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February 20, 2014

TO: Appointing Powers of the California Actuarial Advisory Panel

RE: Actuarial Funding Policies and Practices for Benefit Changes
in Public Pension and OPEB Plans

The California Actuarial Advisory Panel (CAAP) has adopted the *Actuarial Funding Policies and Practices for Benefit Changes in Public Pension and OPEB Plans* as final. Please see the attached document. Our hope is this document will serve as a tool to advance the practice.

Sincerely,

A handwritten signature in cursive script that reads "Leslie P. Finertie".

Leslie P. Finertie
Chair, California Actuarial Advisory Panel

cc: Panel members:
Paul Angelo, Vice Chair
Ian Altman
John E. Bartel
Harold A. Loeb
Alan Milligan
Rick Reed
Graham Schmidt

CALIFORNIA ACTUARIAL
ADVISORY PANEL

ACTUARIAL FUNDING POLICIES AND
PRACTICES FOR BENEFIT CHANGES IN
PUBLIC PENSION AND OPEB PLANS

FEBRUARY 2014

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INTRODUCTION

This discussion supplements the Actuarial Funding Policies and Practices for Public Pension and OPEB Plans and Level Cost Allocation Model (Funding Policies and Practices) distributed by the Panel in early 2013. Please refer to that document for general policy objectives, definitions and various approaches for valuations, which would generally also apply for pricing benefit changes. The funding policies raised in this discussion were developed primarily for pension benefit increases. However reductions in pension accruals as well as new tiers of reduced benefits are also discussed. To the extent that Other Post-Employment Benefits (OPEB) are increased or decreased, these policies could also be applied.

This document assumes that the benefit changes being studied comply with IRS requirements and California state law, for example the prohibition of benefit improvements applicable to some California public pension plans pursuant to AB 340, California Public Employees' Pension Reform Act passed by the legislature in 2012.

This document is intended as advice to actuaries and retirement boards in the setting of funding policy. It is not intended to be proscriptive, nor is it intended to supplant or replace the applicable Actuarial Standards of Practice (ASOPs). Furthermore, it may not be used as a basis for litigation, and should not be referenced in a litigation context. This is consistent with the legislation that created the CAAP and established both its responsibilities and authority. In particular, California Government Code section 7507.2 (e) states:

“The opinions of the California Actuarial Advisory Panel (CAAP) are nonbinding and advisory only. The opinions of the panel shall not, in any case, be used as the basis for litigation.”

SCOPE AND DEFINITIONS

The cost of pension or OPEB benefit changes ultimately depends on the increased or decreased amount of benefits paid to members over time. However, the plan's funding policies determine the immediate impact on contributions as well as how any contribution changes will be allocated over future years. The source of funding may affect the actuarial funding policy used to price the benefit changes. The three basic sources of funding are contributions (such as employer and members), plan assets (such as surplus or non-valuation reserves), and “excess” investment return. There are situations, some explicitly identified below, which may require additional analysis to establish full accountability and transparency regarding the financial impact of benefit plan changes. As always, it is up to the actuary to apply professional judgment to the particulars of the situation and recommend the most appropriate policies and calculations for that situation, including considerations of materiality.

Following are definitions of some terms used in this discussion:

- Prospective benefit changes increase/decrease benefits only for service after some specified date. Also known as “future service” or “future service only” benefits changes.

- Retroactive benefit improvements increase benefits only for service prior to some specified date. Also known as “past service” benefit increases. While most retroactive benefit increases include all past service, a retroactive benefit increase could apply only to a portion of a member’s past service. Note that retroactive benefit reductions are generally not permitted for pension benefits and are therefore omitted in this discussion.
- Retroactive and prospective benefit improvements increase benefits for both past service and future service, such as a change in benefit formula for all years of service.

ACTUARIAL PRICING OF BENEFIT PLAN CHANGES

The remainder of this discussion will identify and discuss a series of considerations that arise when pricing benefit changes, followed by suggested approaches for addressing each consideration in a manner consistent with the concepts and principles referenced in the INTRODUCTION. Note that a document used to consider benefit changes should always disclose the impact of the benefit changes on funding. In addition, it may be appropriate to disclose other impacts of the benefit changes, such as the accounting implications.

1. CONSIDERATION: ACTUARIAL ASSUMPTIONS

CAAP defers to various ASOP regarding the appropriate development and selection of actuarial assumptions. We believe the selection and disclosure of these actuarial assumptions are critical to comply with the funding policy objectives identified above and therefore suggest specific areas where close attention to actuarial assumptions and additional analysis may be needed. Specifically, the results of stress tests, scenario analyses and stochastic modeling may need to be completed in order to properly disclose the potential change in volatility due to benefit changes, or the dependence of the estimated cost of the benefit change on the actuarial assumptions adopted.

