July 27, 2018

ASB Comments
American Academy of Actuaries
1850 M Street NW, Suite 300
Washington, DC 20036

Re: Comments on ASOP 4 Regarding ADC

Members of the Actuarial Standards Board:

The attached comments were developed through the coordinated efforts of members of the Conference of Consulting Actuaries’ (CCA) Public Plans Community and are being submitted to the ASB by the Steering Committee of the CCA Public Plans Community. However, these comments do not necessarily reflect the views of the CCA, the CCA’s members, or any employers of CCA members, and should not be construed in any way as being endorsed by any of the aforementioned parties.

The members of the CCA Public Plans Community represent a broad cross section of public-sector actuaries whose extensive experience with public plans provides the framework for our response. The membership includes over 50 leading actuaries whose firms are responsible for cost and liability measurements for the majority of public sector retirement systems. We believe the overall response reflects a substantial consensus among the actuaries who provide valuation and consulting services to public pension plans.

Paul Angelo, FSA, FCA, MAAA, EA (By Direction)

Chair of the Public Plans Community on behalf of the Public Plans Community Steering Committee
July 27, 2018

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

Dear Board Members:

We, the Steering Committee of the Public Plans Community of the Conference of Consulting Actuaries (CCA PPC), have reviewed the recently released exposure draft of a proposed revision to Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. This letter presents our comments on **Sections 3.14 through 3.20** of the proposed standard. Those sections contain guidance related to an actuarially determined contribution (ADC) and to the components of the contribution allocation procedure (CAP) used to calculate the ADC.

As the ASB should be aware, the CCA PPC had done considerable work reviewing and refining the development of CAPs for public sector retirement plans. The results of that effort are found in the CCA PPC “White Paper”, “Actuarial Funding Policies and Practices for Public Pension Plans”, published in October 2014.¹ The White Paper includes a comprehensive discussion of policy and design considerations related to each of the three elements of a CAP: actuarial cost method, asset valuation method and amortization method for any unfunded actuarial accrued liability (UAAL). It also includes a discussion of some output smoothing methods, which it calls “Direct Rate Smoothing”.

We believe the identification and discussion of considerations related to amortization methods and output smoothing methods found in the White Paper will be helpful to the ASB as it deliberates new guidance in these areas, and we will refer to those discussions in our comments below.

1. **Section 3.14 and Sections 4.1(s) and (u) of the exposure draft relate to amortization methods.** We offer the following comments on this section:

   a. While its guidance is stated in the positive, we believe the intent of Section 3.14 is to preclude amortization methods that combine “negative amortization” (where the payments do not cover

---

¹ These comments were developed through the coordinated efforts of members of the Conference of Consulting Actuaries’ (CCA) Public Plans Community and are being submitted to the ASB by the Steering Committee of the CCA Public Plans Community. However, these comments do not necessarily reflect the views of the CCA, the CCA’s members, or any employers of CCA members, and should not be construed in any way as being endorsed by any of the aforementioned parties.

assumed interest on the UAAL\(^3\) with “rolling amortization” (where the UAAL amortization period is reset at the same duration at each measurement date). We concur with this result, but suggest that result would be clearer if those alternative conditions were presented in separate subsections.

b. The ASB should be aware that even with no negative amortization, rolling amortization can still take a very long time to materially reduce the UAAL. For example, under typical salary growth and interest assumptions, 15-year rolling amortization will not result in negative amortization but will still take over 30 years to reduce a UAAL base to one-half of its original amount. For that reason we recommend that the “reasonable time period” considerations in Sections 3.14(b) i through iv should apply to all amortization methods, with an additional consideration for rolling methods that do not fully amortize the UAAL. This is another reason why it would be clearer to have the “exceed nominal interest on the UAAL” condition as a separate subsection.

