ACTUARIAL STANDARDS BOARD

• SECOND EXPOSURE DRAFT •

Proposed Revision of
Actuarial Standard of
Practice No. 4

Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

Comment Deadline:
May 31, 2013

Developed by the
Pension Committee of the
Actuarial Standards Board

Approved for Exposure by the
Actuarial Standards Board
December 2012

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APPENDIX

SECOND EXPOSURE DRAFT—December 2012

December 2012

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 a second exposure draft of proposed revisions to 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 response and each response sent by e-mail to the address below will be acknowledged, and all responses will receive appropriate consideration by the drafting committee in preparing the final document for approval by the ASB.

The ASB accepts comments by either electronic or conventional mail. The preferred form is e-mail, as it eases the task of grouping comments by section. However, please feel free to use either form. If you wish to use e-mail, please send a message to **comments@actuary.org**. You may include your comments either in the body of the message or as an attachment prepared in any commonly used word processing format. **Please do not password protect any attachments**. Include the phrase “ASB COMMENTS” in the subject line of your message. Please note: Any message not containing this exact phrase in the subject line will be deleted by our system’s spam filter. Comments will be posted in the order that they are received. **Comments received after the deadline will not be posted**.

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

ASOP No. 4 Revision
Actuarial Standards Board
1850 M Street, NW, Suite 300
Washington, DC 20036

The ASB posts all signed comments received to its website to encourage transparency and dialogue. Unsigned or anonymous comments will not be considered by the ASB nor posted to the website. The comments will not be edited, amended, or truncated in any way. Comments will be posted in the order that they are received. Comments will be removed when final action on a proposed standard is taken. The ASB website is a public website and all comments will be available to the general public. The ASB disclaims any responsibility for the content of the comments, which are solely the responsibility of those who submit them.

Deadline for receipt of responses in the ASB office: **May 31, 2013**

Background

The ASB provides coordinated 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 Benefit Obligations*;

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*; and

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

In January 2012, the ASB issued an exposure draft of ASOP No. 4.
http://www.actuarialstandardsboard.org/pdf/exposure/ASOP_No4_exposure_2011.pdf

Seventeen comment letters were received and reviewed.
http://www.actuarialstandardsboard.org/comments/asop04rev_comments.asp
The comment letters reflected diverse viewpoints and the Pension Committee found them to be helpful; the ASB thanks all those who took the time to comment.

The ASB also issued a second exposure draft of ASOP No. 27 concurrently with the first exposure draft of ASOP No. 4. Fifteen comment letters were received on the second exposure draft of ASOP No. 27. Several commentators linked comments on ASOP No. 4 and ASOP No. 27. The Pension Committee found the ASOP No. 27 comment letters to be helpful; the ASB thanks all those who took the time to comment.

The Pension Committee is continuing its work on several standards. The Committee remains focused on the following issues:

- Addressing economic value issues regarding both actuarial methods and actuarial assumptions, thus requiring revisions to both ASOP Nos. 4 and 27, and possibly to ASOP No. 35 as well.

- Coordinating changes to ASOP No. 35 that may be required due to changes in ASOP No. 27 so the two standards provide consistent guidance.

- Developing guidance for the assessment, disclosure, and management of pension risk. The Pension Committee issued a discussion draft asking for comments on proposed guidance and will be reviewing and considering comments received.
  http://www.actuarialstandardsboard.org/pdf/discussions/Risk%20Discussion%20Draft_June%202012.pdf

- Reviewing ASOP No. 4 in its entirety, not just with regard to economic value issues. This review includes funding methods, contribution policy, funded status, projections, terminology, and valuation of certain types of plan provisions.

- Reviewing ASOP No. 6, *Measuring Retiree Group Benefit Obligations*, in its entirety. The ASB appointed a new Retiree Group Benefits Subcommittee, under the jurisdiction of the Pension Committee, to address ASOP No. 6. An exposure draft of ASOP No. 6 was issued in March 2012. Eighteen comment letters were received and the Subcommittee is working on updated guidance.

At this time, the ASB is issuing a second exposure draft of a revision of ASOP No. 4. The guidance in ASOP No. 4 and ASOP No. 27 is intended to be coordinated. In order to help interested parties comment on this second exposure draft, the ASB felt it would be helpful to see how guidance in ASOP No. 27 has evolved through the recent exposure and comment process. The Pension Committee's current working draft of ASOP No. 27 has been posted on the ASB website at the following:
http://www.actuarialstandardsboard.org/pdf/ASOP27_Working_Draft_December_2012.pdf
The working draft of ASOP No. 27 is not being exposed for comment but does reflect guidance that the Pension Committee believes works in concert with the guidance in the second exposure draft of ASOP No. 4.

Further guidance in ASOP No. 6 is expected to be issued in 2013. The Pension Committee will also consider issuing proposed guidance for the assessment, disclosure, and management of pension risk in 2013.

Changes to ASOP No. 35 that align with a revised ASOP No. 27 are also likely to be exposed for comment after final revisions to ASOP No. 27 have been issued.

