ACTUARIAL STANDARDS BOARD

# • SECOND EXPOSURE DRAFT •

**Proposed Revision of**
**Actuarial Standard**
**of Practice**
**No. 4**

# Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

**Comment Deadline:**
**July 31, 2020**

**Developed by the**
**Pension Committee of the**
**Actuarial Standards Board**

**Approved by the**
**Actuarial Standards Board**
**December 2019**

## TABLE OF CONTENTS

**APPENDIX**

December 2019

**TO:** Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

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

**SUBJ:** Proposed Revision of Actuarial Standard of Practice (ASOP) No. 4

This document contains the second exposure draft of a proposed revision of ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions.* Please review this exposure draft and give the ASB the benefit of your comments and suggestions. Each written comment letter or email received by the comment deadline will receive 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 email, 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 email if your comments are being submitted on your own behalf or on behalf of a company or organization.

ASOP No. 4 Revision (Second Exposure Draft)
Actuarial Standards Board
1850 M Street, NW, Suite 300
Washington, DC 20036

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. The ASB disclaims any responsibility for the content of the comments, which are solely the responsibility of those who submit them.

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

**Deadline** for receipt of responses in the ASB office: **July 31, 2020**

History of the Standard

The ASB provides guidance for measuring pension and retiree group benefit obligations through the series of ASOPs listed below.

1. ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*;

2. ASOP No. 6, *Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions*;

3. ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*;

4. ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*;

5. ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations*; and

6. ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions.*

The last revision of ASOP No. 4 was issued in December 2013.

In response to specific requests for changes in the ASOPs and other activity related to public pension plans, in July 2014 the ASB issued a Request for Comments on the topic of ASOPs and Public Pension Plan Funding and Accounting. Over 50 comment letters were received covering a wide variety of potential ASB actions. In December 2014, the ASB formed the Pension Task Force and charged it with reviewing these comments and other relevant reports and input to develop recommendations for ASB next steps. In July 2015, the ASB held a public hearing on actuarial standards of practice applicable to actuarial work regarding public plans. The Pension Task Force provided its report to the ASB in February 2016. The report included suggestions for changes to the ASOPs that would apply to all areas of pension practice. In June 2016, the ASB directed its Pension Committee to draft appropriate modifications to the actuarial standards of practice, in accordance with ASB procedures, to implement the suggestions of the Pension Task Force.

One of the suggestions made by the Pension Task Force was the calculation and disclosure of a solvency value for all valuations of pension plans done for funding purposes. This disclosure was referred to as an investment risk defeasement measure in the first exposure draft and a low-default-risk obligation measure in this exposure draft. The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the "right" liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.

First Exposure Draft

The first exposure draft was issued in March 2018 with a comment deadline of July 31, 2018. Sixty-seven comment letters were received and considered in making changes that are reflected in the second exposure draft.

Notable Changes from the First Exposure Draft

Notable changes made to the first exposure draft are summarized below. Additional changes were made to improve readability, clarity, or consistency.

1. Section 3.8, Actuarial Assumptions, was modified to clarify the requirements regarding the combined effect of assumptions.

2. Section 3.11, Investment Risk Defeasement Measure, was renamed Low-Default-Risk Obligation Measure, and the guidance for calculating such measure was modified substantially.

3. Section 3.14, Amortization Method, was modified with regard to requirements applicable to a method selected by the actuary and the factors the actuary should consider in selecting a method.

4. Section 3.16, Output Smoothing Method, was modified to clarify how to determine whether a reasonable relationship exists between the smoothed contribution and the actuarially determined contribution without regard to the output smoothing method.

5. Section 3.19, Implications of Contribution Allocation Procedure or Funding Policy, was modified to eliminate exceptions to the requirement that the actuary should assess such implications whenever the actuary is performing a funding valuation.

6. New section 3.20, Contribution Lag, was added to clarify guidance that was previously found in section 3.21.

7. Section 3.21, Reasonable Actuarially Determined Contribution, was modified to clarify when the section applies and to further clarify the guidance with respect to assumptions and methods set by another party.

8. Section 3.24, Volatility, was modified to direct an actuary analyzing potential economic and demographic volatility to refer to ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, for additional guidance.

9. Section 3.26, Documentation, was added to provide guidance on documenting work within the scope of this ASOP.

10. Section 4.1, Required Disclosures in an Actuarial Report, was renamed and modified to align the guidance with changes made to section 3.

Request for Comments

The ASB appreciates comments and suggestions on all areas of this revision. Rationale and recommended wording for any suggested changes would be helpful.

The ASB voted in December 2019 to approve this exposure draft.

*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.*

# PROPOSED REVISION OF ACTUARIAL STANDARD OF PRACTICE NO. 4

# MEASURING PENSION OBLIGATIONS AND DETERMINING PENSION PLAN COSTS OR CONTRIBUTIONS

## STANDARD OF PRACTICE

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

1.1 Purpose—This actuarial standard of practice (ASOP or standard) provides guidance to actuaries when performing actuarial services with respect to measuring obligations under a defined benefit pension plan (also referred to as "plan" or "pension plan" throughout this standard) and determining **periodic costs** or **actuarially determined contributions** for such plans. Other actuarial standards of practice address actuarial assumptions and asset valuation methods. This standard addresses broader measurement issues, including **cost allocation procedures** and **contribution allocation procedures**. This standard provides guidance for coordinating and integrating all of the elements of an **actuarial valuation** of a pension plan.

1.2 Scope—This standard applies to actuaries when performing actuarial services with respect to the following tasks in connection with a pension plan:

a. measurement of pension obligations. Examples include determinations of **funded status**, assessments of solvency upon plan termination, market measurements and measurements for use in pricing benefit provisions;

b. assignment of the value of plan obligations to time periods. Examples include **actuarially determined contributions**, **periodic costs**, and **actuarially determined contribution** or **periodic cost** estimates for potential plan changes;

c. development of a **cost allocation procedure** used to determine **periodic costs** for a plan;

d. development of a **contribution allocation procedure** used to determine **actuarially determined contributions** for a plan;

e. determination of the types and levels of benefits supportable by specified cost or contribution levels; and

f. projection of pension obligations, **periodic costs** or **actuarially determined contributions**, and other related measurements. Examples include cash flow projections and projections of a plan's **funded status**.

Throughout this standard, any reference to selecting actuarial assumptions, **actuarial cost methods**, asset valuation methods, **amortization methods**, and **output smoothing methods** also includes giving advice on selecting actuarial assumptions, **actuarial cost methods**, asset valuation methods, **amortization methods**, and **output smoothing methods**. In addition, any reference to developing or modifying a **cost allocation procedure** or **contribution allocation procedure** includes giving advice on developing or modifying a **cost allocation procedure** or **contribution allocation procedure**.

ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, and ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*, provide guidance concerning actuarial assumptions. ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations*, provides guidance concerning asset valuation methods. In the event of a conflict between the guidance provided in this ASOP and the guidance in any of the aforementioned ASOPs, this standard governs.

This standard does not apply to actuaries when performing services with respect to individual benefit calculations, individual benefit statement estimates, annuity pricing, nondiscrimination testing, and social insurance programs as described in section 1.2, Scope, of ASOP No. 32, *Social Insurance* (unless an ASOP on social insurance explicitly calls for application of this standard).

This standard does not require the actuary to evaluate the ability or willingness of the plan sponsor or other contributing entity to make contributions to the plan when due.

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 4.3. 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 any actuarial report that meets the following criteria: (a) the actuarial report is issued on or after a date that is 12 months after the date of adoption of this standard by the Actuarial Standards Board; and (b) the **measurement date** in the actuarial report is on or after a date that is 12 months after the date of adoption of this standard by the Actuarial Standards Board.

## Section 2. Definitions

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

2.1 Actuarial Accrued Liability—The portion of the **actuarial present value of projected benefits** (and **expenses**, if applicable), as determined under a particular **actuarial cost method** that is not provided for by future **normal costs**. Under certain **actuarial cost methods**, the **actuarial accrued liability** is dependent upon the actuarial value of assets.

2.2 Actuarial Cost Method—A procedure for allocating the **actuarial present value of projected benefits** (and **expenses**, if applicable) to time periods, usually in the form of a **normal cost** and an **actuarial accrued liability**. For purposes of this standard, a pay-as-you-go method is not considered to be an **actuarial cost method**.

2.3 Actuarial Present Value—The discounted value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions with regard to future events, observations of market or other valuation data, or a combination of assumptions and observations.

2.4 Actuarial Present Value of Projected Benefits—The **actuarial present value** of benefits that are expected to be paid in the future, taking into account the effect of such items as future service, advancement in age, and anticipated future compensation (sometimes referred to as the "present value of future benefits").

2.5 Actuarial Valuation—The measurement of relevant pension obligations and, when applicable, the determination of **periodic costs** or **actuarially determined contributions**.

2.6 Actuarially Determined Contribution—A potential payment to the plan as determined by the actuary using a **contribution allocation procedure**. It may or may not be the amount actually paid by the plan sponsor or other contributing entity.

2.7 Amortization Method—A method under a **contribution allocation procedure** or **cost allocation procedure** for determining the amount, timing, and pattern of recognition of the unfunded **actuarial accrued liability**.

2.8 Contribution Allocation Procedure—A procedure that uses an **actuarial cost method**, and that may include an asset valuation method, an **amortization method**, and an **output smoothing method**, to determine the **actuarially determined contribution** for a plan. The procedure may produce a single value, such as **normal cost** plus an amortization payment of the unfunded **actuarial accrued liability**, or a range of values, such as the range from the ERISA minimum required contribution to the maximum tax-deductible amount.