c. To summarize these two comments, we recommend restructuring Section 3.14 so that the amortization payments must either (a) exceed nominal interest or (b) fully amortize the UAAL in a reasonable period (and not increase faster than expected payroll). Then the considerations and conditions on reasonable amortization periods should apply to all amortization methods, with a specific consideration for methods that do not fully amortize the UAAL.

d. Section 3.14 should explicitly accommodate the use of “layered” amortization bases, where each change in UAAL is amortized separately. We note that the use of layered amortization bases is anticipated in the disclosure required under Section 4.1(s). Under layered amortization, different bases will be fully amortized at different valuation dates. When a “charge” base (e.g., an actuarial loss) is fully amortized the total (i.e., net) amortization payment decreases while when a “credit” base (e.g., an actuarial gain) is fully amortized the total amortization payment increases. This means that when a credit base is fully amortized, the total amortization payments could fail the conditions of 3.14(a) even though the payments towards each amortization base meet those conditions. We suggest modifying section 3.14 to state that for plans using a method with layered amortization bases, the guidance in that section applies to each base individually rather than to the total amortization payment.

e. The exposure draft does not appear to address amortization of “surplus”, where assets exceed the actuarial accrued liability. Amortizing surplus results in an ADC less than normal cost. The CCA PPC White Paper has a detailed discussion of surplus amortization and concludes that the preferred policy is long, rolling amortization of surplus, just the opposite of UAAL amortization. Even if the ASOP does not give guidance specific to surplus amortization, it should make clear that the constraints in Section 3.14 apply only to UAAL amortization, and not to surplus amortization.

2. **Section 3.16 of the exposure draft, along with the definition in Section 2.18, provide guidance related to output smoothing methods.** We agree that the ASB should provide guidance on output smoothing methods. We also agree that the guidance should be similar in structure to the guidance on asset valuation methods, and on asset smoothing methods in particular, found in Section 3.3 of ASOP No. 44, as is the case in Section 3.16 of the exposure draft. However, there is a wider range of output smoothing methods in use, particularly among public pension plans, than for asset

---

\(^3\) Consistent with Section 3.14(a), negative amortization only occurs with level-percent-of-pay amortization over relatively long periods.
smoothing methods. For that reason, the standard may need to make some differentiations among different types of output smoothing methods and develop its guidance accordingly.

Our comments hope to assist in that effort, and admittedly appear complicated. We would briefly summarize them as follows:

- Incorporate the alternative “sufficiently” conditions from ASOP No. 44 into this Section 3.16.
- Provide specific guidance for phasing in the impact of an assumption change on contributions, even when it is applied in addition to asset smoothing.
- For other output smoothing methods, distinguish those applied instead of asset smoothing from those applied in addition to asset smoothing.
- Generally, subject to conditions analogous to Section 3.3 of ASOP No. 44, the former (“instead of”) should constitute a reasonable ADC under Section 3.20 while the latter (“in addition to”) should not constitute a reasonable ADC unless the ADC without such output smoothing is also disclosed.

Note that our comments are consistent with pages 28-29 of the CCA PPC White Paper, which provides a brief discussion of output smoothing methods, and where they are called “Direct Rate Smoothing” methods.

a. Before considering different types of output smoothing, we have a comment on the conditions found in Section 3.16. As noted above, the conditions in Section 3.16 parallel the conditions of Section 3.3 of ASOP No. 44 applicable to asset valuation methods, specifically asset smoothing methods. However Section 3.3 also allows that asset smoothing methods that return to market value in a sufficiently (rather than reasonably) short period of time or stay within a sufficiently (rather than reasonably) narrow range of market value only need to meet one of those conditions. This is an important feature of ASOP No. 44 that we believe should be incorporated into Section 3.16 of ASOP No. 4.

