

**SUBCHAPTER P. ANNUITY MORTALITY TABLES**  
**28 TAC §3.1501 - §3.1506**

**1. INTRODUCTION.** The Texas Department of Insurance proposes amendments to 28 TAC §§3.1501 - 3.1505 and a new §3.1506, concerning mortality tables for annuity reserve liabilities. The proposed amendments will adopt the 2012 Individual Annuity Reserve Table (2012 IAR) to be used for the minimum reserve valuation for individual annuities or pure endowment contracts issued on and after January 1, 2014.

The department proposes the amendments under Insurance Code §425.059(d)(2), which authorizes the commissioner to approve by regulation any individual annuity mortality table adopted by the National Association of Insurance Commissioners (NAIC) after 1980. The joint American Academy of Actuaries/Society of Actuaries Payout Annuity Table Team developed the 2012 IAR mortality table, and the NAIC adopted it in Model Regulation 821. The department modeled the proposed amendments to §§3.1501 - 3.1505 and new §3.1506 after the NAIC's currently- adopted Model Regulation 821.

Because people who purchase annuities are living longer, resulting in an improvement in mortality, it is necessary to update the mortality table so that insurers will maintain reasonably conservative reserves. This annuity mortality table is a "generational" table containing factors that adjust the mortality rates annually based on expected mortality improvements.

**2. FISCAL NOTE.** Mr. Danny Saenz, Deputy Commissioner, Financial Regulation Division, has determined that, for the first five-year period the proposed amendments

and new section are in effect, there will be no fiscal implications for state or local government as a result of enforcing or administering the proposed amendments. There will be no measurable effect on local employment or the local economy as a result of the proposal.

**3. PUBLIC BENEFIT/COST NOTE.** Mr. Saenz also has determined that for each year of the first five years the proposed amendments and new section are in effect, the public benefit from enforcing the amended sections will be improved reserving practices by insurers issuing individual annuities and pure endowments. Because persons purchasing annuities will generally live longer, the insurer must be prepared to pay annuity benefits over a longer period. The amendments provide for an updated mortality table that increases minimum reserve liabilities, recognizing the longer life expectancy of those who purchase these products. Such reasonably conservative reserve practices strengthen the solvency of companies that issue annuities and justify consumers' reliance on payment of benefits.

Reserves calculated using the updated mortality table will be higher to support the greater number of annuity payments resulting from the improvement in life expectancy for such annuitants. Based on the September 2011 report from the joint American Academy of Actuaries/Society of Actuaries Payout Annuity Table Team, the reserve increase for immediate annuities at male issue ages 65, 75, and 85 is estimated to be 9.9%, 11.2%, and 3.9% respectively. For an annuity issued at age 60 with payout deferred to age 80, the reserve increase is estimated to be 38.2% and 22.7% for a male

issue and a female issue, respectively. These examples assume an interest rate of 5%. For more information and additional reserve examples applying the 2012 IAR table, the complete report is available at the following URL:

[http://www.actuary.org/files/publications/Payout\\_Annuity\\_Report\\_09-28-11.pdf](http://www.actuary.org/files/publications/Payout_Annuity_Report_09-28-11.pdf).

Additional costs related to reserves and implementing the 2012 IAR mortality table may result from statutory requirements (including Insurance Code §425.053 and §425.059 concerning the establishment of reserves) or from existing rule requirements, rather than from this proposal. Additional costs related to these amendments – whether the result of the statutes or this proposal – will vary by insurer based on various factors, including the insurer's available resources and ease of updating the reserve software with the new mortality table. The department does not believe these additional costs will be significant, relative to the benefit to the insurer and the consumer of the improved reserving these amendments provide.

Each insurer has the information on which to estimate its actual costs for reserves. The ultimate cost of compliance is a function of each insurer's business decisions rather than a direct result of this proposal. Given the range of business options an insurer may exercise, it is not feasible for the department to quantify in this proposal the cost impact on each insurer to implement the updated mortality table.

The department has determined that to implement this proposal, insurers will incur costs related to information technology services and actuarial services. It is not feasible for the department to determine the actual cost to insurers for these services or employees, nor can the department determine the actual amount of time each insurer

will need to implement this proposal. However, based on the *2011 Texas Statewide Wages, Occupational Employment Statistics Program* published by the Texas Workforce Commission, the mean hourly wage for an actuary for that year in Texas was \$53.55, and the mean hourly wage for a computer programmer was \$38.02.

In addition to the costs associated with applying the tables, an insurer may incur a one-time cost to amend its existing annuity contracts to reflect the new table, if the policies include the reserving table. In that instance, an insurer will pay, in addition to the legal and administrative costs, a filing fee of \$100 to the department for filing any amendments to the annuity contracts.

#### **4. ECONOMIC IMPACT STATEMENT AND REGULATORY FLEXIBILITY ANALYSIS FOR SMALL AND MICRO BUSINESSES.**

In applying Government Code §2006.002(c), the department has determined the proposed amendments will not have a material adverse economic effect on small or micro business insurance companies required to comply with the proposal. The department is unable to estimate the number of small or micro businesses (as defined by Government Code §2006.001(1) and (2)) that issue annuities or pure endowments and that may be subject to this rule.

