



## AMERICAN ACADEMY *of* ACTUARIES

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September 17, 2010

Governmental Accounting Standards Board  
Mr. David Bean  
Director of Research and Technical Activities  
Project No. 34  
[director@GASB.org](mailto:director@GASB.org)

Re: Preliminary Views on *Pension Accounting and Financial Reporting by Employers*

Dear Mr. Bean:

The American Academy of Actuaries'<sup>1</sup> Pension Practice Council appreciates the opportunity to respond to the Preliminary Views on *Pension Accounting and Financial Reporting by Employers* (PV). It is clear that a considerable amount of deliberation and research on the part of GASB Board Members and staff went into developing the document.

As described in the PV's "Notice to Recipients," the Board anticipates that responses to the PV will represent a spectrum of differing views on the major recognition and measurement issues. With the various practitioners and professionals approaching this task from different perspectives, this response is to be expected. Even for a particular group such as the actuarial profession, there are unique perspectives as a result of evolving actuarial knowledge and differing assessments of such issues as appropriate measurement techniques, cost allocation, and valuation.

The American Academy of Actuaries' mission is to provide independent and objective information, analysis, and education for the formation of sound public policy where actuarial science provides a unique understanding. It is a forum for development of policy solutions that sometimes results in providing more than one solution for policymakers to consider at the same time. This is the case with the Pension Practice Council's response to the PV— you will find included two separate responses to the questions presented, one response prepared by the Pension Finance Task Force and another prepared by the Public Plans Subcommittee.<sup>2</sup>

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<sup>1</sup> The American Academy of Actuaries is a professional association with over 17,000 members, whose mission is to assist public policymakers by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

<sup>2</sup> The Public Plans Subcommittee and the Pension Finance Task force both operate under the Academy's Pension Practice Council. The Pension Finance Task Force is also jointly sponsored with the Society of Actuaries.

We hope the GASB Board will find both responses informative and useful as you further refine the concepts and frameworks outlined in the PV. The Academy would be happy to provide further details or any assistance as this research project continues and would appreciate the opportunity to testify at one of the three public hearings in October.

Please contact Jessica M. Thomas, the Academy's pension policy analyst (202-785-7868, [thomas@actuary.org](mailto:thomas@actuary.org)) if you have any questions, would like to discuss these responses further, or would like to see the Academy's response to the 2009 Invitation to Comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Ethan E. Kra". The signature is written in a cursive, slightly slanted style.

Ethan E. Kra, FSA, MAAA, EA  
Vice President, Pension Practice Council  
American Academy of Actuaries



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### **Response from Pension Finance Task Force**

On behalf of the Joint American Academy of Actuaries/Society of Actuaries Pension Finance Task Force, we thank you for offering us an opportunity to respond to your Preliminary Views on *Pension Accounting and Financial Reporting by Employers*. We appreciate the thoughtful organization and readability of the document, and agree with the GASB Board's preliminary view recognizing a net pension liability and its stipulation of a single actuarial method to calculate liabilities and annual costs. We do not agree, however, with other aspects of the PV, particularly in the choice of entry age normal as the mandated method to determine liabilities and periodic costs and in the rules for determining discount rates.

We believe that all interested parties, and especially taxpayers and bondholders, need to see the value of the pension obligation reported in a manner consistent with the fundamental principles of economics and the presentation of other government debt. Dr. Donald L. Kohn, then vice chairman of the Federal Reserve System made the following pertinent remarks in the spring of 2008:

The chief reason [that current measures of pension liabilities might be less than fully revealing] is that public pension benefits are essentially bullet-proof promises to pay... For all intents and purposes, accrued benefits have turned out to be riskless obligations. While economists are famous for disagreeing with each other on virtually every other conceivable issue, when it comes to this one there is no professional disagreement: The only appropriate way to calculate a present value of a very-low-risk liability is to use a very-low-risk discount rate.

However, most public pension funds calculate the present value of their liabilities using the projected rate of return on the portfolio of assets as the discount rate. This practice makes little sense from an economic perspective. If they shift their portfolio into even riskier assets, does the value of the liability backed by the taxpayer go down? Financial economists would say no, but the conventional approach says yes. Unfortunately, the measure of liabilities that results from this process has a real consequence: it pushes the burden of financing today's pension benefits onto future taxpayers, who will be called upon to fund the true cost of existing pension promises.<sup>3</sup>

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<sup>3</sup> Speech delivered on May 20, 2008 at the National Conference on Public Employee Retirement Systems Annual Conference in New Orleans, LA. Available at <http://www.federalreserve.gov/newsevents/speech/kohn20080520a.htm>

Our view is that the pension obligation is a liability that should be discounted at close to a default-free rate for presentation in the financial statements. Certain consequences flow from this point of view.

First, the annual cost would be calculated as the difference between the current year's pension liability and the prior year's pension liability, net of contributions, and is likely to show a great deal of volatility from one year to the next. It is our understanding that reducing volatility may be an important objective of a cash contribution method, but it is not an objective of financial reporting methods to the detriment of faithfully reporting the economics of the plan. In order for a volatile annual cost to be presented in a way that meets GASB's objectives, it will be important to show separately the different components of annual cost—the part that comes from deferred wages in the period and the parts that come from other sources. The annual operating cost of the plan, or normal cost, specifically, should be shown separately from the non-operating costs (i.e., financing and investment costs, gains and losses, etc.).

Second, other information not reported in the basic financial statements is important enough to warrant discussion elsewhere in the financial reports. In particular, employers should include a description of the plan's funding policy, the current and expected level of future cash flows, and the investment policy of the trust fund, including its allocation among different asset classes.

Our responses to the interrogatories thus reflect this broader view of financial reporting of pension obligations.

*1. It is the Board's preliminary view that, for accounting and financial reporting purposes, an employer is primarily responsible for the portion of the obligation for defined pension benefits in excess of the plan net assets available for benefits. (See Chapter 2, paragraphs 5–10.) Do you agree with this view? Why or why not?*

We agree with the PV when it notes (Chapter 2, Paragraph 6) that the employer has a responsibility for the whole of the benefit obligation “by virtue of the employment exchange, and this obligation is not satisfied until the defined pension benefits have been paid to the employees or beneficiaries when due.” We believe that the full obligation remains with the employer, whether the resources used to make those payments derive from employer contributions or earnings on invested assets. Put another way, the employer's economic obligation is not diminished if it is collateralized by a trust fund, even if that fund is legally separate from the sponsor. The employer is fully exposed to changes in the value of the assets as well as to changes in the liabilities. We do not, therefore, consider a distinction between “primary” and “secondary” to be useful, and in so far as the distinction suggests that the employer has divested itself of part of its obligation, it is potentially misleading.

