



AMERICAN ACADEMY *of* ACTUARIES

August 7, 2009

Governmental Accounting Standards Board
Mr. David Bean
Director of Research and Technical Activities
Project No. 34
director@GASB.org

Dear Mr. Bean:

The American Academy of Actuaries¹ Pension Practice Council appreciates the opportunity to respond to the *Invitation to Comment on Pension Accounting and Financial Reporting*.

The Invitation to Comment (ITC) constitutes a particularly thorough and well-crafted summation of the most important issues. It should encourage disciplined responses from many interested parties. The American Academy of Actuaries' Pension Practice Council stands ready to assist the GASB in its deliberations.

This Academy response specifically addresses pension matters. The ITC notes potential commonalities between the accounting for pensions and other postemployment benefits (OPEB); however, we recommend that the accounting for OPEB benefits be accorded its own, separate due process. When appropriate, we look forward to the opportunity to address GASB the specifics of OPEB accounting.

The ITC notes that there is a wide divergence of opinion on the proper accounting for public plan pension benefits; that difference of opinion extends into the actuarial community as well. Reflecting that diversity of opinion, our response is divided into three parts:

Part 1, *Actuarial viewpoints; measurement and actuarial principles* which provides an overview of the two main perspectives on accounting for governmental pension benefits and the different measurement purposes each approach best serves and uses the questions posed by the ITC to examine how different measurements can meet different measurement objectives. The discussion in part 1 draws heavily on the views discussed in parts 2 and 3.

Part 2, *A market-based view*, which was prepared by a group of actuaries from the Pension Finance Task Force² and answers the questions posed by the ITC from the perspective of showing how the measurement principles would be applied to recognition and disclosure from an approach consistent with capital market theory.

¹ The American Academy of Actuaries is a professional association with over 16,000 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

² The Pension Finance Task Force is jointly sponsored by the American Academy of Actuaries and the Society of Actuaries.

Part 3, *A modified conventional approach*, which was prepared by a group of actuaries from the Academy's Public Plans Subcommittee, and answers the questions posed by the ITC from the perspective of showing how the measurement principles would be applied to recognition and disclosure from a financing-based perspective.

We trust that this information will be useful to the GASB as it weighs what may be competing or conflicting needs. Once again, we appreciate the opportunity to provide comments and would be glad to provide additional detail or support as needed.


Sincerely,



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PART 1 **Actuarial Viewpoints on Public Pension Plan Valuation**

The world of business and finance is continually evolving and the actuarial profession evolves as well. In particular, perspectives on risk have developed in recent years and decades. Within the pension actuarial profession views on risk³, in particular investment risk, have developed to the point where two very different perspectives have emerged on public pension plan valuation. These two perspectives underlie the two different views presented in the additional parts of our response.

One focus of pension actuarial techniques is how to finance the pension benefits to be paid to participants. Key objectives with these financing techniques have been to achieve a smooth, predictable flow of contributions to a pension trust. This approach to financing a pension obligation works best if the pension plan is a long-term vehicle with little likelihood of being terminated due to financial distress, needs of the plan sponsor, or other issues. When long-term planning can be done, short-term increases and decreases (a significant consequence of risk) in total financing requirements may be spread over a specified planning horizon. If the assumptions about future events, most importantly investment returns and the amount of benefits to be paid, are reasonably close to the actual experience over the long term, a satisfactorily smooth development of contributions can result.

This approach assumes that although asset returns are volatile in the short term, they are relatively predictable in the long term. Thus, if one's estimate is that \$X today will accumulate with investment income to an amount sufficient to meet a future payment, then \$X is a reasonable representation of the cost or present value.

Another approach takes a market-based focus and its application to a wide range of financial and investment analyses. Rather than focus on the pattern of contributions, this approach focuses on identifying a current value of pension benefits; the essential concept underlying this view is that consequences of a decision to take investment risk have a financial value that can be observed in the financial markets. In this approach, if market obligations that are similar enough to pension obligations can be identified, then the continually updated price-setting done by the markets for those obligations can be applied to pension commitments. As a result, the consequences of risk are reflected immediately, rather than spread over time.

The actuarial profession encompasses both views, as well as a range of opinions in between. Accounting and funding rules for corporate pension plans have increasingly adopted the market-based view and thus this perspective is increasingly used in the pension actuarial profession.

The ideas that support these two perspectives are much more complex than is described above and more detail is contained in the remaining parts of our response. It is clear, however, that there is financial risk inherent in offering a pension plan to employees. A single value calculated on a particular date will not convey all the useful information about a pension obligation. Disclosure of sensitivity to changes in discount rates, and expected contribution levels under different asset return scenarios are some of the

³ As in the *Invitation to Comment*, we use "risk" in its broad, common meaning encompassing all elements of a random future in which experience will inevitably differ from expectations and assumptions. We use "uncertainty" to reflect the fact that current "measurements" of a random future are representative estimates of a range of likely values, and that the "true" value is not knowable or certain.

additional information that would help users of government financial statements to understand the degree of uncertainty in the values that are used and disclosed in the statements.

We note that communicating risk or uncertainty is not addressed by the ITC or specifically covered in the Concepts Statements. A more developed discussion of the approaches to communicating risk and uncertainty is thus beyond the scope of this comment letter. However, we would be happy to provide additional thoughts on this topic if GASB feels that it would be useful.

Measurement and Actuarial Principles

Responses to the questions posed in the *Invitation to Comment*.

Focus of accounting and financial reporting

Question 1: *To best achieve the financial reporting objectives of accountability and decision usefulness, including the assessment of interperiod equity, which of the following processes related to pensions do you believe governmental accounting and financial reporting should provide information about, and why?*

- a. *The process by which an employer incurs an obligation to employees for defined pension benefits earned by them*
- b. *The process by which an employer finances its projected cash outflows for defined pension benefits*
- c. *Both processes.*

Both processes are important. Parts 2 and 3 of this comment letter present different approaches to recognition and disclosure based on which of these two processes they view as primary. In general, the market-based view focuses on *a.*, the process by which an employer incurs an obligation for the benefits earned by employees; the conventional view focuses on *b.*, the process of financing the projected cash flows.

Both processes are needed to hold decision makers accountable for the key decisions involving the amount of benefits provided to plan participants, the investment of the plan's assets, and the amount and pattern of contributions.

The balance of part 1 explores measurement issues and actuarial principles, and how they relate to each of these processes. Parts 2 and 3 present greater detail on the particular application of the measurement principles to the recognition and disclosure elements that would be appropriate for each perspective.

Liability and expense recognition

Question 2. *What obligations of a sole or agent employer associated with pensions meet the definition of a liability in Concepts Statement No. 4, Elements of Financial Statements, and why?*

- a. *A measure of the cumulative difference between (1) amounts expensed, based on annual required contributions of the employer to the pension plan pursuant to a program of funding pension benefits developed within established parameters, and (2) the amounts the employer actually has contributed to the plan*
- b. *A measure of the employer's unfunded accrued benefit obligation to employees at the financial report date related to the employment agreement governing the exchange of employee services for salaries and benefits*
- c. *Other. (Please identify the obligation that you believe best meets the liability definition.)*

The employer's unfunded obligation for pension benefits meets the definition of a liability under Concepts Statement No. 4. If expense is intended to provide accountability for the financing process, the cumulative difference between amounts expensed and the amounts actually contributed is an important component of the liability and should be separately presented.

Concepts Statement 4 defines liabilities as "present obligations to sacrifice resources that the government

has little or no discretion to avoid.⁴ An estimate of the unfunded obligation attributable to prior periods of service clearly meets this definition.

See the responses to questions 4, 5 and 6a for a discussion of the issues surrounding the measurement and determination of the obligation.

Question 3. Which of the following expense recognition patterns is more consistent with the concept, in paragraph 27 of Concepts Statement 4, that applicability to a reporting period or periods for purposes of expense recognition in government-wide, proprietary fund, and fiduciary fund financial statements should be determined based on the notion of interperiod equity, and why?

- a) Recognition of the effects of transactions and other events that affect the unfunded accrued benefit obligation as they occur each year
- b) Deferred recognition (deferral and amortization) of some or all components of pension cost other than normal cost over a number of future years determined by an employer or by plan trustees within accounting parameters.

“Applicability to a reporting period” and “interperiod equity” as they relate to pension plans and the incidence of expense for various components of the changes in the unfunded pension obligation can only be evaluated with respect to the perspective underlying the particular measurement. Actuaries with different perspectives will define those terms differently.

From a market-based perspective, the obligation for pension benefits represents the amount of pension cost allocated to all past periods, and all changes in the unfunded obligation are therefore “applicable” to the period in which they occur.

From a conventional perspective, deferral and amortization of some changes in the unfunded obligation might be preferred. From this perspective, interperiod equity is considered more broadly as recognizing the total employer contributions needed to fund the plan (benefits paid + expenses – investment income) over the working lifetime of the participants in the plan.

If a balance sheet fully and immediately recognizes changes in the unfunded obligation as a liability, then amortizing certain components of that change for expense purposes requires the addition of a deferred pension cost (and/or a balancing adjustment). The accounting procedure necessitated by a deferred pension cost approach – a large balance sheet liability offset by a deferred cost – will seem very new and unusual to preparers, although it has been used for several years for pension plans in the private sector. The balance adjustment approach would be new in the context of pensions, but we believe that it has precedent in other areas of governmental accounting.

