



SOCIETY OF ACTUARIES

Article from:

# The Actuary

April 1977 – Volume 11, No. 4

## U.S. Decennial Life Tables for 1969-71

The National Center for Health Statistics announces the publication of the following volumes:

Vol. I, No. 2, *Actuarial Tables based on United States Life Tables: 1969-71*,

This presents the most current tables in the series of U.S. Decennial Life Tables based on the U.S. Censuses, and registered deaths during the three-year period surrounding the year of the particular census. It gives 66 commutation function tables, showing all combinations of three color categories (total, white, and negro), both sex categories, and 11 interest rate categories from 3 to 8 by  $\frac{1}{2}$  percent increments.

Copies (stock number 017-022-00380-5) may be obtained at \$1.40 each from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

\* \* \*

Vol. I, No. 3, *Methodology of the National and State Life Tables for the United States: 1969-71*

This describes the methodology used in the decennial life tables for 1969-71 for the U.S. The topics discussed are: (1) preliminary adjustment of data, (2) data used for calculation of life table values, (3) numbers of survivors at ages 2 and under, (4) mortality rates at ages 2-94, and 95 and over, (5) calculation of the remaining life table values, and (6) the special adjustments in the state life tables.

Copies (stock number 017-022-00381-3) may be obtained at 45¢ each from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

\* \* \*

Vol. I, No. 5, *United States Life Tables by Causes of Death: 1969-71*

This presents the most current tables in the series of U.S. Decennial Life Tables based on the U.S. Censuses, and registered deaths during the three-year period surrounding the year of the particular census. It gives 20 tables, showing all combinations of 5 color categories (total, white males, white females, males other than white, females other than white) and 4 causes of death topics (abridged life tables for all causes of death combined and eliminating specified causes of death, number of life table deaths from specified causes, probability of eventually dying from specified causes, gain

in expectation of life due to elimination of specified causes of death). The introduction adds verbal as well as mathematical meaning to the above concepts.

Copies (stock 017-022-00383-0), may be obtained at \$1.30 each from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Note: A detailed review of these Volumes will appear in the Transactions. For Vol. I, No. 1 *United States Life Tables 1969-71* see *The Actuary*, November 1975. □

## I. A. N.

(Continued from page 1)

native to the present halo notation. Three organizations (Finland, Germany and The Casualty Actuarial Society) favoured the introduction of a linearized notation as a replacement of the present halo notation. One organization (Sweden) preferred the introduction of a linearized notation but they were not certain whether the linearized notation should be a replacement of or an alternative to the halo notation. Finally one organization (Italy) could not decide whether to be in favour of or against the introduction of a linearized notation and one organization (Israel) was silent on the issue of linearization.

After some discussion the group of actuaries attending the Special Meeting passed a resolution recommending to the Council of the International Actuarial Association the establishment of a permanent technical committee on the International Actuarial Notation for the purpose of:

- i) considering the extension of the present notation into the fields of pension, sickness, social insurance and demography, and
- ii) defining alternative forms of notation that might be desirable in order to facilitate communication among actuaries of different countries.

The group also recommended that the technical committee report on all matters concerning the International Actuarial Notation to the national organizations and to the Council of the International Actuarial Association. Finally, bearing in mind the need to develop grass roots interest in the various countries, the group concluded by suggesting "that the technical committee should work through

(Continued on page 5)

## SOCIETY RESPONSE ON REFORMS OF U.S. FEDERAL STATISTICS URGED

If you use government statistics — if you would like data to be available to you before they are outdated — if you have doubts about the quality or accuracy of data and/or analyses — if you are concerned about costs to industry and taxpayers of information gathering — if you have ideas on how to improve any phase of government statistics — here is your chance to speak out.

The Society of Actuaries has been invited to be one of four new members on the Joint Ad Hoc Committee on Government Statistics (JAHCOGS). Other organizations represented include:

American Political Science Association  
American Public Health Association  
American Sociological Association  
American Statistical Association  
Federal Statistics Users' Conference  
National Association of Business Economists  
Population Association of America

George L. Hill and Robert J. Johansen have been named Society representatives on the committee. The Casualty Actuarial Society and the Academy have been invited to submit comments to the Society's representatives.

As noted in *The Actuary*, December 1976 page 6, JAHCOGS has issued a report that includes six recommendations relating to improvement of the Federal statistical system. Briefly these recommendations are:

- (1) Statistical planning and coordination should be brought into realistic accord with the current volume of Federal statistical activities.
- (2) Public access to statistical data at a reasonable cost should be improved.
- (3) A thorough review is needed of procedures for awarding Federal contracts for statistical work to nongovernment groups.
- (4) More resources should be applied to analyzing statistical data and developing better methods of presenting data.
- (5) Professional associations should find more effective ways to represent data user needs through Federal advisory committees, and Federal agencies should develop improved ways to use these committees.

