



## ACTUARIAL STANDARDS BOARD

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### ● EXPOSURE DRAFT ●

**Actuarial Standard  
of Practice  
No. 22**

**Statements of Actuarial Opinion Based on  
Asset Adequacy Analysis for Life or Health Liabilities**

**Comment Deadline:  
June 1, 2019**

**Developed by the  
Task Force to Revise ASOP No. 22 of the  
Life Committee of the  
Actuarial Standards Board**

**Approved for Exposure by the  
Actuarial Standards Board**

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**December 2018**

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**TO:** Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Statements of Actuarial Opinion Based on Asset Adequacy Analysis for Life or Health Liabilities

**FROM:** Actuarial Standards Board (ASB)

**SUBJ:** Proposed Revision of Actuarial Standard of Practice (ASOP) No. 22, *Statements of Actuarial Opinion Based on Asset Adequacy Analysis for Life or Health Liabilities*

This document contains an exposure draft of a proposed revision of ASOP No. 22, now titled *Statements of Actuarial Opinion Based on Asset Adequacy Analysis for Life or Health Liabilities*.

Please review this exposure draft and give the ASB the benefit of your comments and suggestions. Each written comment letter or e-mail received by the comment deadline will receive appropriate consideration by the drafting committee and the ASB.

The ASB accepts comments by either electronic or conventional mail. The preferred form is e-mail, as it eases the task of grouping comments by section. However, please feel free to use either form. If you wish to use e-mail, please send a message to **comments@actuary.org**. You may include your comments either in the body of the message or as an attachment prepared in any commonly used word processing format. **Please do not embed your comments in the exposure draft and do not password protect any attachments. If the attachment is in the form of a PDF, please do not “copy protect” the PDF.** Include the phrase “ASB COMMENTS” in the subject line of your message. Please note: Any message not containing this exact phrase in the subject line will be deleted by our system’s spam filter. Also, please indicate in the body of the e-mail if your comments are being submitted on your own behalf or on behalf of a company or organization.

If you wish to use conventional mail, please send comments to the following address:

ASOP No. 22 Revision  
Actuarial Standards Board  
1850 M Street, NW, Suite 300  
Washington, DC 20036-5805

The ASB posts all signed comments received to its website to encourage transparency and dialogue. Comments received after the deadline may not be considered. Anonymous comments will not be considered by the ASB nor posted to the website. Comments will be posted in the order that they are received. All posted comments will be available to the general public on the ASB website. The ASB disclaims any responsibility for the content of the comments, which are solely the responsibility of those who submit them.

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For more information on the exposure process, please see the ASB Procedures Manual.

**Deadline** for receipt of responses in the ASB office: **June 1, 2019**

### History of the Standard

In 1993, the ASB adopted ASOP No. 22, *Statutory Statements of Opinion Based on Asset Adequacy Analysis by Appointed Actuaries for Life or Health Insurers*, which replaced Financial Reporting Recommendation No. 7, *Statement of Actuarial Opinion for Life Insurance Company Statutory Annual Statements*, and No. 11, *Statement of Actuarial Opinion for Interest-Indexed Universal Life Insurance Contracts*, as guidance for opinions under section 8 of the model Actuarial Opinion Memorandum Regulation (1991).

Prior to the adoption, there had been discussions about whether ASOP No. 22 should cover opinions under both section 7 and section 8 of the model regulation. The ASB decided to limit ASOP No. 22 to cover opinions required under only section 8 and adopted Actuarial Compliance Guideline (ACG) No. 4, *Statutory Statements of Opinion Not Including an Asset Adequacy Analysis by Appointed Actuaries for Life and Health Insurers*, in October 1993 to provide guidance on opinions required under section 7.

In the late 1990s and early 2000s, the ASB reviewed all standards of practice related to cash flow testing. Portions of ASOP No. 14, *When to Do Cash Flow Testing for Life and Health Insurance Companies*, were incorporated into ASOP No. 7, *Analysis of Life, Health, or Property/Casualty Insurer Cash Flows*, and ASOP No. 22. In 2001, the ASB adopted the revised ASOP No. 7 and ASOP No. 22, and repealed ASOP No. 14.

