

ASOP 4

Highlights and Key Updates from the 2021 Revision

Michelle Boyles, FSA, EA, MAAA

May 10, 2022

Agenda

- Background on ASOPs
- ASOP 4 Details
- Key Updates to ASOP 4
- What's Next?



Disclaimer

Please note the presenter's statements and opinions are her own and do not necessarily represent the official statements or opinions of the ABCD, ASB, or any other actuarial organization or her employer. They are all based on her understanding of the material.

Background on ASOPs

General background

Why do I need to know about ASOPs?

- Code of Professional Conduct requires compliance
- Failure to follow ASOPs may result in possible disciplinary action
- A basis for assuring work will conform to generally accepted principles and practices
- Assures the public that actuaries are accountable

Recent attention on ASOPs

- Lawsuits against actuaries in recent years have referred extensively to ASOPs
- Frequently discussed issue in external audits

Code of Conduct

- <https://www.actuary.org/content/code-professional-conduct>
- Act with honesty, integrity and competence
- Perform Services only when qualified
- **Satisfy applicable standards of practice**
- Clear and appropriate communication to the intended audience
- Identify the Principal(s) for whom the communication is issued
- Disclose financial arrangement with Principal
- Do not knowingly perform services involving conflict of interest (exceptions)
- Ensure that services are not used to mislead other parties
- Do not disclose confidential information
- Perform services with courtesy and professional respect
- Do not advertise misleading or false information
- Use titles and designations as authorized
- Attempt to resolve observed violation of the code by others
- Respond promptly to ABCD requests

Actuarial Standards Board

- Consists of nine individuals
- Three-year term
- Term limits (two consecutive terms max)
- Receives guidance on appointments from AAA, CAS, and SOA

Applicability Guidelines for Actuarial Standards of Practice

- Guidelines assist in identifying applicable standards by practice area
- Published by the AAA, **NOT** the ASB
- <https://www.actuary.org/content/applicability-guidelines-actuarial-standards-practice-0>
- Not authoritative
- Actuary is still responsible for identifying the ASOPs that apply
- <http://www.actuarialstandardsboard.org/standards-of-practice/>
- Guidelines Indicate:
 - All assignments – 1, 23, 41
 - Retiree Medical – 4, 5, 6, 12, 21, 25, 27, 35, 44, 56
 - DROs – 4,17, 27, 34, 35
 - Social Insurance – 4, 5, 6, 12, 25, 27, 32, 35, 56
 - Funding/FAS – 4, 12, 21, 25, 27, 35, 44, 51, 56

Pension valuation ASOPs

- 1 – Introductory ASOP
- **4 – Measuring Pension Obligations**
- 12 – Risk Classification
- 21 – Responding to or Assisting Auditors
- 23 – Data Quality
- 25 – Credibility Procedures
- 27 – Economic Assumptions
- 35 – Noneconomic Assumptions
- 41 – Actuarial Communications
- 44 – Asset Valuation Methods
- 51 – Assessment and Disclosure of Risks
- 56 – Modeling

Valuation process

Think big-picture, step-by-step view of valuation process:

- Request and receive employee data and financial information
 - ASOP 23 (Data quality)
- Review and set assumptions
 - ASOP 12 (Risk classification); ASOP 25 (Credibility procedures);
 - ASOP 27 (Economic assumptions); ASOP 35 (Non-economic)
- Review and set methods
 - ASOP 4 (Measurement); ASOP 44 (Asset valuation methods); ASOP 56 (Modeling)
- Calculate liabilities
 - ASOP 4 (Measurement); ASOP 51 (Assessment of risks)
- Produce reports, follow-up with auditors, filings, etc.
 - ASOP 21 (Responding to auditors); ASOP 41 (Communication);
 - ASOP 51 (Disclosure of risks)

ASOP 4 Details

Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

Overview

- Revised December 2021 (prior revision was December 2013)
- Effective February 15, 2023
- “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, asset valuation methods, and assessment of risk. 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.”
- In other words...“Umbrella” Standard that coordinates with other ASOPs (27, 35, 44) for an actuarial valuation of a pension plan

Scope

- Applies to performance of and giving advice on the following:

Measuring pension obligations

- Funded status
- Solvency on plan termination
- Market measurements
- Measurements for pricing benefit provisions

Determining periodic costs / Actuarially determined contributions

- Assigning value of obligations to time periods
- Development of cost allocations
- Development of contribution allocations

Determine sustainability of benefit levels

- Also applies to projections of the above (cash flows, funded status)
- Does not apply to individual benefit calculations/estimates, annuity pricing, nondiscrimination testing and social insurance
- Does not require actuary to evaluate the ability of plan sponsor to make contributions when due

Definitions (many) include:

- All things “Actuarial”
 - Accrued Liability
 - Cost Method
 - Present Value
 - Present Value of Projected Benefits
 - Valuation
 - Determined Contribution
- Funded Status
- Prescribed Assumptions / Methods
- Cost or Contribution Allocation Methods
 - Includes Actuarial Cost Method, Asset Valuation Method, and the amortization method.
 - Immediate gain / Spread gain



Required Disclosures

- Statement of the intended purpose
- All appropriate dates and adjustments
- Enough information that another actuary could judge reasonableness
 - Assumptions, methods, data (and changes)
 - Rationale for selection (or changes)
 - Plan provisions
- Statement indicating if the contribution allocation procedure will accumulate adequate assets to make benefit payments when due
- Funded status based on immediate gain method (i.e. MVA)
- Statement that future actuarial measurements may differ significantly
- New additions discussed in next section

Key Updates to ASOP 4

What do you need to know?