Key Changes in the Second Exposure Draft of ASOP No. 4

Some of the changes in the second exposure draft of ASOP No. 4 introduce new concepts while others are refinements to language in the first exposure draft. Readers are encouraged to review the transmittal memo to the first exposure draft for a discussion of all the changes introduced.

Definitions
This second exposure draft uses a **bold font** in the text of the ASOP to indicate a defined term.

Funded Status
The second exposure draft keeps "funded status" as a defined term. In response to the comment letters received, guidance related to the term "fully funded" has been removed from the second exposure draft and has been incorporated in the guidance related to funded status.

The proposed disclosures regarding funded status have been modified and are detailed in section 4.1(q). In particular:

1. The Committee does not intend for the standard to require actuaries to make additional disclosures for federally mandated funded status measurements. Thus, funded status measurements associated with AFTAP certifications or Annual Funding Notices do not trigger additional disclosures. Rather than specifically list all such measurements that are known at this time, the Committee notes that a basic tenet outlined in section 3.3 of ASOP No. 4 is that that actuary's work must be appropriate for the purpose of the measurement. In addition, the funded status disclosures in section 4.1(q) are prefaced with the phrase "if applicable." The Committee believes that it would be reasonable for an actuary to conclude that the disclosures outlined in section 4.1(q) are not appropriate for the purpose of an AFTAP certification. The Committee believes that the actuary should use professional judgment on the application of the disclosure requirements.

2. The proposed guidance now requires the actuary to make a qualitative statement as to whether the funded status measurement is appropriate to assess the plan's ability to settle obligations rather than make a stronger statement that may have required the actuary to develop an estimated settlement measurement.

3. The proposed guidance now requires the actuary to make a qualitative statement as to whether the funded status measurement is appropriate to assess the plan's need for future contributions.

4. If a funded status measurement is based on an actuarial value of assets, the proposed guidance now requires the actuary to make a statement that the funded status would be different using a market value of assets, but does not require the actuary to disclose the measure using market value of assets. In some pension practice areas, there are no regulations governing the extent to which actuarial and market values may differ.

5. The second exposure draft retains the requirement to disclose funded status using an immediate gain actuarial cost method if funded status is shown using a spread gain actuarial cost method.

Contribution Allocation Procedure Assessments and Disclosures

The disclosure language in this second exposure draft has been revised to require the actuary to provide a qualitative description of the implications of the contribution allocation procedure or sponsor funding policy on future expected plan contributions and funded status. If the contribution allocation procedure produces a range of possible contribution amounts, the proposed guidance requires the actuary to disclose the plan sponsor's funding policy that is the basis for the actuary's qualitative assessment. In making this qualitative assessment, the actuary can assume all actuarial assumptions will be met.

The second exposure draft retains the requirement for the actuary to disclose the reason for any change in cost or contribution allocation procedure (unless prescribed by law as described in section 2.20). As in the first exposure draft, changes to a cost or contribution allocation procedure include resetting the actuarial value of assets.

Types of Actuarial Present Values of Pension Obligations

The Committee removed nearly all of the present value type language from the first exposure draft. The concept of a market-consistent present value remains in the second exposure draft as a defined term and with some guidance in section 3.11. The market-consistent present value language now references broad economic and demographic assumptions inherent in observable market pricing of pension cash flows. The proposed language in section 4.1(o) requires the actuary who does determine a market-consistent present value to disclose how benefit payment default risk or the financial health of the plan sponsor was included in the measurement.

Amortization

The Committee added a disclosure requirement in section 4.1(k). The second exposure draft requires the actuary to disclose if the unfunded actuarial accrued liability is expected to increase at any time during the amortization period (assuming all actuarial assumptions are met) or if the unfunded actuarial accrued liability is not expected to be fully amortized.

Coordination with ASOP No. 6

The ASB recognizes the need for better coordination between ASOP No. 4 and ASOP No. 6 and has set a goal for the two standards to be the same where possible and different where necessary. The second exposure draft includes language to improve this coordination.

Relationship between Assets and Obligations

Language in the second exposure draft has been modified in section 3.12 to make the guidance clearer on how the relationship between assets and obligations should be considered.

Request for Comments on ASOP No. 4

The ASB is issuing a revised version of ASOP No. 4 as a second exposure draft to provide members of actuarial organizations governed by the ASOPs and other interested persons an opportunity to comment.

The Pension Committee would appreciate comments on the proposed changes and would like to draw the readers' attention to the following areas in particular:

1. Does the use of bold font to identify defined terms improve the readability and clarity of the standard? If not, what suggestions do you have to improve the recognition of defined terms in the standard?

2. Are the revised disclosure requirements regarding funded status clear, sufficient, and appropriate? If not, how should they be changed?

3. Some disclosures now require a qualitative assessment rather than a quantitative assessment. Do you feel that a qualitative assessment requires less work for the actuary than a quantitative assessment and reflects an appropriate level of disclosure effort?

4. Is the coordination of guidance on market-consistent present value measurements in the second exposure draft of ASOP No. 4 and the working version of ASOP No. 27 appropriate?

5. Is a future change in control of the plan sponsor an appropriate example of an event that can trigger valuation issues under section 3.5.3(d)?

The ASB reviewed this draft and voted in December 2012 to approve its exposure.