In December 2012, the National Association of Insurance Commissioners (NAIC) initially adopted the *Valuation Manual*, which sets forth the minimum reserve and related requirements for jurisdictions where the *Standard Valuation Law*, as amended by the NAIC in 2009, has been enacted. The *Valuation Manual* took effect on January 1, 2017, pursuant to section 11 of the *Standard Valuation Law*. Requirements for the annual actuarial opinion and memorandum pursuant to section 3 of the *Standard Valuation Law* are provided in “VM-30, Actuarial Opinion and Memorandum Requirements.” In December 2017, the NAIC also adopted Actuarial Guideline LI, *The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves*, which provides uniform guidance and clarification of requirements for asset adequacy testing for long-term care insurance. The NAIC plans to incorporate Actuarial Guideline LI into VM-30 at a future date.

In response to these NAIC activities, the ASB decided to revise this ASOP.

### Notable Changes from the Existing ASOP

Changes made to the exposure draft include the following:

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1. Changed the purpose and scope in sections 1.1 and 1.2 from applying to actuaries when providing a statement of actuarial opinion for life and health insurers to applying to actuaries when providing a statement of actuarial opinion relating to asset adequacy analysis of life and health liabilities. The title of the ASOP was changed to reflect the changes in purpose and scope.
2. Removed references to Actuarial Compliance Guideline (ACG) No. 4, *Statutory Statements of Opinion Not Including an Asset Adequacy Analysis by Appointed Actuaries for Life and Health Insurers*, since the current *Standard Valuation Law* requires all reserve opinions to be based on asset adequacy analysis. The ASB plans to repeal ACG No. 4.
3. Added definition for “moderately adverse deviation” in section 2.
4. Added section 3.1.2 to provide guidance on discount rates.
5. Added section 3.1.3 to provide guidance on trends in assumptions.
6. Added section 3.1.4 to provide guidance on assumption margins.
7. Added section 3.1.6 to provide guidance on the use of cash flows from other financial calculations.
8. Added section 3.1.9 to provide guidance on sensitivity testing.
9. Removed some disclosure guidance from section 3 because it was already included in section 4.
10. Added disclosure items to section 4.

The ASB voted in December 2018 to approve this exposure draft.

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*The Actuarial Standards Board (ASB) sets standards for appropriate actuarial practice in the United States through the development and promulgation of Actuarial Standards of Practice (ASOPs). These ASOPs describe the procedures an actuary should follow when performing actuarial services and identify what the actuary should disclose when communicating the results of those services.*

**ACTUARIAL STANDARD OF PRACTICE NO. 22**

**STATEMENTS OF ACTUARIAL OPINION BASED ON  
ASSET ADEQUACY ANALYSIS FOR LIFE OR HEALTH LIABILITIES**

**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 actuarial services with respect to providing a statement of actuarial opinion relating to **asset adequacy analysis** of life or health **liabilities**, pursuant to applicable law (statutes, regulations, and other legally binding authority).
- 1.2 **Scope**—This standard applies to actuaries when performing actuarial services with respect to providing a statement of actuarial opinion related to **asset adequacy analysis** of life or health **liabilities**, under the following circumstances:
- a. the statement of actuarial opinion is prepared to comply with applicable law based on the model *Standard Valuation Law* and VM-30 of the NAIC *Valuation Manual*; or
  - b. the statement of actuarial opinion is prepared to comply with other applicable law.

If the statement of actuarial opinion encompasses health **liabilities**, ASOP No. 28, *Statements of Actuarial Opinion Regarding Health Insurance Liabilities and Assets*, may apply.

If the actuary departs from the guidance set forth in this standard in order to comply with 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. If a conflict exists between this standard and applicable law, the actuary should comply with applicable law.

- 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 is effective for all statements of actuarial opinion issued on or after six months after adoption by the Actuarial Standards Board.



