ACTUARIAL STANDARDS BOARD

• THIRD EXPOSURE DRAFT •

Proposed Revision of
Actuarial Standard
of Practice
No. 4

Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

Comment Deadline:
October 15, 2021

Developed by the
Pension Committee of the
Actuarial Standards Board

Approved by the
Actuarial Standards Board
June 2021

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APPENDIX

June 2021

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 third 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 appropriate consideration by the drafting committee and the ASB.

The ASB appreciates comments and suggestions on all areas of this proposed standard. The ASB requests comments be provided using the Comments Template that can be found here and submitted electronically to **comments@actuary.org**. Include the phrase "ASOP No. 4 COMMENTS" in the subject line of your message. Also, please indicate in the template whether your comments are being submitted on your own behalf or on behalf of a company or organization.

The ASB posts all signed comments received on 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 on 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 comments: **October 15, 2021**

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 and the second 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.

<u>First Exposure Draft</u>

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

<u>Second Exposure Draft</u>

The second exposure draft was approved in December 2019 with a comment deadline of July 31, 2020. Nineteen comment letters were received and considered in making changes that are reflected in the third exposure draft.

Notable Changes from the Second Exposure Draft

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

1. All references to "plan obligations" were changed to "pension obligations" for consistency.

2. All references to "actuarial assumptions" were changed to "assumptions" for consistency.

3. Section 1.2, Scope, was expanded to clarify the application of the standard when an assumption or method is not selected by the actuary.

4. Section 2.8, Definition of Contribution Allocation Procedure, was clarified to state a contribution allocation procedure is one that determines one or more actuarially determined contributions for a plan.

5. Section 2.18, Output Smoothing Method, was clarified to state that for purposes of this standard, an asset valuation method is not an output smoothing method.

6. Section 3.2, General Procedures, was revised to include a specific reference to section 3.20, Contribution Lag, and to move the reference to section 3.25, Approximations and Estimates, from the list to a separate paragraph. In addition, sections 3.23, 3.24, and 3.25 were reordered and renumbered.

7. The guidance in section 3.3.2, Uncertainty or Risk, was revised to refer only to the relevant ASOPs.

8. The title of section 3.8 was changed from "Actuarial Assumptions" to "Assumptions." In addition, exceptions to significant bias now include when alternative assumptions are used for the assessment of risk, in accordance with ASOP No. 51. Section 3.8 also was revised for clarity.

9. Section 3.11, Low-Default-Risk Obligation Measure, was clarified to state that the actuary need not calculate and disclose this obligation measure more than once per year. Additional guidance was provided when plan provisions create pension obligations that are difficult to appropriately measure using traditional valuation procedures. Also, guidance was provided that the actuary should not consider benefit payment default risk or the financial health of the plan sponsor when calculating this measure. Guidance was added to include commentary to help the intended user understand the significance of the low-default-risk obligation measure.

10. Section 3.19, Implications of Contribution Allocation Procedure or Funding Policy, was clarified to state that the actuary should estimate the period over which the unfunded actuarial accrued liability, if any, is expected to be fully amortized. In addition, language was added stating contributions set by law or by a contract, such as a collective

bargaining agreement, constitute a funding policy.

11. Section 3.21, Reasonable Actuarially Determined Contribution, was clarified to state that the actuary should calculate and disclose a reasonable actuarially determined contribution.

12. Section 3.26, Documentation, was modified to state that if preparing documentation, the actuary should consider preparing such documentation in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary's work.

13. Section 4.1(o)(4), was clarified to state, in regard to the low-default risk obligation measure, an actuary should disclose a description of the valuation procedures that differ from those used in the funding valuation 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.

14. Section 4.1(v) of the second exposure draft regarding considerations from sections 3.17 and 3.21 was deleted and a disclosure requirement was added to section 4.1(aa) regarding section 3.21.

15. Section 4.1(y) was modified to require a disclosure of an estimate of the period over which the unfunded actuarial accrued liability, if any, is expected to be fully amortized in all cases, in accordance with section 3.19(c).

16. Section 4.1(aa) was modified to state that the actuary should include a description of how the pertinent conditions in section 3.21 have been taken into account in determining the reasonable actuarially determined contribution.

Notable Changes from the Existing ASOP

Notable changes from the version of ASOP No. 4 adopted December 2013 include the following:

1. Section 3.8, Actuarial Assumptions (now Assumptions), was expanded to provide additional guidance regarding selection of assumptions.

2. Section 3.11, Low-Default-Risk Obligation Measure, was added to provide guidance regarding the calculation of this measure when the actuary is performing a funding valuation.

3. Section 3.14, Amortization Methods, was added to provide guidance on the selection of amortization methods.

4. Section 3.16, Output Smoothing Methods, was added to provide guidance on the selection of output smoothing methods.

5. Section 3.14 (now 3.17), Allocation Procedure, was expanded to provide additional guidance regarding the selection of a cost allocation procedure or contribution allocation procedure.