*2a. It is the Board's preliminary view that the unfunded portion of a sole or agent employer's pension obligation to its employees meets the definition of a liability (referred to as an employer's net pension liability). (See Chapter 3, paragraphs 1-8.) Do you agree with this view? Why or why not?*

*2b. It is the Board's preliminary view that the net pension liability is measurable with sufficient reliability to be recognized in the employer's basic financial statements. (See Chapter 3, paragraphs 9-13.) Do you agree with this view? Why or why not?*

We agree with the PV that the unfunded portion of a sole or agent employer's pension obligation to its employees meets the definition of a liability. The employer has promised a future financial benefit to its employees, the employees have accepted that promise in lieu of other forms of compensation, and the employees can enforce their rights in the courts. An obligation exists, therefore, and should be reported.

The assets accumulated in the trust fund will be used to satisfy the employer's pension obligation. The financial statement certainly should show, at least, the net position. More useful information would be conveyed by separately reporting assets and liabilities. For example, reporting that assets and liabilities are each \$10 billion is more useful than merely reporting that the plan is fully funded.

We agree with the Board that the net pension liability is measurable with sufficient reliability to be recognized in the employer's financial statements. Measurement may be difficult—the obligation involves uncertain future cash flows, it is not traded in markets, and the tax status of the relevant cash flows is different from the cash flows of the employer's tradable debt. Techniques exist, nonetheless, to measure the obligation with sufficient reliability for the financial statements. Equally important, the obligation is so large, in many cases, that not to report it would seriously mislead users of the financial statements with regard to the employer's financial position.

3a. It is the Board's preliminary view that the projection of pension benefit payments for purposes of calculating the total pension liability and the service-cost component of pension expense should include the projected effects of the following when relevant to the amounts of benefit payments: (1) automatic cost-of-living adjustments (COLAs), (2) future ad hoc COLAs in circumstances in which such COLAs are not substantively different from automatic COLAs (see also question 3b), (3) future salary increases, and (4) future service credits. (See Chapter 4, paragraphs 4–13.) Do you agree with this view? Why or why not?

3b. What criteria, if any, do you suggest as a potential basis for determining whether ad hoc COLAs are not substantively different from an automatic COLA and, accordingly, should be included in the projection of pension benefit payments for accounting purposes?

3d. It is the Board's preliminary view that for purposes of determining the total pension liability of a sole or agent employer, as well as the service-cost component of pension expense, the present value of project benefit payments should be attributed to financial reporting periods over each employee's projected service life using a single method—the entry age actuarial cost method on a level-percentage-of-payroll. (See Chapter 4, paragraphs 24–34, and Chapter 5, paragraphs 6 and 7.) Do you agree with this view? Why or why not?

On the treatment of automatic COLAs, ad hoc COLAs, future salary increases, and future service credits

We agree that an estimate of the effect of automatic COLA adjustments should be included in the value of the total pension liability because the right to future COLAs has accrued at the date of the presentation of financial statements and the amount will depend on future events over which the parties have no control.

Whether an *ad hoc* adjustment is part of a substantive plan provision (i.e., should be considered as substantively no different from an automatic COLA provision) should be determined based on all the relevant facts and circumstances. Relevant factors include (1) the pattern of past practice, including whether COLAs have been granted when the plan has been under financial stress; (2) the expectations of employees based on written and oral communications; (3) the relationship of past increases to some external index. A possible standard would be to include in the reported liability the value of future *ad hoc* COLAs if it is reasonable to assume that the courts would enforce a retired employee's claim to a COLA that the system had not granted.

We believe that future salary increases generally should *not* be included in the pension liability until the salary increase is granted.<sup>4</sup> Today's environment has illustrated that governments will freeze wages or lay off employees, if necessary, when future pension accruals are guaranteed for continuing employees. Note that future salary increases are not otherwise part of an employer's obligation, as, for example, an obligation to make contributions to a defined contribution plan that is salary dependent. Nor is the future salary increase itself an obligation of the employer. Therefore, we believe that the liability should not reflect an estimate of future salary increases. We also recognize that no other U.S. accounting standards body has adopted our view.

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<sup>4</sup> Automatic or contractual increases resemble automatic COLAs in this context and are a possible exception.

The dollar amount of future service credits is not ordinarily part of the current obligation and its value, accordingly, should not be included in the reported liability. The method proposed in the PV would spread the cost of future service credits over future years, a method possibly suitable for generating level annual contributions. It does not meet the definition of a liability described in Concepts Statement 4, however, because not all events giving rise to the liability have taken place. Thus, it is not relevant to financial reporting.

Future service credits should be considered, however, in determining eligibility for benefits, including subsidized early retirement benefits, even when those future benefits are limited to benefits accrued to date. An alternative approach is to report only vested benefits (an approach sometimes taken by the National Association of Insurance Commissioners (NAIC) with respect to the statutory statement filed by insurance companies). The difference between the two approaches is usually small. We favor reporting a value for nonvested benefits primarily because of its precedential value for Other Postemployment Benefits (OPEB), in which nonvested benefits play a larger role.

*On the use of the entry age normal actuarial cost method*

We agree with the board that a single methodology for attributing costs to periods is appropriate and promotes comparability. We do not agree with the PV that the value assigned to the pension benefits exchanged for services each year over an employee's career necessarily should bear a consistent relationship to the employee's base salary level. As a result, we also do not agree with the PV in using an entry age normal (EAN) approach to measure the obligation at a point in time.<sup>5</sup>

We believe a better approach for determining the liability would be to recognize the value of the benefits attributed to service to date. Benefits earned to date represent a completed exchange transaction—a year of employee service has been exchanged for a stipulated increase in a future pension benefit. Pension obligations share many characteristics with other forms of debt. This approach would determine a liability that bears a more consistent relationship to the value of other debt in the financial statements.<sup>6</sup>

EAN is a mechanism designed to create smooth and stable cost patterns, not a method to represent the obligation of the plan sponsor. Traditional defined benefit plans sponsored by governments are usually “final-pay” plans, a design that generates increasing accrual patterns as employees age (i.e., as an employee accumulates more service, any increase in pay in a year results in a benefit accrual that is proportional to his or her years of service: as an employee ages, the value of any accrued benefit increases). EAN levels out the costs, usually as a percentage of payroll, over the period of an employee's employment. The PV notes (PV 4.13), that EAN results in measurements that “differ from those that would result ... from a strict application of

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<sup>5</sup> EAN is not a single methodology. Variations in EAN can produce radically different results (e.g. “individual EAN” and “ultimate EAN”). Under the ultimate variant of EAN, a plan amendment that creates a new tier of lower benefits for future hires only can result in both a significant decrease in current cost and an immediate increase in the liability—certainly anomalous results. The Board might consider clarifying its definition of what constitutes an acceptable allocation method if it votes to retain EAN.

