He also shows that some others' estimates would produce results incompatible with any reasonable estimates of the population of North America when Columbus landed.

In the third of 13 appendices, Jaffe explains his derivation of pre-Columbian life tables (agriculturalists live a bit longer, men longer than women). Without skeletons of children (whose bones don't survive), he extended the adult life tables back to age 0 by developing a relationship between e_0 and e_{20} for high mortality populations.

Jaffe confined his analyses to the people in the geographic areas of the United States and Canada. He describes the devastating effects of European colonization on the native populations and their recent increase in numbers to equal the probable population in 1492. In discussing recent trends, he documents inconsistencies in U.S. and Canadian census enumerations and definitions. He also suggests how to adjust and interpret the data for trends. He raises many questions about the pre-Columbian civilizations, pointing out that many questions can never be answered and answers to others can only be conjectured. The deductions and logic are fascinating.

In this interdisciplinary view of the extended history of the native people of North America, Jaffe provides a full picture, explaining what he has done and why. Actuaries reading this book will add to both their knowledge of history and of applying common sense judgments to assumptions, results, and conclusions drawn.

Robert J. Johansen is consulting actuary at Life Actuarial Services, Yonkers, New York.

Editorial cont'd

address fundamental issues and not just their outcomes. The needs of the ultimate users of the system or product being reviewed must be addressed, not just our immediate client. For example, many actuaries believe high cost is the primary cause of lack of universal access to health care. Trying to "solve" the health access issue without addressing the cost issue may only exacerbate the longer-term problem.

As professionals involved in evaluating the consequences of risk, the potential reach and value of the methods we employ can be surprisingly broad. We have to make the extra effort necessary to make a real contribution to business and public policy.

Guest Editor Sam Gutterman, a Vice-President of the Society of Actuaries managing the Health Benefit Systems Practice Area, is director and consulting actuary at Price Waterhouse, Chicago.

Section corner cont'd

The Education and Research Section is sponsoring the 28th Annual Actuarial Research Conference at the University of Wisconsin, Madison, from August 19-21 in honor of Professor Jim Hickman.

This Section administers the ASA/FSA grant program and has awarded 21 grants to universities (2 FSA and 19 ASA) since the program began in 1990.

Fall Seminar Calendar

September 20-21	Valuation Actuary Symposium	San Francisco San Francisco Marriott
October 4-5	Multivariate Duration Analysis	Boston MIT Faculty Club
October 6-7	Multivariate Immunization Theory	Boston MIT Faculty Club
October 17-20	Annual Meeting	New York New York Marriott Marquis
December 6-7	Critical Issues in Underwriting	San Francisco Marriott-Fisherman's Wharf