The ASB establishes and improves standards of actuarial practice. These ASOPs identify what the actuary should consider, document, and disclose when performing an actuarial assignment. The ASB's goal is to set standards for appropriate practice for the U.S.

SECOND EXPOSURE DRAFT—December 2012

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) provides guidance to actuaries when performing professional services with respect to measuring obligations under a pension plan and determining plan **costs** or **contributions** for such plans. Throughout this standard, the term plan refers to a defined benefit pension plan. Other actuarial standards of practice address actuarial assumptions and asset valuation methods. This standard addresses broader measurement issues, including **cost allocation procedures** and **contribution allocation procedures**. This standard provides guidance for coordinating and integrating all of the elements of an **actuarial valuation** of a pension plan.

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

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

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

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

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

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

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

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

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

This standard does not require the actuary to evaluate the ability 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.

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

1.4 Effective Date—This standard will be effective for any actuarial work product with a **measurement date** on or after twelve months after adoption by the Actuarial Standards Board (ASB).

Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice.

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

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

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

2.6 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**.

2.7 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.

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

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

2.10 Cost Allocation Procedure—A procedure that uses an **actuarial cost method** to determine the periodic **cost** for a plan (for example, the procedure to determine the net periodic pension **cost** under accounting standards).

2.11 Expenses—Administrative or investment **expenses** borne or expected to be borne by the plan.

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

2.13 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.

2.14 Market-Consistent Present Value—An **actuarial present value** that is 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.

2.15 Measurement Date—The date as of which the values of the pension obligations and, if applicable, assets are determined (sometimes referred to as the valuation date).

2.16 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.

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

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

2.19 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**.

2.20 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**.

2.21 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 plan **costs** or **contributions** are processes in which the actuary may be required to make judgments or recommendations on the choice of actuarial assumptions, **actuarial cost methods**, asset valuation methods, and **amortization methods**.

The actuary may have the responsibility and authority to select some or all actuarial assumptions, **actuarial cost methods**, asset valuation methods, and **amortization 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**.

ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, and ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*, provide guidance concerning actuarial assumptions. ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations*, provides guidance concerning asset valuation methods. ASOP No. 4 addresses broader measurement issues including **cost allocation procedures** and **contribution allocation procedures**, and provides guidance for coordinating and integrating all of these elements of an **actuarial valuation** of a pension plan. In the event of a conflict between the guidance provided in ASOP No. 4 and the guidance in any of the aforementioned ASOPs, ASOP No. 4 governs.

3.2 General Procedures—When measuring pension obligations and determining plan **costs** or **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 other information from the principal (section 3.7);

f. select actuarial assumptions (section 3.8);

g. select an asset valuation method, if applicable (section 3.9);

h. consider how to measure accrued or vested benefits, if applicable (section 3.10);

i. consider how to measure **market-consistent present values**, if applicable (section 3.11);

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

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

l. select a **cost allocation procedure** or **contribution allocation procedure**, if applicable (section 3.14);

m. assess the implications of the **contribution allocation procedure** or contributions set by contract or law, if applicable (section 3.14);

n. consider the use of approximations and estimates (section 3.15);

o. consider sources of significant volatility (section 3.16); and

p. evaluate **prescribed assumptions and methods set by another party**, if applicable (section 3.17).

3.3 Purpose of the Measurement—When measuring pension obligations and determining plan **costs** or **contributions**, the actuary should take into account the purpose of the measurement. Examples of measurement purposes are accounting **costs**, **contribution** requirements, benefit provision pricing, comparability assessments, withdrawal liabilities, benefit plan settlements, **funded status** assessments, market value assessments, and plan sponsor mergers and acquisitions.

3.3.1 Anticipated Needs of Intended Users—The actuary should consider the anticipated needs of different intended users. For example, some intended users may be interested in **contribution** requirements while others may be interested in evaluating benefit security. Some intended users may be interested in comparing pension obligations among different sponsoring entities while others may be interested in comparing a plan sponsor's pension obligation to the plan sponsor's other financial obligations.

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

3.3.3 Risk or Uncertainty—Consistent with section 3.4.1 of ASOP No. 41, the actuary should consider the risk or uncertainty inherent in the measurement assumptions and methods and how the actuary's measurement treats such risk or uncertainty.

3.4 Measurement Date Considerations—When measuring pension obligations and determining plan **costs** or **contributions** as of a **measurement date**, the actuary should consider the following:

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—Events known to the actuary that occur subsequent to the **measurement date** and prior to the date of the actuarial communication should be treated appropriately for the purpose of the measurement. Unless the purpose of the measurement requires the inclusion of such events, they need not be reflected 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 adjustment is appropriate, the actuary should consider items such as the following, if known to the actuary:

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

b. length of time since the prior measurement;

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

d. changes in economic and demographic expectations; and

e. changes in **plan provisions**.

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

3.5 Plan Provisions—When measuring pension obligations and determining plan **costs** or **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(d).

3.5.1 Adopted Changes in Plan Provisions—Unless contrary to applicable law (statutes, regulations, and other legally binding authority, the actuary should reflect **plan provisions** adopted on or before the **measurement date** for at least the portion of the period during which the provisions are in effect; **plan provisions** adopted after the **measurement date** may, but need not, be reflected.