2.9 Cost Allocation Procedure—A procedure that uses an **actuarial cost method**, and that may include an asset valuation method and an **amortization method**, to determine the **periodic**

**cost** for a plan (for example, the procedure to determine the net periodic pension cost under accounting standards).

2.10 Expenses—Administrative or investment fees or other payments borne or expected to be borne by the plan.

2.11 Funded Status—Any comparison of a particular measure of plan assets to a particular measure of plan obligations.

2.12 Funding Valuation—A measurement of pension obligations or projection of cash flows performed by the actuary intended to be used by the principal to determine plan contributions or to evaluate the adequacy of specified contribution levels to support benefit provisions.

2.13 Gain and Loss Analysis—An analysis of the effect on the plan's **funded status** between two **measurement dates** resulting from the difference between expected experience based upon a set of actuarial assumptions and actual experience.

2.14 Immediate Gain Actuarial Cost Method—An **actuarial cost method** under which actuarial gains and losses are included as part of the unfunded **actuarial accrued liability** of the pension plan, rather than as part of the **normal cost** of the plan.

2.15 Market-Consistent Present Value—An **actuarial present value** that is estimated to be consistent with the price at which benefits that are expected to be paid in the future would trade in an open market between a knowledgeable seller and a knowledgeable buyer. The existence of a deep and liquid market for pension cash flows or for entire pension plans is not a prerequisite for this present value measurement.

2.16 Measurement Date—The date as of which the values of the pension obligations and, if applicable, assets are determined.

2.17 Normal Cost—The portion of the **actuarial present value of projected benefits** (and **expenses**, if applicable) that is allocated to a period, typically twelve months, under the **actuarial cost method**. Under certain **actuarial cost method**s, the **normal cost** is dependent upon the actuarial value of assets.

2.18 Output Smoothing Method—A method to reduce volatility of the results of a **contribution allocation procedure**. The **output smoothing method** may be a component of the **contribution allocation procedure** or may be applied to the results of a **contribution allocation procedure**. **Output smoothing methods** include techniques such as 1) phasing in the impact of assumption changes on contributions, 2) blending a prior valuation with a subsequent valuation to determine contributions, or 3) placing a corridor around changes in the dollar amount, contribution rate, or percentage change in contributions from year to year. An **output smoothing method** may involve a combination of techniques.

2.19 Participant—An individual who satisfies the requirements for participation in the plan.

2.20 Periodic Cost—The amount assigned to a period using a **cost allocation procedure** for purposes other than funding. This may be a function of plan obligations, **normal cost**, **expenses**, or assets. In many situations, **periodic cost** is determined for accounting purposes.

2.21 Plan Provisions—The relevant terms of the plan document and any relevant administrative practices known to the actuary.

2.22 Prescribed Assumption or Method Set by Another Party—A specific assumption or method that is selected by another party, to the extent that law, regulation, or accounting standards gives the other party responsibility for selecting such an assumption or method. For this purpose, an assumption or method set by a governmental entity for a plan that such governmental entity or a political subdivision of that entity directly or indirectly sponsors is deemed to be a **prescribed assumption or method set by another party**.

2.23 Prescribed Assumption or Method Set by Law—A specific assumption or method that is mandated or that is selected from a specified range or set of assumptions or methods that is deemed to be acceptable by applicable law (statutes, regulations, or other legally binding authority). For this purpose, an assumption or method set by a governmental entity for a plan that such governmental entity or a political subdivision of that entity directly or indirectly sponsors is not deemed to be a **prescribed assumption or method set by law**.

2.24 Spread Gain Actuarial Cost Method—An **actuarial cost method** under which actuarial gains and losses are included as part of the current and future **normal costs** of the plan.

## Section 3. Analysis of Issues and Recommended Practices

3.1 Overview—Measuring pension obligations and determining **periodic costs** or **actuarially determined contributions** are processes in which the actuary may be required to make judgments or recommendations on the choice of actuarial assumptions, **actuarial cost methods**, asset valuation methods, **amortization methods**, and **output smoothing methods**.

The actuary may have the responsibility and authority to select some or all actuarial assumptions, **actuarial cost methods**, asset valuation methods, **amortization methods**, and **output smoothing methods**. In other circumstances, the actuary may be asked to advise the individuals who have that responsibility and authority. In yet other circumstances, the actuary may perform actuarial calculations using **prescribed assumptions or methods set by another party** or **prescribed assumptions or methods set by law**.

3.2 General Procedures—When measuring pension obligations and determining **periodic costs** or **actuarially determined contributions**, the actuary should perform the following general procedures:

a. identify the purpose of the measurement (section 3.3);

b. identify the **measurement date** (section 3.4);

c. identify **plan provisions** applicable to the measurement and any associated valuation issues (section 3.5);

d. gather data necessary for the measurement (section 3.6);

e. obtain from the principal other information necessary for the purpose of the measurement (section 3.7);

f. select actuarial assumptions, if applicable (section 3.8);

g. consider how to measure accrued or vested benefits, if applicable (section 3.9);

h. consider how to measure **market-consistent present values**, if applicable (section 3.10);

i. calculate a low-default-risk obligation measure, if applicable (section 3.11);

j. reflect how plan or plan sponsor assets as of the **measurement date** are reported, if applicable (section 3.12);

k. select an **actuarial cost method**, if applicable (section 3.13);

l. select an **amortization method**, if applicable (section 3.14);

m. select an asset valuation method, if applicable (section 3.15);

n. select an **output smoothing method**, if applicable (section 3.16);

o. select a **cost allocation procedure** or **contribution allocation procedure**, if applicable (sections 3.17 and 3.18);

p. assess the implications of the **contribution allocation procedure** or plan sponsor's funding policy, if applicable (section 3.19);

q. calculate a reasonable **actuarially determined contribution**, if applicable (sections 3.20 and 3.21);

r. perform a **gain and loss analysis**, if applicable (section 3.22);

s. consider the use of approximations and estimates (section 3.23);

t. consider the sources of significant volatility, if applicable (section 3.24); and

u. assess the assumptions and methods not selected by the actuary, if applicable (section 3.25).

3.3 Purpose of the Measurement—The actuary should reflect the purpose of the measurement. Examples of measurement purposes include the following:

a. determining **periodic costs** or **actuarially determined contributions**;

b. assessing **funded status**;

c. pricing benefit provisions;

d. comparing benefit provisions between plans;

e. determining withdrawal liabilities or benefit plan settlements; and

f. measuring pension obligations for plan sponsor mergers and acquisitions.

3.3.1 Projected or Point-in-Time Measurements—The actuary should consider whether assumptions or methods need to change for measurements projected into the future compared to point-in-time measurements.

3.3.2 Uncertainty or Risk—In conjunction with the related guidance in ASOP No. 41, *Actuarial Communications,* and ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, the actuary should consider the uncertainty or risk inherent in the measurement assumptions and methods and how the actuary's measurement treats such uncertainty or risk.

3.4 Measurement Date Considerations—The actuary should address the following **measurement date** considerations:

3.4.1 Information as of a Different Date—The actuary may estimate asset and **participant** information at the **measurement date** on the basis of information as of a different date. In these circumstances, the actuary should make appropriate adjustments to the data. Alternatively, the actuary may calculate the obligations as of a different date and then adjust the obligations to the **measurement date** (see section 3.4.3 for additional guidance). In either case, the actuary should determine that any such adjustments are reasonable in the actuary's professional judgment, given the purpose of the measurement.

3.4.2 Events after the Measurement Date—If the actuary is aware of events that occur subsequent to the **measurement date** and prior to the date of the actuarial communication, the actuary should reflect those events appropriately for the purpose of the measurement. Unless the purpose of the measurement requires the inclusion of such events, the actuary may, but need not, reflect these events in the measurement.

3.4.3 Adjustment of Prior Measurement—The actuary may adjust the results from a prior measurement in lieu of performing a new detailed measurement if, in the actuary's professional judgment, such an adjustment would produce a reasonable result for purposes of the measurement. To determine whether such an adjustment would produce a reasonable result, the actuary should consider items such as the following, if known to the actuary:

a. changes in the number of **participants** or the demographic characteristics of that group;

b. length of time since the prior measurement;

c. differences between actual and expected contributions, benefit payments, **expenses**, and investment performance;

d. changes in economic and demographic expectations; and

e. changes in **plan provisions**.

When adjusting obligations from a prior **measurement date**, the actuary should consider whether the assumptions used to determine the obligations should be revised.

3.5 Plan Provisions—When measuring pension obligations and determining **periodic costs** or **actuarially determined contributions**, the actuary should reflect all significant **plan provisions** known to the actuary, as appropriate for the purpose of the measurement. However, if in the actuary's professional judgment, omitting a significant **plan provision** is appropriate for the purpose of the measurement, the actuary should disclose the omission in accordance with section 4.1(e).

3.5.1 Adopted Changes in Plan Provisions—Unless contrary to applicable law, the actuary should reflect **plan provisions** adopted on or before the **measurement date** for at least the portion of the period during which those provisions are in effect. Unless the purpose of the measurement requires that such **plan provisions** be reflected, the actuary may, but need not, reflect **plan provisions** adopted after the **measurement date**.

3.5.2 Proposed Changes in Plan Provisions—The actuary should reflect proposed changes in **plan provisions** as appropriate for the purpose of the measurement.

3.5.3 Plan Provisions That are Difficult to Measure—Some **plan provisions** may create pension obligations that are difficult to appropriately measure using traditional valuation procedures. Examples of such **plan provisions** include the following:

a. gain-sharing provisions that trigger benefit increases when investment returns are favorable but do not trigger benefit decreases when investment returns are unfavorable;

b. floor-offset provisions that provide a minimum defined benefit in the event a **participant's** account balance in a separate plan falls below some threshold;

c. benefit provisions that are tied to an external index, but subject to a floor or ceiling, such as certain cost-of-living-adjustment provisions and cash-balance-crediting provisions; and

d. benefit provisions that may be triggered by an event such as a plant shutdown or a change in control of the plan sponsor.