<sup>6</sup> Tradable government debt is reported at the value received in the markets when first sold, and is then systematically amortized until the debt is extinguished. Pension debt is not easily valued in this way. Consistency with tradable debt can be achieved only approximately.

the terms of the plan.” We believe reflecting the actual obligation and the real annual cost is consistent with, and better reflective of, the sponsor’s obligation.

We also note that the conclusions of the PV differ from the conclusions that other accounting standards rules setters have reached for pension plans in similar contexts (international accounting standards for public reporting by governmental entities, and U.S. and international generally accepted accounting standards for public reporting by nongovernmental entities). The PV does not address these differences or their effect on the public’s expectations for financial statements. Very large inconsistencies, as these may be, could affect the credibility of all governmental accounting statements. We hope that the final document explicitly addresses this, and any other major differences among the accounting standards boards on similar issues.

*3c. It is the Board’s preliminary view that the discount rate for accounting and financial reporting purposes should be a single rate that produces a present value of total projected benefit payments equivalent to that obtained by discounting projected benefit payments using (1) the long-term expected rate of return on plan investments to the extent that current and expected future plan net assets available for pension benefits are projected to be sufficient to make benefit payments and (2) a high-quality municipal bond index rate for those payments that are projected to be made beyond the point at which plan net assets available for pension benefits are projected to be fully depleted. (See Chapter 4, paragraphs 14–23.) Do you agree with this view? Why or why not?*

We disagree with the PV on setting the discount rate because we believe that a financial statement liability calculated under the PV would work against the objectives of accountability, decision usefulness and assessment of interperiod equity. It would do so by requiring a metric that fails to represent faithfully the economics of the plan and sponsor and thereby would work against effective governance and plan management.

The two-tiered discount rate structure in the PV would result in a discount rate close to the expected return on assets (EROA) for most large, well-funded pension plans, and a municipal bond index rate for most unfunded OPEB plans. We will confine our remarks to the use of the EROA as a discount rate.<sup>7</sup>

Most large pension trusts have substantial portions—often more than 50 percent—of their assets invested in equities and equity-like assets. Expected returns on the assets are usually higher than expected returns on bonds from the same issuer precisely because the returns on the underlying securities are more uncertain, or riskier, and market participants demand greater expected returns to compensate them for taking additional risk. The difference between the expected return on risky assets and the expected return on riskless assets is known as a “risk premium.” Hence, the EROA rises as the actual or anticipated percentage of equities in the trust fund rises. The PV

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<sup>7</sup> There would be few pension plans, apparently, where a mixed rate structure would apply. In those cases, there is likely to be a good deal of confusion about how the standard is to apply. Two questions immediately come to mind. One: how is one to determine if a future benefit is likely to be funded? Two: how is a user to understand that a mere commitment to more rapid funding unaccompanied by an immediate increase in assets results in a reduction in liability?

justifies using the EROA as the discount rate as follows (Chapter 4, Paragraph 16):

To the extent that plan net assets available for pension benefits have been accumulated to date in the pension plan and are reasonably expected to grow during the time when benefit payments are being made from those assets, the Board believes that the present value of the employer's projected sacrifice of resources is effectively modified (reduced) by the expected return on investments.

We disagree with this logic primarily because it implies that either (1) the risk of equities underperforming the expected return is minimal, or (2) there is no implicit cost to the risk that equities underperform the expected return. In reality, the EROA is an expected value, not a certainty (or even as probable as the expected return from a matched portfolio of bonds) and there is a cost to assuming the risk of underperformance. A discount rate based on the EROA of the actual portfolio, therefore, typically understates the liability by the amount of the assumed future risk premiums.

To develop a discount rate that does not understate the liability, the discount rate should be based on the characteristics of the liabilities, rather than those of the assets. Pension liabilities are most similar to fixed income investments because of the relatively predictable nature of the future benefit payment streams and the nearly guaranteed status of those benefit payments. A discount rate based on yields on fixed income investments of quality and term structure similar to the liabilities meets the GASB's criterion of being "reasonably expected to grow" into the liability value and is independent of future investment decisions and events.

Although the actual assets may be invested in assets other than a matched portfolio, and asset gains and losses thereby occur, this deviation from expectation is a result of assuming risk; its existence and materiality is in contrast to the PV's criterion for a discount rate that the assets be "reasonably expected to grow" to meet the liability cash flows. To be more decision-useful and allow more faithful assessment of interperiod equity, the discount rate should not reflect expected returns on risky assets as if their returns were guaranteed, but should reflect the nature of the promises themselves, which are well represented by fixed income investments.

Another argument is often raised in favor of using the EROA as a discount rate. The PV, page 17, puts it this way – *"In addition, although investment experience fluctuates from period to period, the Board believes that over the long term, investment returns above or below the long-term expected rate will tend to offset to a great extent."* The trouble with this argument is that "long-term" is undefined and is probably un-definable. For example, consider the two fifty-year periods, 1900-1950 and 1950-2000. The annual average real rate of return (since automatic COLAs tend to neutralize any difference between nominal and real rates) on equities in 1950-2000 was 300 basis points higher than the comparable rate for the 1900-1950 period. Compounded over a fifty-year period these average differences amount to a 338% difference on a dollar invested at the beginning of the period. The use of other periods and lengths of periods would yield different results, and we don't know of any basis for thinking that a particular past period would yield better results when measuring current values. As before, financial reporting would be improved by looking to current liabilities measured at current market rates.

We present below several common situations in which using an EROA as a discount rate would work against effective governance, plan management, and common sense.