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### Section 2. Definitions

The definitions below are defined for use in this actuarial standard of practice and appear in bold throughout the ASOP.

- 2.1 Asset—Any resource that can generate revenue **cash flows** or reduce disbursement **cash flows**.
- 2.2 Asset Adequacy Analysis—An analysis of the adequacy of reserves and other **liabilities** being tested, in light of the **assets** supporting such reserves and other **liabilities**, as specified in the statement of actuarial opinion.
- 2.3 Cash Flow—Any receipt, disbursement, or transfer of cash; includes policy **cash flows** and **cash flows** that are not policy related, such as **cash flows** from **assets**, corporate expenses, litigation costs, and other **cash flows** required by applicable law.
- 2.4 Cash Flow Risk—The risk that the amount or timing of **cash flows** will differ from expectations or assumptions.
- 2.5 Cash Flow Testing—The projection and comparison of the timing and amount of **cash flows** resulting from economic and other assumptions in order to evaluate **cash flow risks**.
- 2.6 Gross Premium Reserve—The actuarial present value of future benefits, expenses, and related amounts less the actuarial present value of future gross premiums and related amounts.
- 2.7 Gross Premium Reserve Test—The comparison of the **gross premium reserve** computed under one or more **scenarios** to the financial statement reserve.
- 2.8 Investment Yield Risk—The risk that investment yields will differ from expectations or assumptions, causing a change in the amount or timing of **cash flows**.
- 2.9 Liability—Any commitment by, or requirement of, an insurer that can reduce revenue **cash flows** or generate disbursement **cash flows**.
- 2.10 Moderately Adverse Conditions—Conditions that include one or more unfavorable, but not extreme, events that have a reasonable probability of occurring during the testing period.
- 2.11 Moderately Adverse Deviation—A change made to one or more assumptions in order to perform **asset adequacy analysis** under **moderately adverse conditions**.
- 2.12 Scenario—A set of economic and other assumptions used in **cash flow testing**.
- 2.13 Subsequent Events—Material events that occur after the valuation date.

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

- 3.1 Asset Adequacy Analysis—When performing an **asset adequacy analysis** on the underlying **cash flows**, the actuary should choose a block of **assets** such that the statement value of those **assets** is no greater than the statement value of the reserves and other **liabilities** being tested. If the actuary determines that additional **assets** are needed to support these reserves and other **liabilities** being tested, then the actuary should establish an additional reserve equal to the statement value of those additional **assets**.

The actuary should consider the types of **assets** and **liabilities** in the **asset adequacy analysis** and the related **cash flows** and **cash flow risks**, including **investment yield risk**.

- 3.1.1 Analysis Methods—The actuary should use professional judgment in choosing an appropriate analysis method. The actuary may use a single method of analysis for all reserves and other **liabilities** or a number of different methods of analyses for each of several blocks of business.

The actuary should consider using **cash flow testing** (see ASOP No. 7, *Analysis of Life, Health, or Property/Casualty Insurer Cash Flows*). **Cash flow testing** may be used in a variety of circumstances and is generally appropriate where **cash flows** may vary, or where the present value of **cash flows** may vary, under different economic or interest rate **scenarios**.

In situations where **cash flows** are not sensitive to economic and interest rate assumptions, the actuary may consider using analysis methods other than **cash flow testing**.

The following are examples of other acceptable analysis methods.

- a. Gross Premium Reserve Test—A **gross premium reserve test** may be appropriate where the testing would emphasize the sensitivity of **moderately adverse deviations** in the underlying mortality, morbidity, withdrawal, and expense assumptions. For example, this type of method may be appropriate for term insurance backed by noncallable bonds.
- b. Demonstration of Conservatism—To the extent that the degree of conservatism in the reserves and other **liabilities** is so great that **moderately adverse deviations** in the assumptions underlying the **cash flows** are covered, the actuary may demonstrate this degree of conservatism as an appropriate **asset adequacy analysis** method. For example, this type of method may be appropriate for a block of accidental death and dismemberment insurance if that block is reserved using conservative interest rates and mortality/morbidity tables.

