Actuarial Standard
of Practice
No. 10

Methods and Assumptions for Use in Life Insurance Company
Financial Statements Prepared in Accordance with U.S. GAAP

Revised Edition

Developed by the
Task Force to Revise ASOP No. 10 of the
Life Committee of the
Actuarial Standards Board

Adopted by the
Actuarial Standards Board
March 2011

(Doc. No. 122)
TABLE OF CONTENTS

Transmittal Memorandum iv

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date 1
   1.1 Purpose 1
   1.2 Scope 1
   1.3 Cross References 1
   1.4 Effective Date 1

Section 2. Definitions 2
   2.1 Best-Estimate Assumption 2
   2.2 Costs 2
   2.3 Deferred Policy Acquisition Cost (DPAC) 2
   2.4 Deferred Sales Inducements (DSI) 2
   2.5 GAAP Net Premium 2
   2.6 Gross Premium 2
   2.7 Lock-In 2
   2.8 Market-Estimate Assumption 2
   2.9 Net GAAP Liability 2
   2.10 Policy Benefit Liability 2
   2.11 Premium Deficiency 2
   2.12 Risk of Adverse Deviation 3
   2.13 Value of Business Acquired (VOBA) 3

Section 3. Analysis of Issues and Recommended Practices 3
   3.1 The Role of the Actuary 3
   3.2 Categories of Assumptions 3
   3.3 Best-Estimate Assumptions 3
   3.4 Market-Estimate Assumptions 4
      3.4.1 Reliability of Market-Estimate Assumptions 4
      3.4.2 Inferring Market-Estimate Assumptions from Related Information 4
      3.4.3 Use of Relevant Information 4
      3.4.4 Using Best-Estimate Assumptions 5
   3.5 Provision for Risk of Adverse Deviation 5
      3.5.1 Degree of Risk 5
      3.5.2 Relationship to Best-Estimates 5
      3.5.3 Effect of Provision 5
   3.6 Internal Consistency 5
   3.7 Methods and Techniques 6
   3.8 Premium Deficiency Testing 6
   3.9 Recognition of Premiums 6
   3.10 Simplifications and Approximations 7
3.11 Documentation

Section 4. Communications and Disclosures
  4.1 Communications
  4.2 Disclosures

APPENDIXES

Appendix 1—Background and Current Practices
  Background
  Current Practices

Appendix 2—Comments on the Exposure Draft and Responses
TO: Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with U.S. GAAP

FROM: Actuarial Standards Board (ASB)

SUBJ: Revision of Actuarial Standard of Practice (ASOP) No. 10

This document contains the final version of a revision of ASOP No. 10, now titled Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with U.S. GAAP.

Background

ASOP No. 10 was originally adopted by the ASB in 1989. The 1989 standard was developed by the American Academy of Actuaries (Academy) Committee on Life Insurance Financial Reporting for the Life Committee of the ASB. In 1992, ASOP No. 10 was expanded to incorporate certain Financial Reporting Recommendations. In 2000, it was revised to reflect GAAP developments since 1992.

Since 2000, several American Institute of Certified Public Accountants’ Statements of Position pertinent to insurance contract accounting have been issued. In addition, certain features of insurance contracts are now considered under GAAP to be embedded derivatives. These features are accounted for at fair value, which has been more specifically defined. As a result of these developments, the ASB authorized another update to ASOP No. 10.

In this update, the task force recommending the changes has removed interpretations of GAAP literature and focused the standard on those activities for which actuaries are most directly responsible. This resulted in the deletion of the “Special Situations” and “Lock-In/Adjustment” sections in the previous version of ASOP No. 10. The ASB believes these sections included interpretations of authoritative GAAP guidance, which is beyond the scope of the actuary’s role. Actuaries can refer to other relevant literature for further information on topics that were deleted.

Exposure Draft

The exposure draft of this revised ASOP was issued in June 2010 with a comment deadline of September 30, 2010. Eight comment letters were received and changes were made in several sections in response. For a summary of the issues contained in these comment letters and the responses thereto, please see appendix 2.

Key Changes
The most significant changes from the exposure draft involve revisions to section 3.4 concerning “market-estimate assumptions.” The changes primarily clarify the guidance related to setting assumptions when there is limited observable information. In addition, section 3.6, Lock-In, was eliminated.

