Via Electronic Mail

July 31, 2018

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

To the Members of the Actuarial Standards Board:

On behalf of Cheiron, Inc. the following are our comments on the exposure draft of proposed changes to ASOP No. 4 that was issued in March 2018. We appreciate the work and effort put in by the ASB Pension Committee to develop this exposure draft based on the recommendations of the Pension Task Force and the direction of the ASB. We also appreciate the opportunity to provide comments and look forward to a second exposure draft on these important changes.

The exposure draft proposes a number of changes to ASOP No. 4. While some of the changes are an improvement, others will cause confusion and be difficult to implement. Our comments are divided into two parts. The first concerns the proposed investment risk defeasement measure. The second concerns other proposed changes.

Part 1 – Investment Risk Defeasement Measure (IRDM)

The most significant proposed change to ASOP No. 4 is the requirement to calculate and disclose an “Investment Risk Defeasement Measure” (hereafter referred to as the IRDM) when the actuary is performing a funding valuation. In essence, as defined, the proposed IRDM is a Market-Consistent Present Value as currently defined in ASOP 4.

We believe that the requirement to calculate and disclose an IRDM should be dropped from any final revision of ASOP No. 4. There are a number of reasons for our belief, which will be briefly discussed below.

1. Pension actuaries already make a number of calculations for various types of plans, many of which are similar to the proposed IRDM. For example, under the Federal laws pertaining to pension plans, a “current liability” is determined for multiemployer plans, and a “funding target” is determined for single-employer plans each of which is a Market-Consistent Present Value. These calculations are made for a purpose under the applicable law. Calculating yet another Market-Consistent Present Value, that has no particular application and provides limited or no additional value, makes no sense and will confuse the recipients. There appears to be no purpose for the calculation.

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2. The IRDM requires the actuary to use a funding method that would not otherwise be used for a number of plans. For example, the funding method used for public plans most often is the entry age normal method. However, the IRDM must be calculated under the unit credit method. There is no corresponding value with which to compare the IRDM.

3. ASOP No. 51 provides for the assessment and disclosure of risk associated with the measurement of pension obligations. The impact of ASOP No. 51 should be assessed before even thinking about mandating a specific measurement that purports to measure investment risk.

4. Since our formation in 2002, we have used projections and stress testing along with other measures to educate trustees and other stakeholders about the risks to which their plans are exposed, enabling them to better manage those risks, most notably investment risk. Based on our experience, we believe stress test projections are better, and that the IRDM is not the most important and useful measure of investment risk. We are concerned that its required disclosure will inhibit the understanding and management of investment risks rather than help.

There is no evidence that the disclosure of an IRDM would help. Current liability has been calculated and disclosed for multiemployer plans since 1987, and we discern no impact upon the management of investment risk due to that disclosure.

Public sector defined benefit plans have been under attack from various directions. The attacks have relied upon market value type measures to portray public sector plans as unaffordable.\(^2\) We are concerned that the critics will seize upon the IRDM as the “one true measure” of the liability and continue to mislead the public when most public plans can never be forced to settle their obligations. In the long run, the requirement for an IRDM will hurt, not help, the reputation of the actuarial profession.

5. Public sector plans are required by Governmental Accounting Standards Board (GASB) statements 67 and 68, as modified, to provide liability values using both an interest rate one percent higher and one percent lower than used in the valuation. The required “+/- 1” values already allow estimation of the liability at other rates.

6. The IRDM makes use of an “accrued benefit.” Many plans will not have a set definition of accrued benefit. The accrued benefit is a defined term in ERISA. It is not a defined term for plans not subject to ERISA. For such plans, determining what is the accrued benefit presents conceptual and legal challenges that go far beyond the actuary’s scope in his or her assignment. Consider, for example, a public plan that promises a benefit based upon final average pay and years of service and that cannot be changed for current employees, even for

\(^2\) For example, one author merely compared the current asset values to the estimated value of current benefits earned without considering that contributions were ongoing. (Even worse, another paper compared the actuarial accrued liability as if it were a current value of benefits instead of a cumulative measure of past normal costs to non-cumulative current revenues to claim that pension benefits were increasing faster than revenues, and blamed the plan sponsor for increasing pension benefits.)
the future, under the state constitution. Is the accrued benefit based upon years of service to date and current pay, years of service to date based upon future pay, or some other measure? A public plan may also provide a cost of living adjustment (COLA), and by combining a long-term COLA assumption with observed short-term yields, the value of the COLA could be grossly overstated. As another example, consider a multiemployer plan that provides that the benefit is a dollar multiplier for each year of service, but that the multiplier at the end of the two-year period after the termination of service will be used if it has increased.\(^3\) In essence, a participant is promised a benefit for service to date based upon a multiplier that is set in the future.

7. The proposed IRDM presents a misleading picture of variable benefit plans where the benefit is adjusted for investment performance. Under variable benefit plans, investment risk is shared with the plan participants by benefit adjustments.\(^4\)

**Part 2 – Other Proposed Changes**

The proposed changes to ASOP 4 in sections 3.14 and 3.16 are overly prescriptive and lead to the development of a detailed rulebook. However, we have suggestions for modifications of those detailed rules if the ASB insists upon this approach. We also suggest an alternative approach that avoids writing a rulebook into the standards, and instead defines criteria for an actuarially determined contribution (ADC) to be considered reasonable.