We also note that the intended references to “ADC without output smoothing” are not consistent, and the words “without output smoothing” should be added at the ends of subsections 3.16(a) and 3.16(c).

b. As observed in the White Paper, at least in public pension practice, output smoothing methods fall into two broad categories. Some are included as a component of a CAP instead of an asset smoothing method, while others are applied to the results of a CAP that already includes an asset smoothing method. Because we believe ASB should consider whether its guidance should distinguish between these two types of output smoothing, we will comment on them separately.4

c. For output smoothing methods that are applied instead of asset smoothing, while the White Paper is silent on such methods, we believe that ASOP guidance analogous to Section 3.3 of ASOP No. 44 is both appropriate and sufficient. Such methods generally determine an ADC based only on a cost method and an amortization method (i.e., using a UAAL based on the

---

4 Note for example that in the examples in Section 2.18, the amount of smoothing added under example 2 (blending) and example 3 (corridor) will vary considerably depending on whether these techniques are applied after asset smoothing or instead of asset smoothing.
market value of assets) and then apply either the blending method or the corridor method from the examples in Section 2.18. For these plans, the “ADC without output smoothing” referenced in Section 3.16 is the market value based ADC and the application of the conditions in Section 3.16 would be similar in result to the application of ASOP No. 44 to an ADC that incorporates asset smoothing.

A different version of this type of “output smoothing in lieu of asset smoothing” was recently developed by CalPERS and adopted by some municipal systems. It mimics the results of asset smoothing by building a ramp-up and ramp-down into the amortization payments themselves. Here again we believe that ASOP guidance analogous to Section 3.3 of ASOP No. 44 is both appropriate and sufficient. While the determination of the “ADC without output smoothing” referenced in Section 3.16 is not as straightforward, we believe actuaries using this method will be able to do so in a manner consistent with the intent of the guidance.

For plans using these methods (and complying with the conditions of Section 3.16) the ADC including output smoothing would be a reasonable ADC under Section 3.20, and there would be no requirement to disclose the ADC without output smoothing. This is analogous to the fact that ASOP No. 44 does not require disclosure of an ADC without asset smoothing, i.e., based solely on the market value of assets.

d. With one important exception5, for output smoothing methods that are applied in addition to an asset smoothing, the discussion in the CCA PPC White Paper leads to their categorization as non-recommended practices. To summarize that discussion, well-designed asset smoothing and amortization methods provide a reasonable balance between intergenerational equity and contribution stability without the additional output smoothing. Accordingly we believe that, with the one exception described in our next comment, an ADC including both asset smoothing and output smoothing should not satisfy the conditions set for a reasonable ADC under Section 3.20. More specifically, plans using such methods should also disclose the ADC without such output smoothing as the reasonable ADC defined under Section 3.20.6

As a simpler and less restrictive alternative, an ADC including both asset smoothing and output smoothing could be considered reasonable under Section 3.20, assuming compliance with Section 3.16. In that case, we would recommend adding to Section 4 a requirement to disclose the ADC without such output smoothing. As discussed above, this disclosure requirement should not apply to an ADC that incorporates output smoothing instead of asset smoothing.

Note that under either of these approaches the conditions of Section 3.16 would involve a comparison between the ADC with and without output smoothing, while Section 3.3 of ASOP No. 44 involves a comparison of the market and smoothed asset values. For an ADC that includes both asset and output smoothing the standard may want to include consideration whether the combined amount of smoothing is reasonable. Alternatively, the general conditions of Sections 3.18 and 3.19 may be adequate to address this concern.

5 We believe that example 1 of Section 2.18, phasing in the impact on contributions of a change in assumptions, is materially different from other types of output smoothing and so will be discussed separately.
6 At the risk of confusing things even further, any output smoothing method should still be required to be reasonable under Section 3.16, even if its use in conjunction with asset smoothing leads to an ADC that is not considered reasonable.
e. The first example of an output smoothing method in Section 2.18 is phasing in the impact on contributions of a change in assumptions. Subject to the conditions of Section 3.16, an ADC that includes this component should be considered reasonable even if that ADC also includes asset smoothing. This is in contrast to our recommendations related to the other examples in Section 2.18.