Any insurance companies subject to the proposed requirements that are small and micro businesses may have initial start up costs to implement the 2012 IAR mortality table and may have to maintain higher reserves to cover the additional liabilities from improved mortality rates. The department's cost analysis in the Public Benefit/Cost Note portion of this proposal also applies to small and micro businesses.

The amendments implementing the 2012 IAR mortality table are necessary to provide the minimum reserve standard required by Insurance Code §425.053.

The department considered alternatives to accomplish the objectives of the proposal and to minimize the impact on small or micro businesses. One alternative was to not adopt the 2012 NAIC mortality tables at all. The department concluded that this was not appropriate under statute. Insurance Code §425.053 requires that companies issuing annuities and pure endowments maintain certain required reserves, and those reserve liabilities are, in part, a function of the mortality tables. Further, Insurance Code §425.059(d)(2) provides that the commissioner may adopt by rule an individual annuity mortality table adopted by the NAIC after 1980. The 2012 IAR mortality table is the mortality table currently adopted by the NAIC and is the appropriate table to use under Insurance Code §425.059(d)(2) for the purposes of Insurance Code §425.053.

Another alternative was to implement different mortality tables for small and micro businesses. The department determined that this is not a viable alternative because these businesses will still be affected by improved mortality rates and the resulting need for increased reserves to support the increased benefits to consumers. Further, as discussed in the analysis of the first alternative, Insurance Code §425.059(d)(2) only gives the commissioner the option of adopting a mortality table that has been adopted by the NAIC. This statute establishes a uniform requirement for all insurers and does not authorize the commissioner to adopt a different table for small and micro businesses.

**5. TAKINGS IMPACT ASSESSMENT.** The department has determined that no private real property interests are affected by this proposal, and this proposal does not restrict or limit an owner's right to property that would otherwise exist in the absence of government action. This proposal does not constitute a taking or require a takings impact assessment under Government Code §2007.043.

**6. REQUEST FOR PUBLIC COMMENT.** To be considered, written comments or a hearing request on the proposal must be submitted no later than 5:00 p.m. on September 16, 2013. The department requires two copies of your comments or hearing request. Send your comments or hearing request to the Chief Clerk by email to [chiefclerk@tdi.texas.gov](mailto:chiefclerk@tdi.texas.gov), or by mail to the Chief Clerk, Mail Code 113-2A, Texas Department of Insurance, P.O. Box 149104, Austin, Texas 78714-9104. The duplicate copy of the comments must be submitted simultaneously to Mike Boerner, Director, Actuarial Office, Mail Code 302-3E, Texas Department of Insurance, P.O. Box 149104, Austin, Texas 78714-9104. If a hearing is held, written and oral comments presented at the hearing will be considered.

**7. STATUTORY AUTHORITY.** The department proposes the amendments and a new section under Insurance Code §§452.053, 425.059(d)(2), and 36.001. Insurance Code §425.053 requires that companies issuing annuities and pure endowments maintain certain required reserves. Section 425.059(d)(2) authorizes the commissioner to adopt by rule any individual annuity mortality table adopted by the NAIC after 1980. Section

36.001 provides that the commissioner of insurance may adopt any rules necessary and appropriate to implement the powers and duties of the Texas Department of Insurance under the Insurance Code and other laws of this state.

**8. CROSS REFERENCE TO STATUTE.** The following statutes are affected by this proposal:

<u>Rule</u>	<u>Statute</u>
§3.1501 through §3.1506	Insurance Code §425.053 and §425.059(d)(2)

**9. TEXT. §3.1501. Purpose.** The purpose of this subchapter is to approve and adopt the following ~~[four]~~ mortality tables and establish the effective dates of their use in determining the minimum standard of valuation for annuity and pure endowment contracts~~[-The mortality tables approved and adopted are]:~~

(1) the 1983 Table "a";

Figure: 28 TAC §3.1501(1)

(2) the 1983 GAM Table;

Figure: 28 TAC §3.1501(2)

(3) the Annuity 2000 Mortality Table; ~~[and]~~

Figure: 28 TAC §3.1501(3)

(4) the 1994 GAR Table; ~~and[-]~~

Figure: 28 TAC §3.1501(4)

(5) the 2012 Individual Annuity Reserving (2012 IAR) Table which, under §3.1506 of this title (relating to Application of the 2012 IAR Mortality Table), is derived from the following tables:

(A) the 2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table; and

Figure: 28 TAC §3.1501(5)(A)

(B) the Projection Scale G2 (Scale G2) table of annual rates.

Figure: 28 TAC §3.1501(5)(B)

### **§3.1502. Definitions.**

The following words and terms, when used in this subchapter, ~~shall~~ have the following meanings, unless the context clearly indicates otherwise.