SUGGESTED APPROACH: CHANGES IN BEHAVIOR

Assumptions for benefit changes should be set consistent with anticipated experience. For example, formula changes that encourage (or discourage) earlier (or later) retirements should be priced using corresponding changes in anticipated retirement rates. If the behavior change is especially difficult to predict or has a significant impact on the cost, various possible scenarios should be run and disclosed before plan changes are approved.

SUGGESTED APPROACH: BENEFIT BASED ON ASSUMPTION

If the cost of the benefit is affected by the variability of the experience underlying the assumption adopted, this should be disclosed with varying results indicated. A sensitivity analysis or stochastic modeling showing the impact of various levels of experience may be necessary to fully disclose the potential impact of the design change. An example may be the sensitivity of COLA benefits to the variability of inflation.

2. CONSIDERATION: GAINSHARING AND OTHER OBLIGATIONS DIFFICULT TO MEASURE USING DETERMINISTIC PROCEDURES AND ASSUMPTIONS

The cost of certain benefit improvements based on future plan experience, for example gainsharing tied to “excess investment return” or floor-offset provisions which provide minimum defined benefits based on a participant’s account balance, should be explicitly recognized if they are significant, based on the actuary’s professional judgment. There are at least two different situations when these benefits, if significant, should be priced and disclosed: first, when the benefit structure is adopted or amended; and second, when a contingent event occurs, causing the provisions of the benefit structure to generate an increase in plan benefits.

SUGGESTED APPROACH: AT THE ADOPTION OR AMENDMENT OF A BENEFIT STRUCTURE CONTINGENT ON FUTURE PLAN EXPERIENCE

The actuary may use stochastic modeling to recognize the decrease in gross investment return for contingent improvements based on excess investment return. This net investment return would then be used to develop the present value of benefits, incorporating the gainsharing contingency. Alternatively the actuary may develop a probability that these benefit increases will occur and incorporate this probability explicitly in the development of the present value of benefits.

SUGGESTED APPROACH: WHEN A BENEFIT CHANGE OCCURS DUE TO A CONTINGENT EVENT

When a contingent event which causes a benefit change occurs, based on a benefit structure already in place, a description of this event and benefit change should be disclosed, along with the effect on the Actuarial Accrued Liability (AAL).

3. CONSIDERATION: CHANGES IN ACTUARIAL ASSUMPTIONS OR FUNDING POLICIES COINCIDING WITH BENEFIT CHANGES

As discussed above, there are times when changes in benefit levels or eligibility require the adoption of revised assumptions to appropriately reflect the expected cost of these changes. However, if a number of unrelated changes are made concurrently, it is possible for the transparency of the financial impact of benefit changes alone to be compromised.

SUGGESTED APPROACH

Other than the special assumptions discussed above, changes in assumptions, funding methods, asset smoothing, amortization periods or other policies should not be tied directly to the benefit changes. The change in AAL, change in normal cost, amortization of change in AAL and change in contributions should be calculated and disclosed separately from other changes that do not directly relate to the benefit change.

SUGGESTED APPROACH

If ad hoc COLA or other benefit improvements are funded from non-valuation assets, the cost of these benefit increases, such as the increase in UAAL and the resulting amortization (ignoring the non-valuation assets), should be disclosed.

4. CONSIDERATION: FUNDING PERIODS FOR RETROACTIVE (PAST SERVICE) BENEFIT INCREASES

Even though GASB rules previously allowed increases in UAAL to be amortized over as long as 30 years, such a period will generally be longer than the average working career of the members receiving the past service benefit increase. This means that some of the cost of the benefit increase will be borne by taxpayers who did not receive any services from the affected members. Requiring shorter amortization periods for retroactive benefit increases means that the short term costs will be higher but the period of intergenerational cost shifting will also be shorter. Please refer to the “Funding Policies and Practices” document for more discussion and detail on acceptable amortization periods.

SUGGESTED APPROACH

The total cost (increase in accrued liability) of retroactive benefit increases should be amortized over a period consistent with the “Funding Policies and Practices”, namely based on the demographic period (generally the average future working lifetime for active member benefit changes and the average future lifetime for retiree benefit changes) up to 15 years. Other acceptable time periods for amortization are outlined in that document.