6. Section 3.14.2 (now 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.

7. Section 3.20, Contribution Lag, was added to provide guidance that 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.

8. Section 3.21, Reasonable Actuarially Determined Contribution, was added to provide additional guidance when performing a funding valuation that does not include a prescribed assumption or method set by law.

9. Section 3.22, Gain and Loss, was added to provide guidance regarding the performance of a gain and loss analysis when performing a funding valuation.

10. Section 3.16 (now section 3.23), 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.

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

12. Section 4.1, Communication Requirements, was renamed "Required Disclosures in an Actuarial Report" and was expanded to provide additional guidance concerning disclosures and reordered to follow the order of the guidance in 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 June 2021 to approve this exposure draft.

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 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, such as 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 pension obligations to time periods, such as **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, such as cash flow projections and projections of a plan's **funded status**.

Throughout this standard, any reference to selecting assumptions, **actuarial cost methods**, asset valuation methods, **amortization methods**, and **output smoothing methods** also includes giving advice on selecting 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 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).

As discussed in ASOP No. 41, *Actuarial Communications*, an assumption or method may be selected by the actuary or selected by another party. Nothing in this standard is intended to require the actuary to select an assumption or method that has otherwise been selected by another party. When performing actuarial services using an assumption or method not selected by the actuary, the guidance in section 3 and section 4 concerning assessment and disclosure applies.

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. 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 ASB; 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 ASB.

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 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 determines one or more **actuarially determined contributions** for a plan. The procedure uses an **actuarial cost method** and may use an asset valuation method, an **amortization method**, or an **output smoothing method**. 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 determines the **periodic cost** for a plan (for example, the procedure to determine the net periodic pension cost under accounting standards). The procedure uses an **actuarial cost method**, and may use an asset valuation method or an **amortization method**.

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 pension 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 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. For purposes of this standard, an asset valuation method is not an **output smoothing method**.

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 pension 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 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 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, determining **periodic costs**, or determining **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 assumptions (section 3.8);

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

h. 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's funding policy, if applicable (section 3.19);

q. take into account the contribution lag, if applicable (section 3.20);

r. calculate a reasonable **actuarially determined contribution**, if applicable (section 3.21);

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

t. take into account the sources of significant volatility, if applicable (section 3.23);

u. assess the assumptions and methods not selected by the actuary, if applicable (section 3.24); and

v. consider preparing and retaining documentation (section 3.26).

In addition, the actuary may use approximations and estimates where circumstances warrant (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 using different assumptions or methods for measurements projected into the future versus point-in-time measurements.

3.3.2 Uncertainty or Risk—The actuary should refer to the guidance on uncertainty and risk in ASOP No. 41 and ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*.

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 or prohibits 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 reflecting 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 using revised assumptions to determine the obligations.

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 or not appropriate for the purpose of the measurement, 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 or prohibits 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 Assumptions—The actuary should refer to ASOP Nos. 27 and 35 for guidance on the selection and assessment of assumptions.

In addition, the actuary should assess whether the combined effect of assumptions is expected to have no significant bias (i.e., it is not significantly optimistic or pessimistic) except when provisions for adverse deviation are included or when alternative assumptions are used for the assessment of risk, in accordance with ASOP No. 51. For this purpose, the actuary should assess 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.

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 take into account 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—When calculating 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 reflect benefit payment default risk or the financial health of the plan sponsor in the calculation.

3.11 Low-Default-Risk Obligation Measure—When performing a **funding valuation**, the actuary should calculate and disclose a low-default-risk obligation measure of the benefits earned or costs accrued as of the **measurement date**. The actuary need not calculate and disclose this obligation measure more than once per year.

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

When calculating this measure, the actuary should select a discount rate or discount rates 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 pension 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 plan provisions create pension obligations that are difficult to appropriately measure using traditional valuation procedures, such as benefits affected by actual investment returns, movements in a market index, or other similar factors, the actuary should consider using alternative valuation procedures such as those described under section 3.5.3 to calculate the low-default-risk obligation measure of those benefits earned or costs accrued as of the measurement date.

For purposes of this obligation measure, the actuary should take into account the effect, if any, of the discount rate or discount rates selected on the pattern of benefits expected to be paid in the future, such as in a variable annuity plan.

When calculating this measure, the actuary should not reflect benefit payment default risk or the financial health of the plan sponsor.

Other than the discount rate or discount rates, the actuary may use the same assumptions used in the **funding valuation** for this measure. Alternatively, the actuary may select other assumptions that are consistent with the discount rate or discount rates and reasonable for the purpose of the measurement, in accordance with ASOP Nos. 27 and 35.

The actuary should provide 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. The actuary should use professional judgement to determine the appropriate commentary for the intended user.

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 should also be 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**.

When disclosing a **funded status** measurement using a **spread gain actuarial cost method**, the actuary should also calculate and disclose a **funded status** measurement using an **immediate gain actuarial cost method**.

3.14 Amortization Method—When selecting 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 take into account 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.