#### Example 1: Assessing the Level of Government Debt

Accurate assessment of the level of government debt is an important piece of information in assessing interperiod equity and accountability, and is decision-useful for any decision regarding the level of government debt.

In our view, a discount rate based on the EROA is a poor choice for determining the value of the liability. This can be seen clearly by constructing a hypothetical bond issue with a sinking fund invested in a balanced portfolio expected to yield 8 percent, even though the bond itself is sold to yield 5 percent. Using the pension accounting proposed in the PV would allow the employer to recognize immediately a profit by recognizing the cash received for issuing the bond as an asset but recognizing a much smaller liability. Although pension accounting does not apply to such a transaction, we believe that the transaction is conceptually similar to the assumption by the employer of a pension obligation.

The pension obligation is a form of debt. It differs from the employer's tradable debt (publicly traded bonds) in several significant respects—it often has constitutional protections that make it senior to the employer's tradable debt, benefit payments are subject to income tax while debt service usually is not, it includes some demographic risks, and (of course) it is not tradable. These considerations suggest modifying the employer's borrowing rate towards a default-free rate of return. An even better option would be a yield curve of rates to reflect the fact that cash flows that differ in timing should be discounted at different annually compounded rates. In today's economic environment, we would expect to see effective rates under this approach of something like 3.5 percent to 4.5 percent, as opposed to today's average rate of close to 8 percent.

Using a discount rate so much higher than the rate used for other government debt—both on the financial statements as well as in the market for tradable debt—creates inconsistencies and underpricing of the pension obligation. This prevents an assessment of interperiod equity because it undervalues the debt incurred in specific periods. It presents challenges to accountability and decision-usefulness by obscuring the actual cost of decisions.

#### Example 2: Assessing Compensation Costs

Plan sponsors must know the annual cost of benefit accruals if they wish to assess their total compensation costs and the costs of individual pieces of compensation. For example, in collective bargaining situations, negotiations often involve trading wages for benefits as well as negotiating the value of total compensation. In other situations, labor costs can affect decisions on employment and salary increase levels as well as project costs. So it is extremely important that the accounting costs be appropriate for these purposes.

Use of the EROA is not appropriate for this purpose for much the same reasons that it is not appropriate in determining the overall indebtedness of the employer with respect to the pension plan. The cost to the employer of promising to make a future payment to an employee depends on the specific conditions of the debt (e.g., constitutional protections, taxability to the

beneficiary, existence of an investment trust). It does not depend on how the employer plans to invest the trust assets. Because of the near-guaranteed nature of pension benefits, their cost is measured most appropriately with a correspondingly low discount rate. To the extent the pension benefits are priced with a discount rate based on the EROA, the employer is taking an investment risk without getting anything in return from the employees. In fact, this underpricing of pension obligations may be one of the reasons why employees in the public sector have much more generous pension benefits than employees in the private sector (employees and unions understand the valuable nature of guaranteed benefits, but employers underprice them). Use of the EROA to measure pension cost in a period, therefore, leads to mismeasurement of the cost of services in a period, and thus to a failure to properly assess interperiod equity.

To be more decision-useful and allow more faithful assessment of interperiod equity, the discount rate should not reflect expected returns on risky assets as if their returns were guaranteed, but should reflect the nature of the promises themselves, which are well represented by fixed income investments.

#### Example 3: Asset Allocation Studies

Many plans use asset-liability modeling (ALM) studies as the primary quantitative analysis for determining their asset allocation. ALM studies typically involve looking at how key plan metrics, such as contributions, expense, and funded status perform under various asset allocations, then selecting the asset allocation that is viewed to best balance risk and return. For asset allocations that reduce expected return as well as risk, using the EROA as the discount rate causes an immediate increase in the liability and decrease in the funded status. This result—a reduction in risk resulting in a decline in funded status—creates a structural bias against an asset allocation that reduces expected return, even as it reduces risk and volatility. Using the EROA to discount the pension obligation, therefore, makes it difficult for plan sponsors to de-risk because of the negative impact on reported funded status.

In fact, a change in asset allocation should have no immediate effect on funded status (i.e., the value of assets is unchanged and the value of the liability does not depend on the allocation policy of the trust fund). As a result, we believe a discount rate based on the EROA is not decision-useful for determining asset allocation.

To be more decision-useful in this context, the discount rate should be independent of the EROA, such as one based solely on fixed income yields.<sup>8</sup> With this method, funded status would increase or decrease based on actual, not expected, investment performance, and would do so only after such performance occurs.

#### Example 4: Pension Obligation Bonds

Under the GASB's PV, issuing debt and funding the plan with investments in equities (which typically have higher expected returns than the rate of governmental borrowing) would appear to improve immediately the plan sponsor's net resource flows because of the difference between the yield on the debt offering and the expected return on assets. In reality, selling bonds and buying the same amount of stocks neither creates nor destroys net resources immediately (excluding transaction costs), and only will create or destroy net resources to the extent the

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<sup>8</sup> Additional details on this point are provided in our response to the GASB's Invitation to Comment.

equities perform better or worse than the interest on the debt. The PV, however, by reporting this accounting arbitrage as an immediate improvement in financial results, would encourage plan sponsors to engage in transactions that are essentially economically valueless. Such transactions are tantamount to buying stocks on margin and recognizing the expected gain immediately.

Oddly, the two-tiered discount rate structure proposed by the GASB could create a structure in which contributing \$1 to an underfunded plan would affect the NPL by an amount greater than \$1, as it would both increase the assets and decrease the liabilities (by making more of the liability covered by plan assets, and subject to the discount rate at the EROA).

We do not believe this is an appropriate result. A \$1 cash contribution by the sponsor neither creates nor destroys net resources—it merely shifts money from one line item to another. Accounting based on the PV would obscure this fundamental fact. To be more decision-useful and allow more faithful assessment of interperiod equity, the discount rate should be invariant to the EROA, such as discounting the entire liability based on fixed-income yields.

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These four examples illustrate how discounting the pension obligation using the EROA tends to mislead users, encourage unnecessarily generous compensation, discourage appropriate risk management of investments, and encourage transactions that have no intrinsic economic value. These are surely among the reasons why virtually all other accounting standards boards have been moving away from using the EROA as the discount rate, instead using fixed income yields.