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 Other Valuation Issues—Some **plan provisions** may create pension obligations that are difficult to measure using deterministic procedures and assumptions selected in accordance with ASOP Nos. 27 and 35. Such **plan provisions** can include those **plan provisions** in which future benefits vary asymmetrically with future economic or demographic experience relative to the estimated projected benefits based on a particular set of actuarial assumptions. 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 procedures, such as stochastic modeling, option-pricing techniques, or assumptions that are adjusted to reflect the asymmetric impact of variations in experience from year to year. In selecting valuation procedures for such **plan provisions**, the actuary should use professional judgment based on the purpose of the measurement and other relevant factors. For example, if the purpose of the measurement is to estimate a **market-consistent present value** of the **plan provisions**, using alternative procedures to capture the impact of asymmetric **plan provisions** may be appropriate. If the purpose of the measurement is to determine plan **contributions**, concerns that certain assumed economic or demographic outcomes may not occur may lead the actuary to ignore asymmetric **plan**

provisions such as shutdown benefits in order to avoid excess funding.

The actuary should disclose the approach taken with any **plan provisions** of the type described in this section, in accordance with section 4.1(i).

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/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 other information from the principal necessary for the purpose of the measurement, such as accounting or funding elections.

3.8 Actuarial Assumptions—The actuary should refer to ASOP Nos. 27 and 35 for guidance on the selection of actuarial assumptions.

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

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

a. relevant **plan provisions** and applicable law (statutes, regulations, and other legally binding authority);

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 backloaded); 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.

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

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

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

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

3.12 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 should be excluded from the obligation.

3.13 Actuarial Cost Method—When assigning **costs** or **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** should begin no earlier than the date of employment and should 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** should bear 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** should be considered when assigning **costs** or **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.**

d. The sum of the **actuarial accrued liability** and the **actuarial present value** of future **normal costs** should equal the **actuarial present value of projected benefits** and **expenses**, to the extent **expenses** are included in the 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**.

3.14 Allocation Procedure—A **cost allocation procedure** or **contribution allocation procedure** typically combines an **actuarial cost method**, an asset valuation method, and an **amortization method** to determine the plan **cost** or **contribution** for the period. When selecting a **cost allocation procedure** or **contribution allocation procedure**, the actuary should consider factors such as the timing and duration of expected benefit payments and the nature and frequency of plan amendments. In addition, the actuary should consider relevant input received from the principal, such as a desire for stable or predictable **costs** or **contributions**, or a desire to achieve a target funding level within a specified time frame.

3.14.1 Consistency Between Contribution Allocation Procedure and the Payment of Benefits—In some circumstances, a **contribution allocation procedure** may not necessarily 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 funding 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 **contributions** would be scheduled to occur too late to make plan benefit payments when due.

When performing professional services with respect to **contributions** for a plan, the actuary should select a **contribution allocation procedure** that, in the actuary's professional judgment, is consistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make **contributions** when due.

In some circumstances, the actuary's role is to determine the **contribution**, or range of **contributions**, using a **contribution allocation procedure** prescribed by law or selected by another party. If, in the actuary's professional judgment, such a **contribution allocation procedure** is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make **contributions** when due, the actuary should disclose this in accordance with section 4.1(l).

3.14.2 <u>Implications of Contribution Allocation Procedure</u>—If **contributions** are based on a **contribution allocation procedure** or the actuary knows the plan sponsor's (or other contributing entity's) funding policy, the actuary should qualitatively assess the implications of that procedure or policy on the plan's expected future **contributions** and **funded status**. If contributions are not based on a **contribution allocation procedure** or funding policy, for example, contributions set in law or by a contract such as a collective bargaining agreement, the actuary should qualitatively assess the implications of those contributions on the plan's expected future **funded status**. In making either of these assessments, the actuary may presume that all actuarial assumptions will be realized and the sponsor (or other contributing entity) will make contributions anticipated by the **contribution allocation procedure** or otherwise. The actuary's assessment required by this section should be disclosed (section 4.1(m)).

3.15 <u>Approximations and Estimates</u>—The actuary should use professional judgment to establish a balance between the degree of refinement of methodology and materiality. The actuary may use approximations and estimates where circumstances warrant. 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, plan **cost**, or plan **contribution**.

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

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

b. changes in economic or demographic assumptions;

c. the effect of discontinuities in applicable **cost** or **contribution** regulations, 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 **cost** expected when using a particular **actuarial cost method** for the plan population.

In analyzing potential variations in economic and demographic experience or assumptions, the actuary should exercise professional judgment in selecting a range of variation in these assumptions (while maintaining internal consistency among these assumptions) and in selecting a methodology by which to analyze them, consistent with the scope of the assignment.

3.17 Evaluation of Assumptions and Methods—An actuarial communication should identify the party responsible for each material assumption and method. Where the communication is silent about such responsibility, the actuary who issued the communication will be assumed to have taken responsibility for that assumption or method.