The ASB thanks everyone who took the time to contribute comments and suggestions on the exposure draft. The ASB adopted this revised standard at its March 2011 meeting.
The ASB establishes and improves standards of actuarial practice. These ASOPs identify what the actuary should consider, document, and disclose when performing an actuarial assignment. The ASB’s goal is to set standards for appropriate practice for the U.S.
ACTUARIAL STANDARD OF PRACTICE NO. 10

METHODS AND ASSUMPTIONS FOR USE IN
LIFE INSURANCE COMPANY
FINANCIAL STATEMENTS
PREPARED IN ACCORDANCE WITH U.S. GAAP

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date

1.1 Purpose—This actuarial standard of practice (ASOP) provides guidance to actuaries when performing professional services related to the preparation of life insurance companies’ financial statements in accordance with U.S. generally accepted accounting principles (GAAP).

1.2 Scope—This standard applies to actuaries when performing professional services related to selecting or reviewing methods or assumptions used in the preparation of life insurance company GAAP financial statements.

The actuary should comply with this standard except to the extent it may conflict with applicable law (statutes, regulations, and other legally binding authority) or authoritative GAAP guidance (such as Accounting Standards Codification, Staff Accounting Bulletins issued by the U.S. Securities and Exchange Commission, and other guidance issued by authoritative bodies). If the actuary departs from the guidance set forth in this standard in order to comply with authoritative GAAP guidance, applicable law (statutes, regulations, and other legally binding authority), or for any other reason the actuary deems appropriate, the actuary should refer to section 4.

1.3 Cross References—When this standard refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate.

1.4 Effective Date—This standard will be effective for professional services supporting the preparation of life insurance company financial statements applicable to fiscal periods ending on or after October 15, 2011.
Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice, and are intended to conform with authoritative GAAP guidance, where applicable.

2.1 **Best-Estimate Assumption**—An assumption that reflects anticipated experience with no provision for risk of adverse deviation.

2.2 **Costs**—All benefit payments and expenses associated with issuing and maintaining a company’s insurance policies and contracts, with no provision for profit.

2.3 **Deferred Policy Acquisition Cost (DPAC)**—An asset representing the unamortized portion of policy acquisition expenses.

2.4 **Deferred Sales Inducements (DSI)**—An asset representing the unamortized portion of sales inducements to policyholders.

2.5 **GAAP Net Premium**—The portion of gross premium that provides for costs.

2.6 **Gross Premium**—Amounts contractually required to be paid or anticipated to be contributed by the policyholder.

2.7 **Lock-In**—A requirement to continue using original basis assumptions (as set at issue, acquisition, or prior redetermination due to a premium deficiency).

2.8 **Market-Estimate Assumption**—An assumption that represents what a typical market participant would use in assessing the amount the participant would pay to acquire a given asset, or the amount the participant would require to assume a given liability (a so-called “exit market” price).

2.9 **Net GAAP Liability**—The GAAP policy benefit liability less any associated DPAC, VOBA, and DSI.

2.10 **Policy Benefit Liability**—An accrued obligation to policyholders that relates to the payment of future costs and amounts accrued for unearned revenue. The amount accrued for unearned revenue may or may not be shown separately in the company’s financial statements, but is, in any case, included in the policy benefit liability for purposes of this standard.

2.11 **Premium Deficiency**—A condition that exists when the net GAAP liability plus the present value of future gross premiums is less than the present value of future benefits and expenses using current best estimate assumptions.
2.12 **Risk of Adverse Deviation**—The risk that actual experience may differ from best-estimate assumptions in a manner that produces costs higher than assumed or revenues less than assumed.

2.13 **Value of Business Acquired (VOBA)**—The intangible asset that arises in the application of GAAP purchase accounting as the difference between the reported value and the fair value of insurance contract liabilities, or comparable amounts determined in purchased insurance business combinations.

### Section 3. Analysis of Issues and Recommended Practices

3.1 **The Role of the Actuary**—The GAAP financial statements of life insurance companies are the responsibility of management. The methodologies used in determining financial statement amounts are, for any specific element, generally prescribed by authoritative GAAP guidance. Actuaries frequently participate in the processes of developing specific techniques for application of GAAP methods and selecting or considering assumptions used in the preparation of life insurance company financial statements. To the extent the actuary participates in these activities, the actuary should be guided by this standard. In addition, the actuary should be familiar with accounting and actuarial literature that is relevant to the activities in which the actuary is participating.