Approaches to measurement

Question 4a. Should the projection of pension obligations include or exclude “automatic” COLAs as part of the pension obligation?

Automatic cost of living adjustments should be included, as they are clearly a part of the benefits promised for current service, and their exclusion would work to the detriment of interperiod equity. This is also true of other types of COLAs, “13th checks” and other types of gain-sharing benefits triggered automatically by a formula.

⁴ Concepts Statement No. 4, Paragraph 17

Question 4b. *Should the projection of pension obligations include or exclude projected future ad hoc COLAs in circumstances in which ad hoc COLAs are substantively a part of the employment agreement, as demonstrated by an employer's pattern of practice?*

The value of ad hoc COLAs that are substantively part of the employment agreement, but are not part of the written documents setting forth the plan of benefits, should be treated consistently with whatever treatment is accorded by the GASB to substantive agreements in general. However, identifying a “pattern of practice” that rises to a level of “substantive agreement” is not always easy, and requires careful analysis and judgment based on the particular facts and circumstances. To the extent that such substantive agreements are included with the pension obligation, they should be separately measured and recognized.

Question 4c. *Should the projection of pension obligations include or exclude projected future salary increases?*

As discussed in the answer to question 1, the answer to this question depends on whether the primary focus of the measurement is the process of earning benefits or the process of financing the total projected costs over periods of time.

For measuring the process of earning benefits, the present value should not reflect an estimate of future salary increases. An employee's entitlement at any point is what he or she can actually draw from the pension system by ceasing employment at the date of valuation. The employee may *anticipate* higher benefits based on future pay increases but the employee's entitlement only accrues when additional qualifying pay is earned.

Alternatively, for measuring the pattern of the pension contributions over periods of time, it would be appropriate to include projected compensation levels in the present value of the total obligation allocated to a particular time period.

Other types of increases in formula benefits – already negotiated union contracts, automatic step rates in benefit levels, for example – should also be considered and consistently reflected in the measure of pension obligations.

Question 4d. *Should projected future benefits include projected future service credits?*

Similar to the answer to Question 4c, projected future service credits are not part of the benefit accrual process, and should not be included in measurements based on that premise. Future service credits may be used to determine eligibility for future benefits at future points of time, but only with respect to benefits accrued at the date of valuation, although there is not universal agreement on this point. Some say that until the eligibility credits are earned, no accrued benefit is “vested” and should not be included in the value of accrued benefits. Others argue that assuming plan continuation, there is a substantive agreement that participants will become eligible for (“grow into”) future benefits based on current service.

Similar to the treatment of projected future salary increases described in the answer to question 4c, for measuring financing processes that allocate total contributions to periods of time, projected future service credits may also be needed to determine projected future benefits.

Question 5. *What should be the basis for determining the discount rate used for discounting projected pension benefits to their present value for accounting purposes?*

- a) *The estimated long-term investment yield for the plan*
- b) *A risk-free rate (or a yield curve of risk-free rates applied to cash flows of different maturities)*
- c) *The employer's borrowing rate*
- d) *An average return on high-quality municipal bonds*
- e) *Other*

As we note throughout our comments, the answer to this question depends very much on the specific purpose of the measurement and what the measurement is intended to capture. If it is necessary to choose a single present value estimate, actuaries (and others) disagree on which model best serves “accounting purposes.” However, as noted in the introduction and throughout, a single value cannot capture all the nuance and complexity of a pension system. Complete information should include the degree of uncertainty embedded in the pension estimates or the range of likely outcomes.

Present values calculated using a risk-free rate, a default-free rate or a borrowing rate are an estimate of the value of benefits or the price to settle the pension obligation. This approach provides an estimate of the liability that is independent of the financing strategy. From the market-based perspective, this approach provides better comparability between employers with other government debt. This approach also recognizes current market conditions for debt and values the pension liability in a corresponding manner.

From the conventional perspective, present values calculated using the expected long-term investment return are an estimate of the long-term cost to taxpayers needed to fund the benefits – not what the settlement price might be at any point in time or the value of the benefits to employees. An estimated contribution depends on the financing strategy (including amount and pattern of contributions and investment strategy) used to fund the plan. This approach spreads the effects of volatility over a specified planning horizon and provides an estimate of the future cash contributions that will be required. It is the budgeting basis for developing a financing strategy.

As described in the introduction, the choice of discount rate – and the resulting differences in handling the consequences of risk – is one of the key issues that separate the two actuarial perspectives more fully developed in parts 2 and 3.

Actuarial methods

Question 6a: *Which actuarial cost method or methods should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

Considerations for choosing a method or methods include:

- *Comparability* – The comparability of financial statements among employers is enhanced by having a single method. However, if a single method is required, but contributions are determined using a different approach, comparisons to the benchmark for financing the benefit may be less meaningful. Different methods may be needed for different purposes.
- *Attribution* – For the measuring the process of incurring the obligation, traditional unit credit may be the best method; but for the process of determining the contributions, the current range of methods may be appropriate. Methods that directly calculate an “accrued liability” (that is, so-called immediate gain methods such as Individual Entry Age or Unit Credit) produce a liability that might be usable for balance sheet purposes, but other methods (so-called spread-gain methods such as Aggregate or Frozen Entry Age) produce an appropriate pattern for budgeting

contributions even though they do not produce a “liability” that could be used on the balance sheet.

- *Consistency* – The method or methods chosen may need to weigh a need for internal consistency (that is, both obligations and expense are calculated using the same method) against consistency with the process (benefit accrual or contribution cash flow) that is the particular focus of the measurement.

If a single method is desired that focuses on the process of accruing benefit obligations, the traditional Unit Credit (without projection) method best fits these considerations. If a single method is desired that focuses on the financing of the benefit obligation and provides a balance sheet liability; the Individual Entry Age method best fits these considerations.

Question 6b. *What should be the maximum amortization period or periods permitted for accounting and financial reporting purposes to determine an employer’s pension obligation and expense? Why?*

Question 6c. *Should different maximum amortization periods be set for different types of changes to the unfunded accrued benefit obligation? Why or why not?*

Question 6d. *If you answered yes to question 6c, what should be the maximum amortization period for benefit changes applied retroactively to past periods of service that were not substantively a part of the employment agreements that established the compensation for services in those periods or were not previously included in the projection of pension benefits? What should be the maximum amortization period for actuarial gains and losses? Why?*

See Question 3 for a discussion of the appropriateness of amortizing some changes in the unfunded obligation. As discussed in that question, amortization may only be appropriate in certain circumstances or for certain purposes.

For measurement purposes where amortization is appropriate, the principle of allocating contributions over working lifetimes (or payroll) can be applied to setting appropriate amortization periods. If there is no future working lifetime associated with a change in the unfunded obligation (such as a benefit increase for retirees), amortizing the change over expected future lifetime or duration of the affected obligation might provide a reasonable practical compromise.

Question 6e. *Which amortization method or methods should be permitted for accounting and financial reporting purposes to determine an employer’s pension obligation and expense? Why?*

The considerations of comparability and consistency discussed in Question 6a, as well as the general discussion in Question 3 about the appropriateness of amortization, also apply to the selection of an amortization method or methods.

For situations where amortization is appropriate for governmental accounting purposes, an ideal amortization method would have a closed amortization period. That is, each layer of unfunded liability would be fully amortized over a fixed and known schedule. Any new changes in the unfunded pension obligation would establish new, closed amortization schedules, or be folded into an existing amortization base of a similar type as long as the period of its amortization is no more than the maximum permitted if established separately. The amortization period would also be reasonably related to working lifetimes, payroll, duration of the obligation, or duration of anticipated economic benefits. In addition, amortization of benefit improvements should at least cover interest on the value of the additional obligation.

Within these constraints, level dollar, level principal payment or level percentage of compensation could all be appropriate. As a practical matter, we recognize that the GASB may have to consider some compromises to these ideals.

***Question 6f.** What method or methods of determining the actuarial value of plan assets should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

From the conventional perspective, using the actuarial value of assets to determine the expense is appropriate. If there is a desire to maintain consistency between the value of assets used for expense and for the balance sheet liability, it may also be appropriate to use the actuarial value of assets to determine the balance sheet liability. The difference between the actuarial value of assets and fair market value could then be treated as part of the deferral and amortization mechanisms, as described above.

However, the fair market value of assets is a data point that measures the actual accumulation of contributions and investment income, and it can be readily compared to the estimated pension obligation. From the market-based perspective, the fair market value of assets is the only asset value that should be used.

The funded status and the unfunded pension obligation using the market value of assets should be disclosed as part of the overall financial statements.

The answers to the remaining questions are covered in the other parts of our response.



AMERICAN ACADEMY of ACTUARIES

Part 2 A Market-Based Viewpoint

Introduction

The market-based view expressed in this part is based on two principles:

1. Market values of assets and liabilities are the most useful values for decision making by employers, employees, lenders and citizens and that those values are also relevant for the accountability of public servants and assessing whether interperiod equity is being maintained, and
2. Benefit obligations accrue in accordance with the Unit Credit actuarial cost method, which method should be the only one permitted for the reporting of costs.

Pension obligations are akin to debt and should be recognized consistently with other debt. Current methods fail to do so in two ways. First, current methods recognize pension obligations in accordance with any of several actuarial funding methods, any of which may or may not coincide with the manner in which pension obligations actually accumulate. Second, pension funding patterns in today's environment typically are calculated using a discount rate assumption that is significantly greater than a rate justified by the nature of the obligation itself.