For such **plan provisions**, the actuary should consider using alternative valuation procedures, such as stochastic modeling, option-pricing techniques, or deterministic procedures in conjunction with assumptions that are adjusted to reflect the impact of variations in experience from year to year. When selecting alternative valuation procedures for such **plan provisions**, the actuary should use professional judgment based on the purpose of the measurement and other relevant factors.

The actuary should disclose the valuation procedures used to value any significant **plan provisions** of the type described in this section 3.5.3, in accordance with section 4.1(f).

3.6 Data—With respect to the data used for measurements, including data supplied by others, the actuary should refer to ASOP No. 23, *Data Quality*, for guidance.

3.6.1 Participants—The actuary should include in the measurement all **participants** reported to the actuary, except in appropriate circumstances where the actuary may exclude persons such as those below a minimum age or service level. When appropriate, the actuary may include employees who might become **participants** in the future.

3.6.2 Hypothetical Data—When appropriate, the actuary may prepare measurements based on assumed demographic characteristics of current or future plan **participants**.

3.7 Other Information from the Principal—The actuary should obtain from the principal other information, such as accounting policies or funding elections, necessary for the purpose of the measurement.

3.8 Actuarial Assumptions—The actuary should refer to ASOP Nos. 27 and 35 for guidance on the selection and assessment of actuarial assumptions. In addition, the actuary should assess whether the combined effect of assumptions, other than 1) **prescribed assumptions or methods set by law** and 2) assumptions that the actuary has not selected and is unable to assess for reasonableness for the purpose of the measurement, is expected to have no significant bias (i.e., it is not significantly optimistic or pessimistic) except when provisions for adverse deviation are included.

3.9 Measuring the Value of Accrued or Vested Benefits—Depending on the scope of the assignment, the actuary may measure the value of any accrued or vested benefits as of a **measurement date**. The actuary should consider the following when making such measurements:

a. relevant **plan provisions** and applicable law;

b. the status of the plan (for example, whether the plan is assumed to continue to exist or be terminated);

c. the contingencies upon which benefits become payable, which may differ for ongoing-basis and termination-basis measurements;

d. the extent to which **participants** have satisfied relevant eligibility requirements for accrued or vested benefits and the extent to which future service or advancement in age may satisfy those requirements;

e. whether or the extent to which death, disability, or other ancillary benefits are accrued or vested;

f. whether the **plan provisions** regarding accrued benefits provide an appropriate attribution pattern for the purpose of the measurement (for example, following the attribution pattern of the **plan provisions** may not be appropriate if the plan's benefit accruals are significantly back-loaded); and

g. if the measurement reflects the impact of a special event (such as a plant shutdown or plan termination), factors such as the following:

1. the effect of the special event on continued employment;

2. the impact of the special event on **participant** behavior due to factors such as subsidized payment options;

3. **expenses** associated with a potential plan termination, including transaction costs to liquidate plan assets; and

4. changes in investment policy.

3.10 Market-Consistent Present Values—If the actuary calculates a **market-consistent present value**, the actuary should do the following:

a. select assumptions based on the actuary's observation of the estimates inherent in market data in accordance with the guidance in ASOP Nos. 27 and 35, depending on the purpose of the measurement; and

b. reflect benefits earned as of the **measurement date**.

In addition, the actuary may consider how benefit payment default risk or the financial health of the plan sponsor affects the calculation.

3.11 Low-Default-Risk Obligation Measure—If the actuary is performing a **funding valuation**, the actuary should calculate and disclose a low-default-risk obligation measure of the benefits earned as of the **measurement date**.

When calculating this measure, the actuary should select a discount rate derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future. Examples of discount rates that may meet these requirements include, but are not limited to, the following:

a. US Treasury yields;

b. rates implicit in settlement of plan obligations including payment of lump sums and purchases of annuities from insurance companies;

c. yields on corporate or tax-exempt general obligation municipal bonds that receive one of the two highest ratings given by a recognized ratings agency;

d. non-stabilized ERISA funding rates for single employer plans; and

e. multiemployer current liability rates.

When calculating this measure, the actuary should use an **immediate gain actuarial cost method**.

When benefits are affected by the assumed discount rate or expected investment return, the actuary may reflect the impact of variations in benefits earned as of the **measurement date**.

Other than the discount rate, the actuary may use the same assumptions used in the **funding valuation** for this measure. Alternatively, the actuary may select other reasonable assumptions in accordance with ASOP Nos. 27 and 35.

3.12 Relationship between Asset and Obligation Measurement—The actuary should reflect how plan or plan sponsor assets as of the **measurement date** are reported. For example, if the plan or plan sponsor assets have been reduced to reflect a lump sum paid, the lump sum or the related annuity value is excluded from the obligation.

3.13 Actuarial Cost Method—When selecting an **actuarial cost method** to assign **periodic costs** or **actuarially determined contributions** to time periods in advance of the time benefit payments are due, the actuary should select an **actuarial cost method** that meets the following criteria:

a. the period over which **normal costs** are allocated for a **participant** begins no earlier than the date of employment and does not extend beyond the last assumed retirement age. The period may be applied to each individual **participant** or to groups of **participants** on an aggregate basis.

When a plan has no active **participants** and no **participants** are accruing benefits, a reasonable **actuarial cost method** will not produce a **normal cost** for benefits. For purposes of this standard, an employee does not cease to be an active **participant** merely because he or she is no longer accruing benefits under the plan;

b. the attribution of **normal costs** bears a reasonable relationship to some element of the plan's benefit formula or the **participant's** compensation or service. The attribution basis may be applied on an individual or group basis. For example, the **actuarial present value of projected benefits** for each **participant** may be allocated by that **participant's** own compensation or may be allocated by the aggregated compensation for a group of **participants**;

c. **expenses** are considered when assigning **periodic costs** or **actuarially determined contributions** to time periods. For example, the **expenses** for a period may be added to the **normal cost** for benefits or **expenses** may be reflected as an adjustment to the investment return assumption or the discount rate. As another example, **expenses** may be reflected as a percentage of pension obligation or **normal cost**; and

d. the sum of the **actuarial accrued liability** and the **actuarial present value** of future **normal costs** equals the **actuarial present value of projected benefits** and **expenses**, to the extent **expenses** are included in the **actuarial accrued liability** and **normal cost**. For purposes of this criterion, under a **spread gain actuarial cost method**, the sum of the actuarial value of assets and the unfunded **actuarial accrued liability**, if any, shall be considered to be the **actuarial accrued liability**.

If the actuary discloses a **funded status** measurement using a **spread gain actuarial cost method**, then the actuary should calculate a **funded status** measurement using an **immediate gain actuarial cost method**.

3.14 Amortization Method—If the actuary selects an **amortization method**, the actuary should select an **amortization method** for each amortization base that is expected to produce amortization payments that fully amortize the amortization base within a reasonable time period or reduce the outstanding balance by a reasonable amount each year.

For purposes of determining a reasonable time period or a reasonable amount, the actuary should consider factors including, but not limited to, the following, if applicable:

a. whether the **amortization method** is open or closed;

b. the source of the amortization base;

c. the anticipated pattern of the amortization payments, including the length of time until amortization payments exceed nominal interest on the outstanding balance;

d. whether the amortization base is positive or negative;

e. the duration of the **actuarial accrued liability**;

f. the average remaining service lifetime of active plan **participants**; and

g. the **funded status** of the plan or period to plan insolvency.

If the actuary selects an **amortization method**, the actuary should select an **amortization method** that is expected to produce total amortization payments that are expected to fully amortize the unfunded **actuarial accrued liability** within a reasonable time period or reduce the unfunded **actuarial accrued liability** by a reasonable amount within a sufficiently short period.

The actuary should assess whether the unfunded **actuarial accrued liability** is expected to be fully amortized.

For purposes of this section, the actuary should assume that all actuarial assumptions will be realized and **actuarially determined contributions** will be made when due.

3.15 Asset Valuation Method—The actuary should refer to ASOP No. 44 for guidance on the selection and use of an asset valuation method.

3.16 Output Smoothing Method—If the actuary selects an **output smoothing method**, the actuary should select an **output smoothing method** that results in a reasonable relationship between the smoothed contribution and the **actuarially determined contribution** without output smoothing. A reasonable relationship includes the following:

a. the **output smoothing method** produces a value that does not fall below a reasonable range around the corresponding **actuarially determined contribution** without output smoothing; and

b. any shortfalls of the smoothed contribution to the **actuarially determined contribution** without output smoothing are recognized within a reasonable period of time.

3.17 Allocation Procedure—When selecting a **cost allocation procedure** or **contribution allocation procedure**, the actuary should consider the following:

a. the balance among benefit security, intergenerational equity, and stability or predictability of **periodic costs** or **actuarially determined contributions**;

b. the timing and duration of expected benefit payments;

c. the nature and frequency of plan amendments; and

d. relevant input from the principal, for example, a desire to achieve a target funding level within a specified time frame.

3.18 Consistency between Contribution Allocation Procedure and the Payment of Benefits—When selecting a **contribution allocation procedure**, the actuary should select a **contribution allocation procedure** that, in the actuary's professional judgment, is consistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make **actuarially determined contributions** when due. In some circumstances, a **contribution allocation procedure** may not be expected to produce adequate assets to make benefit payments when they are due even if the actuary uses a combination of assumptions selected in accordance with ASOP Nos. 27 and 35, an **actuarial cost method** selected in accordance with section 3.13 of this standard, and an asset valuation method selected in accordance with ASOP No. 44.