3.2 **Categories of Assumptions**—Two general approaches to establishing actuarial assumptions are used in the preparation of GAAP financial statements: best-estimate assumptions and market-estimate assumptions. The type of assumption used and whether any provisions for risk or uncertainty are included in the assumption are dictated by the particular circumstances and applicable accounting guidance. Some assumptions are periodically reviewed and updated to reflect emerging experience, whereas others are locked-in. The actuary should exercise care to ensure that the proper category of assumptions is used.

3.3 **Best-Estimate Assumptions**—In instances where GAAP requires best-estimate assumptions, the actuary should use assumptions that reflect management’s assessment of emerging experience without provisions for risk or uncertainty. Where there is no emerging experience, the actuary should use assumptions that reflect management’s expectations of how experience will emerge. Best-estimate assumptions may be established as the “most likely,” “average,” or “central” outcome, corresponding, respectively, to the mode, mean, or median of a probability distribution. Other interpretations of best estimate are possible. The actuary should use actuarial judgment to determine which interpretation of best-estimate is appropriate for the situation at hand with reference to the applicable authoritative GAAP guidance.

In advising management as to the selection of best-estimate assumptions, the actuary should consider, among other things, the characteristics and magnitude of the company’s
4

business; the maturity of the company and its rate of growth; the prior experience of the company and the trends in that experience; as well as medical, economic, social, and technological developments that might affect future experience. The actuary’s advice should consider the company’s actual recent experience data, if, in the actuary’s judgment, it is relevant and credible.

The actuary should also consider relevant industry data or data from other similarly situated companies to supplement available company specific data. ASOP No. 23, Data Quality, gives further guidance to the actuary on issues related to the selection of data, use of imperfect data, and reliance on data supplied by others.

3.4 Market-Estimate Assumptions—Certain financial statement items (for example, derivatives and embedded derivatives) are measured at fair value in GAAP financial statements. When the fair value of an item is called for in GAAP financial statements and not readily observable in the marketplace, a value for such items may need to be calculated. Such calculations commonly incorporate market-estimate assumptions.

3.4.1 Reliability of Market-Estimate Assumptions—In determining market-estimate assumptions, the actuary should use reliable market information to the extent reasonably observable. Some assumptions (for example, the market’s assessment of future interest rates) may be directly observable in published sources that are commonly quoted for market-based information. The general acceptance of such information by the market may serve to enhance the actuary’s comfort with its reliability. The actuary should consider using multiple sources of information, when available, to help validate the reliability of the information.

3.4.2 Inferring Market-Estimate Assumptions from Related Information—When directly pertinent information is not observable, the actuary should seek to infer market-estimate assumptions from other observable information. Such information may be obtained by observing market transactions that imply the market’s assessment of the assumption. For example, when making a market-estimate assumption for the volatility of one year returns on a stock market index, the actuary may be able to deduce that assumption from observing the price at which options on that index are trading.

3.4.3 Use of Relevant Information—Often, the actuary will not be able to observe market transactions that incorporate the assumptions that are needed. In such situations, the actuary should use available observable information that may have relevance in determining market participants’ assessment of the assumption that is required. For example, an actuary may have no means of directly observing the market’s assessment of mortality for a specific group of lives. However, industry mortality data or mortality assumptions used by market participants in pricing transactions involving similar sets of lives may be observable. The actuary may consider this information to be relevant in establishing an assumption even though
the information is not directly observable for the specific group of lives under consideration.

3.4.4 Using Best-Estimate Assumptions—When there is insufficient observable information, a market-estimate assumption may be based on best-estimate assumptions. Such assumptions should always reflect market-observable information to the extent possible. When incorporating best-estimate assumptions, the actuary should consider whether including a margin for uncertainty is appropriate. If such a margin is included, the actuary should consider how much margin a market participant would use, based on the same considerations as discussed in sections 3.4.1 to 3.4.3.

3.5 Provision for Risk of Adverse Deviation—In certain instances GAAP requires a provision for the risk of adverse deviation in assumptions.

3.5.1 Degree of Risk—When determining the provision for risk of adverse deviation, the actuary should consider the degree of risk and uncertainty in that assumption in total and at each future duration. The actuary should consider policy features that reduce risk, such as indeterminate premiums or dividends, in determining a provision for adverse deviation in the assumptions. The actuary should consider the magnitude and frequency of fluctuations in relevant historical experience, if available. For assumptions that are relatively insignificant, the actuary may decide to add little or no provision for risk of adverse deviation.