3.17.1 Prescribed Assumption or Method Set by Another Party—The actuary should evaluate whether a **prescribed assumption or method set by another party** is reasonable for the purpose of the measurement, except as provided in section 3.17.3. The actuary should be guided by Precept 8 of the *Code of Professional*

Conduct, which states, "An Actuary who performs Actuarial Services shall take reasonable steps to ensure that such services are not used to mislead other parties." For purposes of this evaluation, reasonable assumptions or methods are not necessarily limited to those the actuary would have selected for the measurement.

3.17.2 Evaluating Prescribed Assumption or Method—When evaluating a **prescribed assumption or method set by another party**, the actuary should consider whether the prescribed 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).

3.17.3 Inability to Evaluate Prescribed Assumption or Method—If the actuary is unable to evaluate a **prescribed assumption or method set by another party** without performing a substantial amount of additional work beyond the scope of the assignment, the actuary should disclose this in accordance with section 4.2(b).

Section 4. Communications and Disclosures

4.1 Communication Requirements—Any actuarial communication prepared to communicate the results of work subject to this standard must comply with the requirements of ASOP Nos. 23, 27, 35, 41, and 44. In addition, such communication should contain the following disclosures when relevant and material. An actuarial communication can comply with some, or all, of the specific requirements of this section by making reference to information contained in other actuarial communications available to the intended users (as defined in ASOP No. 41), such as an annual **actuarial valuation** report.

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

b. the **measurement date**;

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

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

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

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

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

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

i. a description of the methods used to value any significant benefit provisions described in section 3.5.3 such that another actuary could make an objective appraisal of the reasonableness of the actuary's work as presented in the actuarial report;

j. a description of the **actuarial cost method** and the manner in which **normal costs** are allocated, in sufficient detail to permit another actuary qualified in the same practice area to assess the material 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);

k. a description of the **cost allocation procedure** or **contribution allocation procedure** including a description of **amortization methods** and amortization bases, and a description of any pay-as-you-go funding (i.e., the intended payment by the plan sponsor of some or all benefits when due). The actuary should disclose if the unfunded **actuarial accrued liability** is expected to increase at any time during the amortization period or if the unfunded **actuarial accrued liability** is not expected to be fully amortized. For purposes of this section, the actuary should assume that all actuarial assumptions will be realized and **contributions** will be made when due;

l. a statement indicating that the **contribution allocation procedure** is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, if applicable in accordance with section 3.14.1;

m. a qualitative description of the implications of the **contribution allocation procedure**, sponsor funding policy, or contributions set by contract or law, as applicable, on future expected plan **contributions** and **funded status** in accordance with section 3.14.2. If the **contribution allocation procedure** produces a range of values, the actuary should disclose the actuary's understanding of the sponsor's funding policy for the purpose of the actuary's assessment in accordance with section 3.14.2;

n. 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;

o. if applicable, a description of how benefit payment default risk or the financial health of the plan sponsor was included in any **market-consistent present value** of accrued or vested benefits;

p. **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**. The **immediate gain actuarial cost method** used for this purpose should be disclosed in accordance with section 4.1(j);

q. if applicable, a description of the particular measures of plan assets and plan obligations that are included in the actuary's disclosure of the plan's **funded status**. 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 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. a statement, appropriate for the intended users, indicating that future measurements (for example, of pension obligations, plan **costs**, plan **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;

s. 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;

t. 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 **cost**, **contribution**, **funded status**, or other measures, by words or numerical data, as appropriate;

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

v. if, in the actuary's professional judgment, the actuary's use of approximations or estimates could result in a significant margin for error relative to the results if a detailed calculation had been done, a statement to this effect.

4.2 Disclosure about Prescribed Assumptions or Methods—The actuary's communication should state the source of any prescribed assumptions or methods. In addition, with respect to **prescribed assumptions or methods set by another party**, the actuary's communication should identify the following, if applicable:

a. any **prescribed assumption or method set by another party** that significantly conflicts with what, in the actuary's professional judgment, would be reasonable for the purpose of the measurement (section 3.17.2); or

b. any **prescribed assumption or method set by another party** that the actuary is unable to evaluate for reasonableness for the purpose of the measurement (section 3.17.3).

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

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

b. the disclosure in ASOP No. 41, section 4.4, if, in the actuary's professional judgment, the actuary has otherwise deviated materially from the guidance of this ASOP.

Appendix

Comments on the First Exposure Draft and Responses

The first exposure draft of this proposed revision of ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions,* was issued in January 2012 with a comment deadline of May 31, 2012. Seventeen comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of this appendix, the term "commentator" may refer to more than one person associated with a particular comment letter. The Pension Committee carefully considered all comments received, and the ASB reviewed (and modified, where appropriate) the proposed changes.

Summarized below are the significant issues and questions contained in the comment letters and the responses to each.