When selecting 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 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—When selecting an **output smoothing method**, the actuary should select an **output smoothing method** that results in a reasonable relationship between the smoothed contribution and the corresponding **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 corresponding **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 take into account 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 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—When performing a **funding valuation**, the actuary should do the following:

a. qualitatively assess the implications of the **contribution allocation procedure** or the plan's funding policy on the plan's expected future contributions and **funded status**;

b. estimate how long before any contribution as determined by the **contribution allocation procedure** or the plan's funding policy is expected to exceed the **normal cost**, plus interest on the unfunded **actuarial accrued liability**, if applicable;

c. estimate the period over which the unfunded **actuarial accrued liability**, if any, is expected to be fully amortized; and

d. 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, contributions set by law or by a contract, such as a collective bargaining agreement, constitute a funding policy.

For purposes of this section, the actuary may presume that all 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 reflecting the passage of time between the **measurement date** and the expected timing of actual contributions.

3.21 Reasonable Actuarially Determined Contribution—When performing a **funding valuation**, except where the **actuarially determined contribution** is based on a **prescribed assumption or method set by law**, the actuary should also calculate and disclose a reasonable **actuarially determined contribution**. For this purpose, an **actuarially determined contribution** is reasonable if it uses 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 is expected to have 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 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—When 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 assumptions. For example, successive **gain and loss analyses** may not provide useful information about the reasonableness of the 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 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 take into account 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, where applicable.

3.24 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).

3.25 Approximations and Estimates—Where circumstances warrant, the actuary may use approximations or estimates in performing the actuarial services. 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**.

When using approximations or estimates, the actuary should use professional judgment to establish a balance between the degree of refinement of methodology and whether the impact on the results is material.

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. If preparing documentation, the actuary should consider preparing such documentation in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary's work. 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 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** (see section 3.4.2);

d. a description of adjustments of prior measurements (see 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 (see section 3.5.3);

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 or when alternative assumptions are used for the assessment of risk, in accordance with ASOP No. 51 (see 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 (see section 3.11). In addition to the measure, the actuary should disclose the following:

  1. the discount rate or discount rates used and rationale for selection;

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

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

  4. a description of the valuation procedures that differ from those used in the **funding valuation** 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; and

  5. 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 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** if the actuary discloses a **funded status** based on a **spread gain actuarial cost method** (see section 3.13). The **immediate gain actuarial cost method** used for this purpose should be disclosed (see 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. If an **output smoothing method** is used, the actuary should also disclose the corresponding **actuarially determined contribution** without output smoothing;

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 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;

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

x. if applicable, an estimate of how long before any contribution as determined by the **contribution allocation procedure** or the plan's funding policy is expected to exceed the **normal cost**, plus interest on the unfunded **actuarial accrued liability** (see section 3.19[b]);

y. an estimate of the period over which the unfunded **actuarial accrued liability**, if any, is expected to be fully amortized (see section 3.19[c]);

z. if applicable, a statement indicating that the **contribution allocation procedure** or funding policy 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 (see section 3.19[d]);

aa. if applicable, a reasonable **actuarially determined contribution**, the corresponding **funded status**, and any material assumptions or methods that were used in the calculation that are not otherwise disclosed. The actuary should include a description of how pertinent conditions discussed in section 3.17 have been taken into account in determining the reasonable **actuarially determined contribution** (see section 3.21). The disclosure may be brief but should be relevant to the plan's circumstances;

bb. if applicable, the results of the **gain and loss analysis** 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** performed (see section 3.22). 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);

cc. 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

dd. 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 <u>Disclosures in an Actuarial Report about Assumptions or Methods Not Selected by the</u>

Actuary—The actuary should include disclosures in an actuarial report stating the source of any material assumptions or methods 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 report 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 in an Actuarial Report—The actuary also should include disclosures in accordance with ASOP No. 41 in an actuarial report for the following circumstances:

a. if the actuary states reliance on other sources and thereby disclaims responsibility for any material assumption or method selected by a party other than the actuary; and

b. if in the actuary's professional judgment, the actuary has 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

Comments on the Second Exposure Draft and Responses

The second exposure draft of the proposed revision of ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, was approved in December 2019 with a comment deadline of July 31, 2020. Nineteen comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of the 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 the appendix includes the Pension Committee and the ASB. Also, the section numbers and titles used in the appendix refer to those in the second exposure draft.

GENERAL COMMENTS	
Comment	Two commentators felt that the standard proposed by the exposure draft would introduce redundant analyses and disclosures for many plans already subject to a vast array of rules and requirements. It would be more appropriate to provide exemptions for plans already subject to such governance.
Response	The reviewers disagree and believe that, to the extent possible, ASOPs should apply to the entire practice area, and made no change in response to this comment.
Comment	One commentator felt that much of the new material in the proposed ASOP No. 4 revision will not apply to the majority of pension plans. The commentator saw no reason to make substantial revisions to a key pension ASOP and then exclude the majority of pension work from those revisions.
Response	The reviewers believe that, to the extent possible, ASOPs should apply to the entire practice area, and that the revisions to ASOP No. 4 are necessary and appropriate.
Comment	One commentator suggested that the proposed ASOP changes be included as considerations as opposed to mandatory disclosures.
Response	The reviewers believe that the balance of considerations and disclosures in the proposed revision is appropriate.

SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES AND EFFECTIVE DATE	
Section 1.2, Scope	
Comment	One commentator suggested adding the sentence, "ASOP No. 56, *Modeling*, provides guidance with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models" as the second-to-last sentence of the paragraph so that all potential conflicts are consolidated in one place for pension actuaries.
Response	The reviewers disagree and made no change in response to this comment. The reviewers note the paragraph in scope addresses potential conflicts with pension-related ASOPs that provide guidance directly related to this standard. In addition, the reviewers note ASOP No. 56 states, "If the actuary determines that the guidance from another ASOP conflicts with the guidance of this ASOP, the guidance of the other ASOP will govern."
SECTION 2. DEFINITIONS	
Comment	Three commentators suggested adding a definition of "funding policy."
Response	The reviewers disagree that a definition of "funding policy" would improve the guidance but did modify the phrase "plan sponsor's funding policy" to "plan's funding policy" in response to these comments.
Comment	One commentator noted that the concept of the low-default-risk obligation measure is not sufficiently defined.
Response	The reviewers believe the guidance is sufficient and made no change in response to this comment.
Section 2.2, Actuarial Cost Method	
Comment	One commentator suggested revision to the definition of "actuarial cost method" by indicating that a procedure that meets the rest of the definition of actuarial cost method should retain that status even if it includes a provision that the allocation to a time period be not less than the amount required under a pay-as-you-go method.
Response	The reviewers believe the guidance is sufficient and made no change in response to this comment.
Section 2.7, Amortization Method	
Comment	One commentator felt that the term "unfunded actuarial accrued liability" makes sense for an amortization method used for a funding valuation (i.e., used in a contribution allocation procedure) but does not make sense for an accounting valuation (i.e., when used in a cost allocation procedure).
Response	The reviewers believe that the guidance is sufficiently clear and made no change in response to this comment.
Section 2.8, Contribution Allocation Procedure	
Comment	One commentator felt the standard should be clear that the terms cost allocation procedure and contribution allocation procedure do not apply to prescribed methods.
Response	The reviewers believe that the guidance is sufficiently clear and made no change in response to this comment.
Comment	One commentator recommended the definition of contribution allocation procedure in section 2.8 be clarified to indicate that each procedure produces a single value, but multiple procedures may be used as part of a funding policy.
Response	The reviewers modified the definition in response to this comment.

Section 2.18, Output Smoothing Method	
Comment	One commentator felt it would be helpful if the ASOP specifically indicated that an asset valuation method is not treated as an output smoothing method, as "asset valuation method" appears to meet the definition of an output smoothing method.
Response	The reviewers agree and modified the language in response to this comment.
SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES	
Comment	One commentator suggested removing the term "disclose" from several sections in section 3 and putting a disclosure requirement in section 4.
Response	The reviewers note that all disclosure requirements are included in section 4. In addition, for emphasis, some disclosure requirements are also repeated in section 3. Therefore, the reviewers made no change in response to this comment.
Section 3.2, General Procedures	
Comment	One commentator suggested amending the first sentence of section 3.2 to read, "When measuring pension obligations and determining or assessing periodic costs or anticipated contributions, the actuary should perform the following general procedures:"
Response	The reviewers believe the current guidance is appropriate but modified the first sentence in section 3.2 to improve clarity.
Comment	Two commentators suggested changing section 3.2(f) to "select or identify the applicable actuarial assumptions, (section 3.8)," since not all assumptions are selected by the actuary.
Response	The reviewers agree that not all assumptions or methods are selected by the actuary and modified the language in sections 1.2 and 3.2(f) in response to these and other comments.
Comment	Two commentators suggested changing "select" to "select and identify" in sections 3.2(k-o).
Response	The reviewers believe the guidance in sections 3.2(k-o) is appropriate but modified the language in section 1.2 to address these and other comments.
Comment	One commentator suggested changing section 3.2(p) to "assess the implications of the plan's funding policy, whether it is based on one or more contribution allocation procedures or other contribution setting procedures, if applicable (section 3.19)."
Response	The reviewers disagree with the suggested wording but modified the language in sections 2.8 and 3.2(p) in response to this and other comments.
Comment	One commentator felt that the reference to section 3.20 ("Contribution Lag") in section 3.2(r) was unintended.
Response	The reviewers agree and added a new section 3.2(q) in response to this comment.
Section 3.3.2, Uncertainty or Risk	
Comment	One commentator felt it is unnecessary to refer to requirements of ASOP No. 41, *Actuarial Communications*, and ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, especially in a manner that may generate confusion about what is required, and recommended that this section be deleted.
Response	The reviewers disagree and made no change in response to this comment.
Section 3.4.2, Events after the Measurement Date	
Comment	One commentator suggested changing the words in the final sentence from "measurement requires the inclusion" to "measurement prohibits or requires the inclusion."
Response	The reviewers agree and modified the language in response to this comment.

