

**Comment #9 – 7/20/18 – 2:35 p.m.**

**Comments on Proposed Revision of ASOP No. 4**

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To: Actuarial Standards Board (ASB)

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Thank you for the opportunity to comment on the proposed revision of ASOP No. 4. Patrick Kinlaw is an actuary practicing in-house at the North Carolina Retirement Systems, and has also worked in private-sector consulting. Sam Watts is a policy director at the North Carolina Retirement Systems. These comments are our own and do not reflect the views of any governmental entity, organization, or company.

The comments pertain to Section 3.11 (“Investment Risk Defeasement Measure”) and Section 3.16 (“Output Smoothing Method”).

**Section 3.11, “Investment Risk Defeasement Measure”**

Compared to actuarial practice prior to ASOP No. 51, it would be a step forward for public retirement systems’ annual funding valuation reports to include a liability measure discounted using high-quality fixed income yields. It remains to be seen whether it is a step forward in light of ASOP No. 51.

While the measure has various potential uses to public systems, including improved funded status comparability across systems, its primary use is to illustrate the reliance of the valuation liability measurement on investment risk. The new measure, when compared to the valuation liability, illustrates the present value that the valuation assumes will be produced by investment risk-taking. It might become clearer that, to the extent returns are not delivered by investment risk-taking relative to the lower-risk benchmark, this present value must be funded by plan members, employers, or the public. This might lead to better-informed decisions.

The measure does not accurately indicate the cost of eliminating investment risk – even where such risk can be eliminated. It is better understood as a measure of the retirement system’s reliance on investment risk, one that incorporates market information more immediately than the valuation liability does. This may underscore a naming problem in the Investment Risk Defeasement Measure, but it also may be more than a naming problem. In terms of modeling and communication, an unfavorable long-term investment experience scenario (a potentially valuable aspect to this disclosure for public retirement systems) might differ from an asset allocation scenario estimating the effect of a hypothetical change to 100% high-quality fixed income investments (less valuable for public systems). If the purpose is the former, then the nature of the calculation might lead the actuary to select different economic or demographic assumptions under Section 3.11(d). The actuary might also feel that a different projection or measurement, to be disclosed pursuant to ASOP No. 51, is a clearer illustration of the same underlying risk issue.

Public-system actuaries might reasonably be concerned about the potential selective highlighting of the new measure by policy advocates unconcerned with actuarial professional standards. The risk of misuse, beyond the actuary’s control, should be weighed against whatever disclosure benefits the ASB perceives, incremental to benefits already implemented through ASOP No. 51. The ASB might consider further guidance as to how public-system actuaries may make the disclosure while taking “reasonable steps” to avoid its misuse (Code of Professional Conduct, Precept 8).

Here are some further practical observations regarding Section 3.11:

- (1) **Possible Unintended Consequence:** There will be times in the future, just as in the past, when market fluctuations or sustained conditions will cause the Section 3.11 measure to be less than a retirement system's assets or its valuation liability. Such conditions, though far from current reality, should be considered in principles-based guidance. Using North Carolina as an example, for more than 30 consecutive years from the 1960s through the 1990s, the yield on long-term Treasury securities exceeded the long-term investment return assumption. As recently as 2009, long-term, high-quality fixed income yield indices during certain months exceeded the long-term investment return assumption. The use of the unit credit cost method would likely decrease the Section 3.11 measure further relative to the valuation liability. If the Investment Risk Defeasement Measure is less than current plan assets, stakeholders might conclude wrongly that the actuary is recommending action relative to asset allocation. They might conclude that such action would reduce the valuation liability when, in fact, it might increase it. If the Investment Risk Defeasement Measure is less than the valuation liability, stakeholders might conclude wrongly that the valuation liability is overstated. We might see unintended consequences such as entities misusing a temporarily low Investment Risk Defeasement Measure to advocate for higher rate-of-return assumptions, contribution holidays, or benefit increases without commensurate funding.
- (2) **Fiscal Notes:** It is not entirely clear whether the definition of "Funding Valuation" in Section 2.12 is meant to include fiscal notes, whereby public-system actuaries inform governing bodies about the cost of proposed legislative changes. If so, additional guidance may be needed. For example, the recipient of a fiscal note may need to have a clear "single answer" for use in public budgets, comparison to estimates by other actuaries (or non-actuaries), or other purposes.
- (3) **Bond Disclosures and Other Statements:** Although the measure is intended only for funding valuation purposes, its disclosure would require governments to consider whether or how to address it in bond offering statements, financial reporting footnotes, or other public materials. Actuaries will not always be in a position to inform or control these decisions.
- (4) **Similar Measures Already Disclosed:** Some public systems may already disclose a measure like the Section 3.11 measure. For example, as required by state law, the annual funding valuation reports for the North Carolina Retirement Systems disclose a liability measure discounted using the yield on 30-year U.S. Treasury securities. The proposed revision appears to require a third measure, or a change in statute to conform the existing measure to ASOP No. 4.
- (5) **Actuarial Cost Method:** Section 3.11(b) would require the new measure to be determined using the unit credit (UC) actuarial cost method. The ASB might consider whether the guidance could permit use of the entry age normal, level percent of pay (EAN) method. Public sponsors must use EAN for financial reporting. Many use EAN for funding purposes. Certain publications from the actuarial community have expressed a preference for EAN over UC for public-system funding. Moreover, a public-system actuary may believe EAN is more appropriate, for instance if benefit accruals related to future service are constitutionally protected.
- (6) **Treasury Yield Curve vs. Single Rate:** Option 1 under Section 3.11(c) allows the measure to be determined by discounting at Treasury yields. The general language under Section 3.11(c), regarding "a hypothetical bond portfolio whose cash flows reasonably match the pattern of benefits expected to be paid in the future", implies use of a full Treasury yield curve. The ASB might consider whether this option could be simplified without meaningful loss of information by permitting use of a single, publicly transparent discount rate such as the 30-year Treasury yield.

### Section 3.16, "Output Smoothing Method"

Guidance in this area is appreciated. As with the prior section, here are a few practical observations:

- (7) **Multiple Output Smoothing Methods:** The contribution allocation procedure may include different types of output smoothing methods simultaneously. For example, while the effect of an assumption change is being phased into the calculation of the actuarially determined contribution, there may be a funding policy that provides for a minimum contribution level at least equal to (but sometimes exceeding) the actuarially determined contribution. The actuary may feel the existence of the funding policy is relevant to the reasonableness of phasing in the effect of the assumption change. It might be helpful to clarify whether, in evaluating if the relationship between the smoothed contribution and the actuarially determined contribution is reasonable, the actuary may take into account the combined effect of all operative output smoothing methods.
- (8) **Maintaining Funding Discipline:** An output smoothing method may have the advantage of encouraging adherence to making a contribution that is at least related to the actuarially determined contribution. The output smoothing method may provide a viable path for the sponsor to implement recommended valuation updates without abandoning the funding policy. The guidance might address whether the anticipated actual contributions to the system, as opposed to those indicated by the contribution allocation procedure, are a relevant consideration. Although ASOP No. 51 states specifically that the actuary need not consider “the ability or willingness of the plan sponsor or other contributing entity to make contributions to the plan when due”, in the context of an output smoothing method the conclusion might be different.
- (9) **Clarification of “Systematically”:** Section 3.16(c) states that in order for the output smoothing method to be reasonable, it should not be “expected to systematically produce contributions less than the actuarially determined contribution.” The word “systematically” in this context is clear if there will be many observations over many periods, some greater and some less than an expectation (for example, with an asset smoothing method or amortization method). It seems less clear for an output smoothing method that is implemented for a limited time period, or to phase in the recognition of a particular change.
- (10) **Mid-Course Corrections During Smoothing Period:** Conditions may change while the effect of an assumption change is being phased in over multiple measurements. Such changes may necessitate further revision of the assumption during the smoothing period. If, for example, the effect of a change in the investment return assumption is phased in, the asset allocation or capital market assumptions may change materially during the smoothing period. The proposed revision appears to afford the actuary some judgment in this situation, to recommend an adjustment within the guidance of Section 3.16. This seems appropriate.

Thank you for considering these comments. You are welcome to contact us with questions.