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

GENERAL COMMENTS	
Comment Response	One commentator suggested that the title be changed to "Measuring Pension Obligations, Costs or Contributions." The reviewers believe that the title as written is clear and made no change.
Comment Response	A few commentators opined that pension actuaries serve clients and not the public at large. In this view: • Actuaries serve clients and prepare work for the client's benefit and at the client's behest; • No party other than the client should expect to benefit or draw any inference from the actuary's work; • Other entities in society provide regulations that serve the public interest; • As a result of the prior bullets, the standards should not require any work or disclosure that is intended to benefit interested parties in the public at large. The reviewers considered this viewpoint but concluded the current paradigm for self-governance established by the *Code of Professional Conduct* requires the ASOPs to reflect a concern for public interest.
Comment Response	Many commentators opined that certain aspects of the proposed language in the first exposure draft expanded the scope of the assignment beyond the client request. Scope expansion without a corresponding client request may lead to the actuary performing work without being compensated appropriately. The reviewers understand that actuaries need to be successful commercially and are sensitive to creating burdensome practice requirements. In this second exposure draft, the Committee has balanced the proposed requirements for appropriate actuarial practice with actuaries' concerns about expansion of work product requirements.

SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES, AND EFFECTIVE DATE	
Section 1.2, Scope	
Comment	One commentator suggested that the examples in section 1.2(a) emphasized market value measures of plan obligations and should be modified.
Response	The reviewers believe that the section provides a sample of the most common projects intended to be included in the scope of this standard and made no change.
SECTION 2. DEFINITIONS	
Section 2.1, Actuarial Accrued Liability	
Comment	One commentator suggested that this definition should be changed to the accumulation of prior normal costs.
Response	The reviewers believe that the definition as written is clear and appropriate, and made no change.
Section 2.2, Actuarial Cost Method	
Comment	One commentator objected to this definition as being inconsistent with the definition in ERISA. Another suggested a change in the language from "in advance of the time benefit payments are due" to "in advance of the time benefit payments are expected to be paid."
Response	The reviewers changed the language of this section to clarify that the pay-as-you-go method is not considered an actuarial cost method for purposes of the standard.
Section 2.7, Contribution	
Comment	Several commentators indicated that contributions should be actual contributions, not potential contributions and suggested that the standard should define potential contribution.
Response	The reviewers believe that this definition as written is useful for the purpose of the standard and is sufficiently clear, and made no change.
Section 2.8, Contribution Allocation Procedure	
Comment	One commentator suggested replacing 20-year amortization in the example with "an" amortization.
Response	The reviewers agree and made the change.
Section 2.9, Cost	
Comment	Several commentators indicated that cost measures are not simply portions of obligations and proposed alternative wording.
Response	The reviewers agree and accepted suggested alternative wording.
Section 2.10, Cost Allocation Procedure	
Comment	One commentator suggested adding the phrase "for minimum funding purposes under Section 430 of the Internal Revenue Code." Another commentator suggested that the language be broadened by using "accounting standards" rather than referring to the standards promulgated by the Financial Accounting Standards Board.
Response	The reviewers agree with the suggestion to broaden the application to all accounting standards and changed the language, but do not agree that a reference to minimum funding standards belongs in this section.
Section 2.11, Expenses	
Comment	One commentator noted that investment expenses in mutual funds may be difficult to measure and the standard should not place undue burdens on the actuary with respect to measurement of investment expenses.
Response	The reviewers believe there is sufficient expense disclosure in the mutual fund industry to allow actuaries to reflect mutual fund expenses in accordance with the guidance in the standard.

Section 2.12, Fully Funded and Section 2.13, Funded Status	
Comment Response	Several commentators expressed concerns about the requirements in the exposure draft relative to a plan that may be deemed to be "fully funded" and indicated that the language in section 2.13 was not appropriate in a definition. The reviewers agree with the concerns, modified the requirements, deleted the definition of "fully funded," and simplified the definition of "funded status."
Section 2.15, Measurement Date	
Comment Response	One commentator suggested defining "valuation date" rather than "measurement date." The reviewers disagree with the suggestion and made no change.
SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES	
Section 3.2, General Procedures	
Comment Response	One commentator suggested that gathering sponsor elections known as of the measurement date should be added to the list of general procedures in section 3.2(c). The reviewers agree and made changes to sections 3.2(d), 3.6, and to the disclosure in section 4.1.
Section 3.3.1, Anticipated Needs of Intended Users	
Comment Response	One commentator suggested that anticipated needs of intended users be qualified as those needs that may be known. The reviewers believe that the existing language is sufficiently clear and made no change.
Section 3.3.3, Risk or Uncertainty	
Comment Response	One commentator expressed concern that the language in this section was too broad. The reviewers note that this language is in ASOP No. 41, *Actuarial Communications*, and do not believe that it broadens the scope of the actuary's work.
Section 3.5, Plan Provisions	
Comment Response	One commentator suggested that the language be modified to apply to significant plan provisions "known to the actuary." Another commentator suggested the addition of a new section relative to principal elections made prior to the measurement date. Another commentator suggested that there should be a definition of "significant" for this purpose. The reviewers agree with the first commentator and modified the language of this section. The reviewers do not believe that the standard needs to define significant for this purpose and note that the term is anticipated to be defined in the revised *Introduction to the Actuarial Standards of Practice*. The reviewers agree with the suggestion regarding principal elections, but decided to address it in section 3.7 rather than section 3.5.
Section 3.5.1, Adopted Plan Changes	
Comment Response	One commentator suggested that section 3.5.1 is too restrictive. Another commentator found the term "applicable law" to be too narrow. The reviewers agree with the suggestion to clarify the scope of applicable law and changed the language to be consistent with other sections of the standard. The reviewers do not agree that the section is too restrictive.
Section 3.5.3, Other Valuation Issues	
Comment Response	Several commentators suggested alternative language for this section that they believed more clearly expressed the intent. The reviewers agree and changed the language in sections 3.5.3(a), (d), and in the penultimate paragraph of this section.