Examples of such circumstances include the following:

a. a plan covering a sole proprietor with funding that continues past an expected retirement date with payment due in a lump sum;

b. using the aggregate **actuarial cost method** for a plan covering three employees, in which the principal is near retirement and the other employees are relatively young; and

c. a plan amendment with an amortization period so long that overall plan **actuarially determined contributions** would be scheduled to occur too late to make plan benefit payments when due.

3.19 Implications of Contribution Allocation Procedure or Funding Policy—If the actuary is performing a **funding valuation**, the actuary should qualitatively assess the implications of the **contribution allocation procedure** or plan sponsor's funding policy on the plan's expected future contributions and **funded status**. For purposes of this section, contributions set by law or by a contract, such as a collective bargaining agreement, constitute a funding policy. If the **contribution allocation procedure** results in an **actuarially determined contribution** that is less than the **normal cost** plus interest on the unfunded **actuarial accrued liability**, the actuary should estimate how long before the **actuarially determined contribution** is expected to exceed that amount. If contributions are set by law or by a contract (such as a collective bargaining agreement), the actuary should estimate the period over which the unfunded **actuarial accrued liability** is expected to be fully amortized. The actuary should assess whether the **contribution allocation procedure** or funding policy is significantly inconsistent with the plan accumulating assets adequate to make benefit payments when due, and estimate the approximate time until assets are depleted.

For purposes of this section, the actuary may presume that all actuarial assumptions will be realized and the plan sponsor (or other contributing entity) will make contributions anticipated by the **contribution allocation procedure** or funding policy.

3.20 Contribution Lag—When calculating an **actuarially determined contribution**, the actuary should consider taking into account the passage of time between the **measurement date** and the expected timing of actual contributions.

3.21 Reasonable Actuarially Determined Contribution—If the actuary is performing a **funding valuation** where the **actuarially determined contribution** is not based on a **prescribed assumption or method set by law**, the actuary should calculate and disclose an **actuarially determined contribution** using a **contribution allocation procedure** that satisfies the following conditions:

a. all significant assumptions selected by the actuary are reasonable, all significant **prescribed assumptions or methods set by another party** do not significantly conflict with what in the actuary's professional judgment is reasonable in accordance with ASOP Nos. 27 and 35, and the combined effect of these assumptions has no significant bias (i.e., it is not significantly optimistic or pessimistic) except when provisions for adverse deviation are included;

b. if an **actuarial cost method** is used, it should be consistent with section 3.13. If an **actuarial cost method** with individual attribution is used, each **participant's normal cost** should be based on the **plan provisions** applicable to that **participant**;

c. if an **amortization method** is used, it should be consistent with section 3.14;

d. if an asset valuation method is used, it should be consistent with section 3.15;

e. if an **output smoothing method** is used, it should be consistent with section 3.16; and

f. the **contribution allocation procedure** should, in the actuary's professional judgment, be consistent with the plan accumulating assets adequate to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make **actuarially determined contributions** when due.

3.22 Gain and Loss Analysis—If the actuary is performing a **funding valuation**, the actuary should perform a **gain and loss analysis** for the period between the prior **measurement date** and the current **measurement date**, unless in the actuary's professional judgment, successive **gain and loss analyses** would not be appropriate for assessing the reasonableness of the actuarial assumptions. For example, successive **gain and loss analyses** may not provide useful information about the reasonableness of the actuarial assumptions for a small plan in which a single individual accounts for most of the **actuarial accrued liability**. If a **gain and loss analysis** is performed, the actuary should at least separate the total gain or loss into investment gain or loss and other gain or loss.

3.23 Approximations and Estimates—The actuary should use professional judgment to establish a balance between the degree of refinement of methodology and materiality. The actuary may use approximations and estimates where circumstances warrant. The following are some examples of such circumstances:

a. situations in which the actuary reasonably expects the results to be substantially the same as the results of detailed calculations;

b. situations in which the actuary's assignment requires informal or rough estimates; and

c. situations in which the actuary reasonably expects the amounts being approximated or estimated to represent only a minor part of the overall pension obligation, **periodic cost**, or **actuarially determined contribution**.

3.24 Volatility—If the scope of the actuary's assignment includes an analysis of the potential range of future pension obligations, **periodic costs**, **actuarially determined contributions**, or **funded status**, the actuary should consider sources of volatility that, in the actuary's professional judgment, are significant. Examples of potential sources of volatility include the following:

a. plan experience differing from that anticipated by the economic or demographic assumptions, as well as the effect of new entrants;

b. changes in economic or demographic assumptions;

c. the effect of discontinuities in applicable law or accounting standards, such as full funding limitations, the end of amortization periods, or liability recognition triggers;

d. the delayed effect of smoothing techniques, such as the pending recognition of prior experience losses; and

e. patterns of rising or falling **periodic cost** expected when using a particular **actuarial cost method** for the plan population.

When analyzing potential variations in economic and demographic experience or assumptions, the actuary should refer to ASOP No. 51 for additional guidance.

3.25 Assessment of Assumptions and Methods Not Selected by the Actuary—For each **measurement date**, the actuary should assess whether an assumption or method not selected by the actuary is reasonable for the purpose of the measurement, other than 1) **prescribed assumptions or methods set by law** and 2) assumptions or methods that the actuary has not selected and is unable to assess for reasonableness for the purpose of the measurement. For purposes of this assessment, reasonable assumptions or methods are not necessarily limited to those the actuary would have selected for the measurement. In this assessment, the actuary should determine whether the assumption or method significantly conflicts with what, in the actuary's professional judgment, would be reasonable for the purpose of the measurement. If, in the actuary's professional judgment, there is a significant conflict, the actuary should disclose this conflict in accordance with section 4.2(a).

3.26 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. When preparing documentation, the actuary should prepare 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 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 to which this standard applies, the actuary should refer to ASOP Nos. 23, 27, 35, 41, 44, and 51. In addition, such communication should contain the following disclosures when relevant and material. An actuarial communication can comply with some, or all, of the specific requirements of this section by making reference to information contained in other actuarial communications available to the intended users (as defined in ASOP No. 41), such as an annual **actuarial valuation** report.

a. a statement of the intended purpose of the measurement and a statement to the effect that the measurement may not be applicable for other purposes;

b. the **measurement date**;

c. a description of adjustments made for events after the **measurement date** under section 3.4.2;

d. a description of adjustments of prior measurements used under section 3.4.3;

e. an outline or summary of the **plan provisions** reflected in the **actuarial valuation**, a description of known changes in significant **plan provisions** reflected in the **actuarial valuation** from those used in the immediately preceding measurement prepared for a similar purpose, and a description of any significant **plan provisions** not reflected in the **actuarial valuation**, along with the rationale for not reflecting such significant **plan provisions**;

f. a description of the valuation procedures used to value any significant **plan provisions** of the type described in section 3.5.3 such that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work as presented in the actuarial report;

g. the date(s) as of which the **participant** and financial information were compiled;

h. a summary of the **participant** information;

i. if hypothetical data are used, a description of the data;

j. a description of any accounting policies or funding elections made by the principal that are pertinent to the measurement;

k. a description of known changes in assumptions and methods from those used in the immediately preceding measurement prepared for a similar purpose. For assumption and method changes that are not the result of a **prescribed assumption or method set by another party** or a **prescribed assumption or method set by law**, the actuary should include an explanation of the information and analysis that led to those changes. The explanation may be brief but should be pertinent to the plan's circumstances;

l. a statement indicating whether, in the actuary's professional judgment, the combined effect of the assumptions other than 1) **prescribed assumptions or methods set by law** and 2) assumptions that the actuary has not selected and is unable to assess for reasonableness for the purpose of the measurement, is expected to have no significant bias (i.e., it is not significantly optimistic or pessimistic) except when provisions for adverse deviation are included, in accordance with section 3.8;

m. a description of the types of benefits regarded as accrued or vested if the actuary measured the value of accrued or vested benefits, and, to the extent the attribution pattern of accrued benefits differs from or is not described by the **plan provisions**, a description of the attribution pattern;

n. a description of whether and how benefit payment default risk or the financial health of the plan sponsor was included, if a **market-consistent present value** measurement was performed;

o. if applicable, a low-default-risk obligation measure determined in accordance with section 3.11. In addition to the measure, the actuary should disclose the following:

  1. the discount rate used and rationale for its selection;

  2. a description of other significant assumptions that differ from those used in the **funding valuation** and rationale for their selection;

  3. the **immediate gain actuarial cost method** used;

  4. any adjustments made to reflect the impact of variations in benefits earned as of the **measurement date** when benefits are affected by the assumed discount rate or expected investment return; and

  5. related commentary to help the intended user understand the significance of the low-default-risk obligation measure with respect to the **funded status** of the plan, plan contributions, and the security of **participant** benefits.

p. a description of the **actuarial cost method** and the manner in which **normal costs** are allocated, in sufficient detail such that another actuary qualified in the same practice area would be able to understand the significant characteristics of the method (for example, how the **actuarial cost method** is applied to multiple benefit formulas, compound benefit formulas, or benefit formula changes, where such **plan provisions** are significant);

q. if applicable, a description of the particular measures of plan assets and plan obligations that are included in the actuary's disclosure of the plan's **funded status**. For **funded status** measurements that are not prescribed by federal law or regulation, the actuary should accompany this description with each of the following additional disclosures:

  1. whether the **funded status** measure is appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations;

  2. whether the **funded status** measure is appropriate for assessing the need for or the amount of future contributions; and