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- c. Demonstration of Immaterial Variation—Some products may have risks that are not subject to material variation, where the **cash flow risks** have been limited by product design and the investment strategy. Rather than perform **cash flow testing**, the actuary may demonstrate that these risks are not subject to material variation and that **moderately adverse deviations** in assumptions underlying the **cash flows** are covered. For example, this type of method may be appropriate for a variable annuity with no guarantees and no unamortized expense allowance.
  - d. Risk Theory Techniques—The risks inherent in products with short-duration **liabilities** supported by short-duration **assets** may be more appropriately analyzed by measuring **moderately adverse deviations** in assumptions underlying the **cash flows**, other than **cash flows** specifically associated with **assets**, using risk theory techniques. These risks may involve a small number of large individual claims over a short period.
  - e. Loss Ratio Methods—Loss ratio methods may be appropriate when the **cash flows** are of short duration. Under this method, **moderately adverse deviations** in the assumptions underlying the morbidity or mortality costs may be tested. Loss ratio methods are described in ASOP No. 5, *Incurred Health and Disability Claims*.
- 3.1.2 Discount Rates—The actuary should reflect the expected yield on the current block of **assets**, as well as the anticipated yields on any **assets** to be purchased or divested in the future, in the discount rates used in the analysis.
- 3.1.3 Trends in Assumptions—The actuary should consider reflecting anticipated trends in the assumptions. When determining the level of trend to apply, if any, the actuary should consider the following:
- a. whether different trends should be used for different types of business; for example, mortality improvement may be different between life and annuity products;
  - b. the source and credibility of the assumptions; for example, different trends may be appropriate when using company experience vs. industry studies; and
  - c. the impact of trends on **asset adequacy analysis** results; for example, the effect of future economic conditions on policyholder elections.
- 3.1.4 Assumption Margins—The actuary should consider adding margins to assumptions to reflect adverse deviation. When determining the level of assumption margins, if any, the actuary should consider the following:
- a. the level of uncertainty for the assumption, including sparsity of data;

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- b. the degree of adverse deviation covered;
- c. whether individual margins or aggregate margins are used in the analysis;
- d. the interaction or correlation between assumptions; and
- e. the impact of any prescribed margin on the overall analysis.

The actuary may use assumption margins to reflect the possibility that multiple adverse conditions could occur at one time. For example, the actuary could add margins to the mortality assumption while analyzing investment **scenario** changes to reflect the possibility that adverse mortality could occur while adverse investment returns occur.

3.1.5 Aggregation During Testing—When performing an **asset adequacy analysis**, the actuary should not use **assets** or **cash flows** from one block of business to discharge the reserves and other **liabilities** of another block of business if those **assets** or **cash flows** cannot be used for that purpose. For example, separate account **assets** are generally not available during the testing period to discharge general account reserves and other **liabilities**.

3.1.6 Use of Cash Flows from Other Financial Calculations—The actuary may use the **cash flows** from other financial calculations (for example, reserve or capital models) in **asset adequacy analysis**. When doing so, the actuary should consider any differences between the **cash flows** in the financial calculations and the **asset adequacy analysis** due to items such as the following:

- a. starting **assets**;
- b. assumptions, including margins;
- c. sensitivities;
- d. interim shortfalls in accumulated **cash flows**;
- e. rules for the aggregation of results; and
- f. taxes.

If the actuary uses **cash flows** from other financial calculations, the actuary should confirm that the assumptions underlying these **cash flows** are appropriate for an **asset adequacy analysis** under **moderately adverse conditions**.

3.1.7 Use of Analyses or Data Predating the Valuation Date—If appropriate, the actuary may use data or financial calculations from (i) an **asset adequacy**

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**analysis** performed prior to the valuation date, (ii) an analysis performed at the time of policy issue, (iii) modeling based on data taken from a time that predates the valuation date, or (iv) other analysis methods.

For example, if appropriate, the actuary may use a prior analysis of a closed block of business, or the actuary may use data from September 30 to perform an **asset adequacy analysis** in support of a December 31 valuation.