3.5.2 Relationship to Best-Estimates—In selecting assumptions that include provision for the risk of adverse deviation, the actuary should consider whether such assumptions bear a reasonable relationship to the best-estimate or market-estimate assumptions, as appropriate.

3.5.3 Effect of Provision—The provision for risk of adverse deviation should be such that the net GAAP liability is increased. If the direction of the effect of including a provision for adverse deviation in an assumption is not clear, the actuary should attempt to determine the nature of a provision for adverse deviation that is appropriate. If the actuary is unable to determine the directional effect, then the actuary need not include a provision for adverse deviation in that assumption. The additive impact of provisions for risk of adverse deviation should be established at a level that provides for an appropriate amount of adverse deviation in aggregate.

3.6 Internal Consistency—In advising management as to the selection of assumptions, the actuary should identify assumptions that, when taken together, reflect all pertinent areas of expected future experience and are specific to the product, line of business, or block of business for which financial statement values are being calculated. These assumptions should be internally consistent. Assumptions that are not dependent on specific product features or company specific considerations (for example, U.S. Treasury yields or
volatility of a common equity index) should be consistent across product lines. Similar
concepts of consistency should be applied in establishing provisions for risk of adverse
deviation.

3.7 Methods and Techniques—Methods used to determine GAAP financial statement
amounts are generally prescribed by authoritative GAAP guidance and will vary
according to the specific literature that applies.

When developing detailed techniques for determining financial statement amounts in
accordance with the prescribed GAAP methodology, the actuary should consider the
following:

a. the substance of the relationship between the issuer of the policy and the
policyholder;

b. the classification of the contract (for example, insurance versus investment);

c. the duration of the contract;

d. the materiality of resulting financial statement amounts;

e. the cash flow characteristics of the contract, including insurance company cash
flows related to the contract but not directly associated with the contract
provisions;

f. the sensitivity of the resulting financial statement amounts to changes in
assumptions;

g. techniques consistent with those used historically for valuing contracts similar to
those issued by the insurance company, if such information is available; and

h. any other items that are expected to have a material impact on the policy cash
flows.

3.8 Premium Deficiency Testing—When testing for premium deficiency, GAAP guidance
requires the actuary to use best-estimate assumptions, current at the time of testing,
without making provision for adverse deviation. If recognition of a premium deficiency is
required, the current best-estimate assumptions are used to determine future changes in
the net GAAP liability. For types of contracts where lock-in applies, the current best-
estimate assumptions are then subject to lock-in.

3.9 Recognition of Premiums—The actuary should use appropriate methods to recognize
premiums in income. These methods are determined by authoritative GAAP guidance
and vary by the type of contract. The recognition of GAAP net premiums in the policy
benefit liability, DPAC, VOBA, and DSI computations should be consistent with the treatment of gross premiums in the income statement.

3.10 **Simplifications and Approximations**—The actuary may, when appropriate, use assumptions and techniques (for example, models) that simplify calculations. Simplification and approximations are acceptable only if the results are reasonably expected not to differ materially from more detailed calculations. The actuary should seek guidance from accounting professionals on questions related to financial statement materiality.

3.11 **Documentation**—The actuary should prepare and retain appropriate documentation regarding the methods, assumptions, procedures, and the sources of the data used. The documentation should be in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary’s work.

**Section 4. Communications and Disclosures**

4.1 **Communications**—When issuing an actuarial report under this standard, the actuary should consider the intended purpose of the actuarial report and be guided by ASOP No. 41, *Actuarial Communications* and the documentation and communication requirements included in ASOP No. 21, *Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas*.

4.2 **Disclosures**—The actuary should include the following, as applicable, in an actuarial communication:

a. the disclosure in ASOP No. 41, section 4.2, if any material assumption or method was prescribed by applicable law (statutes, regulations, and other legally binding authority);

b. the disclosure in ASOP No. 41, section 4.3, if the actuary states reliance on other sources, including authoritative GAAP guidance, and thereby disclaims responsibility for any material assumption or method selected by a party other than the actuary; and

c. the disclosure in ASOP No. 41, section 4.4, if, in the actuary’s professional judgment, the actuary has otherwise deviated materially from the guidance of this ASOP.
Appendix 1

Background and Current Practices

Note: This appendix is provided for informational purposes, but is not part of the standard of practice.