Section 3.5.1, Adopted Changes in Plan Provisions	
Comment Response	One commentator suggested changing the words in the final sentence from "measurement requires the inclusion" to "measurement prohibits or requires the inclusion." The reviewers agree and modified the language in response to this comment.
Comment Response	One commentator suggested replacing the first sentence of the section with, "Unless contrary to applicable law (for example, statutes, regulations, accounting standards or guidance, and other binding authority), or not appropriate for the purpose of the measurement, 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." The reviewers agree and modified the language in response to this comment.
Section 3.6.1, Participants	
Comment Response	One commentator noted that section 3.6.1 permits exclusion of persons below a minimum age and suggested that the exclusion not be allowed to apply to beneficiaries. The reviewers believe the guidance is sufficiently clear and made no change in response to this comment.
Comment Response	One commentator felt the reference to "employees who might become participants in the future" should be clarified to read "employees or expected future employees who might become participants in the future" to accommodate open group valuations. The reviewers believe the guidance in sections 3.6.1 and 3.6.2 is sufficiently clear and made no change in response to this comment.
Section 3.8, Actuarial Assumptions (now Assumptions)	
Comment Response	One commentator felt it would be better to replace "no" with "any" so that the actuary has to determine if significant bias exists, rather than determine if there is none. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator felt the guidance should require or recommend that the actuary should disclose significant bias, as the actuary might be performing calculations using significantly biased assumptions to apply stress tests or investigate scenarios outside the area of the actuary's reasonable expectations. The reviewers disagree with the additional disclosure requirement in this ASOP but modified the language in response to this comment.
Comment Response	One commentator suggested the phrase "unable to assess for reasonableness" should be changed to "unable to assess for reasonableness without performing a substantial amount of additional work beyond the scope of the assignment." The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator suggested clarifying that the section does not apply if such bias is intended and disclosed. The reviewers believe the disclosure requirement of "no significant bias" is appropriate but modified the guidance to include a reference to ASOP No. 51 in response to this and other comments.
Section 3.9, Measuring the Value of Accrued or Vested Benefits	
Comment Response	One commentator recommended section 3.9(g)(3) (expenses associated with a potential plan termination, including transaction costs to liquidate plan assets) and section 3.9(g)(4) (changes in investment policy) be deleted or changed. The reviewers believe the guidance is appropriate and made no change in response to this comment.

Section 3.10, Market-Consistent Present Values	
Comment	One commentator suggested eliminating this section (and the associated definition in section 2.15) and, if the concept is retained, it should be made clear that ABO and PBO under ASC 715 are not treated as market consistent present values.
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment.
Section 3.11, Low-Default-Risk Obligation Measure	
Comment	One commentator suggested modifying the language to allow for an array of discount rates.
Response	The reviewers agree and modified the language in response to this comment.
Comment	One commentator suggested changing from "…pattern of benefits…" to "…pattern and amount of benefits…."
Response	The reviewers disagree and made no change in response to this comment.
Comment	One commentator recommended that the actuary should not consider benefit payment default risk or the financial health of the plan sponsor.
Response	The reviewers agree and modified the language in response to this comment.
Comment	One commentator suggested that the proposed low-default-risk obligation measure be a solvency liability measure.
Response	The reviewers disagree and made no change in response to this comment.
Comment	One commentator suggested different terminology for the low-default-risk obligation measure.
Response	The reviewers made no change in response to this comment.
Comment	One commentator suggested that the standard specifically state that the funding valuation report can refer to other measures already provided to the client to satisfy this requirement.
Response	The reviewers note that section 4.1 states, "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." Therefore, the reviewers made no change in response to this comment.
Comment	One commentator objected to the requirement in section 4.1 that the rationale for the selection of the discount rate be disclosed.
Response	The reviewers disagree and made no change in response to this comment.
Comment	One commentator noted that "benefits earned as of the measurement date" is ambiguous, as the dollar amount of benefits earned may be known but eligibility for subsidies and supplements may depend on future service or the occurrence of a specific event. Therefore, the commentator felt there should be an affirmative statement that approaches to determining "benefits earned as of the measurement date" should be appropriate for the purpose of the measurement.
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment.
Comment	Several commentators suggested the low-default-risk obligation measure would be more appropriate in ASOP No. 51.
Response	The reviewers disagree and made no change in response to this comment.
Comment	Several commentators suggested the requirement in section 3.11 to calculate and disclose a low-default-risk obligation measure was too prescriptive.
Response	The reviewers disagree and made no change in response to this comment.