The above views would lead to revaluing pension obligations at each statement date using actuarial assumptions, and a discount rate, relevant at that date. However, other debt is valued at market value when issued but is then amortized systematically over the period of the loan. Whether this discrepancy is serious or not is beyond the scope of these comments. However, if it turns out to be a barrier to the approach suggested, one would suggest that (1) it should not be a barrier to making any improvements in the current accounting requirements, and (2) footnote disclosure of market values would significantly improve the usefulness of the financial statements.

Concerning pension funding requirements, note that the objectives of funding and accounting differ sufficiently to expect that funding and accounting requirements should also differ.

Focus of accounting and financial reporting

Question 1: *To best achieve the financial reporting objectives of accountability and decision usefulness, including the assessment of interperiod equity, which of the following processes related to pensions do you believe governmental accounting and financial reporting should provide information about, and why?*

- a. *The process by which an employer incurs an obligation to employees for defined pension benefits earned by them*
- b. *The process by which an employer finances its projected cash outflows for defined pension benefits*
- c. *Both processes.*

- 1) The process by which an employer incurs an obligation to employees is the more important of the two for financial reporting purposes. The other process, by which an employer finances its cash outflows, is useful for budgetary purposes but is of secondary interest to the users of financial statements.
- 2) The market-based value of plan liabilities for a typical governmental pension plan as defined here is a present value of accrued benefits discounted with yields on fixed income investments that are default free or have a low probability of default. This comment letter does not address the technical advantages of various proposed yield curves for this purpose such as US Treasuries, swaps, TIPS, or credit-based curves.
- 3) In the vast majority of public pension plans, the employer promises to make payments that have an extremely high probability of being paid. The process by which the employer incurs the obligation to pay a future pension is akin to the creation of debt, where the lenders are the employees whose wages are deferred and the borrower is the government. Creditors of governments seek information about the ability and willingness of governments to levy taxes to finance *all* debt repayment and the costs and obligations of those activities that could compete for those borrowers' resources. Accountability for resources entrusted to the government does not apply just to public pension plan assets, but also to the liabilities that these assets are ultimately intended to pay, as the liabilities are present obligations to sacrifice resources. Market values of assets and liabilities, as elaborated later, provide the best available values for principals – employers, employees, debt-holders and taxpayers – and their agents. Thus, they further the goal of holding accountable principals and agents with an interest in pension debt.
 - a) For example, if an employee wishes to put a value on his pension, the market value of the stream of pension payments is the best possible value to use because it represents the collective wisdom of all the participants in the market about the value of the benefit.⁵ If an employer wishes to consider the cost of a benefit improvement, the value of the improvement at market value is the best possible value to use because the market value is an estimate of how much the employer would have to pay in the market for a third party to undertake a similar obligation. Even though the employer may have no intention of paying a third party to undertake the obligation and there may not be a deep liquid market for the exact obligation, market-based pricing information for similar obligations is the best estimate of the value of the obligation.
 - b) The actuarial liability current shown in the Comprehensive Annual Financial Report (CAFR) is less useful. It is a creature of an actuarial funding method that is designed to smooth the contribution stream; it does not show the pension obligation at its value to the principals. Second, common practice at the moment is to use a discount rate that includes a risk premium on the investment portfolio. As a consequence of this practice, the pension debt is valued at significantly less than the value of the benefits to the principals. By measuring debt improperly, the principals are less accountable for its proper management.
- 4) Market-based values and timely recognition are essential to appropriate decision making in many contexts. For example, a decision to improve benefits cannot be made reasonably in the absence of a market-based calculation. Amending a pension plan to increase the value of pension obligations by \$1 billion, however measured, increases the government's debt by \$1 billion, but, under current standards, may appear to cost only the \$30 million that might show up in the statement of resource flows as an amortization applicable to the year. This lack of transparency is similar to valuing a new car at the monthly finance charge while ignoring the total cost of the car.

⁵ An employee may or may not prefer the pension to the lump sum equivalent of its market value, depending on the employee's individual preferences for when to receive payments.

- 5) Ignoring market-based values and untimely recognition distorts interperiod equity. Clearly, understating current costs hides costs that should properly be recognized today. These include the cost of retroactive plan amendments and the market cost of current benefit accruals.
- a) The nature of governmental entities is often offered as a reason to ignore current market values. A government has a very long lifetime that spans multiple generations; it has the power of taxation; bankruptcies of governmental entities are almost unheard of as are pension plan terminations. Thus, one can assert that a government can ignore current market values because it will outlast them.

Certainly, short-term fluctuations in market values are not the most important factor in the long-term management of a governmental pension fund. But the argument of the prior paragraph simply does not address a principal question that users of financial statements wish to see addressed – “What are the government’s liabilities?” Users can evaluate whether pension obligations are significant or not in light of the financial statements as a whole, but only if they can obtain a fair picture of what those liabilities are.

Liability and expense recognition

Question 2. *What obligations of a sole or agent employer associated with pensions meet the definition of a liability in Concepts Statement No. 4, Elements of Financial Statements, and why?*

- a. *A measure of the cumulative difference between (1) amounts expensed, based on annual required contributions of the employer to the pension plan pursuant to a program of funding pension benefits developed within established parameters, and (2) the amounts the employer actually has contributed to the plan*
- b. *A measure of the employer's unfunded accrued benefit obligation to employees at the financial report date related to the employment agreement governing the exchange of employee services for salaries and benefits*
- c. *Other. (Please identify the obligation that you believe best meets the liability definition.)*

- 1) The pension obligation that best meets the definition of a liability in Concepts Statement No. 4 is “a measure of the employer’s unfunded accrued benefit obligation associated with services received from the employees to date.”
- 2) Concepts Statement 4 defines liabilities as “present obligations to sacrifice resources that the government has little or no discretion to avoid.”⁶ This definition implies a snapshot measurement of the present value of the employer’s unfunded accrued benefit obligation, not a metric based on the accumulated differences between the amounts expensed and the amounts contributed. Further, a liability is created only when “the event that created the liability has taken place.”⁷ Such an “event” should be considered employment service and actual asset returns, so the liability should be calculated with the accrued benefit obligation based on past service and the asset values as of the measurement date.
- 3) The employer’s unfunded accrued benefit obligation is significant to users of financial statements in several ways:
 - a) Employees and employers should know the value of benefits promised in lieu of wages or to be negotiated.
 - b) Debt-holders and taxpayers need to know the amount of debt taken on by the government in order to best judge the entity’s financial position.
 - c) The unfunded accrued obligation measures the difference between the value of the amounts promised for past labor and the amount funded to pay for those benefits, and thus represents a transfer of wealth from past periods to future.

Question 3. *Which of the following expense recognition patterns is more consistent with the concept, in paragraph 27 of Concepts Statement 4, that applicability to a reporting period or periods for purposes of expense recognition in government-wide, proprietary fund, and fiduciary fund financial statements should be determined based on the notion of interperiod equity, and why?*

- a. *Recognition of the effects of transactions and other events that affect the unfunded accrued benefit obligation as they occur each year*
- b. *Deferred recognition (deferral and amortization) of some or all components of pension cost other than normal cost over a number of future years determined by an employer or by plan trustees within accounting parameters.*

⁶ Concepts Statement No. 4, Paragraph 17

⁷ Concepts Statement No. 4, Paragraph 22

- 1) Employers should “recognize the effects of various pension-related transactions or other events immediately upon occurrence.”⁸
- 2) An unfunded accrued benefit obligation is akin to debt of the plan sponsor, and represents borrowing by the government from the employees. Concepts Statement No. 4, Paragraph 27 addresses borrowing within the framework of interperiod equity:

“For example, the burden of the cost of services is borne by present-year taxpayers and revenue providers. This burden is not shifted to future-year taxpayers or revenue providers through an increase in the level of borrowing, for example.”

- 3) Because a change in the unfunded accrued benefit obligation is a change in the level of borrowing, expense recognition should be based on the effects of transactions and other events that affect the unfunded accrued benefit obligation as they occur each year.
- 4) The most decision useful information is generally current information. For example, an amendment improving past-service benefits results in an immediate increase in indebtedness and benefit entitlement, while a gain or loss in asset value results in an immediate increase or decrease in assets or liabilities. Conversely, measuring pension obligations at either historical or amortized cost does not reflect the actual events that have occurred and can lead to decisions based on accounting methodologies rather than on actual events.

The transactions and events that affect the unfunded accrued benefit obligation need to be segregated in the resources flow statement. Specifically, wage or operating cost arising from pension benefits should be limited to the value of benefits arising in the year and the value of retroactive plan amendments. Other asset and liability increases and decreases are non-wage experience and should be treated as separate component(s). The different components of pension cost have different consequences for decision-making accountability.

- 5) The information outlined above should be available to the users of financial statements, whether that information is recognized or merely disclosed.

⁸ The required contributions do not need to be set equal to accounting expense calculated as the change in the unfunded obligation. To do so could introduce undue volatility into a budgeting process.

Approaches to measurement

The responses in this part to the questions posed in Chapter 4, *Approaches to Measurement*, flow from the previously stated view that a statement of financial position should reflect current values of accrued pension benefits consistent generally with the measurement principles that apply to non-pension debt.