Background

The American Institute of Certified Public Accountants (AICPA) developed Audits of Stock Life Insurance Companies (Audit Guide) in 1972 with the cooperation of life insurance company accountants and actuaries. The Audit Guide represented the first effort by the accounting profession to establish GAAP for the life insurance industry. The Financial Accounting Standards Board (FASB) is now responsible for the determination of GAAP for companies whose financial statements are audited. It does so through the promulgation of Statements of Financial Accounting Standards (SFAS).

GAAP standards for stock life insurance companies are primarily established by Accounting Standards Codification Topic 944 “Financial Services, Insurance” but other topics are also relevant. Prior to GAAP codification, these standards could be found in SFAS No. 60, Accounting and Reporting by Insurance Enterprises, and SFAS No. 97, Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments, among others. The FASB issued SFAS No. 60, which generally codified the concepts in the Audit Guide, in 1972. In 1987, the FASB issued SFAS No. 97, which (1) established GAAP for certain forms of insurance contracts not specifically addressed by SFAS No. 60, primarily universal life-type contracts; (2) established GAAP for investment contracts not involving a significant insurance component; and (3) revised GAAP for limited-payment contracts. In November 1990, the AICPA issued Practice Bulletin 8, providing guidance for certain questions related to SFAS No. 97.

In 1995, the FASB issued SFAS No. 120, Accounting and Reporting by Mutual Life Insurance Enterprises and by Insurance Enterprises for Certain Long-Duration Participating Contracts. This statement extended the requirements of SFAS No. 60 and SFAS No. 97 to mutual life insurers, established accounting for certain participating life insurance contracts of mutual life insurance enterprises (and stock life insurance subsidiaries of mutual life insurance enterprises), and permitted other stock life insurers to apply its provisions to participating life insurance contracts that meet the statement’s conditions. At the same time, the AICPA provided further clarification of the accounting requirements for long duration participating contracts in Statement of Position (SOP) No. 95-1, Accounting for Certain Insurance Activities of Mutual Life Insurance Enterprises. Other standards are also relevant, as is prevailing accounting practice in areas not specifically addressed by an SFAS. Prior to the issuance of SFAS No. 120, mutual life
insurers’ statutory financial statements were, in practice, described as being in accordance with GAAP.

**Current Practices**

The Academy had promulgated *Financial Reporting Recommendations and Interpretations* applicable to GAAP for insurance companies, thus establishing guidance to actuaries in this area before the formal appearance of ASOP No. 10 in 1989. Because of changes in GAAP resulting from SFAS No. 97, SFAS No. 120, and evolution in actuarial practice, ASOP No. 10 was revised most recently in 2000. Since 2000, GAAP has continued to evolve and it is appropriate once again to replace certain existing guidance and to promulgate a more generally applicable standard of actuarial practice with respect to life insurance company GAAP financial statements.
Appendix 2

Comments on the Exposure Draft and Responses

The exposure draft of this revised ASOP, Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with U.S. GAAP, was issued in June 2010 with a comment deadline of September 30, 2010. Eight comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of this appendix, the term “commentator” may refer to more than one person associated with a particular comment letter.

The Task Force to Revise ASOP No. 10 carefully considered all comments received, and the Life Committee and the ASB reviewed the proposed changes and made modifications to the ASOP where appropriate.

Summarized below are the significant issues and questions contained in the comment letters and responses to each. The term “reviewers” includes the task force, the Life Committee, and the ASB. Unless otherwise noted, the section numbers and titles used below refer to those in the exposure draft.

### GENERAL COMMENTS

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator asked for examples of relevant literature that would help the actuary address “special situations.”</td>
<td>The reviewers do not believe it would be appropriate to reference specific sources of non-authoritative literature within the ASOP, as the list could not be complete and may suggest that certain sources are more relevant than others. The Financial Accounting Standards Board has consolidated the authoritative literature into the Accounting Standards Codification, and there are various references to this literature throughout this standard. Anything outside of the authoritative GAAP literature is an interpretation and outside the scope of this standard.</td>
</tr>
<tr>
<td>One commentator suggested that an actuary who is performing functions within the scope of this ASOP should be familiar with the various sources of relevant literature.</td>
<td>The reviewers agree and believe this is covered in section 3.1.</td>
</tr>
<tr>
<td>One commentator recommended that the ASB be prepared to revise this standard as the accounting for insurance contracts is currently under review by the Financial Accounting Standards Board.</td>
<td>The reviewers agree that the ASB should be prepared to revise this standard as GAAP for insurance contract accounting changes.</td>
</tr>
</tbody>
</table>

### SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES, AND EFFECTIVE DATE
### Section 1.2, Scope

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several commentators indicated that the references to authoritative</td>
<td>The reviewers agree and modified the references to authoritative GAAP literature to reflect this change in this section and throughout the ASOP.</td>
</tr>
<tr>
<td>GAAP literature needed to be updated to reflect Accounting Standards</td>
<td></td>
</tr>
<tr>
<td>Codification.</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 2. DEFINITIONS

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator suggested referring the actuary to relevant definitions</td>
<td>The reviewers believe that the language in the exposure draft is sufficient.</td>
</tr>
<tr>
<td>included in authoritative GAAP guidance.</td>
<td></td>
</tr>
<tr>
<td>One commentator suggested including a definition of “VOBA.”</td>
<td>The reviewers agree and added a definition of “VOBA.”</td>
</tr>
<tr>
<td>One commentator suggested capitalizing terms that are defined in this</td>
<td>The reviewers disagree, as capitalizing terms is not the format used in actuarial standards of practice.</td>
</tr>
<tr>
<td>standard.</td>
<td></td>
</tr>
<tr>
<td>Section 2.8, Market-Estimate Assumptions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Two commentators addressed the difficulty of obtaining market-estimate</td>
<td>The reviewers agree and deleted the clause from the definition.</td>
</tr>
<tr>
<td>assumptions from market sources in situations where it can be extremely</td>
<td></td>
</tr>
<tr>
<td>difficult to find an appropriate market for the instruments being</td>
<td></td>
</tr>
<tr>
<td>valued. It was suggested that the definition exclude the phrase “obtained</td>
<td></td>
</tr>
<tr>
<td>from market data.”</td>
<td></td>
</tr>
<tr>
<td>Section 2.12, Risk of Adverse Deviation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator suggested instead (or in addition) the ASOP should</td>
<td>The reviewers believe the definition of “Risk of Adverse Deviation” is appropriate and that section 3.5 adequately covers the topic of provision for adverse deviation and made no change.</td>
</tr>
<tr>
<td>define Provision for Risk of Adverse Deviation.</td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES

#### Section 3.1, The Role of the Actuary

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator suggested that while the financial statements are indeed the responsibility of management, the actuary has responsibility for ensuring that reasonable assumptions are used in the computation of the value of assets and liabilities related to insurance policies in force.</td>
<td>The reviewers believe that actuaries are frequently asked by management to review or recommend the assumptions used to compute the stated values of assets and liabilities related to insurance policies in force. The reviewers also felt that actuaries, by virtue of their training and experience are well suited for such work. However, there is no requirement that an actuary take on these responsibilities in preparing GAAP financial statements; therefore, no change was made in this section.</td>
</tr>
</tbody>
</table>

#### Section 3.2, Categories of Assumptions

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator suggested that in the second sentence “provisions are added to the assumption” be changed to “provisions are made to the assumption” to account for situations where assumptions are reduced by such provisions.</td>
<td>The reviewers agree and revised the language in response to the comment.</td>
</tr>
</tbody>
</table>