  3. if applicable, a statement that the **funded status** measure would be different if the measure reflected the market value of assets rather than the actuarial value of assets;

r. **funded status** based on an **immediate gain actuarial cost method** in accordance with section 3.13 if the actuary discloses a **funded status** based on a **spread gain actuarial cost method**. The **immediate gain actuarial cost method** used for this purpose should be disclosed in accordance with section 4.1(p);

s. the remaining balance to be amortized, the remaining amortization period, and the amortization payment included in the **periodic cost** or **actuarially determined contribution** for each amortization base along with a disclosure if the unfunded **actuarial accrued liability** is not expected to be fully amortized;

t. a description of any **output smoothing method** used. Additionally, the actuary should disclose an **actuarially determined contribution** without output smoothing, if calculated;

u. a description of the **cost allocation procedure** or **contribution allocation procedure** including a description of the **amortization method** and any pay-as-you-go funding (i.e., the intended payment by the plan sponsor of some or all benefits when due);

v. a description of how the considerations in section 3.17 have been taken into account in selecting each method of the **contribution allocation procedure** used to determine the reasonable **actuarially determined contribution** satisfying the requirements of section 3.21. The disclosure may be brief but should be pertinent to the plan's circumstances. This section is not applicable to methods not selected by the actuary;

w. a description of all changes in **cost allocation procedures** or **contribution allocation procedures** that are not a result of a **prescribed assumption or method set by law**, including the resetting of an actuarial asset value. The actuary should disclose the reason for the change and the general effects of the change on relevant **periodic cost**, **actuarially determined contribution**, **funded status**, or other measures by words or numerical data, as appropriate. The disclosure of the reason for the change and the general effects of the change may be brief but should be pertinent to the plan's circumstances;

x. a qualitative description of the implications of the **contribution allocation procedure** or plan sponsor's funding policy on future expected plan contributions and **funded status** in accordance with section 3.19, if applicable. The actuary should disclose the significant characteristics of the **contribution allocation procedure** or plan sponsor's funding policy, and the significant assumptions used in the assessment;

y. if applicable, that the **contribution allocation procedure** results in an **actuarially determined contribution** that is less than the **normal cost** plus interest on the unfunded **actuarial accrued liability** and, in that case, how long before the

**actuarially determined contribution** is expected to exceed that amount, in accordance with section 3.19;

z. if contributions are set by law or by a contract (such as a collective bargaining agreement), an estimate of the period over which the unfunded **actuarial accrued liability** is expected to be fully amortized, in accordance with section 3.19;

aa. if applicable, a statement indicating that the **contribution allocation procedure** is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, as well as an estimate of the approximate time until assets are depleted, in accordance with section 3.19;

bb. if applicable, a reasonable **actuarially determined contribution**, in accordance with section 3.21, the corresponding **funded status**, and any material assumptions or methods that were used in the calculation that are not otherwise disclosed;

cc. if applicable, the results of the **gain and loss analysis** performed in accordance with section 3.22, separating the total gain or loss into investment gain or loss and other gain or loss. The actuary may meet the disclosure requirements of this section by providing more detailed results of the **gain and loss analysis**. For example, the actuary could separate the non-investment gain or loss into demographic and economic gains or losses, or could identify gains or losses caused by individual decrements (for example, withdrawal, retirement, mortality) and other economic factors (for example, salary growth, inflation);

dd. if, in the actuary's professional judgment, the actuary's use of approximations and estimates could produce results that differ materially from results based on a detailed calculation, a statement to this effect; and

ee. a statement, appropriate for the intended users, indicating that future measurements (for example, of pension obligations, **periodic costs**, **actuarially determined contributions**, or **funded status** as applicable) may differ significantly from the current measurement. For example, a statement such as the following could be applicable: "Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's **funded status**); and changes in **plan provisions** or applicable law."

In addition, the actuarial communication should include one of the following:

1. if the scope of the actuary's assignment included an analysis of the range of such future measurements, disclosure of the results of such analysis together with a description of the factors considered in determining such range; or

2. a statement indicating that, due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

4.2 Disclosure about Assumptions or Methods Not Selected by the Actuary—The actuary's communication should state the source of any material assumption or method that the actuary has not selected.

With respect to any assumption or method that the actuary has not selected, other than **prescribed assumptions or methods set by law**, the actuary's communication should identify the following, if applicable:

a. any assumption or method that the actuary has not selected that, individually or in combination with other assumptions or methods, significantly conflicts with what, in the actuary's professional judgment, is reasonable for the purpose of the measurement; or

b. any assumption or method that the actuary has not selected and is unable to assess for reasonableness for the purpose of the measurement.

4.3 Additional Disclosures—The actuary should also include the following, as applicable, in an actuarial communication:

a. 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 set by a party other than the actuary; and

b. 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.

4.4 Confidential Information—Nothing in this ASOP is intended to require the actuary to disclose confidential information.

## Appendix 1

### Comments on the First Exposure Draft and Responses

The first exposure draft of the proposed revision of ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, was issued in March 2018 with a comment deadline of July 31, 2018. Sixty-seven 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 Pension Committee carefully considered all comments received, and the ASB reviewed (and modified, where appropriate) the changes proposed by the Pension Committee.

Summarized below are the significant issues and questions contained in the comment letters and the responses to each. Minor wording or punctuation changes that were suggested but not significant are not reflected in the appendix, although they may have been adopted.

The term "reviewers" in appendix 1 includes the Pension Committee and the ASB. Unless otherwise noted, the section numbers and titles used in appendix 1 refer to those in the first exposure draft.

| | |
|---|---|
| **SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES AND EFFECTIVE DATE** | |
| **Section 1.4, Effective Date** | |
| Comment | One commentator requested that the effective date be modified to clarify that the standard is not immediately effective for reports that include projections. |
| Response | The reviewers agree and modified the language in response to this comment. |
| **Section 2, Definitions** | |
| Comment | Several commentators suggested that a definition of investment risk defeasement measure be included in section 2. |
| Response | The reviewers disagree and did not include a definition in section 2. |
| **SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES** | |
| **Section 3.2, General Procedures** | |
| Comment | One commentator indicated that it may be helpful to define "assess" and "evaluate" to help actuaries understand the distinction if a change in actuarial practice is expected as a result of changing the words in the ASOP. |
| Response | The reviewers note that "assess" has been used for consistency among the ASOPs that specifically apply to actuaries when performing services related to pension plans. |
| **Section 3.3, Purpose of the Measurement** | |
| Comment | One commentator questioned why "market value assessments" was removed from the list of examples in this section. |
| Response | The reviewers believe that the two examples (market value assessments, and plan sponsor mergers and acquisitions) are encompassed in bullet (f.). |

| | |
|---|---|
| **Section 3.3.2, Uncertainty or Risk** | |
| Comment | One commentator indicated that adding the reference to ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, in this section could be interpreted as extending ASOP No. 51's risk evaluations beyond funding valuations and suggested deleting the reference. |
| Response | The reviewers disagree that the reference to ASOP No. 51 expands the scope of ASOP No. 51, and therefore made no change in response to this comment. |
| **Section 3.4.2, Events After the Measurement Date** | |
| Comment | One commentator suggested reinstating wording dropped from prior versions of sections 3.4.2 and 3.5.1. |
| Response | The reviewers agree and modified the language in response to this comment. |
| **Section 3.8, Actuarial Assumptions** | |
| Comment | One commentator supported requiring the actuary to evaluate and comment on the appropriateness of the actuarial assumptions being used, whether the actuary establishes the assumption or not. |
| Response | The reviewers acknowledge the support but modified the guidance in response to other comments. |
| Comment | Several commentators suggested that section 3.8 should remain as a one-sentence reference to ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, and ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*. |
| Response | The reviewers disagree and made no change in response to these comments. |
| **Section 3.10, Market-Consistent Present Values** | |
| Comment | Two commentators questioned the distinction between benefits "earned" and benefits "accrued." |
| Response | In response to these and other comments, the reviewers eliminated the use of the term "benefits accrued." |
| **Section 3.11, Investment Risk Defeasement Measure (now titled, Low-Default-Risk Obligation Measure)** | |
| Comment | Several commentators requested that this section be deleted. |
| Response | The reviewers disagree and retained this section. |
| Comment | Several commentators requested additional clarifications or refinements of the scope, purpose, or application of this section. |
| Response | In response to numerous comments received, the reviewers made significant changes to the guidance. |
| Comment | Several commentators suggested that this proposed requirement more logically belonged in ASOP No. 51 and found it confusing in ASOP No. 4. Some of these commentators indicated that this confusion is compounded by the difference between the "minimal-risk" measure referenced in Section 3.4 of ASOP No. 51 and the investment risk defeasement measure requirement in ASOP No. 4. |
| Response | The reviewers made significant changes and believe that the modified guidance is appropriately placed within ASOP No. 4. |
| Comment | Several commentators supported the proposed requirements of section 3.11 and described various benefits of the disclosure. |
| Response | The reviewers acknowledge the support but modified the guidance in response to other comments. |