Overview

New Requirements

- Low-Default-Risk Obligation Measure
- Reasonable Actuarially Determined Contribution
- Gain and Loss Analysis

Additional Guidance

- Amortization Methods
- Output Smoothing Method
- Allocation Procedure
- Contribution Lag
- Volatility

Disclosures

- Documentation
- Required Disclosures in an Actuarial Report

Low-Default-Risk Obligation Measure

- Application:
 - When performing a funding valuation
 - Based on 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.
- Use an immediate gain cost method
- Discount rate basis:
 - 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: US Treasury yields, rates implicit in settlement of pension obligations including payment of lump sums and purchases of annuities from insurance companies, yields on corporate or tax-exempt general obligation municipal bonds that receive one of the two highest ratings given by a recognized ratings agency, non-stabilized ERISA funding rates for single employer plans, and multiemployer current liability rates
- Other assumptions may be the same as the funding valuation

Reasonable Actuarially Determined Contribution

- Application:
 - When performing a funding valuation
 - **Except** where the ADC is based on a prescribed assumption or method set by law
- What's reasonable?
 - Assumptions
 - All significant assumptions selected by the actuary are reasonable
 - All significant prescribed assumptions or methods selected by another party do not significantly conflict with what the actuary considers to be reasonable
 - The combined effect of the assumptions is expected to have no significant bias (other than provisions for adverse deviation)
 - The cost method, amortization method, asset valuation method, and output smoothing method are all consistent with this ASOP
 - The contribution allocation procedure is consistent with the plan accumulating assets adequate to make benefit payments when due, assuming all assumptions are met and contributions are made when due

Gain and Loss Analysis

- Application:
 - When performing a funding valuation
 - **Except** where the analysis would not be appropriate for assessing the reasonableness of assumptions such as with a small plan where one participant accounts for most of the liability.
- Defined as 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.
- If prepared, at least separate the total gain or loss into investment gain or loss and other gain or loss

Additional Guidance

Amortization method

- Select a method that produces payments that either: (1) fully amortize the base within a reasonable time period or (2) reduce the outstanding balance by a reasonable amount each year
- Considerations: open/closed, source of the base, payment pattern, negative amortization, gain/loss treatment, liability duration, AFWL, and plan funded status

Output smoothing method

- Select a method that results in a reasonable relationship between the smoothed contribution and the ADC without smoothing
- Reasonable if the result does not fall below a reasonable range and if the shortfalls are recognized within a reasonable period of time

Allocation procedure

- Balance benefit security, intergenerational equity, stability/predictability of costs or contributions
- Consider timing and duration of expected benefit payments, the nature and frequency of plan amendments, and input from the principal

Contribution lag

- Consider reflecting the time between calculation of the ADC and expected contribution timing

Volatility

- This section now points to ASOP 51 for additional guidance on volatility

Required Documentation (New!)

- The actuary should consider preparing and retaining documentation to support compliance with the requirements of the ASOP, including those not required to be disclosed in the report
- Level of documentation is not specified:
 - Subject to actuarial judgment and based on the complexity and purpose of the work
 - Consider preparing in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary's work

New Required Disclosures

- A statement indicating whether the combined effect of the selected assumptions is expected to have no significant bias (ignoring provisions for adverse deviation and ASOP 51 calculations)
- If applicable, disclose a low-default-risk obligation measure and the following:
 - the discount rate or discount rates used and rationale for selection;
 - a description of other significant assumptions, methods, and procedures, if any, that differ from those used in the funding valuation and rationale for their selection;
 - 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 remaining balance, remaining period, and payment for each amortization base and a disclosure if the UAAL is not expected to be fully amortized
- A description of the output smoothing method, if applicable, and the ADC without smoothing
- If applicable, a reasonable ADC, the corresponding funded status, and any material assumptions or methods that were used in the calculation that are not otherwise disclosed
- Gain and loss analysis, if applicable

What's next?

Pension valuation ASOPs

- 1 – Introductory ASOP
- 4 – Measuring Pension Obligations
- 12 – Risk Classification
- 21 – Responding to or Assisting Auditors
- 23 – Data Quality
- 25 – Credibility Procedures
- **27 – Economic Assumptions**
- **35 – Noneconomic Assumptions**
- 41 – Actuarial Communications
- 44 – Asset Valuation Methods
- 51 – Assessment and Disclosure of Risks
- 56 – Modeling

Other ASOPs in pension-related work

- 5 – Incurred Health and Disability Claims
- 6 – Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions
- 17 – Expert Testimony by Actuaries
- 32 – Social Insurance
- 34 – Actuarial Practice Concerning Retirement Plan Benefits in Domestic Relations Actions

Questions?

Loose Parts by Dave Blazek



Of all the actuaries at the firm, none could match the zeal of Earnest T. Cromwell.