Question 4a. *Should the projection of pension obligations include or exclude “automatic” COLAs as part of the pension obligation?*

- 1) The value of the pension obligation appearing in the statement of financial position should reflect the system’s best estimate of the value of the promise, including the value of automatic COLAs.
- 2) Automatic COLAs are typically part of the current benefit promise from the sponsoring entity to active and retired employees. That is, an employee’s benefit in retirement will increase from time to time in proportion to the increase in some stated index of the cost of living.
- 3) The promise is typically as secure as the promise of the basic benefit itself. Accordingly, it should be included in the valuation unless there are strong reasons to the contrary.
- 4) One reason offered against recognition of future COLAs is the uncertainty of the future event and the consequent difficulty of making an assumption. Making no assumption is equivalent to making an assumption of zero and recognizing a loss when the COLA actually occurs. Further, an inflation assumption is implicit in liability discount rates, so using an inflation assumption of zero for automatic COLAs might be inconsistent with the choice of discount rate.
- 5) To not estimate future COLAs in current accrued benefit values would result in no distinction between the liabilities of a sponsor of a plan that had an automatic COLA and the liabilities of a sponsor of an otherwise identical plan except that it had no COLA. This lack of comparability among plans would adversely affect the users of financial statements.

Question 4b. *Should the projection of pension obligations include or exclude projected future ad hoc COLAs in circumstances in which ad hoc COLAs are substantively a part of the employment agreement, as demonstrated by an employer’s pattern of practice?*

- 1) The value of ad hoc COLAs that are substantively part of the employment agreement, but are not part of the written documents setting forth the plan of benefits, should be treated consistently with whatever treatment is accorded by the GASB to substantive agreements in general.
- 2) Substantive agreements to provide pension benefits should be treated no differently from substantive agreements that create liabilities in other areas of the entity’s operations.
- 3) The proper treatment of substantive agreements generally is beyond the scope of these comments.

Question 4c. *Should the projection of pension obligations include or exclude projected future salary increases?*

- 1) The value of accrued benefits in the financial statements should not reflect an estimate of future salary increases.
- 2) Most governmental pension plans, and the great majority of the larger systems, provide pension benefits that are a multiple of final average pay. An employee leaving service at any time may be entitled to future COLA on his or her pension, but is typically not entitled to escalation based on pay not earned at the sponsoring entity.

There is an exception to this rule. Many pension systems have reciprocity agreements with some class of other governmental sponsored systems (e.g., an employee in a municipal plan who transfers to a state plan may have his benefit from the municipal plan based on final pay in the state plan). How to account for this situation is a practical issue that must be dealt with but should not obstruct the solution to the more general problem.

- 3) Many governmental systems, especially those of the states and larger municipalities, are constrained by law to continue the plan of pension benefits in effect at the time an employee is hired. That is, an employee once hired will continue to accrue pension benefits during his employment under a plan no less generous than the plan in effect at the employee's date of hire. (However, it is unusual to find legally binding requirements, or even a substantive agreement, to increase the pay on which the pension will be based.) Although there is an implicit cost to this type of requirement, it is a more faithful representation of the substantive agreement to not reflect expected future salary increases than to attempt to place a cost on the plan sponsor's obligation to continue the plan for current employees.
- 4) Neither the value of future pay nor the value of future pay increases is considered a present obligation in a government's financial statements. Nor is future pay considered in valuing other, non-pension liabilities that depend on that future pay. Applying the definition of liability from Concepts Statement No. 4 seems to lead to the conclusion that a liability for future pay increases and a liability for future benefits that depend on those future pay increases are linked – they should either both appear in the financial statements, or neither should be reflected in the financial statements.
- 5) Employers and employees are better served by recognizing the value of future benefits based on final pay at the time the pay increase is granted than by a recognition scheme that anticipates those increases.
 - a) An employee's entitlement at any point is what he or she can actually draw from the pension system by ceasing employment at the date of valuation. The employee may *anticipate* higher benefits based on future pay increases but his entitlement only accrues when he renders service and earns the pay.
 - b) An employer's obligation for an individual employee's benefit grows exponentially as an employee nears retirement age. Using anticipated pay smoothes the pattern of recognition, with higher than actual recognition in the early years of an employee's tenure, and lower than actual recognition in the later years. Thus interperiod equity cannot generally be maintained through anticipation of future salary increases.
 - c) These remarks are not intended to address the common practice of anticipating pay increases in the calculation of contributions.

Question 4d. *Should projected future benefits include projected future service credits?*

- 1) Projected future benefits should exclude future service credits.
- 2) Future service credits do not affect benefits until the service is actually rendered. Thus they may be best thought of as associated with the period in which the service is rendered.
- 3) Future service credits are used to determine eligibility for future benefits at future points of time, but only with respect to benefits accrued at the date of valuation. A case can be made that until the credits are earned, no accrued benefit is “vested” and should not be included in the value of accrued benefits. Alternatively, a case can also be made that assuming plan continuation, there is a substantive agreement that participants will become eligible for (“grow into”) future benefits based on current service. This response takes no position on this matter.

Question 5. *What should be the basis for determining the discount rate used for discounting projected pension benefits to their present value for accounting purposes?*

- a. *The estimated long-term investment yield for the plan*
- b. *A risk-free rate (or a yield curve of risk-free rates applied to cash flows of different maturities)*
- c. *The employer’s borrowing rate*
- d. *An average return on high-quality municipal bonds*
- e. *Other*

- 1) The discount rate to be used to discount projected pension benefits should normally be based on yields on fixed income investments that are default free or have a low probability of default.
- 2) Pension obligations are akin to debt where the governmental entity is the borrower and the employees are the lenders. The sponsoring entity has agreed to pay future benefits in lieu of current wages. Pension debt is vastly more complicated than ordinary borrowings, and the complexity may result in differences in valuation technique, but any analysis has to start with a recognition that users of financial statements need to see pension debt reported in a manner more or less consistent with the reporting of other debt.
- 3) Pension obligations differ from tradable debt in several ways:
 - a) Pension obligations are more complex than tradable debt – the timing of future payments is uncertain due to demographic risks; the term of the debt may extend beyond the term of any available matching assets; the amount of debt is constantly changing as employees enter, leave, become eligible for benefits and so forth. (But note that the absence of consideration of future salary increase simplifies the calculation somewhat.)
 - b) Pension debt is often senior to tradable debt because of constitutional or legal requirements.
 - c) Pension debt is backed by assets in trust. (Unlike a typical sinking fund, the accumulation pattern bears no necessary relationship to the manner in which the debt is accumulating.)
 - d) Pension debt may have no matching asset, especially at the longest durations.
- 4) It’s not clear which specific discount mechanism – Treasuries, swaps, TIPS or some other curve – is most appropriate, or indeed if any single mechanism is appropriate in all situations. Nor does this response consider the complexities created by differing tax regimes. What is clear, however, is that discounting based on a yield curve with characteristics similar to the accrued benefit obligation produces a value consistent with the valuation of other government debt.

- 5) Current practice, on the other hand, is to discount pension debt at a rate based on the expected rate of return on the assets in the pension trust. This procedure should be rejected for the following reasons:
- a) It is inconsistent with how all other debt is valued, or should be valued, by any interested party at any time.
 - b) It leads to the illusion that an immediate book profit is possible without risk. This last assertion would be obvious if there were no pension plan to obscure the transaction. Imagine, for example, that a government borrows \$1 million on a note due in 5 years at 5% receiving proceeds of \$784,000 which it recognizes as an asset. Instead of recognizing a liability of \$784,000, it does a pension-type valuation at 8% and books a liability of \$681,000 for an immediate improvement in its balance sheet of \$103,000. A similar, but sanctioned, arbitrage is sometimes constructed by borrowing in the open market and investing the proceeds in the pension plan. Unless there is a tax advantage to be gained, either process is simply booking anticipated earnings before they are earned and ignoring the risk inherent in riskier investments.
 - c) The pension liability is in fact largely independent of the chosen investments in the trust fund, as previously discussed. Current accounting policy, by encouraging investment in equities to justify a higher discount rate, has the unfortunate result of driving investment policy.
 - d) Thus, current practice compromises accountability by ignoring the cost and consequences of risks taken on behalf of the principals. Current practice provides information that is not the most decision useful by undervaluing the cost of plan changes and by valuing all pension obligations inconsistently with other obligations. Current practice compromises interperiod equity by taking immediate credit for investment earnings that, if earned at all, should be credited in future periods.

In summary, pension obligations should be valued consistently with other debt taking into account the borrower, the fund and constitutional and legal protections. The result has to be more decision useful than current practice.

Actuarial methods

Question 6a: Which actuarial cost method or methods should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?

Question 6b. What should be the maximum amortization period or periods permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?

Question 6c. Should different maximum amortization periods be set for different types of changes to the unfunded accrued benefit obligation? Why or why not?

Question 6d. If you answered yes to question 6c, what should be the maximum amortization period for benefit changes applied retroactively to past periods of service that were not substantively a part of the employment agreements that established the compensation for services in those periods or were not previously included in the projection of pension benefits? What should be the maximum amortization period for actuarial gains and losses? Why?

Question 6e. Which amortization method or methods should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?

Question 6f. What method or methods of determining the actuarial value of plan assets should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?