| | |
|---|---|
| Comment<br><br><br>Response | Several commentators suggested that additional disclosures be required, such as a normal cost on the same basis, the projected benefit stream, or disclosure of an investment risk defeasement measure with accounting valuation results.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br>Response | Several commentators suggested that the investment risk defeasement measure requirements should be coordinated with the definition of market-consistent present values.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br>Response | Several commentators encouraged the ASB to strengthen the requirement by limiting the discount rate used in this section to a rate or rates based only on U.S. Treasuries.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br>Response | Several commentators suggested alternative language for the guidance.<br><br>The reviewers did not adopt suggested language but made significant changes to the guidance. |
| Comment<br><br><br>Response | Several commentators suggested that this measure is close to other common low-default-risk measures of pension obligations, and that the ASOP should allow use of such other measures to satisfy this requirement.<br><br>The reviewers agree and modified the guidance. |
| Comment<br><br><br>Response | Several commentators suggested that the disclosure of the investment risk defeasement measure should be accompanied by additional discussion of potential variation in its value or interpretation of its significance.<br><br>The reviewers agree that the disclosure should be accompanied by additional discussion and modified the guidance in 4.1(o). |
| Comment<br><br><br><br>Response | Several commentators indicated that the principles-based guidance already in ASOP No. 51 is sufficient and the ASB should give actuaries time to develop measures that comply with that guidance rather than impose additional guidance in the form of the investment risk defeasement disclosure.<br><br>The reviewers disagree that additional new guidance should not be provided at this time but made significant changes to the guidance in this section. |
| Comment<br><br>Response | Several commentators indicated that this section was too prescriptive and suggested a more principles-based approach.<br><br>The reviewers agree and modified the guidance in response to these and other comments. |
| Comment<br><br>Response | Several commentators suggested that the name of the investment risk defeasement measure be changed, and some provided specific suggestions.<br><br>The reviewers agree and changed the name. |
| Comment<br><br>Response | Several commentators indicated that investment risk defeasement measure is poorly or inadequately defined.<br><br>In response to these and other comments received, the reviewers made significant changes to the guidance. |
| Comment<br><br><br>Response | Several commentators suggested that actuaries be exempt from this requirement when providing services for small pension plans or when providing services for plans for which defeasement is not possible.<br><br>The reviewers disagree and made no change in response to these comments. |

| | |
|---|---|
| Comment<br><br><br><br><br>Response | Several commentators indicated that the calculation intended by this proposed requirement did not seem to serve a purpose and provides limited or no value. These commentators also indicated that the purpose of the investment risk defeasement measure and expectations for how it should or would be used are unclear.<br><br>The reviewers disagree and made no change to the guidance in response to these comments. The reviewers note that an explanation for the Board's inclusion of the requirement in this exposure draft may be found in the transmittal memorandum. |
| Comment<br><br><br>Response | Several commentators suggested that the guidance on selection of assumptions for the investment risk defeasement measure is inappropriate or unclear.<br><br>In response to this and other comments received, the reviewers made significant changes to the guidance. |
| Comment<br><br><br><br><br><br><br><br><br>Response | Several commentators noted that the unit credit actuarial cost method mandated for calculation of the investment risk defeasement measure is inconsistent with the ongoing nature of public pension plans and is therefore not a good measure. Some commentators also indicated that there is no companion measurement of the same liability made using the long-term valuation assumptions and without anything with which to compare it, the measure fails in its stated purpose of showing a measure of the risk inherent in reliance upon investments achieving an expected rate of return equal to the funding valuation discount rate.<br><br>The reviewers note the comments and modified the guidance. |
| Comment<br><br><br><br><br><br><br>Response | Several commentators indicated that the investment risk defeasement measure may require the use of methods or assumptions that are not appropriate for valuing variable annuity plans and other risk-sharing designs, as well as plans that pay variable lump sums. The investment risk defeasement measure is also not appropriate for assessing the investment risk of a pension plan that pays benefits through variable annuity contracts.<br><br>The reviewers note the comments and modified the guidance. |
| Comment<br><br><br>Response | Several commentators pointed out various potential unintended and undesirable consequences of disclosing the required measurement.<br><br>In response to numerous comments received, the reviewers made significant changes to the guidance related to the calculation of the measurement. |
| Comment<br><br><br>Response | Several commentators suggested that the investment risk defeasement measure will be interpreted as a solvency value or an endorsement of "one true measure" of pension obligations.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br><br><br>Response | Several commentators indicated that the investment risk defeasement measure will be misunderstood and misused.  Some also expressed concern that the requirement may cause actuaries to violate Precept 8 of the *Code of Professional Conduct*.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br><br><br><br>Response | Several commentators expressed concerns about the process used to develop this new disclosure requirement.  The commentators questioned whether the process that led to the proposed requirement is appropriate and consistent with the ASB's established methods and procedures for standard setting.<br><br>The reviewers believe that the process that led to the proposed requirement is in keeping with the ASB's established procedures for standard setting. |
| Comment<br><br><br>Response | Several commentators suggested that disclosure of an investment risk defeasement measure may itself breach fiduciary duties or cause other breaches.<br><br>The reviewers note if there is any conflict between the actuary's obligation under the law and an ASOP, the actuary must comply with the law. |

| | |
|---|---|
| Comment<br><br>Response | Several commentators suggested that the required disclosure is an unwelcome contribution to a political campaign against public sector defined benefit pension plans.<br><br>The reviewers disagree. |
| Comment<br><br>Response | Several commentators requested that the ASB provide a rationale for adding this requirement.<br><br>The reviewers note that an explanation for the Board's inclusion of the requirement in this exposure draft may be found in the transmittal memorandum. |
| **Section 3.13, Actuarial Cost Method** | |
| Comment<br><br>Response | One commentator suggested a clarification that paragraph (c) only applies to expenses that are paid from the pension trust.<br><br>The reviewers believe the definition in section 2.10 is sufficiently clear and made no change in response to this comment. |
| Comment<br><br>Response | One commentator requested clarification in the first sentence of the second paragraph to indicate that the normal cost for a plan without benefits accruing might just be the expenses, if applicable, and not the actuarial present value of benefits. In addition, the commentator believed the "and" in that sentence should be "and/or." The commentator believed the scope of the last sentence of (a) should be limited to section 3.13 rather than to the entirety of ASOP No. 4. The commentator believed 3.13(c) would be clearer if it indicated that expenses may be reflected as a component of normal cost and/or as an adjustment to the investment return or discount rate assumptions.<br><br>The reviewers believe the guidance is sufficiently clear and made no change in response to this comment. |
| **Section 3.14, Amortization Method** | |
| Comment<br><br>Response | One commentator suggested that for plans that develop separate amortization bases for each separately identified portion of the unfunded actuarial accrued liability, the requirements of section 3.14 should be applied either to each base or to the aggregation of all bases.<br><br>The reviewers modified the language in response to this and other comments. |
| Comment<br><br>Response | One commentator suggested that the guidance explain why the duration of the actuarial accrued liability is an important factor to consider regarding the amortization method.<br><br>The reviewers believe that the guidance is sufficient and made no change. |
| Comment<br><br>Response | One commentator indicated that any amortization approach which does not target full amortization within the working lifetime of active plan participants should be discouraged.<br><br>The reviewers modified the language in response to this and other comments. However, the reviewers did not make the guidance as prescriptive as suggested. |
| Comment<br><br>Response | One commentator indicated that guidance should require periodic calculation and disclosure of gain/loss amortized over a reasonable period in a reasonable manner without regard to how other amortization bases may be amortized. The commentator suggested a maximum amortization period for each such base equal to the average future working lifetime of active plan participants or 15 years if greater (at time of base establishment). The commentator noted that less prescriptive language could simply require the actuary to use professional judgement to select a contribution allocation procedure that avoids "over-smoothing" of the actuarially determined contribution.<br><br>The reviewers modified the language in response to this and other comments. However, the reviewers did not make the guidance as prescriptive as suggested. |

| | |
|---|---|
| Comment<br><br><br><br><br><br>Response | Several commentators suggested revising the language to read, "The actuary should select an amortization method that produces amortization payments that exceed nominal interest on the unfunded actuarial accrued liability and that satisfy the following conditions"; drop condition (i) and renumber the remaining conditions. The commentator indicated that a superior approach would require simple straight-line (level dollar) amortization over the period selected.<br><br>The reviewers modified the language in response to this and other comments. However, the reviewers did not make the guidance as prescriptive as suggested. |
| Comment<br><br><br>Response | Several commentators indicated that this section should apply only when amortizing a positive unfunded liability and not when there is a negative unfunded liability.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br><br><br>Response | Several commentators indicated that the guidance is not clear when the actuary is not selecting the method and should permit the actuary to use a method adopted by a board against the actuary's recommendation.<br><br>The reviewers clarified the guidance in response to these comments. |
| Comment<br><br><br><br><br>Response | One commentator indicated that actuaries should be required to evaluate and comment upon the implications of whatever amortization methods and periods are used. The commentator suggested that amortization over the future working lifetime of active plan participants might be a good benchmark for this purpose.<br><br>The reviewers modified the language in response to this and other comments. However, the reviewers did not make the guidance as prescriptive as suggested. |
| Comment<br><br><br>Response | Several commentators requested that the guidance provide additional detail regarding the acceptance of a layered amortization approach.<br><br>The reviewers modified the language in response to this and other comments. |
| Comment<br><br><br><br><br><br><br>Response | One commentator noted that current language would permit 100-year level dollar amortization of the unfunded liability and wondered if this was intended. The commentator believes that there can be circumstances where amortization payments that increase faster than anticipated payroll may not only be acceptable but also necessary. The commentator indicated that section 3.14 should explicitly state whether its requirements are to apply to each layer separately or to the sum of all layers.<br><br>The reviewers modified the language in response to this and other comments. |
| Comment<br><br><br><br><br><br>Response | One commentator indicated that section 3.14 seems to imply that all the bases have to be closed including gain and loss bases, and if so, the guidance should be clearer. The commentator also wondered if in situations where there is a mix of credit and charge bases, the guidance anticipates that a plan can have an unfunded liability and end up getting a credit against the normal cost due to the structure of the bases (or the opposite could occur).<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br><br><br><br><br>Response | One commentator suggested a less prescriptive alternative by replacing all of section 3.14 with a simple statement along the following lines: "If the actuary selects or recommends or applies an amortization method, the method should be compatible with the plan accumulating assets sufficient to pay benefits when due and it should fund the plan's unfunded liabilities within a reasonable period of time considering relevant facts and circumstances."<br><br>The reviewers disagree and made no change in response to this comment. |