(1) 1983 GAM Table--Mortality table developed by the Society of Actuaries' Committee on Annuities and adopted as a recognized mortality table for annuities in December 1983, by the National Association of Insurance Commissioners.

(2) 1983 Table "a"--Mortality table developed by the Society of Actuaries' Committee to Recommend a New Mortality Basis for Individual Annuity Valuation and adopted as a recognized mortality table for annuities in June 1982, by the National Association of Insurance Commissioners.

(3) 1994 GAR Table--The 1994 Group Annuity Reserving Table developed by the Society of Actuaries' Group Annuity Valuation Table Task Force and adopted as a

recognized mortality table for annuities on December 16, 1996, by the National Association of Insurance Commissioners.

(4) Annuity 2000 Mortality Table--Mortality table developed by the Society of Actuaries' Committee on Life Insurance Research and adopted as a recognized mortality table for annuities on December 16, 1996, by the National Association of Insurance Commissioners.

(5) Period Table--Table of mortality rates applicable to a given calendar year.

(6) Generational Mortality Table--Mortality table containing a set of mortality rates that decrease for a given age from one year to the next based on a combination of a Period Table and a projection scale containing rates of mortality improvement.

(7) 2012 IAR Table--Generational mortality table developed by the Society of Actuaries' Committee on Life Insurance Research and containing rates,  $q_x^{2012+n}$ , derived from a combination of the 2012 IAM Period Table and Projection Scale G2, using the methodology stated in §3.1506 of this title (relating to Application of the 2012 IAR Mortality Table).

(8) 2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table--The Period table containing loaded mortality rates for calendar year 2012. This table contains rates,  $q_x^{2012}$ , developed by the Society of Actuaries' Committee on Life Insurance Research.

(9) Projection Scale G2 (Scale G2)--Table of annual rates,  $G2_x$ , of mortality improvement by age for projecting future mortality rates beyond calendar year 2012. The Society of Actuaries' Committee on Life Insurance Research developed this table.

**§3.1503. Individual Annuity or Pure Endowment Contracts.**

(a) Except as provided in subsections [~~subsection~~] (b) and (c) of this section, the 1983 Table "a" is recognized and approved as an individual annuity mortality table for valuation and, at the option of the company, may be used to determine [~~for purposes of determining~~] the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after August 29, 1977.

(b) Except as provided in subsection (c) of this section, either the 1983 Table "a" or the Annuity 2000 Mortality Table must [~~shall~~] be used to determine [~~for determining~~] the minimum standard of valuation for any individual annuity or pure endowment contract delivered or issued for delivery on or after January 1, 1987.

(c) Except as provided in subsection (d) of this section, the Annuity 2000 Mortality Table must [~~shall~~] be used to determine [~~for determining~~] the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2000.

(d) The 1983 Table "a" without projection must be used to determine [~~is to be used for determining~~] the minimum standard [~~standards~~] of valuation for an individual annuity or pure endowment contract issued on or after January 1, 2000, solely when the contract is based on life contingencies and is issued to fund periodic benefits arising from:

(1) settlements of various forms of claims pertaining to court settlements or out of court settlements from tort actions;

(2) settlements involving similar actions such as workers' compensation claims; or

(3) settlements of long term disability claims where a temporary or life annuity has been used in lieu of continuing disability payments.

(e) Except as provided in subsection (d) of this section, the 2012 IAR Mortality Table must be used to determine the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2014.

#### **§3.1504. Group Annuity or Pure Endowment Contracts.**

(a) Except as provided in subsections (b) and (c) of this section, the 1983 GAM Table, the 1983 Table "a", and the 1994 GAR Table are recognized and approved as group annuity mortality tables for valuation and, at the option of the company, any one of these tables may be used for purposes of valuation for any annuity or pure endowment purchased on or after August 29, 1977, under a group annuity or pure endowment contract.

(b) Except as provided in subsection (c) of this section [~~subsection~~], either the 1983 GAM Table or the 1994 GAR Table must [~~is to~~] be used to determine [~~for determining~~] the minimum standard of valuation for any annuity of pure endowment purchased on or after January 1, 1987, under a group annuity or pure endowment contract.

(c) The 1994 GAR Table must [~~shall~~] be used to determine [~~for determining~~] the minimum standard of valuation for any annuity or pure endowment purchased on or after January 1, 2000 under a group annuity or pure endowment contract.

**§3.1505. Application of the 1994 GAR Table.**

In using the 1994 GAR Table, the mortality rate for a person age  $x$  in year  $(1994 + n)$  is calculated as follows:

Figure: 28 TAC §3.1505

**§3.1506. Application of the 2012 IAR Mortality Table.**

In using the 2012 IAR Mortality Table, the mortality rate for a person age  $x$  in year  $(2012 + n)$  is calculated as follows:

Figure: 28 TAC §3.1506

**10. CERTIFICATION.** This agency certifies that the proposed amendments have been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued at Austin, Texas, on July 30, 2013.



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Texas Department of Insurance