Comment Response	Several commentators suggested that requirement to calculate and disclose the low-default-risk obligation measure be changed from the actuary "should" to "should consider." The reviewers disagree and made no change in response to this comment.
Comment Response	Several commentators suggested that changing "benefits earned" to "benefits earned or costs accrued" in sections 3.11 and 4.1(o)(4). The reviewers agree and modified the language in section 3.11 in response to this comment. The reviewers note modifications were made to the language in section 4.1(o)(4) eliminating the use of "benefits earned."
Comment Response	Several commentators suggested deleting the word "obligation" from "low-default-risk obligation measure." The reviewers disagree and made no change in response to this comment.
Comment Response	Several commentators felt that the low-default-risk obligation measure does not provide useful information and should be removed from the standard. The reviewers disagree and made no change in response to this comment.
Comment Response	Several commentators felt that the low-default-risk obligation measure does not adequately address variable benefit plans. The reviewers agree and modified the language in response to this comment by including a reference to "plan provisions that are difficult to appropriately measure using traditional valuation procedures."
Comment Response	One commentator suggested including the low-default-risk obligation measure in a valuation of variable benefit features is likely to be misleading. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator recommended moving the reference of an immediate gain actuarial cost method to the start of the second paragraph for clarity. The reviewers agree and made the change in response to this comment.
Comment Response	One commentator felt that the low-default-risk obligation measure would cause confusion and misunderstanding among the memberships, employers, legislators, and tax-payers who embody the stakeholders of all public pension plans. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator requested that the ASB provide special relief from the low-default-risk obligation measure disclosure requirement for Length of Service Award Programs (LOSAPs). The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator suggested the following modification to the last sentence in section 3.11: "Alternatively, the actuary may select other assumptions that are consistent with the discount rate and reasonable for the purpose of the measurement, in accordance with ASOP Nos. 27 and 35." The reviewers agree and modified the language in response to this comment.
Comment Response	One commentator felt that the low-default-risk obligation measure should be tailored to more specific circumstances rather than "funding valuations" in general. The reviewers believe a low-default-risk obligation measure should be calculated when a funding valuation is performed. However, in response to this comment, the following sentence was added to the end of the first paragraph of section 3:11: "The actuary need not calculate and disclose this obligation measure more than once per year."

Comment Response	One commentator asked the ASB to reconsider the use of the term "low risk" to describe this alternative measurement. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator felt that there are better mechanisms offering more transparency, which already exist, than the low-default-risk obligation measure. The reviewers acknowledge other mechanisms exist but believe the low-default-risk obligation measure is appropriate.
Comment Response	One commentator felt that the measurement proposed in section 3.11 will result in additional fees being charged to governmental defined benefit plans that are already complying with a myriad of regulatory standards, which require multiple measurements of benefit obligations. The reviewers believe that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan and, therefore, made no change in response to this comment.
Comment Response	One commentator felt the overall financial solvency of the plan sponsor is a better indicator of the security of plan benefits compared to the alternative measurement proposed in the exposure draft. The reviewers acknowledge other mechanisms to measure the security of plan benefits exist but believe the low-default-risk obligation measure is appropriate.
Comment Response	One commentator felt as a measure of risk, the calculations at different discount rates made for Governmental Accounting Standards Board (GASB) statements 67 and 68 and the risk analysis made under ASOP No. 51 are of much more interest to the intended user of the funding valuation. The reviewers acknowledge other measures of risk exist but believe the low-default-risk obligation measure is appropriate.
Section 3.12, Relationship between Asset and Obligation Measurement	
Comment Response	One commentator suggested changing "value is excluded" to "value should also be excluded" in the last sentence of section 3.12. The reviewers agree and made the change in response to this comment.
Section 3.13, Actuarial Cost Method	
Comment Response	One commentator suggested changing the final sentence of section 3.13 from "should calculate a funded status…using an immediate gain actuarial cost method" to "should also calculate a funded status…using an immediate gain actuarial cost method." The reviewers agree with the addition of "also" and made the change in response to this comment.
Section 3.14, Amortization Method	
Comment Response	One commentator felt prescribing amortization methods and periods should not be necessary, but that actuaries should be required to evaluate and comment upon the implications of whatever amortization methods and periods are used (negative amortization, in particular). The reviewers do not believe the guidance in section 3.14 is overly prescriptive. Moreover, the reviewers believe the disclosure requirements regarding amortization methods and their implications are sufficient. Therefore, the reviewers made no change in response to this comment.