| | |
|---|---|
| Comment<br><br><br><br><br><br>Response | One commentator recommended restructuring section 3.14 so that the amortization payments must either (a) exceed nominal interest or (b) fully amortize the unfunded accrual actuarial liability in a reasonable period (and not increase faster than expected payroll). The commentator also suggested modifying section 3.14 to state that for plans using a method with layered amortization bases, the guidance in that section applies to each base individually rather than to the total amortization payment.<br><br>The reviewers modified the language in response to this and other comments. |
| Comment<br><br><br><br>Response | Several commentators suggested that the guidance in this section require selection of an amortization method that fully amortizes the unfunded actuarial accrued liability within a reasonable time period and meets one of the three conditions in (a) and (b).<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br><br>Response | One commentator wanted the guidance to clarify whether an actuary could select GAAP methodology to develop an annual cost for a plan that is not subject to GAAP.<br><br>The reviewers believe the modified guidance is sufficient. |
| Comment<br><br><br><br>Response | One commentator believed that negative amortization in any year is unreasonable and any reasonable method must fully fund the UAAL in a reasonable period of time. The commentator indicated that section 3.14 as drafted does not meet these criteria.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br><br><br><br><br><br><br>Response | Several commentators suggested alternative language to require the amortization payment "exceed nominal interest on the unfunded actuarial liability," noting that this could include a $1 excess, with perpetual interest only amortization. One commentator suggested that if amortization payments do not exceed interest this fact should be disclosed in the actuarial report. One commentator indicated that section 3.14 still allows too much room for "creative" amortization.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br><br><br>Response | Several commentators suggested that this section be strengthened to prohibit any negative amortization and the guidance should more strongly recommend amortization periods consistent with average expected working lifetime of active plan participants.<br><br>The reviewers disagree and made no change in response to these comments. |
| Comment<br><br><br>Response | Several commentators suggested that the current guidance be applied separately to each amortization base.<br><br>The reviewers clarified the guidance in response to this comment. |
| Comment<br><br><br><br>Response | One commentator suggested adding a new subparagraph (c) to apply the same basic principles in (a) and (b) to layered amortization approaches. In addition, the amortization period applied to gains should be the same or longer than the period used for losses.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br><br>Response | One commentator suggested that the growth in payroll assumption for this section be determined assuming no future increase in the number of active employees.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br>Response | Several commentators indicated that the guidance may need to be modified for plans in surplus.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br><br>Response | One commentator supported the added focus on amortization methods which helps shine a light on excessive deferral of costs or contributions.<br><br>The reviewers acknowledge the support but modified the guidance in response to other |

| | |
|---|---|
| | comments. |
| **Section 3.16, Output Smoothing Method** | |
| Comment<br><br><br><br>Response | Several commentators suggested clarifying the difference between "the actuarially determined contribution determined without output smoothing" and "the actuarially determined contribution with output smoothing" throughout this section.<br><br>The reviewers agree and modified the language. |
| Comment<br><br><br><br><br>Response | One commentator suggested that the language of this section should be consistent with the guidance in ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations*, including use of the concept of "sufficiently narrow range" and "sufficiently short period" and provided suggested language.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br><br><br>Response | One commentator suggested that the actuary should address the combined effect of all operative output smoothing methods in evaluating the reasonableness of the actuarially determined contribution with and without output smoothing.<br><br>The reviewers agree but modified the language in section 2.18 in response to this comment. |
| Comment<br><br><br>Response | One commentator suggested that the actuary consider whether the anticipated actual contributions to the system are a relevant consideration.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator requested clarification of the meaning of "systematically" in section 3.16(c).<br><br>In response to this and other comments, the reviewers deleted section 3.16(c). |
| Comment<br><br><br>Response | Several commentators indicated that if an output smoothing method is used, the actuarially determined contribution without output smoothing should also be disclosed.<br><br>The reviewers agree and added a disclosure requirement in section 4.1. |
| Comment<br><br><br>Response | One commentator indicated that the language in this section should be modified to allow for a contribution rate to remain above the actuarially determined contribution for an indefinite time.<br><br>The reviewers agree and modified the language. |
| Comment<br><br><br><br><br>Response | One commentator indicated that the guidance should preclude the simultaneous use of both output smoothing and asset smoothing. The commentator further suggested that if the guidance is not so modified, the ASOP should remind the actuary to consider (in the event both are used) whether the total amount of smoothing is reasonable.<br><br>The reviewers believe the guidance is sufficient and made no change in response to this comment. |
| Comment<br><br><br>Response | One commentator requested clarification of the actuary's responsibilities when the actuary is not responsible for selection of the output smoothing method.<br><br>The reviewers believe the guidance is sufficient and made no change in response to this comment. |
| Comment<br><br><br>Response | One commentator suggested providing guidance (or considerations) on how an actuary should evaluate reasonableness for purposes of this section.<br><br>The reviewers believe that the guidance is sufficiently clear and made no change. |
| Comment<br><br><br><br>Response | One commentator indicated a preference for smoothing output results rather than smoothing assumption inputs and suggested that full recognition of the assumption change should be disclosed.<br><br>The reviewers believe the guidance is sufficient and made no change in response to this comment. |

| | |
|---|---|
| Comment<br><br>Response | Several commentators agreed that guidance with respect to output smoothing was useful.<br><br>The reviewers acknowledge the support but modified the guidance in response to other comments. |
| **Section 3.17, Allocation Procedure** | |
| Comment<br><br>Response | One commentator suggested alternative wording along the lines of "maintaining the cost level and cost uncertainty within a range that is anticipated by the plan sponsor rather than predictable costs."<br><br>The reviewers believe the guidance is appropriate and made no change in response to this comment. |
| Comment<br><br>Response | One commentator expressed concerns about how to consider the requirements of a., b., and c. of this section and asked for more clarification. The commentator also suggested eliminating paragraphs (a)–(c) and rewriting (d) to combine the concepts. Another commentator also suggested combining (a)–(c). into one item and providing more guidance or examples.<br><br>The reviewers believe the requirements are sufficiently clear but combined the concepts as suggested. |
| Comment<br><br>Response | One commentator suggested the old language requiring the actuary to consider "factors such as" should be restored to provide flexibility to consider factors not listed. The commentator also suggested restoring the example of relevant input received from the principal: "a desire to achieve a target funding level within a specified time frame."<br><br>The reviewers disagree that the language restricts the consideration of other factors, but restored the example. |
| **Section 3.18, Consistency Between Contribution Allocation Procedure and the Payment of Benefits** | |
| Comment<br><br>Response | One commentator believed this section should address situations where the actuary selects both a contribution allocation procedure and an output smoothing method, and when selecting both, the actuary should ensure that, in the actuary's professional judgment, the combination is consistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor will make actuarially determined contributions when due.<br><br>The reviewers disagree and believe that the guidance in sections 3.16 and 3.18 is sufficient. |
| **Section 3.19, Implications of Contribution Allocation Procedure or Funding Policy** | |
| Comment<br><br>Response | One commentator questioned why the requirements of section 3.19 don't apply to valuations that include a prescribed assumption or method.<br><br>The reviewers modified the guidance to eliminate the exclusion "that does not include a prescribed assumption or method set by law" in response to this comment. |
| Comment<br><br>Response | One commentator found the language used in the first paragraph to be confusing. The commentator suggested that a more rigorous definition of contributions set by law would help avoid the confusion and noted that the same language is used in section 4.1(v).<br><br>The reviewers believe the term "contributions set by law" is sufficiently clear, but modified the language in response to other comments. |
| **Section 3.20, Reasonable Actuarially Determined Contribution (now section 3.21)** | |
| Comment<br><br>Response | One commentator recommended that the section 3.20, Reasonable Actuarially Determined Contribution, should be determined independent of any non-actuarially determined contribution-based funding policy, rather than being developed to match the contributions set by such non-actuarially determined contribution funding policy.<br><br>The reviewers disagree and made no change in response to this comment. |

| | |
|---|---|
| Comment<br><br>Response | One commentator indicated that a range should be permitted for the reasonable actuarially determined contribution.<br><br>The reviewers believe that the guidance is sufficiently clear and made no change. |
| Comment<br><br>Response | One commentator suggested adding "federal" before "law."<br><br>The reviewers disagree and made no change in response to these comments. The reviewers direct the commentator to sections 2.22 and 2.23. |
| Comment<br><br>Response | One commentator believes the requirements of section 3.20 should be applicable only if the actuary has reason to believe that the current funding policy is inconsistent with accumulating sufficient assets.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | Two commentators questioned whether the provisions of section 3.20(g) are necessary.<br><br>The reviewers believe the provisions are necessary and note that the provisions are now included in new section 3.20. |
| Comment<br><br>Response | Several commentators supported the requirements of section 3.20.<br><br>The reviewers acknowledge the support but modified the guidance in response to other comments. |
| Comment<br><br>Response | One commentator indicated that the range of what might be considered a reasonable actuarially determined contribution might be too wide.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator felt it was worthwhile to consider requiring the computation of a reasonable actuarially determined contribution in virtually all cases.<br><br>The reviewers agree and modified the guidance. |
| Comment<br><br>Response | One commentator suggested using a common discount rate for all reasonable actuarially determined contribution determinations.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator suggested that the exclusion for funding valuations where the actuarially determined contribution is based on a prescribed assumption or method set by law should be deleted.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator indicated that this section is redundant or not applicable.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator suggested shortening the language in section 3.20(f) to read, "the contribution allocation procedure should be consistent with section 3.18."<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator suggested clarification of the phrase, "each participant's normal cost should be based on the plan provisions applicable to that participant."<br><br>The reviewers believe the guidance is sufficiently clear and made no change in response to this comment. |