- 3.1.8 Testing Horizon—The actuary should perform an **asset adequacy analysis** over a period that extends to a point at which, in the actuary’s professional judgment, the use of a longer period would not materially affect the analysis.
- 3.1.9 Sensitivity Testing—In setting assumptions and assumption margins, the actuary should consider performing sensitivity testing on how variations in an assumption or combination of assumptions can impact the **asset adequacy analysis** results.
- 3.1.10 Completeness—When performing the **asset adequacy analysis**, the actuary should take into account anticipated material **cash flows** such as renewal premiums, guaranteed and nonguaranteed benefits and charges, expenses, and taxes. In determining the **assets** supporting the tested reserves and other **liabilities**, the actuary should consider any **asset** segmentation system used by the company.

The actuary should confirm that the total amount of any reserves and other **liabilities** reported as “not analyzed” is immaterial.

- 3.1.11 Reliance on Others for Data, Projections, and Supporting Analysis—The actuary may rely on data, projections, and supporting analysis supplied by others. When practicable, the actuary should review the data, projections, and supporting analysis for reasonableness and consistency. For further guidance, the actuary should refer to ASOP No. 23, *Data Quality*, and ASOP No. 41, *Actuarial Communications*. The actuary should disclose the extent of any such reliance.
  - 3.1.12 Subsequent Events—The actuary should make a reasonable effort to be informed about **subsequent events**.
- 3.2 Forming an Opinion with Respect to Asset Adequacy Analysis—In judging whether the results from the **asset adequacy analysis** are satisfactory, the actuary should follow the guidance below:
- 3.2.1 Reasonableness of Results—The actuary should review the modeled future economic and experience conditions and test results for reasonableness.
  - 3.2.2 Adequacy of Reserves and Other Liabilities—When forming an opinion, the actuary should consider whether the reserves and other **liabilities** being tested are adequate under **moderately adverse conditions**, in light of the **assets** supporting

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such reserves and other **liabilities**. To hold reserves or other **liabilities** so great as to withstand any conceivable circumstance, no matter how adverse, would usually imply an excessive level of reserves or **liabilities**.

- 3.2.3 Analysis of Scenario Results—If the supporting **assets** are insufficient to meet the reserves and other **liabilities** under a **scenario**, the actuary should consider whether further analysis is required. However, this situation does not necessarily mandate additional reserves or **liabilities**. Further analysis may indicate that current reserves and other **liabilities** are adequate. For example, if a large number of **scenarios** were run, the failure of a small percentage of them may not indicate the need for additional reserves or **liabilities**.
- 3.2.4 Aggregation of Results—After testing is done, the actuary may consider offsetting deficiencies in one business segment with sufficiencies in another business segment for the purposes of reporting and documenting the results of testing. The actuary should consider the type and timing of **cash flows** and the related **cash flow risks**. When choosing to aggregate results of different business segments, the actuary should consider the comparability of elements of the analysis such as analysis methods, economic **scenarios**, discount rates, and sensitivity of assumptions.
- 3.2.5 Results from Prior Years—The actuary should consider analyzing trends in results over time and reconciling the results from prior years.
- 3.2.6 Management Action—The actuary should consider the insurer’s capacity and intent with regard to in-force management action, including the determination of nonguaranteed elements and dividends. For example, if the actuary reflects future changes in premiums or other policy charges in the analysis, the actuary should consider the asset adequacy, regulatory, and policyholder impact of those changes.
- 3.2.7 Opinions of Other Actuaries—When more than one actuary contributes to forming an opinion, the actuary should review the contributions of these other actuaries. The actuary should then form an overall opinion without claiming reliance on the opinions of other actuaries.
- 3.3 Statement of Actuarial Opinion—The form, content, and recommended language of the statement of actuarial opinion may be specified by applicable law. The actuary should include a statement on the adequacy of reserves and other **liabilities** based on an **asset adequacy analysis**, the details of which are contained in the supporting memorandum.
- 3.4 Documentation—The actuary should consider preparing and retaining documentation to support compliance with the requirements of section 3 and the disclosure requirements of section 4. The actuary should consider preparing such documentation in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary’s work or could assume the assignment if necessary. The degree of such

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documentation should be based on the professional judgment of the actuary and may vary with the complexity and purpose of the actuarial services. In addition, the actuary should refer to ASOP No. 41, section 3.8, for guidance related to the retention of file material other than that which is to be disclosed under section 4.