Section 3.6.2, Hypothetical Data	
Comment Response	One commentator suggested using the phrase "imputed data" rather than "hypothetical data." The reviewers believe that existing guidance is clear and made no change.
Section 3.7, Types of Actuarial Present Values	
Comment	Several commentators expressed concerns relative to proposed guidance in the exposure draft regarding types of present values, particularly the additional disclosure requirements. Concerns included the following: • The bifurcation of present value types on assets created many problems for commentators who pointed out that the split was not as neat as the Committee might have imagined since market measurements can be based on a reference portfolio of assets. • Many commentators pointed out that the present value type language focused primarily on discount rates and that other economic and demographic assumptions are needed to develop market measurements. • Some commentators felt inclusion of a market measurement was premature given the lack of consensus in the profession on the matter. In the same vein, other commentators felt inclusion of a market measurement was inappropriate since standards end up defining minimum practice and there is no current requirement anywhere in the profession for this type of measurement. • Some commentators felt the examples in the discussion of a market-consistent present value were too prescriptive. • Many commentators objected to the requirement that the actuary disclose implications of the present value type chosen for a measurement as well as the example given in the disclosure paragraph.
Response	After careful consideration of the comments received and the objectives for the guidance, the Committee removed nearly all of the present value type language from the proposed standard. The concept of a market-consistent present value remains in the proposed standard and is now a defined term and with some guidance in section 3.11. The market-consistent present value language now references broad economic and demographic assumptions inherent in observable market pricing of pension cash flows.
Section 3.10, Measuring the Value of Accrued of Vested Benefits	
Comment	One commentator suggested that this section be strengthened to require that, in the absence of legal or other binding authority to the contrary, or when otherwise directed, the calculations anticipated by this section be made on a market-consistent basis. Another commentator suggested that "misleading" is a better term than "not appropriate" in section 3.10(f). Another commentator noted also relative to section 3.10(f) that "severely" (as in "severely backloaded") is not defined. Another commentator noted that the list provided in this section is equally applicable to projected benefits as well as accrued and vested benefits and suggested that the guidance in this section also apply to calculations of benefits other than accrued or vested.
Response	The reviewers agree with the suggestion regarding the use of the word "severely" and changed it to "significantly." The reviewers believe that requiring market-consistent measurements would be too restrictive. The reviewers also believe that the rest of the section provides clear guidance and made no further changes.

Section 3.11, Relationship Between Procedures Used for Measuring Assets and Obligations	
Comment	One commentator found this section unclear and potentially so broad that it could be interpreted as requiring market value measures of liabilities whenever a market value of assets is used in the measurement.
Response	The reviewers did not intend this section to require market-consistent measurements and clarified the language.
Section 3.12, Actuarial Cost Method	
Comment	One commentator suggested that the standard require more restrictive periods of amortization for certain plan amendments.
Response	The reviewers believe that such requirements would unnecessarily constrain practice and made no changes.
Comment	Several commentators noted that expenses for some investments (such as mutual funds) may not be known and, therefore, should not be required to be considered by the actuary. Another commentator suggested that the standard refer to expenses to be paid by the plan.
Response	The reviewers believe that the current language relative to consideration of expenses is clear and sufficient for its purpose. The reviewers also made no change as a result of the second comment, since expenses are already defined as expenses anticipated to be paid from the plan in section 2.11.
Comment	One commentator suggested that the standard define “spread-gain actuarial accrued liability” as a term distinct from the defined term “actuarial accrued liability.” The commentator also suggested that the standard require the actuary to disclose that a spread gain actuarial method is only a device for allocating pension costs and a spread gain actuarial accrued liability is not appropriate to use in measuring funded status.
Response	The reviewers believe the disclosure requirements in sections 4.1(p) and 4.1(q) provide appropriate disclosure of funded status measurements. As such, the reviewers do not believe the standard needs to delve into the distinction between spread gain actuarial liability and actuarial accrued liability.
Section 3.13, Allocation Procedure	
Comment	One commentator questioned whether the last sentence of this section belonged.
Response	The reviewers agree and removed the sentence from this section, as it is already included in section 1.2.
Section 3.13.2, Actuary Selects Contribution Allocation Procedure, and Section 3.13.3, Actuary Does Not Select Contribution Allocation Procedure	
Comment	One commentator found these headings unclear.
Response	The reviewers agree and removed the headings. In addition, the guidance contained in sections 3.13.4 and 3.13.5 was modified as discussed below and combined into one new section 3.13.2.
Comment	One commentator did not understand the meaning of “significantly inconsistent” in section 3.13.3.
Response	The reviewers believe the language of this section is sufficiently clear, particularly since “significant” is a term that is expected to be defined in the revised *Introduction to the Actuarial Standards of Practice*.