*4a. It is the Board's preliminary view that the effects on the net pension liability of changes in the total pension liability resulting from (1) differences between expected and actual experience with regard to economic and demographic factors affecting measurement, (2) changes of assumptions regarding the future behavior of those factors, and (3) changes of plan terms affecting measurement should be recognized as components of pension expense over weighted-average periods representative of the expected remaining service lives of individual employees, considering separately (a) the aggregate effect on the liabilities of active employees to which the change applies and (b) the aggregate effect on the liabilities of inactive employees. (See Chapter 5, paragraphs 8–10.) Do you agree with this view? Why or why not?*

*4b. It is the Board's preliminary view that the effects on the net pension liability of projected earnings on plan investments, calculated using the long-term expected rate of return, should be included in the determination of pension expense in the period in which the earnings are projected to occur. Earnings on plan investments below or above the projected earnings should be reported as deferred outflows (inflows) unless cumulative net deferred outflows (inflows) resulting from such differences are more than 15 percent of the fair value of plan investments, in which case the amount of cumulative deferred outflows (inflows) that is greater than 15 percent of plan investments should be recognized as an increase or decrease in expense immediately. (See Chapter 5, paragraphs 12–15.) Do you agree with this view? Why or why not?*

So far as the net financial position is concerned, changes in liabilities based on experience, changes in assumptions, and plan changes should be recognized immediately and separately from the operating and financing costs of the plan.

The proposed treatment of “unexpected” changes in the unfunded benefit obligation does not follow logically from the board’s other preliminary views, which treat the portions of the liability “expected” to accrue as part of past expense. (On the other hand, we agree that changes due to normal cost, interest, and contributions should be reflected immediately, as proposed).

The 15 percent corridor approach in the preliminary views does not appear to have any fundamental economic rationale. This is evident from the fact that there would be different treatment of plan experience just below the 15 percent threshold than just above it.

In addition, treating investment experience beyond the 15 percent corridor similarly to normal cost would obscure the differences between ongoing operating costs and one-time experience gains and losses. Without differentiation, pension expense would not be a decision-useful metric for evaluating the annual cost of deferred wages (as opposed to the investment experience of the plan).

We also note that employer contributions should not be considered reductions in expense as suggested in PV 5.16; rather, they are simply transfers from one line item classification—cash—to another—net pension liability. Plan administrative expenses are current-year costs and should be reflected in expense. Employee contributions, similarly, should be subtracted from the total normal cost to arrive at the pension expense attributable to the employer.

Whatever the Board decides, the treatment of unexpected changes should be separate and distinct from the ongoing operations of the plan (normal cost), which is relatively stable.

*5a. It is the Board’s preliminary view that each employer in a cost-sharing plan is implicitly primarily responsible for (and should recognize as its net pension liability) its proportionate share of the collective unfunded pension obligation, as well as its proportionate share of the effects of changes in the collective unfunded pension obligation. (See Chapter 6.) Do you agree with this view? Why or why not?*

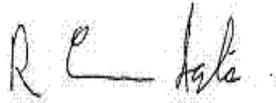
*5b. The Board is considering basing the determination of proportionate shares of the collective net pension obligation on employers’ respective shares of the total annual contractually required contributions to the plan and believes that would provide a reliable basis for measurement. However, the Board is seeking constituent input regarding other potential bases that might exist for this determination. (See Chapter 6, paragraph 8.) What basis, if any, do you suggest for determining a cost-sharing employer’s proportionate share of the collective net pension obligation?*

No comment.

*6. The Board's preliminary view is that a comprehensive measurement (an actuarial valuation for accounting and financial reporting purposes) should be made at least biennially, as of a date not more than 24 months prior to an employer's fiscal year-end. If the comprehensive measurement is not made as of the employer's fiscal year-end, the most recent comprehensive measurement should be updated to that date. Professional judgment should be applied to determine the procedures necessary to reflect the effects of significant changes from the most recent comprehensive measurement date to the employer's fiscal year-end. Determination of the procedures needed in the particular facts and circumstances should include consideration of whether a new comprehensive measurement should be made. (See Chapter 7.) Do you agree with this view? Why or why not?*

No comment.

Sincerely,

A handwritten signature in black ink, appearing to read "R. E. Inglis". The signature is written in a cursive style with a horizontal line extending from the end.

R. Evan Inglis, FSA, FCA, MAAA  
Chair, Joint Academy/SOA Pension Finance Task Force  
American Academy of Actuaries



## AMERICAN ACADEMY of ACTUARIES

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### **Response from the Public Plans Subcommittee**

On behalf of the Public Plans Subcommittee of the American Academy of Actuaries, we appreciate the opportunity to comment on the GASB's Preliminary Views on *Pension Accounting and Financial Reporting by Employers*. This response represents the views developed by practicing public-sector actuaries. We have organized this response according to the *Questions for Respondents* and the six *Issues* raised in the PV.

Our summary response to the questions stated in the PV is that, while we support and agree with GASB's views on the measurement of the Total Pension Liability (TPL), we urge the GASB to reconsider the asset valuation method used in the offset to the TPL and the methods proposed for recognition of changes in the Net Pension Liability (NPL) to reporting periods.

Before responding to the stated issues and questions, there is an overriding issue that should be addressed in our response: the need for a link between pension accounting and pension funding. We acknowledge the new direction presented in the PV focusing on accounting measurement separate from funding. We urge the GASB, however, to consider that the public may be better served if measures of pension accounting cost and funding cost are more closely related. This position is based on both practical and theoretical reasons.

At the practical level, because of the public nature of information within the public sector, two divergent sets of measurements can confuse the end users of this information. At the more theoretical level, this approach and the resulting expense measure is inconsistent with the GASB's stated intent that pension expense bear a consistent relationship to compensation levels. In addition, this issue has important consequences for two of GASB's core concepts—accountability and interperiod equity.

1. *Accounting vs. Funding and Accountability.* Because the current ARC-based expense is a viable basis for contributions, it provides essential information to assess the employer's accountability for the pension obligation. The loss of that expense/funding connection raises practical issues that the GASB should consider and address:
  - a. The GASB should consider how the new reporting will provide decision-useful information about employer accountability if there is no connection between pension expense and the amounts actually funded. We recommend that the GASB should include disclosures related to an actuarially determined contribution (ADC), even if that contribution basis is different from pension expense. This should include information comparing the ADC to actual contributions both on a period-by-period and cumulative basis.