- 1) Current accounting rules allow governments to account for their pension plans by using the same actuarial cost methods and assumptions that they use to determine contributions. Most actuarial cost methods include techniques for amortizing gains, losses and retroactive plan amendments, and for determining an actuarial value of assets that is neither a market value nor an historical value. The purpose of these techniques is to develop a contribution pattern that is stable and predictable over time.
- 2) The ITC identifies the following advantages of current methods over proposed alternatives
 - a) Flexibility due to having several options to choose from
 - b) Consistency with methods used for funding
 - c) Low expense and liability volatility
 - d) Comparability isn't achievable in any event, so it would be misleading to suggest otherwise
 - e) Costs are allocated over long periods of time, consistent with pension plans being long-term commitments.
- 3) None of these advantages relates to accountability, decision usefulness or interperiod equity.
- 4) Pension expense, as discussed in prior sections of these comments, is not inherently stable or predictable unless benefit design and investment policy make it so. GASB's objectives of accountability, decision usefulness and interperiod equity do not lead to the conclusion that expense should be stable and predictable.
- 5) On the other hand, reducing the number of permissible actuarial cost methods would enhance the ability of users of the financial statements to compare the financials of different governmental preparers. Comparability, in turn, tends to enhance accountability, decision usefulness and the identification of interperiod transfers.

- a) Each currently permissible method allocates a different amount of pension cost to each reporting period, thus leading to different consequences for the same potential actions (plan changes, funding or investment decisions). Significant decisions are then driven by the choice of accounting method, rather than by the economics of the situation. Accountability is distorted and intergenerational equity is obscured.
 - b) Use of the Unit Credit cost method best achieves the objectives of accountability, decision usefulness and interperiod equity.
 - i) The unit credit cost method charges the value of benefits earned during each period of service to that period. Other methods do not.
 - ii) The unit credit method is consistent with Concepts Statement No. 4, which notes that “The event that created the liability [employment service, in the case of pensions] has taken place.”⁹
- 6) Pension obligations should be immediately recognized, as are other obligations. Deferral of obligations obscures the economics of the situation from the user of financial statements. Accountability and decision usefulness are enhanced by looking at actual assets and liabilities, valued at market.
- a) A distinction needs to be made, as discussed earlier, between changes in the pension obligation that arise from benefits earned in the period or retroactive plan amendments on the one hand, and all other changes on the other hand. Earnings on invested assets, interest on pension debt and changes in assumptions, for example, are not part of wages and should not be reported in a category that suggests that they are.
 - b) It has been argued that a retroactive plan amendment should be amortized over future periods to match in time the anticipated enhanced productivity or reduced cash compensation that may have motivated the amendment. Paragraph 22 of Concepts Statement 4 appears to lead to the more natural conclusion that a liability once created should be recognized, at least in the statement of financial position.
- 7) The fair market value of assets should be used for all accounting and disclosure purposes.
- a) Asset smoothing methods are one technique among many to provide a predictable and stable contribution pattern over time. The assets thus reported are not otherwise meaningful and are not helpful to the users of financial statements.

It has been argued that markets, especially for equities, are volatile for no apparent reason and that market value at a point in time is not the best measure of an asset’s underlying value, especially if the asset is held by a party that is not obliged to sell it at the valuation date. Nonetheless, the consensus view of a market as to an asset’s value is clearly of greater interest than a purely artificial construct. Further, what weight to give a particular day’s market value is a decision for the user of financial statements, and not the preparer.

⁹ Paragraph 22.



AMERICAN ACADEMY of ACTUARIES

Part 3 A Modified Conventional Viewpoint

Introduction

These introductory comments are intended to provide a backdrop and framework to the questions posed in the Invitation to Comment. They are intended to lay the foundation in order to keep the specific responses concise.

Governmental pension accounting and financial reporting is – and should be – different. There are at least four fundamental characteristics of governmental entities that support this assertion.¹⁰

1. *Perpetual existence.* While it is never an excuse for poor funding discipline or intergenerational inequity, the longevity of governmental entities (and their pension plans as well) does relieve public-sector financial reporting from preoccupation with current short-term solvency and settlement values, which are so central to private-sector pension accounting standards. The calculation of the Accumulated and Projected Benefit Obligations (ABO and PBO) and the use of market-based discount rates for remeasurement¹¹, emphasize a short-term settlement view of pension liabilities in private-sector pension accounting.

The number of private-sector employers that merge with or acquire other employers, terminate or freeze their defined benefit pension plans, and even to file for bankruptcy themselves, supports a short-term settlement focus for the private sector. However, a long-term perspective of accounting, which focuses on the long-term expected cash requirements and expenses of governmental pension obligations, is more consistent with the nature of governmental entities.¹²

Governmental pension plans should be viewed as a going concern, an illiquid liability, not a mere negative asset held for sale or exchange. The pension obligation, however, might be considered as a liability “in use”, and measured with a long-term actuarial measurement attribute. Unless

¹⁰ For a more detailed development of those differences between public and private-sector entities and their pension plans which affect the differences in accounting treatment, refer to “Part 5 (Consider the Measurement Purpose)” of the Series “Revisiting Pension Actuarial Science – A Five Part Series” by Rizzo, Ostaszewski and Krekora in the 2009 Public Pension Finance Symposium sponsored by the Society of Actuaries. <http://www.soa.org/files/pdf/2009-chicago-ppf-paper-krekora-part-05.pdf>

¹¹ Paragraph 44 of the Statement of Financial Accounting Standards No. 87 (as amended) states “Assumed discount rates shall reflect the rates at which the pension benefits could be effectively settled.” Paragraph 44A states, “Pursuant to paragraph 44, an employer may look to rates of return on high-quality fixed-income investments in determining assumed discount rates. The objective of selecting assumed discount rates using that method is to measure the single amount that, if invested at the measurement date in a portfolio of high-quality debt instruments, would provide the necessary future cash flows to pay the pension benefits when due. Notionally, that single amount, the projected benefit obligation, would equal the current market value of a portfolio of high-quality zero coupon bonds whose maturity dates and amounts would be the same as the timing and amount of the expected future benefit payments..... Assumed discount rates shall be reevaluated at each measurement date. If the general level of interest rates rises or declines, the assumed discount rates shall change in a similar manner.” Furthermore, the private sector approach uses a benefit cash flow stream, based on benefits accumulated to the measurement date using an elaborate service-based set of attribution rules. The private-sector approach arrives at results which are theoretically and numerically similar to a termination liability, while not truly the same.

¹² There is a relevant section on pages 19 and 20 of “Why Governmental Accounting And Financial Reporting Is – And Should Be – Different”, by the Governmental Accounting Standards Board, titled Potential Longevity. The last sentence thereof states, “The relative longevity of government is reflected in the long-term view applied in governmental financial reporting.”

plan termination or settlement is under serious consideration, an annual remeasurement of the governmental pension benefit obligation to ensure the value of the obligation is tracking the current yield curve has no practical decision utility. The purpose of an annual remeasurement of the pension liability is to update it for new benefit accruals, projections and population changes; not for short-term economic fluctuations in market or settlement values.

2. *Funding and budgeting.* The primary goal of federal funding standards for private-sector employers is to ensure that their plans have sufficient current assets to cover current accrued benefit liabilities. Part of the reason for this is to limit the potential transfer of liabilities to the Pension Benefit Guaranty Corporation. Private-sector accounting standards also take a short-term measurement perspective. Funding standards for public-sector plans are sometimes codified in statutes, ordinances or other formal actions. Sometimes they consist of less formal policies and agreements.

Whatever their mode of adoption, public-sector funding rules generally do not focus on short-term solvency, but on budgeting the long-term cash requirements of the plan. Because there is no universal funding requirement for government-sponsored pension plans, the accounting standards provide an important benchmark for assessing whether pension obligations are being funded in a responsible manner. If the long-term perspective of funding standards applicable to and used by state and local employers were coupled with a short-term private-sector approach to accounting and financial reporting, the results would be a serious disconnect in accountability and usefulness. Accounting and funding do not have to be identical, but they should both have a long-term perspective.

The entire public-sector budgeting process has no parallel in the private sector. The high-profile position of funding and budgeting in the public sector is and should be reflected in its pension accounting.

Finally, there is more attention devoted to the balance sheet in the private sector than in the public sector, where the resource flows statements seem to hold more relevance to users. This tends to cause the balance sheet to drive private-sector accounting standards with the income statement following its lead. Accordingly, private-sector pension accounting is compelled to measure the pension obligation as some form of a market value of the liability (albeit ill-defined). Public-sector pension accounting is and should be more focused on the outflows of resources, with the pension liability measured in terms of the funding obligation rather than the reverse.

3. *No stock value.* In the marketplace, when investors consider buying shares of a company, they want to know, "How much is it worth?" The governmental employer has no financial shareholders. No one asks that question about a government. It is not for sale and there is no meaningful venue for a discussion of the market price of the governmental employer. The private sector's interest in the market-based value or price of the company affects its pension accounting treatment in two important ways. First, the pass-through treatment of the private-sector pension plan forces a benefit-driven measurement of the liability rather than a funding-driven measurement¹³. Second, the settlement value drives the market-based measurement attribute of the pension benefit liability. Private-sector accounting standards take a short-term measurement perspective partly to provide a current market value so the plan sponsor can be valued properly on

¹³ The pass-through view treats the pension fund as if it were merely an internal account. The promise to pay a deferred benefit results from the employment exchange transaction remains with the employer. The obligation is not treated as being transferred to the plan, but retained by the employer. Hence, the employer's liability is measured simply as the present value of the expected benefits accrued to date, with no regard for any actuarial cost method. Pass-through requires that the accounting costs and liabilities for a funded pension promise be measured the same as if the plan were pay-as-you-go. Pass-through pretends the pension fund is not even there.

a stock exchange or other corporate transaction. With no stock price of a governmental entity to consider, the current market-based value of a pension benefit obligation accrued as of any given date has little relevance in the public sector.