5. CONSIDERATION: PROSPECTIVE OR RETROACTIVE BENEFIT REDUCTIONS

While benefit reductions for current active members have been unusual for California public pension benefits, they have occurred for OPEB benefits. Generally, if prospective benefit reductions occur which are tied to future benefit accruals, such as a reduction in benefit percentage for pensions, the cost of the benefit changes would be reflected in the future normal cost, with no adjustment to the AAL. However, if a change, such as delayed eligibility for benefits, reduces the value of retroactive and prospective benefits, the effect would be reflected in both the Normal Cost and the AAL.

SUGGESTED APPROACH

If a retroactive benefit decrease is adopted, care should be taken in selecting an amortization period for the negative change in UAAL so that the annual cost of the remaining benefits are not artificially depressed. Generally, using an amortization period no shorter than the future working lifetime of active members (or future lifetime if the benefit change primarily affects retired members) would be appropriate. Also, it would increase transparency to disclose the timing and amount of increase in annual cost, once the amortization of the negative UAAL base has been completed.

6. CONSIDERATION: NEW BENEFIT TIER FOR FUTURE HIRES

If a new tier is implemented for active employees hired after a specific date, and that benefit does not affect active members hired prior to that date, the Normal Cost and AAL for the non-affected active members would not change due to the implementation of the new benefit tier. The development of normal cost for plans with multiple tiers is discussed further in “Funding Policies and Practices”.

SUGGESTED APPROACH

When asked to compute the cumulative savings due to implementation of a new benefit tier, the actuary should provide the total and the discounted present value of such savings, possibly with different assumptions such as future salary increases, hiring patterns, and member behavior.

The actuary should also consider whether the amortization policy for the plan is appropriate given a change in plan dynamics. For example, the implementation of a new defined contribution only tier may result in the closing of the current defined benefit plan. The actuary should consider whether or not the amortization schedule for the closed defined benefit plan should be adjusted.

REQUIRED FINANCIAL IMPACT DISCLOSURES PRIOR TO ADOPTION

Currently there is no standard format, content, or process for determining and presenting the cost of a pension benefit improvement. CalPERS uses a report format for agencies requesting a benefit improvement cost study. Similarly, most independent retirement systems will have an actuarial study done at the request of an employer or bargaining parties or retirement board. However, there is no statewide standard for content, level of detail, disclaimers, or risk analysis. In addition, an actuarial study may be provided to the bargaining parties, but those parties are then free to negotiate benefits with or without direct advice from the actuary. The level of financial detail required and the extent to which it is made available to the public also varies considerably.

In addition to the following recommendations regarding disclosure, please note that there are statutory requirements for California public pension and OPEB plans that may apply. For example, Government Code section 7507 requires that, in certain circumstances, “an actuary shall be present to provide information as needed at the public meeting at which the adoption of a benefit change shall be considered.” In addition, that section may also require that “the future costs of changes in retirement benefits or other postemployment benefits, as determined by the actuary, shall be made public at a public meeting at least two weeks prior to the adoption of any changes in public retirement plan benefits or other postemployment benefits.”

SUGGESTED APPROACH

Any benefits change proposals should be accompanied by a detailed cost analysis, which would normally include the following:

1. The change in the present value of future benefits;
2. The change in normal cost;
3. The change in AAL;
4. The amortization period for any change in UAAL;
5. The change in normal cost plus amortization of the change in AAL, regardless of the funded status of the plan and separate from any assumption or method changes not directly required by the change in benefits;
6. If applicable, the change in assumptions due to the benefit change;
7. The net change in employer cost and the expected duration of such increase, including the short-, intermediate- and long-term impact, if different;
8. The net change in employee contributions and the expected duration of such change;
9. The impact on surplus, if any;
10. The use of nonvaluation assets, if any;
11. Where a single deterministic pricing is not sufficient to document with transparency the financial impact of the change, additional information sufficient to do so.

In addition, the detailed cost analysis may include the following:

12. The projection of required contributions, funded status or other financial calculations that may not be captured sufficiently by a single-date pricing, as appropriate;
13. The source(s) of funding for any change in normal cost;
14. The source(s) of funding for any change in AAL;
15. Enhanced risk disclosures such as sensitivity analysis, deterministic stress test or stochastic analysis (See CAAP's Model Disclosure Elements for Actuarial Valuation Reports for more detail);
16. If materially different, the expected volatility of contribution levels before and after the plan change;
17. If future experience is expected to change due to a benefit change, the need for a review of the related assumptions, once experience develops;
18. If routinely disclosed or if otherwise being studied, the impact of benefit changes on potential plan termination liabilities or other plan calculations;
19. Other financial implications of the benefit change, including the impact on accounting disclosures.

It may be sufficient to refer to other reports, such as the annual actuarial valuation report or periodic experience study, to define the benefits, actuarial assumptions and methods, and other components used for the pricing analysis.