- b. The GASB should consider how financial statement users will understand and reconcile two different measures of pension cost—one for accounting and one for funding.
    - i. As discussed further below, we note that the proposed basis in the PV for service cost(s) is fully compatible with an ADC. We recommend the GASB modify the basis for expensing changes in the proposed liability measure to be closer and more reconcilable to a funding basis (such as represented by an ADC). See our responses to *Issue 4* for details.
2. *Accounting vs. Funding and Interperiod Equity.* The PV addresses one aspect of interperiod equity (IPE), the matching of current period inflows of resources with current period costs of services. We suggest the GASB consider the volatility of measurements when attributing pension cost over reporting periods as another aspect of IPE.
- a. The matching of current period inflows and costs in a career context addresses what is often called *intergenerational equity*. There is another aspect of IPE, however, a period-to-period IPE, that will be violated by the proposals in the PV. Period-to-period IPE should provide that the cost attributed to a period does not affect that period inequitably compared to periods just before and after.
  - b. The PV treatments of certain changes in actuarial assumptions lead to an expense measure that could be extraordinarily volatile from period to period. For example, updating the mortality assumption for retirees would cause an extraordinary increase in pension expense for the single year of adoption for a component of cost that actually changes over a long period of time; a series of market gains could lead to greatly reduced or even negative pension expense, again for a single period, possibly to be reversed shortly thereafter. Even for an expense measure, given the long-term nature of the pension obligation, this could produce a clearly inequitable allocation of cost from one period to the next.
  - c. The GASB could address this interperiod inequity by explicitly incorporating volatility management into its recognition of changes in NPL. This will lead to a balancing of demographic measures (for intergenerational IPE) with longer recognition periods (for period-to-period IPE). This is discussed in detail in our response to *Issue 4a* and *4b*.
3. *Accounting vs. Funding and the level cost of services model.* Aside from these practical points, there is a strong theoretical basis for maintaining a relationship between funding and expense in that both are intended to produce a level cost of service. This concept, as discussed below, is also consistent with the long-term nature of the pension obligation as described in the PV.
- a. The service cost and liability measures that the GASB has proposed for plans with an expectation of sufficient future funding (Entry Age method with long term earnings discount rate) are also consistent with the model approach most frequently applied for funding purposes among public plans, because both expense and funding are intended to maintain a consistent relationship to compensation levels. This means the level-cost

method is equally appropriate for accounting cost (expense) and funding cost (contributions).

- b. As a result, expense and funding start out from the same level cost of services (service cost). The GASB PV expense differs from funding in how it recognizes *variations around that level cost*, variations caused by investment return and by changes in the TPL through benefit changes, experience gains/losses, and assumption changes.
- c. We recognize that there may be reasons to recognize such variations differently for expensing vs. funding. The need to balance demographically based cost attribution with volatility management (discussed in 2 above), however, applies equally to expensing and funding. This means that any differences should be limited.
- d. Addressing these issues will greatly facilitate reconciling and understanding any difference between expensing and funding. It also could allow employers to consider funding at the same level as expensing.

With these principles in mind, here are our responses to the issues and question from the PV:

*1. It is the Board's preliminary view that, for accounting and financial reporting purposes, an employer is primarily responsible for the portion of the obligation for defined pension benefits in excess of the plan net assets available for benefits. (See Chapter 2, paragraphs 5–10.)*

We agree with this finding for the reasons ably presented in the PV.

*2a. It is the Board's preliminary view that the unfunded portion of a sole or agent employer's pension obligation to its employees meets the definition of a liability (referred to as an employer's net pension liability). (See Chapter 3, paragraphs 1–8.)*

We agree with the finding that the NPL—whether based on market value of assets or some smoothed market-related value—meets the Concepts 4 definition of a liability, as described in the PV.

*2b. It is the Board's preliminary view that the net pension liability is measurable with sufficient reliability to be recognized in the employer's basic financial statements. (See Chapter 3, paragraphs 9–13.)*

We agree that an NPL based on the market value is an important measure of liability that should be disclosed in the notes to the financial statements. We believe that the NPL based on the market value of assets (which for this item only we will call MNPL), however, is not a sufficient reliability measurement for recognition on the basic financial statements (BFS). We recommend

that if any form of the NPL is reported on the basic financial statements, it should be based on a smoothed, market-related value, so as to obtain a reliable measurement from period to period.

- a. If a liability as potentially large as the NPL is incorporated into the BFS, it must be measured in a way that is reliable in the context of the long-term nature of the obligation. Because of the volatility inherent in market value of plan assets, the MNPL will be too volatile to provide a reliable measure from period to period. Short-term (year over year) swings in the market value of plan assets do not fairly represent the long-term nature of the pension obligation.
- b. The GASB can address this concern by basing the NPL on an asset value with a different measurement approach than market value—one that inherently offsets the short-term fluctuations while still maintaining a close relationship to market value over the longer term. We recommend replacing the market value of assets with a market-related value of assets as the offset to the TPL. This market-related value of assets would be based on a "sufficiently short" time to return to market value. This ensures that any deviations of actual from expected returns are fully recognized in a sufficiently short period.
  - i. If the smoothed market-related value of assets was defined by including one-fifth of each year's deviation of actual-from-expected investment returns, the asset value would be, essentially, a five-year smoothing of volatility.
  - ii. A percentage corridor might be placed around the market value. The "sufficiently short" five-year period for smoothing, however, reduces or eliminates the need for a corridor.
  - iii. On a theoretical basis, this provides better interperiod equity, better acknowledgement of the long term nature of the pension obligation, and helps solve the reliability flaws mentioned in Item a, above.

Changes in the market value of a retirement system from year to year do not inure to the employer directly. Market value, therefore, makes for a poor measurement for reporting an outstanding obligation and long-term liability such as pensions. Recognition of changes in this smoothed asset value is discussed further in our response to *Issue 4b*.

- c. The MNPL still should be part of the employer's financial reporting, as part of the notes to the financial statements. The notes could also include information on the relationship between the NPL and the MNPL (or equivalently, between the market and smoothed-asset values), the effects of smoothing on future costs, etc.

As discussed above, we believe that an NPL based on a smoothed asset value is measurable with sufficient reliability to be recognized in the BFS. The question of whether the entire initial amount is recognized as expense in the statement of activity all in that first implementation year or over a transition period, however, should be considered carefully. As long as the NPL is recognized as a liability on all employers' BFSs, that should be sufficient for comparability—even though some may have an offsetting asset during the transitional amortization.