4. *Pension plan independence.* Public-sector pension funds usually have much greater independence from the employer than do private-sector pension funds¹⁴. It is not surprising that private-sector accounting standards view the single-employer pension fund as a mere pass-through, since it has minimal independence from the employer. However, the economic and legal contract that exists between the sole or agent governmental employer and the plan should be fully reflected in governmental pension accounting standards because of the pension plan's greater independence from the employer in the public-sector environment. This is not only true for cost-sharing employers, but also for sole and agent employers.

While not necessarily an exhaustive list or treatment, these four distinguishing characteristics of the public-sector environment have profound implications for the uniqueness of governmental pension accounting and financial reporting and the basis for the argument that they should continue to be different from the private sector.

The relatively independent nature of the governmental pension fund (whether a sole, agent or cost-sharing plan) and its contractual relationship with the governmental employer steers away from the pass-through concept. There is a sound theoretical basis for rejection of the pass-through notion that lies at the core of the responses that follow. The rejection of pass-through compels the consideration of the pension fund's role of the in modeling the substantive characteristics in the underlying transactions within the governmental structure.

A contractual relationship exists between the governmental employer and the funded plan. Under the contract the plan assumes the benefit liability (for paying the actual pension benefits to plan members) in exchange for the employer assuming a funding liability pursuant to specified funding pattern (defined by the actuarial cost method chosen, most commonly Entry Age Normal). There is a very real legal and economic exchange of the benefit liability owed to the member for a funding liability owed to the plan. It is, essentially, a debt restructuring.

Both debt structures and their respective payment patterns would fully discharge the obligation to plan members. The debt restructure is not just an artifice or a convenient way of thinking about pension finance. Pursuant to the debt restructure (the employer funding contribution pattern required under the actuarial cost method), the plan, through statutory or contractual authority, makes very real demands upon the employer's current resources. The pattern of the plan's funding demands on the employer is very different (and accelerated) from the pattern of the plan member's benefit demands on the plan.

To illustrate the reality of the debt restructure (even upon a sole or agent employer), consider the employer's outflow of resources for pension purposes over the past 50 years and over the next 50 years. The actual cost to the taxpayers over these prior years has been the funding contributions required by the plan's actuarial cost method under the debt restructuring. The expected cost to the taxpayers over the next 50 years, too, will be the funding contributions required by the plan's actuarial cost method under the debt restructuring. The taxpayers have not been paying the pension benefits; the plan has been paying them. The taxpayers have been paying the funding contributions required. The governmental employer's financial statements should reflect the costs to taxpayers (in the past and as expected in the future), not the

¹⁴ For a more detailed development of the independence of the governmental pension fund from the employer (as compared to the private sector), why it should not be treated as a pass-through, and how this status affects the differences in accounting treatment, refer to "Part 4 (Residual Benefit Liability)" of the Series "Revisiting Pension Actuarial Science – A Five Part Series" in the 2009 Public Pension Finance Symposium sponsored by the Society of Actuaries. <http://www.soa.org/files/pdf/2009-chicago-ppf-paper-krekora-part-04.pdf>

benefit cash flows; and certainly not the volatile and hypothetical market value of such benefit liabilities, so prominent in private-sector accounting.

The legal reality is that a plan member who feels that his pension amount is "not right" might seek to approach his governmental employer for a remedy. The public employer, however, may no longer owe the benefit which would likely be the responsibility of the plan under contract. Thus, if the employer has a pension liability, it may be owed to the plan rather than to the plan member. This would mean that the employer has a funding liability rather than a benefit liability.

The plan has the pension benefit liability to the members, as long as there are assets in trust. In the unlikely event of the depletion of all plan assets, if the employer is no longer complying with its funding obligation, it will likely take back the "residual benefit liability" to itself¹⁵. In short, if the employer has a pension liability, it is a funding liability owed to the plan under the actuarial cost method used to restructure the original and accruing debt (a benefit liability) promised to employees. Similarly, the plan has assumed that benefit liability owed to plan members.

Indeed there are characteristics of this contract that tend to resemble a pass-through. Certainly, the employer has put the benefit payment liability to the plan. However, the plan has a call upon the employer for the funding obligation. The nature of the contract is not the same as an ongoing non-participating group annuity contract with an insurance company, under which the employer cedes all risks (economic, demographic and behavioral) to a separate legal entity that has no recourse back to the employer. Pension plans (whether private or public) can go back to the employer annually to adjust the contribution requirements because the plan does not retain risk or reward unto itself. The arguments presented herein against pass-through, in favor of modeling the role of the pension fund, preserve the notion that the employer retains the various risks. Actuarially speaking, the benefit incurral and benefit financing focuses both reflect the sole and agent employer retains all pension risks and rewards.

Furthermore, there are exceptions to this view of an exchange transaction. At times, the employer unilaterally chooses not to fund the plan as specified under the actuarial restructuring, and the plan appears to have no recourse or chooses not to pursue enforcement of the contract. However, those circumstances do not seem to be sufficient to ignore the agreement for standards-setting purposes. Finally, there are many examples in which plans are not completely at arm's length from the employer.

Nevertheless, as a broad observation of the landscape as a whole, the equation of the government employer with the plan is strained. These four public-sector characteristics and the debt restructuring that occurs between the employer and plan lead to the rejection of the pass-through paradigm for public pension finance.

Accounting standards setters, not actuaries are best suited to sort out these matters. For the majority of government employers and their plans, this notion of an exchange transaction between employer and plan might provide a good measure of sound theoretical support for a practical decision to maintain a *financing* perspective for governmental employer pension accounting.

¹⁵ Ibid.

Focus of accounting and financial reporting

Question 1: *To best achieve the financial reporting objectives of accountability and decision usefulness, including the assessment of interperiod equity, which of the following processes related to pensions do you believe governmental accounting and financial reporting should provide information about, and why?*

- a) *The process by which an employer incurs an obligation to employees for defined pension benefits earned by them*
- b) *The process by which an employer finances its projected cash outflows for defined pension benefits*
- c) *Both processes.*

Both processes.

The “process by which an employer (and plan) incurs an obligation to employees” is interpreted herein as the accrual of the employer’s benefit promise or obligation to plan members. This process is interpreted and understood as the voluntary employment exchange between the employer and employee, which initially obligates the employer to pay a deferred benefit to the employee, in an amount that increases as the employee renders each period of covered service to the employer. This initial obligation of the employer is measured with the present value of expected future pension payments that have accrued or otherwise accumulated as of the measurement date. However, as discussed in the introduction, this obligation is transferred to become an obligation of the plan. These responses refer to this process as the incurrence of the benefit obligation resulting in a benefit liability owed by the plan to the member, which is called the present value of accrued or accumulated benefits (PVAB)¹⁶.

This, of course, is very different from the “process by which an employer finances” the projected future cash outlays made by the pension fund. This is interpreted as the accrual of an employer’s funding obligation to the plan. This process is interpreted and understood as the exchange between the employer and the plan, which obligates the plan to pay the deferred benefits initially borne by the employer as each period of covered service is rendered (relieving the employer of that initial obligation unless the plan were to default). In turn, this exchange obligates the employer to pay contributions to the plan on an advance-funding basis pursuant to a pattern established in accordance with the actuarial cost method chosen by the plan. These responses often refer to this process as financing or funding the obligation or liability the employer owes to the plan. This is called the actuarial accrued liability (AAL), and the portion not yet funded with qualifying assets is the UAAL.

With that interpretation and understanding, information about both processes should be provided. But information about funding costs and liabilities is, by far, more important for employers and plans viewed as going concerns. Information about benefit accruals and liabilities could become more important in the event that the either the employer or the plan is in financial distress.

The venue of the information drives which process is relevant, because the employer’s obligation concerning pensions is different from the plan’s obligation in virtually all circumstances. The employer’s financial statement should provide information about the process by which an employer finances its projected future cash outflows and the plan’s financial statement should provide information about the process by which an employer incurs (and transfers to the plan) a benefit obligation to employees. Depending on the particular user, only one of the financial statements might be sufficient for the user’s

¹⁶ The PVAB is also the basis for what has been called the Traditional (unprojected) Unit Credit cost method (TUC). There is a lot more to describing the calculations for the PVAB. This will be left to later Questions. For example, Question 5 relates to the discount rate and Question 6a relates to the actuarial cost method. The answers to those Questions define the benefit focus or the financing focus. Without defining exactly what benefits are earned each period and accumulated to date and without defining what discount rate to use, the term PVAB will be used herein for the generic process of benefit incurrence.

specific purpose at the time. Information found in both financial statements, however, should be considered for a full understanding of the plan and related costs and liabilities.

Accountability

Public officials are responsible for defeasing the pension obligation that the employer initially promises to employees, and to do so in a prudent manner. This is best accomplished through the agreement between the employer and the funded plan, in which the benefit stream is restructured to a contribution stream determined on an actuarially systematic basis (usually designed to be level as a percent of pay). The primary users of the employer's financial statement need to have information about the financing arrangement in place with the plan, in order to hold the employer's public officials accountable. The most important aspect of accountability is whether the employer has been funding the plan adequately, not what the settlement price might be at any point in time.