#### Section 3.3, Best-Estimate Assumptions

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>One commentator suggested that this section did not adequately address the situation when there is no emerging experience, as when one must establish assumptions for an entirely new product or risk factor. It was suggested that the actuary could use any available and relevant data even if that data might not contain emerging experience.</td>
<td>The reviewers agree and added a sentence to this section addressing this situation.</td>
</tr>
<tr>
<td><strong>Section 3.4, Market-Estimate Assumptions</strong></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>One commentator questioned the suggestion in section 3.4.1 that the actuary consider multiple sources of the same information.</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td>The reviewers agree and modified section 3.4.1 to more clearly indicate how multiple sources of information can be used to enhance the actuary’s comfort with the reliability of the data used as a basis for market-estimate assumptions.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>One commentator suggested clarifying the language in section 3.4.1, Reliability of Market-Estimate Assumptions, and section 3.4.3, Use of Relevant Information.</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td>The reviewers agree and the language in these sections has been revised from the exposure draft with the intent of clarification.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>One commentator recommended providing a clarifying example of how one might use market observable information as inputs into establishing market-estimate assumptions related to insurance or policyholder behavior risks.</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td>The reviewers agree with this comment and section 3.4.3 now includes an illustrative example of how market observable data might be used to establish a market-estimate mortality assumption.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>One commentator suggested improving the language in section 3.4.4, Using Best-Estimate Assumptions, to ensure that the suggested practices were supported in GAAP literature and are not an interpretation.</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td>The reviewers agree and section 3.4.4 has been modified to clarify how best-estimate assumptions might be used as an input into market-estimate assumptions in certain situations. The reviewers believe that the revised language is not an interpretation of GAAP literature.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Section 3.5, Provision for the Risk of Adverse Deviation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comment</strong></td>
</tr>
<tr>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>One commentator suggested the last sentence of section 3.5.2 introduces a new example of a reasonable relationship between assumptions with and without provision for the risk of adverse deviations. Is the example really a matter of reasonable relationships, or is it actually addressing a different question, namely loss recognition? Another commentator was concerned the sentence could be viewed as an interpretation of GAAP.</td>
</tr>
<tr>
<td>One commentator suggested the first sentence of section 3.5.3 be changed to, “The provision for risk of adverse deviation for each assumption should be such that it contributes to an increase in the Net GAAP liability as well as an increase in the net GAAP liability in aggregate from all risk margins.” It was also suggested the last sentence provide more specificity as to what is meant by the authors and how the actuary should determine the appropriate amount.</td>
</tr>
<tr>
<td>One commentator suggested that section 3.5.3 address the difficulty of selecting a provision for adverse deviation that will have the desired impact on GAAP reserves and that part of the challenge is that the provision may need to vary by age, duration, and possibly other parameters. It was also suggested that it may be both mechanically and conceptually difficult to find a pattern that will have the desired effect on reserves both as a stand-alone adjustment and in the aggregate and that the most important sentence was the last one: a set of assumptions that provides “for an appropriate amount of adverse deviation in aggregate.”</td>
</tr>
<tr>
<td>One commentator requested greater clarification in section 3.5.3. For example: Does the provision need to increase the net GAAP liability at each duration? At what point in time should the impact of the provision be measured? What is an appropriate amount of provision? And, is the actuary responsible for determining the level of aggregation used in measuring the provision?</td>
</tr>
</tbody>
</table>

**Section 3.6, Lock-In**
Several commentators recommended that the last sentence of this section be deleted or modified because it was considered both confusing and an interpretation of GAAP literature. An additional comment suggested that the reference in this paragraph to “loss recognition” be changed to refer to “premium deficiency” to be consistent with the language used in Accounting Standards Codification 944-60-25-8 & 9 (paragraph 35 of FAS 60).

Another commentator suggested that examples of the assumptions subject to lock-in be provided in that it is not always clear what is or is not an assumption. In the comment, indeterminate premium changes were used as an example of an area that may be considered ambiguous in this regard.

The reviewers agree with these comments and deleted this section.
### Section 3.7, Internal Consistency

| Comment | One commentator suggested revising the title of this section to incorporate the comprehensiveness required by the first sentence of this section. Another commentator suggested eliminating the application of consistency to the determination of provisions for the risk of adverse deviation. A third commentator recommended using examples that more clearly illustrated assumptions that would not be dependent on specific product features or company considerations. |
| Response | The reviewers believe the title of this section adequately describes the content. Further, the reviewers believe that the language regarding the application of internal consistency to provisions for risk of adverse deviation is appropriate. The examples in the exposure draft have been changed to reference U.S. Treasury interest rates and the volatility of common equity index returns. |

### Section 3.8, Methods and Techniques

| Comment | One commentator recommended that the relationship between a company and the distributor of a product may be an important consideration in establishing the detailed methods and techniques discussed in this section. |
| Response | The reviewers agree and a category was added for other items that may materially impact policy cash flows. |

### Section 3.11, Simplifications and Approximations

| Comment | One commentator suggested certain edits to this section to improve its readability. |
| Response | The reviewers agree and revised the language in this section. |

### SECTION 4. COMMUNICATIONS AND DISCLOSURES

### Section 4.1, Communications

| Comment | One commentator suggested including references to the communication requirements included in the U.S. Qualification Standards for Actuaries and the documentation requirements included in ASOP No. 21, *Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas*. |
| Response | The reviewers agree and revised this section to include a reference to ASOP No. 21. However, the reviewers consider the communication requirements included in the U.S. Qualification Standards for Actuaries to be broadly applicable and do not believe those requirements should be added to this standard, specifically. |