This particular type of output smoothing is discussed in the CCA PPC White Paper. There it is considered an acceptable practice, even in combination with asset smoothing, as long as the phase in period ends before the next expected review of actuarial assumptions (but no longer than five years). While we believe the guidance in Section 3.16 would arguably lead to this same constraint on the phase in period, that condition could be made more explicit specifically for this type of output smoothing.

Phasing in the impact on contributions of a change in assumptions is reasonable even in combination with asset smoothing because assumption changes occur less frequently than actuarial valuations. For many public systems, experience studies are performed on a regular schedule, generally every three to five years. If there is no phase in of assumption changes, such plans (using three years as an example) will have relatively stable contributions for three year periods, with a discontinuity following the experience study. A three year phase in simply exchanges each of these larger triennial contribution changes for three equal annual changes.

Finally, we should note our strong preference for phasing in the contribution impact of an assumption change rather than phasing in the assumption change itself. While we are not submitting comments on the exposure drafts of ASOP Nos. 27 and 35, we have some concern that the proposed guidance there on phasing in assumptions may give that practice more of an endorsement than is either intended or desirable.

3. We offer the following comments pertaining to both sections 3.14 and 3.16 regarding who selects the amortization method or the output smoothing method:

   a. The new sections 3.14 and 3.16 begin with the phrase "If the actuary selects..." Although the actuary may give advice on the selection of an amortization method or output smoothing method, the plan sponsor or the governing body of the plan may actually select the method. For amortization methods, if the method selected is not in compliance with section 3.14, it appears that the actuary would need to disclose an alternative under 3.20. For output smoothing, the actuary’s assignment may end at the determination of the ADC without any output smoothing, with the plan sponsor subsequently applying an output smoothing method. We ask the ASB to clarify the meaning of the actuary selecting these methods in the context of methods set by another party (but not prescribed by law).

4. Section 3.20 of the exposure draft relates to a reasonable actuarially determined contribution (ADC). We support the disclosure of a Reasonable ADC in all funding valuations, which is consistent with this statement from page 6 of the CCA PPC White Paper:

   Some pension plans have contributions rates that are set on a fixed basis, rather than being regularly reset to a specific, actuarially determined rate. The CCA PPC believes that such plans should develop an actuarially determined contribution rate for comparison to the fixed rate.
While we have provided comments on the detailed guidance in sections 3.14 and 3.16 above, we note that those rules clearly move in the direction of more prescriptive guidance. Furthermore, making adjustments (such as found in our comments) to accommodate practices that are reasonable while restricting practices that are not reasonable leads to even more prescriptive rules. As an alternative, we suggest that those detailed rules may not be needed if a reasonable ADC is simply specified in Section 3.20 as one that satisfies the following two principles-based conditions:

1. The ADC is either currently greater than normal cost plus interest on the UAAL (measured on the market value of assets) or is expected to be greater within a sufficiently short time period, and
2. The ADC is expected to fully amortize the UAAL (not surplus) or come within a sufficiently narrow range of full amortization within a reasonable time period.

As long as the ADC complies with these two principles-based conditions, the standards need not and should not specify the details of the amortization method, the asset smoothing method, or the output smoothing method. Practice notes and white papers are more appropriate for providing specific advice on how to develop the components of such a reasonable Contribution Allocation Procedure, consistent with these two conditions.

We appreciate the opportunity to provide feedback on the proposed revisions to ASOP No. 4 and would be happy to discuss our comments in greater detail.

Sincerely,

Members of the Conference of Consulting Actuaries Public Plans Community Steering Committee

Paul Angelo, Chair
Thomas B. Lowman, Vice Chair
Brent A. Banister
David L. Driscoll
William B. Fornia
William R. Hallmark

David Lamoureux
Stephen T. McElhaney
Brian B. Murphy
Mark Olleman
James J. Rizzo
Lance J. Weiss