Current financial reporting for recognition focuses on the process by which pension benefits are financed. This focus holds parties accountable for the prudent financing of future obligations. The benchmark provided by the annual required contribution and Net Pension Obligation in the current accounting standard has been a very important lever to improve the funding of government-sponsored pension plans. A change in focus to the process of benefit accrual for recognition in the employer's financial statements would relieve public officials from being held to an actuarially systematic and sound level of financing. The PVAB and its annual accrual counterpart for expensing might serve as useful information in certain venues and for limited purposes. However, it is a poor benchmark for accountability with respect to prudent defeasance of the pension obligation. Information about the process of current and long-term financing, particularly for recognition, is the more appropriate metric for accountability.

The current approach to governmental pension accounting and financial reporting, however, creates some opacity related to decisions granting additional benefits. The effects of these decisions are not transparent to the users because, currently, there is no information in either the employer's or the plan's financial statements regarding the effect of plan benefit changes adopted by the employer or the plan. These decisions commit taxpayers to pay for new obligations in the future without any requirement to disclose the incremental costs.

Employers' financial statement disclosures should provide information about any new funding obligations by presenting a reconciliation of the current UAAL with the previous valuation, with each primary source of change identified and quantified. One such primary source of change in the UAAL would arise from benefit improvements adopted¹⁷. Accountability for decisions to improve benefits can be further enhanced by requiring amortization of those improvements over appropriate periods as discussed later. Additionally, other disclosures concerning the long-term funding demands upon the employer and their sensitivity to risk would be useful for holding public officials accountable.

The benefit accrual or incurrence of the benefit obligation is the wrong metric against which to hold the employer's public officials accountable because they have a funding obligation to pay to the plan, not a benefit obligation to pay to the members. The benchmark for accountability should be a systematic actuarial funding pattern, designed to be a level percent of pay. That financing process should be the benchmark to determine if public officials are responsibly defeasing the pension obligation on behalf of taxpayers. The employer's financial statement should present information about the employer's obligations.

However, a complete view of the whole pension obligation cannot and should not be limited to the employer's financial statement. Both financial statements (the employer's and the plan's) should be

¹⁷ Refer to the response to Questions 9 for a more detailed treatment.

considered as a whole in judging the actions of public officials with respect to retirement systems.

The plan's financial statement should include information on its obligation to pay the expected benefits accrued to date to plan members when due, which it has assumed from the employer. It should present an appropriate version of the PVAB¹⁸ (using a long-term expected return on the plan's portfolio as the discount rate) as a liability of the plan. As in the recommendations above for disclosing UAAL changes in the employer's financial statement, the sources of changes in the PVAB should be identified, quantified and disclosed in the plan's financial statement. While this information does not relate to the employer's financing obligation, it furthers the aim of holding public officials accountable for additional burdens placed on the plan.

Taken together, the employer's and plan's financial statements should provide information necessary to holding public officials accountable for financing the pension obligation in a systematic manner and for the adoption of benefit improvements affecting the employer's funding and the plan's funded status.

While not specifically requested in the ITC, the GASB might consider revisiting the frequency and timing of valuations for pension and OPEB programs. Information in the financial statements would be more useful if it were not stale. Annual valuations for funded plans would be more useful, as would valuation dates no earlier than 12 months before the first day of the reporting period. Additional emphasis on the effect "significant changes" should have on financial statements might result in more useful and timely information as well.

Decision Usefulness

The PVAB is a measure of the obligation accrued by plan members as of a given date, without any projection of future service or future salary increases. There is no projection in its calculation of what plan members would receive when they are expected to leave covered employment. Coupled with a market-based discount rate, it is essentially a settlement value of what has been earned to date. That would be useful in the event the plan were being considered for termination, freezing or other settlement of the obligation. Recognizing the PVAB as a balance sheet liability on the plan's financial statement may serve a useful purpose for a short-term snapshot of the plan's solvency in the event of a current plan freeze.

However, the PVAB is of little or no use for budgeting or funding. Any funded ratios or comparisons using PVAB would be misleading as an indicator of funding progress because it has no long-term forecast in it. Information about the benefit incurrence would not be useful to lenders and rating agencies.

On the other hand, information about the process by which an employer finances the pension obligation is useful for numerous purposes. It would help public officials know if the employer can afford the plan or benefit improvement being proposed. Funding forecast information in the Notes would help lenders and rating agencies know if the plan is sustainable and whether the expected future funding demands upon the employer would impair its ability to service its bonded debt. Information about the financing of the plan would be useful to taxpayers who must ultimately furnish the funds needed to carry out the funding policy.

Interperiod Equity

The value of the annual increment in any individual employee's PVAB for services rendered over a full career is substantially back-loaded, causing the costs for each year's accrual to increase over time (even when expressed as a percent of pay) from a relatively small amount, often less than zero, during the early

¹⁸ How and where the plan's liability should appear in the plan's financial statement is discussed in the response to Question 8.

years to a high level in the later years of his or her career. For example, when the percent-of-pay cost of benefits (under a PVAB approach) earned in the last 10 years are so much more than the percent-of-pay costs for the same benefits earned in the first 10 years, the approach is not intergenerationally equitable. For a closed group of employees, even the total of such costs is back-loaded, for the total cost of the group is simply the sum of the costs of each individual. If new hires at younger ages enter the group, the increasing costs are dampened to be more level as a percent of pay. Nevertheless, the underlying method for each individual does not exhibit intergenerational equity, and relying on an open group with a constant influx of younger employees does not negate the fact of generational transfer inherent in the PVAB.

Most actuarial cost methods used to transform or restructure the pattern of the benefit obligation are designed to establish a contribution pattern which is level as a percent of pay. This level percent-of-pay objective is more than just a convenient and predictable funding pattern. A level percent of pay may be considered as a proxy for intergenerational equity. There is no debate that a level percent of pay for defined contribution plan expensing is considered a natural way to achieve interperiod equity. Similarly, expensing the cost of defined benefits earned over a career with a level percent of pay attempts to ensure that each generation of taxpayers pays its fair share and each accounting period is charged its fair share of the total cost of the employment exchange. Of course, actual events will differ from the actuarial projections and, only after these events occur, can actual intergenerational equity be measured.

Additional Information

In addition to the current information provided in the various parts of the employer's and plan's financial statements, more information is needed for accountability, decision usefulness and assessing interperiod equity. The GASB Board members might consider the following types of additional information to be included in disclosures, the first in the plan's financials and the rest in the employer's:

1. A reconciliation of the PVAB from the previous valuation to the current one, identifying and quantifying the sources of change as arising from actuarially expected changes, changes in plan benefits, changes in actuarial assumptions or methods, and actuarial gains or losses.
2. A presentation of the amounts composing the UAAL, including the current balances arising from (a) the amounts at transition and, since transition, (b) all prior plan benefit changes, (c) all prior changes in actuarial assumptions and methods and (d) all prior actuarial gains and losses.
3. A reconciliation of the UAAL from the previous valuation to the current one, identifying and quantifying the sources of change as arising from actuarially expected changes, changes in plan benefits, changes in actuarial assumptions or methods, and actuarial gains or losses.
4. The funded ratio comparing the AAL to plan assets, using the actuarial value of assets as well as the market value of assets.
5. A forecast of future annual required contributions, actual contributions and funded ratios over a number of future years, prepared on the premise that the emerging experience of the plan will match the assumptions used in its actuarial valuations. There is always a certain amount of risk inherent in publishing forecasts because the emerging experience is never as assumed. Therefore, this item should not be presented without the information provided in item 6, below. Without the information in item 6, this item 5 should be omitted.
6. A stress-testing of the forecasted annual required contribution, expected contributions, and funded ratios under various scenarios of future investment returns. While stochastic methods of stress-testing might yield more useful information to users, deterministic methods might be sufficient under a cost-benefit consideration.

Liability and expense recognition

Question 2. *What obligations of a sole or agent employer associated with pensions meet the definition of a liability in Concepts Statement No. 4, Elements of Financial Statements, and why?*

- a. *A measure of the cumulative difference between (1) amounts expensed, based on annual required contributions of the employer to the pension plan pursuant to a program of funding pension benefits developed within established parameters, and (2) the amounts the employer actually has contributed to the plan*
- b. *A measure of the employer's unfunded accrued benefit obligation to employees at the financial report date related to the employment agreement governing the exchange of employee services for salaries and benefits*
- c. *Other. (Please identify the obligation that you believe best meets the liability definition.)*

Both seem to satisfy the definition, and both should appear on the Statement of Net Assets separately.

An employer's funding obligation to the plan for prior service qualifies as a liability as defined in Concepts Statement No. 4. The total UAAL is the current best estimate of the liability under Concepts Statement No. 4 for the pension obligation because it represents the present value of future cash contributions needed to fund the portion of the pension obligation attributed to prior service. This change in financial reporting from the current standards is not without its challenges, as described in responses to subsequent questions.

The cumulative excess of the current and prior years' expense over the current and prior year's employer contribution is a component liability of the total UAAL. It is a measure of current delinquency in payments otherwise required pursuant to the accounting benchmark for funding and is critical for assessing the prudent financing of the pension obligation. Depending on the funding policy adopted by the plan, it may also represent the contractual liability of the employer.

As mentioned in the Introduction, the plan's obligation to pay the deferred benefits to members, i.e., the PVAB, does not seem to be a liability of the employer unless or until the plan defaults on its obligation to members.