Comment Response	One commentator suggested moving the third paragraph to follow the first paragraph so both requirements regarding time periods and amounts are presented together, followed by the considerations that are to be used in both contexts. The reviewers believe the guidance is appropriate and made no change in response to this comment.
Comment Response	One commentator recommended that the list include "the degree to which the anticipated pattern of amortization relies on assumed payroll growth for the plan population." The reviewers believe the guidance is appropriate and made no change in response to this comment.
Section 3.16, Output Smoothing Method	
Comment Response	Several commentators suggested adding "corresponding" before "actuarially determined contribution" in section 3.16. The reviewers agree and modified the language in response to these comments.
Section 3.17, Allocation Procedure	
Comment Response	One commentator felt the list in section 3.17 should be examples of what an actuary should consider instead of a specifically required list (also applies to 4.1[v]) and suggested changing the first sentence in section 3.17 to read, "When selecting a cost allocation procedure or contribution allocation procedure, the actuary should consider factors such as:" The reviewers disagree and made no change in response to this comment. In addition, the reviewers note that ASOP No. 1, *Introductory Actuarial Standard of Practice*, states, "If after consideration, in the actuary's professional judgment, an action is not appropriate, the action is not required."
Section 3.19, Implications of Contribution Allocation Procedure or Funding Policy	
Comment Response	One commentator felt the language in section 3.19 that allows "the actuary to presume that all actuarial assumptions will be realized" (when assessing the implication of the contribution allocation procedure for IRS funding valuations) is unclear due to the phase out of stabilized interest rates. In particular, whether actuarial assumptions are assumed to remain the same should be clarified. The reviewers believe the current language is sufficient and made no change in response to this comment.
Comment Response	One commentator recommended that any references to "contribution allocation procedure or funding policy" be changed to "contribution allocation procedure or other funding policy" where other funding policy would replace plan sponsor's policy. The reviewers agree in concept and modified the guidance in response to this comment, but did not use the suggested language.
Comment Response	Several commentators felt some of the assessments in section 3.19 are quantitative and some are qualitative and recommended removing the word "qualitatively" from the first sentence. The commentators believe the three assessments in section 3.19 should be applied to the contribution allocation procedure or other funding policy that is used to determine the anticipated contribution and suggested language. The reviewers agree in concept and modified the guidance in response to these comments, but did not use the suggested language.
Comment Response	One commentator felt it would be helpful to clarify that the normal cost may be reduced by the excess, if any, of the actuarial value of assets compared to the actuarial accrued liability without requiring the estimate or disclosure described in sections 3.19 and 4.1(y). The reviewers disagree, believe the guidance is appropriate, and made no change in response to this comment.

Section 3.21, Reasonable Actuarially Determined Contribution	
Comment Response	Two commentators felt that the applicability of this section was unclear and recommended clarifying the exemption from calculating and disclosing a reasonable actuarially determined contribution for ERISA qualified pension plans. The reviewers believe the guidance is clear and made no change in response to this comment.
Comment Response	One commentator suggested the opening paragraph of section 3.21 be revised from "should calculate and disclose" to "should also calculate." The reviewers agree with the addition of "also."
Comment Response	One commentator felt the application of this section is not clear in cases where no actuarially determined contribution is calculated and recommended that the actuary should calculate and disclose a reasonable actuarially determined contribution in those circumstances. The commentator provided sample language. The reviewers agree and modified the guidance.
Comment Response	One commentator felt that frequent (such as annual) changes in methodology may not result in a reasonable actuarially determined contribution. The commentator suggested that a reasonable actuarially determined contribution is one that uses a contribution allocation procedure that is expected to be applied consistently in the future. The reviewers disagree, believe the guidance is appropriate, and made no change in response to this comment.
Comment Response	Two commentators observed that the term "reasonable" does not appear in this section other than in the title and suggested language. The reviewers agree and modified the language in response to this comment.
Comment Response	One commentator recommended changing the new wording added to the last sentence of section 3.21(a) to "…and the combined effect of these assumptions is expected to have no significant bias (i.e., it is not significantly optimistic or pessimistic)…." The reviewers agree and made the change.
Comment Response	One commentator felt that the requirements of section 3.21 should be applicable only if the actuary has reason to believe that the current funding policy is inconsistent with accumulating sufficient assets. The reviewers disagree and made no change in response to this comment.
Section 3.24, Volatility (now section 3.23)	
Comment Response	One commentator felt that directing the actuary to ASOP No. 51 for guidance in a section that includes periodic costs, when ASOP No. 51 does not apply when determining periodic costs, is inappropriate and confusing. The reviewers agree and modified the language in response to this comment.
Section 3.25, Assessments of Assumptions and Methods Not Selected by the Actuary (now section 3.24)	
Comment Response	Two commentators felt that the guidance requiring the actuary to disclose if he or she is "unable to assess" an assumption should also include "without performing a substantial amount of additional work beyond the scope of the assignment." The reviewers believe the guidance is appropriate and made no change in response to these comments. The reviewers note the changes in guidance are consistent with the guidance in 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*.