| | |
|---|---|
| Comment<br><br>Response | One commentator requested clarification of the types of plans that would be subject to the requirements of sections 3.19 and 3.20 and the meaning of the phrase, "a funding valuation that does not include a prescribed assumption or method set by law." The commentator cites several examples where the commentator believes the guidance in this regard is unclear.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br>Response | One commentator indicated that the requirements of section 3.20 should be applicable only if the actuary has reason to believe the current funding policy is inconsistent with accumulating sufficient assets.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator noted that the requirement to reflect timing between the measurement date and the contribution date could add a great deal of complexity for very little value. The commentator suggested including the phrase, "the actuary should consider" before the requirement.<br><br>The reviewers modified the guidance in response to this and other comments. |
| Comment<br><br>Response | One commentator believed that the restrictions on the actuarial cost method in this section were not needed.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | One commentator believes that it is appropriate for the actuary to use assumptions or methods selected by another party if they are not unreasonable or inconsistent with ASOP requirements even when those assumptions or methods may not have been those that would have been selected independently by the actuary. As section 3.20 is currently written, it is not clear that this approach would be permitted.<br><br>The reviewers agree and clarified the guidance. |
| Comment<br><br>Response | Two commentators suggested that reasonableness of an actuarially determined contribution could be determined by testing the result against two objective criteria.<br><br>The reviewers disagree that the suggested criteria are sufficient and made no change in response to these comments. |
| Comment<br><br>Response | One commentator indicated that for fixed-rate plans the reasonable actuarially determined contribution should be determined on a consistent year-to-year basis rather than solving for the reasonable actuarially determined contribution that justified the fixed rate contributions for the year. The commentator also suggested considering further strengthening the disclosure requirements by requiring the actuary to disclose whether past changes to the actuarially determined contribution calculation follow a consistent pattern, and if so, what the implications of the pattern are.<br><br>The reviewers disagree and made no change in response to this comment. |
| Comment<br><br>Response | Several commentators supported calculation and disclosure of a reasonable actuarially determined contribution when the determination prescribed by the plan sponsor is not a reasonable actuarially determined contribution.<br><br>The reviewers acknowledge the support but modified the guidance in response to other comments. |

| | |
|---|---|
| **Section 3.21, Gain and Loss Analysis (now section 3.22)** | |
| Comment<br><br><br>Response | One commentator suggested replacing "should perform" with "should consider performing" and dropping the "unless" clause. The commentator also questioned whether the intended guidance is applicable if a spread gain valuation method is used.<br><br>The reviewers disagree and made no change in response to this comment. In addition, the reviewers note the guidance states, "the actuary should perform a gain and loss analysis...unless in the actuary's professional judgment, successive gain and loss analyses would not be appropriate for assessing the reasonableness of the actuarial assumptions." |
| Comment<br><br><br><br><br>Response | One commentator requested that the guidance clearly state that a detailed gain and loss analysis by source is not intended. The commentator also suggested changing the phrase "successive gain and loss analyses would not be appropriate for assessing the reasonableness of the actuarial assumptions" to "successive gain and loss analyses would not be appropriate or necessary for assessing the reasonableness of the actuarial assumptions."<br><br>The reviewers believe that the language is sufficiently clear and made no change in response to this comment. |
| Comment<br><br><br>Response | One commentator suggested that a more helpful example would discuss the situation when a limited group of individuals account for most of the actuarial liability.<br><br>The reviewers believe that the current example is appropriate and made no change in response to this comment. |
| Comment<br><br><br>Response | One commentator suggested that the actuary should disclose any assumption that has produced only gains (or only losses) for three or more years in a row.<br><br>The reviewers disagree, note that the ASOPs are principles-based, and made no change in response to this comment. |
| Comment<br><br><br>Response | One commentator believed this section should either be dropped entirely or changed so that the actuary should consider whether to perform such analysis.<br><br>The reviewers disagree and made no change in response to this comment. |
| **Section 3.23, Volatility (now section 3.24)** | |
| Comment<br><br><br>Response | One commentator requested that the ASB clarify the interaction between this section and ASOP No. 51.<br><br>The reviewers agree and modified the language in response to this comment. |
| **Section 3.24, Assessments of Assumptions and Methods (now section 3.25)** | |
| Comment<br><br><br><br><br>Response | One commentator indicated that the language in this section is inconsistent with language in ASOP Nos. 27 and 35, and should be updated to be consistent. The commentator also indicated that the language appears to be in the wrong location in the standard and perhaps should just reference the appropriate sections in ASOPs Nos. 27 and 35.<br><br>The reviewers modified the language in this section and in section 4.2 in response to this comment. However, the reviewers note that this section applies to assumptions and methods while the scope of ASOP Nos. 27 and 35 does not include methods. |
| **SECTION 4. COMMUNICATIONS AND DISCLOSURES** | |
| **Section 4.1, Communication Requirements (now titled Required Disclosures in an Actuarial Report)** | |
| Comment<br><br><br><br><br><br>Response | One commentator believed that the actuary should not have to assess the reasonableness and consistency with other assumptions of assumptions that the actuary does not control, other than to disclose if they significantly conflict with what would be reasonable. The commentator suggested carving Assumptions Set by Another Party out of this requirement or deleting this requirement and leaving the guidance on assumptions in ASOP Nos. 27 and 35.<br><br>The reviewers disagree and made no change in response to this comment. |

| | |
|---|---|
| Comment<br><br>Response | One commentator recommended that a comprehensive listing of all documents comprising the actuarial report be required to be part of each component document.<br><br>The reviewers note that ASOP No. 41, *Actuarial Communications*, states the actuary should disclose "if appropriate, the documents comprising the actuarial report" and made no change in response to this comment. |
| Comment<br><br>Response | One commentator requested clarification around proposed requirements for the actuary's responsibility to assess assumptions and methods and providing rationale (and the interrelation between the two responsibilities).<br><br>The reviewers modified the language in response to this comment. |
| Comment<br><br>Response | One commentator requested clarification of whether the "corresponding funded status" referred to in this section should be the one used in determining the actuarially determined contribution.<br><br>The reviewers believe the guidance is sufficiently clear and made no change in response to this comment. |
| Comment<br><br>Response | One commentator believed that additional sections of 4.1 (including 4.1[k] through 4.1[t]) should also apply to a reasonable actuarially determined contribution developed in section 3.20.<br><br>The reviewers agree and modified the language in response to this comment. |
| Comment<br><br>Response | One commentator requested clarification around guidance addressing overall consistency of assumptions. The commentator did not believe that section 4.1(l) is appropriate.<br><br>In response to this and other comments, the reviewers clarified the guidance in sections 3.8 and 4.1(l). |
| Comment<br><br>Response | One commentator suggested that section 4.1(o) be amended by adding the phrase "that differ from assumptions used for the primary measurement."<br><br>The reviewers agree with the concept and modified section 4.1(o) but did not use the suggested language. |
| Comment<br><br>Response | One commentator questioned whether section 4.1(r) should be retained.<br><br>The reviewers believe the guidance is appropriate and made no change in response to this comment. |
| Comment<br><br>Response | In section 4.1(t), one commentator suggested re-inserting the words, "for purposes of this section, the actuary should assume that all actuarial assumptions will be realized and actuarially determined contributions will be made when due."<br><br>The reviewers believe the section referenced should be section 4.1(s), but otherwise agree with the comment, and modified the language in that section in response to this comment. |
| Comment<br><br>Response | In section 4.1(u), one commentator suggested that the ASB clarify whether this section requires a quantitative analysis or may be satisfied by a qualitative analysis.<br><br>The reviewers clarified the guidance in response to this comment. |
| Comment<br><br>Response | In section 4.1(u), one commentator stated it is inappropriate to require disclosure when the plan is in surplus by more than the normal cost and the allocation procedure results in a $0 contribution.<br><br>The reviewers modified the guidance in response to this comment. |
| Comment<br><br>Response | One commentator objected to the addition of section 4.1(w) because such new disclosures would often involve substantial additional work not requested by the principal.<br><br>The reviewers disagree and made no change in response to this comment. The reviewers note that the guidance states, "the disclosure may be brief." |

| | |
|---|---|
| Comment<br><br>Response | One commentator expressed reservations about including section 4.1(w).<br><br>The reviewers note the guidance in section 3.17 was modified and made no change in response to this comment. |
| Comment<br><br>Response | One commentator suggested inserting "if applicable" in section 4.1(y).<br><br>The reviewers agree and made the change. |
| Comment<br><br>Response | One commentator recommended that the disclosure requirement in section 4.1(bb) be clarified or made explicit.<br><br>The reviewers believe the guidance is sufficiently clear and made no change in response to this comment. |
| **Section 4.2, Disclosure about Assumptions or Methods Not Selected by the Actuary** | |
| Comment<br><br>Response | One commentator believed that ASOP No. 4 is not the appropriate standard to deal with the choice of or internal consistency of assumptions. In addition, the commentator believed that in many situations it will not be possible for the actuary to determine whether the combination of assumptions significantly conflicts with what would be reasonable when the individual assumption chosen by the other party does not significantly conflict with what the actuary believes is reasonable. Finally, the commentator objected to this requirement for additional analyses that the actuary may not be qualified to perform, were not requested by the principal, and for which the actuary will not be compensated.<br><br>In response to this and other comments, the reviewers modified the guidance in sections 3.8 and 4.1(l). |
| **Section 4.4, Confidential Information** | |
| Comment<br><br>Response | Two commentators suggested that section 4.4 be amended to be consistent with the corresponding sections in ASOP Nos. 27 and 35, and one commentator proposed specific language.<br><br>The reviewers revised the language to be consistent with the language in the second exposure drafts of ASOP Nos. 27 and 35. |