*3a. It is the Board's preliminary view that the projection of pension benefit payments for purposes of calculating the total pension liability and the service-cost component of pension expense should include the projected effects of the following when relevant to the amounts of benefit payments: (1) automatic cost-of-living adjustments (COLAs), (2) future ad hoc COLAs in circumstances in which such COLAs are not substantively different from automatic COLAs (see also question 3b), (3) future salary increases, and (4) future service credits. (See Chapter 4, paragraphs 4–13.)*

We agree with the GASB's endorsement of a total pension liability component based on projected salaries and service, which is consistent with the GASB's conclusion that pension expense should reflect the employee's ongoing, career-long employment relationship with the employer. We also agree with the inclusion of automatic COLAs and ad hoc COLAS that are not substantively different from automatic COLAs.

*3b. What criteria, if any, do you suggest as a potential basis for determining whether ad hoc COLAs are not substantively different from an automatic COLA and, accordingly, should be included in the projection of pension benefit payments for accounting purposes?*

We recommend that determination of "not substantively different from automatic" should reflect the basis, process, and authority for granting such benefits, including any recent changes in such factors. Past frequency and consistency of ad hoc COLAs also should be considered. We note that this could lead to valuing the ad hoc COLA using a stated assumption as to frequency (e.g., three out of five years).

*3c. It is the Board's preliminary view that the discount rate for accounting and financial reporting purposes should be a single rate that produces a present value of total projected benefit payments equivalent to that obtained by discounting projected benefit payments using (1) the long-term expected rate of return on plan investments to the extent that current and expected future plan net assets available for pension benefits are projected to be sufficient to make benefit payments and (2) a high-quality municipal bond index rate for those payments that are projected to be made beyond the point at which plan net assets available for pension benefits are projected to be fully depleted. (See Chapter 4, paragraphs 14–23.)*

We agree with the GASB's endorsement of a total pension liability and service cost measure based in large part on a long-term earnings discount rate, which is consistent with the GASB's conclusion that the "employer's projected sacrifice of resources can be effectively modified (reduced) by the expected return on investments" for accounting purposes.

When projecting assets for comparing to projected benefits values, the GASB should clarify that any anticipated contributions that are to fund benefits for current members should be included, regardless of the basis used for those contributions.

- a. The PV clearly takes this position by saying the projected assets should “include projected future contributions from all sources related to funding the benefits of employees currently in the plan.”
- b. The PV also says, however, that the projection should “reflect a reasonable expectation of future employer contribution levels for current employees.” This statement is open to more than one interpretation and should be clarified carefully.

We recommend the GASB clarify that the projected assets include all projected future contributions that are to fund the unfunded liability for current members.

*4a. It is the Board’s preliminary view that the effects on the net pension liability of changes in the total pension liability resulting from (1) differences between expected and actual experience with regard to economic and demographic factors affecting measurement, (2) changes of assumptions regarding the future behavior of those factors, and (3) changes of plan terms affecting measurement should be recognized as components of pension expense over weighted-average periods representative of the expected remaining service lives of individual employees, considering separately (a) the aggregate effect on the liabilities of active employees to which the change applies and (b) the aggregate effect on the liabilities of inactive employees. (See Chapter 5, paragraphs 8–10.)*

We recommend that plan changes be distinguished from gains/losses, as well as assumption changes, as fundamentally different events requiring distinct treatment when attributing their effect to reporting periods. The PV rationale that these were treated the same “to avoid unnecessary complexity” is insupportable given that:

- a. Only plan changes are a change in the compensation relationship for services between employees and employer and are generally within the control of the employer.
- b. Plan changes are a resetting of benefit levels while gains/losses and assumption changes are a remeasurement of the cost of existing benefit levels, based on expectations of events with a material degree of uncertainty.
- c. Assumption changes can be a material realignment of long-term projected expectations that go beyond participant service lives, as well as changing the duration of expected future service.
- d. The additional complexity required to accommodate these differences is not complex and actually provides more transparency in evaluation of cost expectations and sources, in addition to being well established in current practice within the level cost model.

For plan changes, we generally agree with the short or immediate recognition proposed in the PV. This is an area in which a difference between expense and an actuarially determined contribution is justified.

For gains/losses and assumption changes, the PV approach—especially for inactive members—is inconsistent both with interperiod equity and with the conclusion that pension expense should bear a consistent relationship with salary levels.

- a. As discussed in our introduction, interperiod equity requires consideration of period-to-period equity, and not solely intergenerational equity.
  - i. By focusing exclusively on matching of liability changes to the active service lives, the PV expense measure will result in gross expense volatility, due to both plan experience and assumptions changes.
  - ii. Requiring assumption changes be expensed in the same fashion as other changes when they often reflect adjustments to much longer term measurements could result in unrealistic changes in expense. For example mortality improvements incorporated for the measurement of retiree liabilities under the PV would be expensed in one year when they actually reflect a slow moving trend that will be reflected over the average future lifetime of the current retirees.
- b. As discussed in our introduction, short or immediate recognition of these liability changes is inconsistent with the level cost model adopted for determining service cost.
  - i. While full recognition of each member’s ultimate liability during his or her individual service may be a worthy accounting goal, precisely achieving this goal is not attainable, given that pension costs are estimates and so must be remeasured even after the member’s service is completed.
  - ii. Immediate recognition of these liability changes will cause variations in annual cost greater than the underlying service cost, which can defeat the purpose of using a level-cost method to determine a service cost that is reasonably level from period to period.
  - iii. For example, inactive gains/losses and assumption changes could be recognized over a period based on the demographics of the inactive members, such as the average life expectancy.
- c. We recommend that these changes should be attributed so as to promote interperiod equity by avoiding undue volatility in period-to-period expense. This is achieved by an attribution period that balances demographic measures with longer periods that manage volatility.
  - i. Based on our experience with many plans over many years and conditions, we believe that an attribution period of 15-to-20 years for gains/losses and assumption changes will accomplish this balance.
  - ii. A 15-year period also will assure a minimum attribution of interest on the beginning-of-year liability amount, and so would be consistent with the intent of the PV.

- d. Note that this amortization framework could provide a basis for both expense and an actuarially determined contribution, in which the ADC could allow for a range of amortization periods, and expense is based on a single point in the range (most likely the shortest period in the range).