Section 3.26, Documentation	
Comment Response	One commentator felt it does not make sense that an actuary "should consider" preparing and retaining documentation but, if the actuary decides to do so, 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." The reviewers agree and modified the second sentence to read, "If preparing documentation, the actuary should consider preparing such documentation in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary's work."
Comment Response	One commentator felt that because this guidance is provided in section 3 and not section 4 of the proposed ASOPs, they read it to mean that it pertains to recommended practices and not to communications and disclosures. Therefore, the commentator recommends that the reference to section 4 be removed from the first sentence. The reviewers disagree and made no change in response to this comment.
Comment Response	Two commentators noted that the clause "or could assume the assignment if necessary" should be removed. The reviewers agree and made the change.
Comment Response	One commentator recommended that the sentence, "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" be struck since it does not add any requirement that does not already exist in ASOP No. 41. The reviewers disagree that the sentence should be struck but modified the language to remove reference to section 3.8 in ASOP No. 41.
SECTION 4. COMMUNICATIONS AND DISCLOSURES	
Section 4.1, Required Disclosures in an Actuarial Report	
Comment Response	One commentator suggested the first sentence of section 4.1 be changed to add "with respect to required disclosures" at the end to specify what the actuary should consider in the listed ASOPs when issuing an actuarial report. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator felt that section 4.1(o) is not needed and could be deleted. The reviewers disagree and made no change in response to this comment.
Comment Response	One commentator suggested that any rationale for the selection could simply be a statement that the rate is prescribed by law and that section 4.1(o)(1) be modified by deleting the requirement for disclosing the rationale. The reviewers disagree that the requirement for disclosing the rationale should be deleted and note that the modified guidance in section 3.11 states, "When calculating this measure, the actuary should select a discount rate or discount rates 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." Therefore, the reviewers made no change in response to this comment.
Comment Response	One commentator suggested deleting section 4.1(o)(5) requiring a commentary on the significance of the low-default-risk obligation measure and believes this measure has no significance with respect to the funded status of the plan, plan contributions, and the security of participant benefits. The reviewers disagree and believe the guidance is sufficient.

Comment Response	One commentator believed it would be helpful to the actuary to have section 4.1(o)(5) include the following statement: “In commenting on these issues, the actuary is not required to speculate as to whether or not benefits would be eliminated if such a funding method were used, but should indicate that such issues are relevant. We believe it is important to understand that the existence as well as the security of benefits is dependent upon the ability to invest in securities other than low-default-risk fixed income obligations.” The reviewers believe the guidance is sufficient and made no change in response to this comment.
Comment Response	One commentator recommended the following changes to section 4.1(o)(5): “related commentary to help the intended user understand the significance of the low default-risk obligation measure with respect to assessments of the funded status of the plan, the adequacy of plan contributions, and the security of participant benefits.” The reviewers believe the guidance is sufficient and made no change in response to this comment.
Comment Response	One commentator suggested it is unclear what the ASB expects the actuary to disclose in response to this requirement in section 4.1(o)(5). In response to this comment, the reviewers added the following guidance to section 3.11: “The actuary should provide 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. The actuary should use professional judgement to determine the appropriate commentary for the intended user.”
Comment Response	One commentator recommended clarifying the disclosure requirement in section 4.1(p) in situations where applicable law, regulations or accounting standards clearly specify how normal costs are to be allocated for all types of benefits provided by the plan. The reviewers believe the guidance is appropriate and made no change in response to the comment.
Comment Response	One commentator suggested that section 4.1(q)(3) include the suggestion to incorporate the funded status measure using market value, not just state that it would be different. The reviewers disagree and believe the guidance is sufficient.
Comment Response	Several commentators recommended changing the last sentence of section 4.1(t) to read, “Additionally, the actuary should disclose the corresponding actuarially determined contribution without output smoothing;” The reviewers agree and modified the language in response to these comments.
Comment Response	Multiple commentators objected to the addition of the requirement in section 4.1(v) of the second exposure draft as it is overly burdensome. Several of the commentators suggested language to clarify the intent. The reviewers agree in part, deleted section 4.1(v), and added a disclosure requirement to section 4.1(bb) (now section 4.1[aa]) in response to these comments.
Comment Response	Two commentators felt that the requirements of 4.1(v) should apply only when some aspect of the contribution allocation method has changed or when the actuary is selecting a new method. The reviewers disagree but in response to other comments deleted section 4.1(v) and added a disclosure requirement to section 4.1(bb) (now section 4.1[aa]).

Comment Response	One commentator recommended changes to 4.1 (x), (y), and (aa) to remove references to the contribution allocation procedure and actuarially determined contribution and reference only the funding policy and anticipated contributions in these disclosures. The reviewers disagree about removing references to the contribution allocation procedure but modified the language in response to this and other comments.
Comment Response	One commentator suggested removing the requirement in section 4.1(z) that this section applies only if contributions are set by law or by contract and instead require this disclosure only if the plan has unfunded actuarial accrued liability. The reviewers agree and modified the language in response to this and other comments.
Comment Response	One commentator suggested adding the sentence, “If the actuarially determined contribution is not reasonable in accordance with section 3.21, the deviation should be identified and explained;” to section 4.1(bb). The reviewers disagree and believe that the guidance is sufficient.
Section 4.2, Disclosure about Assumptions or Methods Not Selected by the Actuary (now titled, Disclosures in an Actuarial Report about Assumptions or Methods Not Selected by the Actuary)	
Comment Response	One commentator felt that this section should not apply to (i) assumptions that an actuary is unable to assess for reasonableness without doing significant additional work beyond the scope of the assignment, and (ii) assumptions that the actuary is totally unable to assess for reasonableness. The reviewers disagree and made no change in response to this comment. The reviewers note the changes in guidance are consistent with guidance in ASOP Nos. 27 and 35.