PROJECT HISTORY – 2002

RECOGNITION OF THE 2001 CSO MORTALITY TABLE FOR USE IN DETERMINING MINIMUM RESERVE LIABILITIES AND NONFORFEITURE BENEFITS MODEL REGULATION (#814)

1. What issues was the project intended to address?

Over the last four years, the Life and Health Actuarial Task Force has worked with the American Academy of Actuaries and the Society of Actuaries in the development of the 2001 Commissioners Standard Ordinary Mortality Table. The table will replace the 1980 CSO table as the minimum standard in the calculation of reserves and nonforfeiture values for life insurance policies. The purpose in developing the model is to provide states the regulatory language to implement the new table.

2. What states participated in drafting the model?

The following states are currently members of the Life and Health Actuarial Task Force: New Mexico (Chair), Arkansas (Vice-Chair), California, Connecticut, Florida, Illinois, Minnesota, Nebraska, New York, Oklahoma, Pennsylvania, Texas, Utah, and Washington.

3. When was the charge given to the task force, and what was the nature of the charge?

The following charge was formally given to the task force in 1999: "Work with the Society of Actuaries in the development of new mortality, annuity, and accidental death benefit mortality tables." Work on a new mortality table was given top priority. Also, the American Academy of Actuaries was a very significant participant in the project.

4. What general procedure was followed in drafting the model? What efforts were made to assure that all interested parties were provided an opportunity to comment during the drafting process?

The efforts of the task force were closely coordinated with all industry interested parties, with respect to the development of both the table and the model. In addition to open sessions at the quarterly meetings of the NAIC, numerous conference calls were held over the last several years to discuss the various drafts of the documents. Notice of those conference calls was posted on the NAIC's home page on the Internet and e-mailed to approximately 200 interested parties, including representatives of the American Council of Life Insurers, the National Alliance of Life Companies, and the National Fraternal Congress of America.

This excerpt from the final report of the American Academy of Actuaries' Commissioner Standard Ordinary Task Force provides additional information on the process by which the table was developed. During this process there were extensive communications between the Society and Academy committees and the task force. All facets of the table were thoroughly reviewed with the task force prior to its completion.

> The current statutory valuation standard, the 1980 CSO Table, is more than 20 years old. As is shown in this report, current mortality levels, represented by the 2001 Valuation Basic Table, are lower than the mortality levels underlying the 1980 CSO Table. The current valuation mortality standard produces reserves, excluding deficiency reserves, that overall are higher for the illustrated model office than those produced by the proposed 2001 CSO Table.
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> At the request of the LHATF, both the SOA and the Academy have worked to develop a proposed mortality table intended to replace the 1980 CSO Table in the current

statutory valuation structure. While the Academy's Life Practice Council believes that a move to a valuation system that provides more actuarial flexibility and responsibility to set reserves that reflect individual company characteristics is desirable, we recognize that a new table is appropriate.

The SOA and the Academy divided this work into two pieces: the construction of a valuation basic experience table, and the development of an appropriately loaded valuation table. The first part of this work was completed by the SOA's Individual Life Insurance Valuation Mortality Research Task Force (SOA Task Force). This group developed the 2001 VBT, a graduated experience table suitable for use as the basis for a valuation table. The second part was done by the Academy Task Force, which, with guidance and direction from the LHATF, developed the loads and reviewed the resulting reserves described in this report.

These two groups have developed the proposed 2001 CSO Table—a table that is appropriate as a replacement for the 1980 CSO Table. This proposed 2001 CSO Table is shown in Appendix A. Separate nonsmoker, smoker, and composite nonsmoker/smoker tables were developed for males and females for a total of six tables. Each table has values for a 25-year select period and for ultimate ages.

The proposed 2001 CSO Table is intended to provide a minimum standard for the valuation of standard ordinary life insurance. However, this standard may not produce adequate reserves in all cases. In addition, since the table is intended only for valuation, the use of this table may not be appropriate for pricing or for other pricing related purposes.

5. What significant issues were raised during the drafting process, and how were those issues resolved?

The process by which the table was developed is reviewed in Item #4. The following are three key issues that were addressed in developing the model:

A) Should a higher mortality standard than the table be used for certain types of business?