**Amortization Methods – Proposed Section 3.14**

Proposed Section 3.14 would provide guidance on amortization methods selected by the actuary. It would require that the amortization method either produce payments that exceed nominal interest on the unfunded actuarial accrued liability, or satisfy a number of conditions. The conditions are (a) that payments do not increase, or do not increase more rapidly than expected covered payroll, and (b) the payments fully amortize the unfunded actuarial accrued liability within a reasonable time-period. A reasonable time-period depends on the consideration of a number of factors.

Many amortization methods determine the amortization period separately for identified portions of the change in unfunded actuarial accrued liability and a separate amortization base is set up.\(^5\) This is often referred to as “layered amortization.” We suggest that the conditions of Section 3.14 be applied separately to each portion of the unfunded actuarial accrued liability with its own amortization period. This is important because, over time, as one amortization base becomes fully amortized (such as a base for an experience gain); the net payments required by the remaining bases may exceed the increase in covered payroll. The combination of layers may also result in temporary negative amortization even though each individual layer does not.

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\(^3\) The undersigned has seen one such plan, which still exists.

\(^4\) Recently, the Society of Actuaries recognized our work with the state of Maine as a winning submission to its *Retirement 20/20* Call for Models for Public Pension Plans Contest. See [https://www.soa.org/press-releases/2018/retirement-20-20/](https://www.soa.org/press-releases/2018/retirement-20-20/).

\(^5\) Separate bases may be required under ERISA for certain types of plans, and have been in the past.
Section 3.20 - Reasonable Actuarially Determined Contributions

Proposed Section 3.20 would require that an actuary performing a funding valuation that does not include a prescribed assumption or method set by law, to calculate and disclose an ADC using a contribution allocation procedure that satisfies a number of conditions. The conditions include a requirement that if an actuarial cost method with individual attribution is used, then the normal cost for a participant should be based upon the plan provisions applicable to that participant. We understand that the intent of the condition in the previous sentence is to preclude the use of an “ultimate entry age normal cost.”

Because plans subject to ERISA have at least one prescribed assumption or method set by law, the requirement to make and disclose an ADC does not apply. Thus, it appears that Section 3.20 is directed at plans not subject to ERISA, and is directed at public plans in particular.

Rather than providing detailed rules for each of the components of an ADC (i.e., amortization method, asset smoothing method, and output smoothing method), we think the standard should describe principles to which a reasonable ADC should adhere. Using a framework similar to that in ASOP 44 for asset smoothing methods, we suggest that the ADC be required to meet the following two criteria:

1. The ADC is greater than the normal cost plus interest on the unfunded accrued liability (measured on the market value of assets) or is expected to be greater within a sufficiently short period of time, and

2. The ADC is expected to pay off the unfunded accrued liability (not surplus) or come within a sufficiently narrow range in a reasonable period of time.

As long as the ADC meets these two criteria, we should not care about the details of the amortization method, the asset smoothing method, or any output smoothing methods. The details of how to construct these methods are better left to practice notes or white papers and should not be a part of the standards of practice.

Section 3.21 Gain and Loss Analysis

Proposed Section 3.21 would require an actuary performing a funding valuation to perform a gain and loss analysis for the period between the last measurement date and the current measurement date, unless in the actuary’s professional judgment, successive gain and loss analyses would not be appropriate for assessing the reasonableness of the assumptions. Proposed Section 3.21 would further provide that, if a gain and loss analysis is performed, the actuary should at least separate the total gain or loss into investment gain or loss and other gain or loss.

We believe that the proposed Section 3.21 should either be dropped from the final revision, or that the requirement be that the actuary should consider whether to make a gain or loss analysis, or should consider whether to separate the total gain or loss into investment components and other components. In many cases, a gain or loss analysis makes no sense. Consider a single-
employer plan where the funding valuation is based upon prescribed interest rates and a
described mortality table. Each year a single amortization base is determined (if there is a
“funding shortfall”) and amortized over seven years. That single amortization base reflects, at a
minimum, the gains and losses, and the change in prescribed assumptions from the previous
valuation. There is no usefulness to a gain and loss analysis in this situation.

In other cases, a gain and loss analysis will add additional cost and little benefits. Consider a
situation where the aggregate cost method is used for a multiemployer pension plan. A normal
cost is developed as a percentage of pay by taking the present value of future benefits,
subtracting the value of the assets, and then dividing by the present value of future payroll. The
percentage is applied to pay to get the normal cost as a dollar amount. The gain and loss from
year to year is imbedded in the changes in the normal cost percentage. However, that percentage
change reflects other factors as well, such as plan changes and assumption changes. Separately
determining a gain or loss is complex, costly, and not needed.

For a public plan, the requirements of GASB Statements 67 and 68 already require that the
investment gain or loss be identified separately from other gains and losses. Thus, the calculation
and disclosure sought by proposed Section 3.21 is already being made.

Applicable Law

The current ASOP 4 has many references to applicable law and carefully clarifies the term with
the parenthetical “(statutes, regulations, and other legally binding authority).” The proposed
revision would delete the parenthetical statement everywhere except in a paragraph in Section
1.2. The definitions do not define the term “applicable law.”

We believe that the elimination of the parenthetical could be regarded as meaning the following
regulations and other legally binding authority is no longer considered part of applicable law in
the various sections of ASOP 4 where the term is found. We believe that result is not intended.
We suggest that a definition of applicable law be added to Section 2 and that the definition
include the parenthetical “(statutes, regulations, and other legally binding authority).”

If you have any questions or would like to discuss this letter, please feel free to contact me at
703-896-1456, extension 1039.

Sincerely,
Cheiron

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