Finally, it is not clear from the PV whether the principal amounts of these changes are to be amortized using straight-line, declining, or increasing patterns. If amortization is straight line on the principal plus interest on a declining balance, the net result is a recognition that exhibits a declining dollar amount and a faster declining percent of pay. This appears to be inconsistent with the level (percent of pay) cost of services model adopted by the GASB for the service-cost component.

*4b. It is the Board's preliminary view that the effects on the net pension liability of projected earnings on plan investments, calculated using the long-term expected rate of return, should be included in the determination of pension expense in the period in which the earnings are projected to occur. Earnings on plan investments below or above the projected earnings should be reported as deferred outflows (inflows) unless cumulative net deferred outflows (inflows) resulting from such differences are more than 15 percent of the fair value of plan investments, in which case the amount of cumulative deferred outflows (inflows) that is greater than 15 percent of plan investments should be recognized as an increase or decrease in expense immediately. (See Chapter 5, paragraphs 12–15.)*

This approach—essentially unlimited smoothing within a relatively narrow market value corridor—may be an overly simple method that will result in potentially significant volatility when determining pension cost, whether for accounting or funding.

- a. The asset smoothing method implicit in the PV—permanent deferral of investment gains/losses—provides inadequate recognition of actual investment experience and so leads to the need for the 15 percent “corridor” to ensure some relationship to market value.
  - i. According to the PV, this permanent deferral is predicated on past experience offset by future experience. This is not generally supported by the statistical concept “reversion to mean” in that we cannot rely on short term future results to offset recent experience. This method, also does not accommodate emerging concerns about the influence of “fat tail” events on long-term expectations.
  - ii. A preferred practice is to recognize past experience over some relatively short period, rather than rely on future offsetting experience. This would reduce or even eliminate the need for a corridor type of constraint on the smoothing method.
- b. Under the PV method, the resulting combination of too little volatility (and no recognition) during some periods, and too much volatility (and too much recognition) in other periods, is inconsistent with both interperiod equity and with the conclusion that pension expense should bear a consistent relationship with salary levels.

Under *Issue 2b*, in the context of liability recognition, we described the details of a smoothed market-related value of assets that could be used as the offset to the TPL, in lieu of the market value. In the context of expense recognition, we recommend this as an alternative to the method proposed under *Issue 4b* of the PV.

In addition, we recommend that changes in the smoothed market-related assets be amortized over a 15-year period, similar to differences between actual and expected liability experience. In fact, it would simplify matters—yet retain the same mathematical result—if the changes in NPL caused by differences between actual and expected experience from the behavior of both the assets and liabilities were amortized together over 15 years. The 15-year period for both is designed to be long enough to capture the cycles of actual vs. expected and short enough to avoid negative amortization and avoid unnecessary deferrals.

This allows for effective management of investment volatility, both directly through asset smoothing and indirectly through amortization of changes in NPL due to changes in the smoothed asset value.

This also has the reporting advantage of avoiding two different deferred inflow/outflow accounts on the BFS—one for investment return and one for TPL changes—because the investment deferrals would be incorporated into the NPL.

*5a. It is the Board's preliminary view that each employer in a cost-sharing plan is implicitly primarily responsible for (and should recognize as its net pension liability) its proportionate share of the collective unfunded pension obligation, as well as its proportionate share of the effects of changes in the collective unfunded pension obligation. (See Chapter 6.)*

*5b. The Board is considering basing the determination of proportionate shares of the collective net pension obligation on employers' respective shares of the total annual contractually required contributions to the plan and believes that would provide a reliable basis for measurement. However, the Board is seeking constituent input regarding other potential bases that might exist for this determination. (See Chapter 6, paragraph 8.) What basis, if any, do you suggest for determining a cost-sharing employer's proportionate share of the collective net pension obligation?*

We do not disagree with the value and need for determination of proportionate shares of obligations among employers. There may be a need, however, to distinguish different methods for relatively large systems versus the aggregation of small systems. Within the public plan arena, there are some systems that are very dependent on the value of risk-pooling of relatively small municipal employers. Implementation of a determination of proportionate shares could become a material expense and undermine the risk-pooling benefits for these systems.

Should the pooled risk be deemed worthy of allocation to individual entities, then a straight pro rata allocation based on entity contributions to total plan contributions is an over simplification. A major concern is that such a method ignores the difference in cash flow by employer. Consider a participating employer with two-thirds of its members as retirees participating in the aggregate with another employer with two-thirds of its members as actives. Ignoring the

disproportionate maturity of these two employers could produce inappropriate proportionality of expense if the only allocation criteria are contributions.

An allocation methodology must take into account the contractual limitations placed on each entity in the cost-sharing plan and account for the relative cash flows. Consideration also should be afforded of the liability that would be assessed a member entity should it choose to withdraw from the plan, although many jurisdictions do not permit the participating employer to withdraw, except under limited circumstances.

In addition, amortizing any changes in the NPL is done on a plan-wide basis and therefore may not match the individual employer's demographic makeup.

There are many anomalies that arise in the process of an artificial allocation. The resulting allocations no longer may be sufficiently reliable to fairly represent that employer's own obligation. If the employer's obligation is defined in terms of the funding requirement, then the GASB should be more consistent in the application of that principle.

*6. The Board's preliminary view is that a comprehensive measurement (an actuarial valuation for accounting and financial reporting purposes) should be made at least biennially, as of a date not more than 24 months prior to an employer's fiscal year-end. If the comprehensive measurement is not made as of the employer's fiscal year-end, the most recent comprehensive measurement should be updated to that date. Professional judgment should be applied to determine the procedures necessary to reflect the effects of significant changes from the most recent comprehensive measurement date to the employer's fiscal year-end. Determination of the procedures needed in the particular facts and circumstances should include consideration of whether a new comprehensive measurement should be made. (See Chapter 7.)*

We have no major concern with this concept. While similar to the requirements of Statement 27, the requirement to consider and possibly reflect changes since the last valuation will increase allocation of entity resources to pay for these additional actuarial fees. It also is subject to fairly broad interpretation as to what must be reflected in an update and what reasonably can be deferred to the next valuation. In the agent and cost-sharing plan arrangements, this could require significant additional work, especially in situations in which different employers have different fiscal year-end dates.

Sincerely,



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