Section 3.13.4, Assessment of Overall Implications of Contribution Allocation Procedure, and Section, 3.13.5 Contribution Set by Contract or Law	
Comment	Several commentators expressed concern about the proposed requirements of this section. They felt that the proposed language placed an impractical burden on the actuary (to perform quantitative forecasts), and that evaluation of the expected pattern of future cost, funded status, and contributions represented additional work not wanted or contracted by the principal. One commentator believed that any assessment should be long term in nature, while another commentator indicated that the assessment should be limited to a brief period of time.
Response	The reviewers agree with the concerns expressed by the commentators, but believe that the actuary should qualitatively (not necessarily quantitatively) assess the implications of the assumptions and methods selected on expected future contributions and funded status (on an expected basis). These sections were revised for this purpose.
Section 3.14, Approximations and Estimates	
Comment	One commentator suggested alternative wording for this section to make it clearer.
Response	The reviewers agree and accepted the proposed wording change.
Section 3.16.1, Prescribed Assumption or Method Set by Another Party	
Comment	One commentator raised a question regarding obligations of the actuary under Precept 8 of the *Code of Professional Conduct*.
Response	The reviewers did not address this question about the *Code of Professional Conduct* as it is beyond the scope of this ASOP.
Section 3.16.2, Evaluating Prescribed Assumption or Method	
Comment	One commentator suggested that instead of disclosing any significant conflicts, the standard should require the actuary to disclose the assessment of the assumptions in all instances.
Response	The reviewers believe the existing language is clear, appropriate, and consistent with requirements in ASOP No. 41.
SECTION 4. COMMUNICATIONS AND DISCLOSURES	
Section 4.1, Communications Requirements	
Comment	One commentator suggested replacing “where” in the first paragraph of this section with “when.” Another commentator indicated that many of the requirements of this section are burdensome “best practices” that are beyond the normal needs of principals and should be removed from the standard.
Response	The reviewers agree with the specific language suggestion and made this change. The reviewers do not agree that many of the disclosure requirements of this section should be removed.
Comment	One commentator suggested changes to expand disclosures relative to significant plan provisions included in the valuation in section 4.1(d).
Response	The reviewers agree and expanded the disclosure to include a description of changes from known provisions included in the previous valuation.
Comment	Regarding section 4.1(f), one commentator suggested that the summary of participant information include age and service distributions. Another commentator suggested that guidance be provided for acceptable disclosure of participant information.
Response	The reviewers disagree and found these suggestions too prescriptive. However, consistent with the modification of section 3.6, the reviewers added a requirement to disclose relevant principal elections.
Comment	One commentator suggested that the language in section 4.1(h) replicate the language in ASOP No. 41.
Response	The reviewers agree and made the suggested language change.

Comment Response	Regarding section 4.1(i), several commentators expressed concerns about disclosing the implications of the type of actuarial present value selected. The reviewers agree and eliminated this disclosure item.
Comment Response	As noted above, several commentators expressed concerns about the disclosure of an expectation of declining future funded status or increased contributions as listed in sections 4.1(k) and (l). The reviewers agree but modified section 4.1(k) to require disclosure if the unfunded liability is expected to increase at any time in the future and modified section 4.1 to require disclosure of the qualitative description discussed in section 3.14.2.
Comment Response	One commentator suggested a slight modification of the language in section 4.1(m) for consistency. The reviewers agree and made the change. The reviewers also added a new disclosure requirement of how client-specific default risk was reflected for those communications that include market-consistent measures of accrued or vested benefits.
Comment Response	Several commentators expressed concerns about having to disclose funded status based on market value in addition to any funded status based on a value not equal to market value as listed in section 4.1(n). The reviewers agree and deleted this disclosure.
Comment Response	One commentator believed that the disclosure in section 4.1(o) was too prescriptive. The reviewers disagree and retained the language as is.
Comment Response	Regarding section 4.1(p), several commentators expressed concerns about requiring disclosures regarding statements relative to funded status measurements, particularly statements that a plan may be considered "fully funded." The reviewers agree and removed the proposed disclosures regarding such statements. However, the reviewers retained and modified the language of this section applicable to measurements of funded status.
Comment Response	One commentator found the guidance in section 4.1(r) confusing. Another commentator suggested that the same wording be used in this section as used in section 4.1.3 of ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, including the phrase, "the disclosure may be brief but should be pertinent to the plan circumstances." The reviewers separated the section into two separate disclosures for clarification purposes. The reviewers considered the language change suggestion but did not make a change.
Section 4.2, Additional Disclosures	
Comment Response	Several commentators noted that there appeared to be a discrepancy between the disclosure requirements in this section and the general disclosure requirements in ASOP No. 41. In particular, ASOP No. 41 appears to provide that no disclosure is necessary if assumptions/methods are selected by another party and the actuary believes these assumptions/methods are reasonable. The reviewers agree with the comment, but believe the actuary should disclose the party responsible for pension plan assumption selection, if it is not the actuary, and modified the language of this section accordingly.