### Section 4. Communications and Disclosures

- 4.1 Required Disclosures in an Actuarial Report—When issuing an actuarial report under this standard, including statements of actuarial opinion, regulatory asset adequacy issues summaries (RAAISs), and supporting memoranda, the actuary should refer to ASOP Nos. 5, 7, 23, 28, and 41. In addition, the actuary should disclose the following, whether or not required by applicable law:
- a. whether additional reserves have been established due to the **asset adequacy analysis** (see section 3.1);
  - b. the **asset adequacy analysis** methods chosen (see section 3.1.1);
  - c. any material changes in the methods, models, or assumptions from those used in the prior opinion;
  - d. the material risks analyzed, any sensitivity tests performed on those risks, and the results of those tests, when relevant (see sections 3.1 and 3.1.9);
  - e. the assumptions chosen and any trends reflected in the assumptions (see section 3.1.3);
  - f. the margins chosen, even if the actuary concludes that a margin is not necessary (see section 3.1.4);
  - g. whether any aggregation was done, either during testing or during analysis of results (see sections 3.1.5 and 3.2.4);
  - h. the use of **cash flows** from other financial calculations in the **asset adequacy analysis** (see section 3.1.6);
  - i. the reasonableness of any prior period data, studies, financial calculations, and methods; that key assumptions are still appropriate; and that no material events have occurred prior to the valuation date that would invalidate the **asset adequacy analysis** on which the actuary's opinion is based (see section 3.1.7);
  - j. the testing horizon used in the **asset adequacy analysis** (see section 3.1.8);
  - k. extent of any reliance on the work product of others (see section 3.1.11);
  - l. any **subsequent events** that have occurred (see section 3.1.12);

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- m. the basis of any judgment about the adequacy of reserves or other **liabilities** (see section 3.2.3);
  - n. the assumed results of management actions considered in forming an opinion (see section 3.2.6); and
  - o. any deficiencies or limitations in the data, analyses, assumptions, or related information used in the **asset adequacy analysis**.
- 4.2 Additional Disclosures in an Actuarial Report—The actuary should also include the following disclosures, as applicable, in an actuarial report:
- a. the disclosure in ASOP No. 41, section 4.2, if any material assumption or method was prescribed by applicable law;
  - b. the disclosure in ASOP No. 41, section 4.3, if the actuary states reliance on other sources 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**

### **Background and Current Practices**

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

#### **Background**

In 1975, the National Association of Insurance Commissioners (NAIC) began requiring that a statement of actuarial opinion on reserves and related actuarial items be included in the annual statement filed by life and health insurance companies. In response to this requirement, the American Academy of Actuaries promulgated Financial Reporting Recommendation No. 7, *Statement of Actuarial Opinion for Life Insurance Company Statutory Annual Statements*, setting forth the actuary's professional responsibilities in providing such an opinion.

The form and content of this actuarial opinion, as specified in the instructions to the annual statement, dealt specifically with reserves and did not explicitly address the adequacy of the assets supporting these reserves and other liabilities to meet the obligations of the company. Although not explicitly required to do so by the opinion or by existing professional standards, some actuaries began to analyze the adequacy of assets in forming their opinions. In addition, when the state of New York adopted the 1980 amendments to the *Standard Valuation Law*, it established an optional valuation basis for annuities, permitting lower reserves provided that an asset adequacy analysis supported the actuarial opinion with respect to such reserves.