The following types of business were not included in the experience studies used to develop the table: guaranteed issue, simplified issue, substandard, ETI, and reduced paid up. Concerns were expressed that the table might not be adequate to cover the mortality levels typically exhibited by these types of business. Some consideration was given to requiring the use of either the 1980 CSO Table or some multiple of the 2001 CSO Table in the valuation of these products. Ultimately, these approaches were not incorporated into the model, primarily due to a) differences among companies as to what is regarded as "guaranteed issue," "simplified issue," and "substandard," and b) uncertainties regarding the tax consequences. Instead, the following provision was included in the model to provide additional assurance of adequate reserves:

> When the 2001 CSO Mortality Table is the minimum reserve standard for any plan for a company, the actuarial opinion in the annual statement filed with the commissioner shall be based on an asset adequacy analysis as specified in Sections [insert applicable references to Section 5A of the Actuarial Opinion and Memorandum Regulation] of the [insert state] Insurance Regulations. A commissioner may exempt a company from this requirement if it only does business in this state and in no other state.

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B) Should different mortality standards be permitted in the calculation of basic and deficiency reserves?

As codified in The Valuation of Life Insurance Policies Model Regulation ("XXX"), actuaries are currently permitted to use different mortality bases in the calculation of basic and deficiency reserves. Often, basic reserves are calculated using ultimate mortality, while deficiency reserves incorporate select mortality modified by "X-factors." Concerns were raised regarding the actuarial appropriateness of this practice, and some suggestions were made that the model prohibits this. In particular, this excerpt from the 1981 *Transactions of the Society of Actuaries* (Volume XXXIII) on the development of the 1980 CSO Table appears to support the use of a single mortality basis:

> It was originally indicated that the committee would develop only ultimate tables. However, because of the growing concern over deficiency reserve problems for certain plans of life insurance, Ten-Year Selection Factors have been developed and endorsed by the NAIC. These factors are for use in conjunction with 1980 CSO Tables as an alternative minimum standard for both valuation and deficiency reserves on a plan-by-plan basis. Companies would have the option of using 1980 CSO rates or applying selection factors to 1980 CSO rates. The basis chosen for a particular plan should be used to value both the basic life insurance reserve and the deficiency reserves.

In drafting the final version of the model, the task force decided to leave the approach codified in XXX unchanged. The view of the members is that it would be too disruptive of the long-standing actuarial practice to implement such a significant change. However, it should be noted that one component of achieving this consensus was the assurance that a provision requiring asset adequacy testing would be included in the model (that provision is shown in Item "A" above).

C) Should limitations be place on the use of gender-blended mortality tables for nonforfeiture purposes?

Use of gender-blended mortality tables in computing nonforfeiture values is currently authorized in the "NAIC Procedure for Permitting Same Nonforfeiture Standards for Men and Women Insured Under 1980 CSO and 1980 CET Mortality Tables." That model gives insurers a great deal of latitude in deciding when to use gender blended tables, as described in this excerpt from that model:

> (1) No attempt was made to define which policies and situations are covered by the *Norris* decision and which are not. The breadth of the *Norris* decision is unclear and may ultimately have to be resolved by further court decisions or federal legislation.
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> (2) Insurers are given flexibility to use either:
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> (a) The existing tables with mortality rates that vary by age and sex; or
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> (b) Tables of mortality rates, which are a blend of the male and female mortality rates.

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Some task force members raised concerns that this language is so broad that gender-blended tables can be used in situations that are clearly beyond the scope of the decision in *Arizona Governing Committee v. Norris.* In response to those concerns, the task force included language in the model that describes the general circumstances in which gender-blended tables may be used (underline added):

> For any ordinary life insurance policy delivered or issued for delivery in this state on and after January 1, 200[_] [insert same date as in Section 4A], <u>that utilizes the same premium rates and charges for male and female lives or is issued in circumstances where applicable law does not permit distinctions on the basis of gender</u>, a mortality table that is a blend of the 2001 CSO Mortality Table (M) and the 2001 CSO Mortality Table (F) may, at the option of the company for each plan of insurance, be substituted for the 2001 CSO Mortality Table for use in determining minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

6. What are the implications of this project for accreditation and codification?

The task force notes that the 2001 CSO Table represents a significant new mortality standard, which should be reviewed by the accreditation and codification committees.

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