(Continued on page 5)

## Society's Response

(Continued from page 4)

(6) Better means must be found for monitoring the Federal statistical system, especially to make both Congress and the Executive Branch of the government as well as the public aware of what affects statistical quality.

A copy of the full report which appeared in the *Statistical Reporter* may be obtained from the Society's office.

The JAHCOGS group will meet once a month through August 1977, at which time its final report will be released. Since lack of time and personnel will not permit detailed analyses of substantive and technical problems in the area of Federal statistical programs, the JAHCOGS group is focusing its attention on the broader subject of organization and control of the statistical functions of various units of the Federal government. The work of the committee has a potential for widespread and lasting benefit for users of and contributors to government statistics.

During its term, JAHCOGS will work with two experienced consultants on drafting a report on options for improving the coordination of the present decentralized Federal statistical system. In addition, JAHCOGS plans to frame a set of proposals to be implemented by the committee's constituent associations or any other interested body. The purpose of these proposals will be to focus continued attention on the issues discussed by the committee. It should be noted that all committee reports will include a clear disclaimer with regard to responsibility or endorsement of the sponsoring associations.

Society members are urged to send their JAHCOGS representatives any opinions, suggestions, or problems relating to Federal statistics, including their recommendations as to postures the Society representatives might adopt. In view of the fact that the committee must accomplish its work within the next two or three months, an early response is most important.

## I. A. N.

(Continued from page 4)

national or regional organizations, whose function should be to assist in carrying out the detailed investigations and experimentations necessary to achieve the aims of the technical committee."

## TOTAL GROUP

Bruce F. Spencer, *Group Benefits in a Changing Society*, pp. 330, Charles D. Spencer & Associates, 222 W Adams St, Chicago, Ill. 60606, 1976, \$17.50.

by William Schreiner

As might be expected in a business as dynamic as group insurance, few textbooks have been available to the group insurance consultant which provide an up-to-date survey of the design and direction of employee benefit programs. Bruce Spencer, associate editor of "Employee Benefit Plan Review," has set out to fill this void with "Group Benefits in a Changing Society." This is a formidable task and this reader judges the result to be only partially successful.

The book's greatest strength lies in its comprehensive description and an explanation of life, disability, and medical care benefits currently available in the marketplace. The material on ERISA and non-insured approaches also provides useful reviews and checklists for these subjects. In addition, although the text is punctuated with what appears to be a lifetime supply of exclamation points, the writing is generally clear and effective. Unfortunately, however, the book contains a significant number of errors and misinterpretations which detract from its credibility.

Two factual errors are offered as examples. In Chapter 2 the author indicates that Section 79 of the Internal Revenue Code "prohibits the use of medical underwriting to determine benefits or rates for group term life coverage for cases under 10 lives." Rather than prohibiting medical underwriting below 10 lives, Section 79 withholds favorable tax treatment in such situations — a distinction of considerable importance to a benefits consultant who might be tempted by the text's statement to tell his client that an insurer could not legally request such underwriting. In Chapter 3 the text states that Maine currently has a minimum first year group term insurance rate law in effect. The law was repealed in 1975.

More seriously, the text also shows an incomplete understanding of the mechanics and objectives of premium setting and experience refund practices. An example of this is the concern expressed that "the risk that the older employee working for a small company may die might be greater than can be offset by

reasonable premiums." Actually it is the existence of financial risks that cannot be safely absorbed by an individual or small group that is the basis of the insurance enterprise. Also, a statement that "many insurance companies are happy" to have a claim ratio below 95% for small groups suggests a higher tolerance for suffering than one should believe exists in the industry.

There is also a surprising benefit omission in the text. In the description of major medical deductibles, there is no reference to medical care deductible accumulation periods of less than 12 months.

Considering the difficulty of the task the author undertook, it is not surprising that he does not successfully negotiate all of the pitfalls. Nevertheless, the book is welcome and deserves the attention of those interested in the current state of employee benefit plans even though it has to be read critically.

## Social Security

Orlo R. Nichols and Steven F. McKay, *The Effect of the 1976 Automatic Increase on Dynamic Projections of Benefits*, Actuarial Note No. 90, Social Security Administration, Baltimore, Maryland, August 1976, pp. 6.

This Note analyzes the effect that the Social Security automatic adjustment provisions enacted in 1973 will have on future benefits based on actual increases through 1976 and projected increases thereafter. Five alternative sets of economic assumptions are used regarding future increases in annual earnings and in the Consumer Price Index. Projections are presented of future earnings, benefits, and replacement ratios (benefits at retirement compared with the previous year's earnings).

Copies of this note may be obtained free of charge from the Office of the Actuary, Social Security Administration, Baltimore, Maryland 21235.

## To Determine Best Milk Givers

### Model Developed to Apply Actuarial Principles to Cows

Animal science and computer experts at Brigham Young University (BYU) here are going to apply to Dossie the actuarial principles used by insurance companies on people.

Computerworld

Moos in place of  $\mu$ 's?