The type of asset adequacy analysis most widely used by actuaries is multi-scenario cash flow testing. To guide actuaries choosing to use this technique, the Actuarial Standards Board (ASB) adopted ASOP No. 7, then titled *Performing Cash Flow Testing for Insurers*, in October 1988. In addition, in July 1990, the ASB adopted ASOP No. 14, *When to Do Cash Flow Testing for Life and Health Insurance Companies*, to provide guidance in determining whether to do cash flow testing in forming a professional opinion or recommendation.

In December 1990, the NAIC amended the *Standard Valuation Law*, and, in June 1991, the NAIC adopted the *Actuarial Opinion and Memorandum Regulation (AOMR)*. These actions had the effect of moving the requirement for the statement of actuarial opinion from the annual statement instructions into the model law itself and provided detailed instructions for the form and content of the opinion and the newly required supporting memorandum. The most significant changes made by the NAIC in the 1991 *AOMR* were that companies were required to name an appointed actuary, and, for companies subject to section 8 of the *AOMR*, statements of actuarial opinion on reserve and other liability adequacy were required to be based on an asset adequacy analysis described in the supporting memorandum. The asset adequacy analysis required by the regulation must conform to the standards of practice promulgated by the ASB.

For companies subject to section 7, the 1991 *AOMR* required an actuarial opinion that the reserves and related actuarial items have been calculated in accordance with the *Standard*

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*Valuation Law* and supporting regulations. Section 7 of the 1991 AOMR did not require an opinion on reserve adequacy.

The ASB adopted Actuarial Compliance Guideline (ACG) No. 4, *Statutory Statements of Opinion Not Including an Asset Adequacy Analysis by Appointed Actuaries for Life and Health Insurers*, in 1993 to provide guidance for section 7 opinions.

In 1993, the ASB also adopted ASOP No. 22, *Statutory Statements of Opinion Based on Asset Adequacy Analysis by Appointed Actuaries for Life or Health Insurers*, which replaced Financial Reporting Recommendation No. 7 and No. 11 as guidance for section 8 opinions.

In the late 1990s and early 2000s, the ASB reviewed all standards of practice related to cash flow testing. Portions of ASOP No. 14 were incorporated into ASOP No. 7 and ASOP No. 22. In 2001, the ASB adopted the revised ASOP No. 7 and ASOP No. 22, and repealed ASOP No. 14.

Starting in 2001, the model AOMR adopted by the NAIC required all actuarial opinions to be based on asset adequacy analysis.

In addition to the AOMR, actuarial opinions are required under the NAIC's *Synthetic Guaranteed Investment Contracts Model Regulation* and under the NAIC's *Separate Accounts Funding Guaranteed Minimum Benefits under Group Contracts Model Regulation*.

In 2012, the NAIC initially adopted the *Valuation Manual*, which sets forth the minimum reserve and related requirements for jurisdictions where the *Standard Valuation Law*, as amended by the NAIC in 2009, has been enacted. The *Valuation Manual* took effect on January 1, 2017, pursuant to section 11 of the *Standard Valuation Law*. Requirements for the annual actuarial opinion and memorandum pursuant to section 3 of the *Standard Valuation Law* are provided in "VM-30: Actuarial Opinion and Memorandum Requirements." In December 2017, the NAIC adopted Actuarial Guideline LI, *The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves*, which provides uniform guidance and clarification of requirements for asset adequacy testing for long-term care insurance. The NAIC plans to incorporate Actuarial Guideline LI into VM-30 at a future date.

In response to these NAIC activities, the ASB decided to revise this ASOP.

### Current Practices

Statements of actuarial opinion on reserves and related items have been provided since 1975, and practice regarding the basic elements of the opinion is well established. With respect to opinions based on asset adequacy analysis, current practice continues to evolve.

Actuaries who perform asset adequacy analysis use professional judgment in choosing the appropriate methods, testing periods, modeling techniques, levels of aggregation, etc. The actuary forms an opinion based on the results of the asset adequacy analysis results and any additional analyses needed to render that opinion. The actuarial memorandum discloses the details of the asset adequacy analysis and the basis for the actuary's opinion. Additional

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documentation may be prepared by the actuary as appropriate to support the actuarial memorandum.