The employer should recognize its funding liability in its Statement of Net Assets, possibly in two components and a total. One component is the current Net Pension Obligation, the total is the UAAL, and the other component is the portion of the total scheduled for payment in the future. If only the UAAL were presented as a liability, without presenting the Net Pension Obligation (even if it were in the Notes), a critical element for accountability would be lost.

It would be simpler and more straightforward to leave the balance sheet liability as solely the Net Pension Obligation, as specified in the current standards. However, it is more transparent and compelling to consider the promise of benefits and the promise of funding to be liabilities of the plan and the employer, respectively.

Question 3. Which of the following expense recognition patterns is more consistent with the concept, in paragraph 27 of Concepts Statement 4, that applicability to a reporting period or periods for purposes of expense recognition in government-wide, proprietary fund, and fiduciary fund financial statements should be determined based on the notion of interperiod equity, and why?

- a. Recognition of the effects of transactions and other events that affect the unfunded accrued benefit obligation as they occur each year
- b. Deferred recognition (deferral and amortization) of some or all components of pension cost other than normal cost over a number of future years determined by an employer or by plan trustees within accounting parameters.

The nature of a defined benefit plan makes it impossible to achieve perfect interperiod or intergenerational equity. The measurement of employer pension obligations accrued or allocated to the current or prior years depends on numerous actuarial assumptions about future events and conditions. Emerging experience is always different from the assumptions underlying these calculations. As each year passes, the amounts accrued or allocated to specific years change, resulting in actuarial gains and losses. On occasion, a plan will re-calibrate its forecast by changing its actuarial assumptions or methods, resulting in a further change in these amounts. Only after the last dollar of benefit is actually paid to a plan member can one determine with certainty the total cost allocable (under any chosen method) to specific prior years.

Immediate expense recognition of this stream of annual corrections and changes in the UAAL might have some theoretical appeal. However, for practical reasons, deferred recognition is the preferred approach. Some or all of the changes occurring in the UAAL can be amortized over a period of time without compromising the overall principle of interperiod equity.

The periods over which changes in the UAAL should be amortized and recognized are discussed in later Questions, and are tied to the type of change considered with an attempt to preserve some measure of interperiod equity.

Recommending the recognition of the UAAL as a liability on the sole and agent employer's Statement of Net Assets, coupled with deferred recognition of some or all changes in the UAAL, results in a position that is essentially consistent with Alternative 3, as described in Chapter 3 of the Invitation to Comment.

Specifically, the focus of pension expense should be the accounting benchmark for financing the liability. This benchmark can be thought of as the operating cost (normal cost) plus the financing cost (UAAL payment) determined within parameters established by GASB (the annual required contribution). This benchmark is critical to the assessment of the stewardship of public assets in the context of financing the pension obligation.

Nevertheless, embracing Alternative 3 as a model for pension accounting and financial reporting for sole and agent employers is not without its challenges.

In order to balance the expense to changes in the balance sheet liability, this approach requires the addition of a deferred pension cost or a year-end adjustment.

Such a deferred pension cost can be quite volatile, reflecting the gains and losses arising each year, as well as the full value of any benefit changes adopted in that year. The accounting procedure necessitated by this approach described as Alternative 3 will seem very new and unusual to preparers and users. Not only will there be some resistance to recognizing the UAAL as a liability, but having an offsetting value in the Statement of Net Assets, through which each year's amortization components of the annual required contribution will be recycled, will represent a significant departure from current practice.

Another possibly more palatable approach might be to set up a “below-the-line” year-end adjustment to reflect the portion of the current year’s change in UAAL that is not yet being recognized/amortized as an expense.

These matters are certainly beyond the scope of actuarial expertise. Nevertheless, it appears that one of these options seems to be the natural result of recognizing a liability on the balance sheet without immediate recognition in the expense.

Approaches to Measurement

Question 4a. *Should the projection of pension obligations include or exclude “automatic” COLAs as part of the pension obligation?*

It is difficult to imagine a credible rationale for the exclusion of future automatic cost of living adjustments, as they are clearly a part of the benefits promised for current service, and their exclusion would work to the detriment of interperiod equity. This is also true of other types of COLAs, “13th checks” and various types of gain-sharing benefits triggered automatically by a formula.

Question 4b. *Should the projection of pension obligations include or exclude projected future ad hoc COLAs in circumstances in which ad hoc COLAs are substantively a part of the employment agreement, as demonstrated by an employer’s pattern of practice?*

The same is true of excluding future ad hoc COLAs where experience demonstrates that such increases are a part of the substantive plan but are not automatic. Notwithstanding the difficulties in judging when and whether past practices rise to the level of a substantive plan provision, such ad hoc COLAs should be included in the benefit projections. These also include various types of gain-sharing benefits granted at the discretion of a pension board or employer.

Question 4c. *Should the projection of pension obligations include or exclude projected future salary increases?*

Because a large proportion of retirement systems in the public sector base benefits on final average salary, the reflection of projected future salary increases is essential to the proper projection of future benefits, and excluding them would also hinder the achievement of interperiod equity by making it impossible to determine the probable ultimate value of benefits earned for past service. Some would object that survival in service and the pay increases that accompany it should not be taken for granted, but the contingency of earlier termination at lower levels of pay is best reflected in a multiple-decrement actuarial valuation model using appropriately chosen decrements.

Prudent financing of pension benefits demands advance funding of future expected salary increases. The establishment of the restructured financing liability, therefore, requires the employer to recognize future expected salary increases in the actuarial measurement of the financing-based expense and liability.

Question 4d. *Should projected future benefits include projected future service credits?*

Similarly, the objective projection of future pension benefits and, therefore, the funding liability, must reflect anticipated future service credits. The appropriate actuarial cost method chosen by the plan is the proper mechanism for allocation of the value of such projected future benefits to past service and future

service.

Except where circumstances make the assumption of an ongoing plan inappropriate, the projection of future pension benefits should reflect all of these.

Question 5. *What should be the basis for determining the discount rate used for discounting projected pension benefits to their present value for accounting purposes?*

- a. *The estimated long-term investment yield for the plan*
- b. *A risk-free rate (or a yield curve of risk-free rates applied to cash flows of different maturities)*
- c. *The employer's borrowing rate*
- d. *An average return on high-quality municipal bonds*
- e. *Other*

The 50th percentile among the expected long-term rates of return for the plan is the most appropriate discount rate for determining the annual required contribution and the UAAL for recognition and disclosure purposes.

A plan might choose a lower rate for funding in order to be more conservative; or a plan might have a more expectations and choose a higher rate. But for financial reporting purposes, a form of “best estimate” or “expected” return is most reflective of the long-term cost to taxpayers and most useful for holding public officials accountable. When coupled with an appropriate actuarial cost method, this selection of the discount rate produces a cost allocation designed to be level as a percent of pay.

Forecasting future rates of return is an inexact science at best, whether short-term or long-term. If the accounting standard expressed the assumed investment return in terms of the 50th percentile of expected long-term returns, it might encourage a better selection process and a greater funding discipline in plan officials, and their investment and actuarial advisors.

Recognition and disclosures in the employer financial statements resulting from the actuarial cost method's allocation process should reflect the expected costs to taxpayers. This simple principle is not achieved with PVAB discounted at risk-free rates, or the employer's borrowing rate or the average return on high-quality municipal bonds, which are all current snapshot measures of bond yields observed in the marketplace as of the reporting date. They are measuring value or settlement price rather than cost.

Some version of these snapshot yields produce a form of settlement price for the pension obligation accrued to date. This is inconsistent with the long-term view of governmental pensions. Since governmental pension plans seldom terminate, there is no useful purpose gained for discounting accrued benefits with a snapshot yield. The use of such bond yield rates seems to be an attempt to satisfy a fair value measurement attribute for the liability. If a fair value measurement attribute is the objective, then the current use of ABO as the benefit model is wrong. A fair value model would measure only the contractual benefit obligation and would add risk margins to the expected benefit payments earned to date. Nonetheless, fair value seems an inappropriate measure of a liability that is not for sale or exchange, is highly illiquid, and is used to maintain the workforce that provides services. An actuarial funding measurement attribute, that reflects the employer's obligations to the plan, is more consistent.

Snapshot bond yields are volatile and would produce volatile expense and liability results. The volatility in these financial statement elements would not be reflective of any costs actually paid or incurred (or expected to be paid or incurred) by the taxpayers under the plan's funding requirements. The rates currently observed would produce expenses and liabilities which are substantially higher than those produced by the 50th percentile of long-term expected returns of the portfolio. In the late 1970s and early 1980s, the snapshot bond yields would have produced the opposite, substantially lower expenses and liabilities. Serious unintended consequences might include the moral hazard of inadvisable benefit

improvements when snapshot rates are up and plan terminations or freezes when they are down.

Note disclosures in the employer's financial statements should provide additional information useful for assessing risk inherent in the plan's investment policy. This can be achieved with a variety of methods, such as deterministic stress testing or stochastic modeling.

Actuarial methods

Question 6a: *Which actuarial cost method or methods should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

Ideally, and consistent with the comments in the Introduction, the actuarial cost method used for the expense and liabilities recognized should be the same method the plan uses for funding because that represents the expense and liability inherent in the debt restructuring that moved the benefit liability to a financing liability.

It may be useful to model the residual benefit liability owed by the employer directly to plan members for remaining benefit payments in the event the pension fund runs out of money. That could be recognized as a minimum liability (to be compared to the UAAL), but is likely to be less than the UAAL. This discussion may be beyond the scope of this response.

It is not entirely achievable or desirable to match the actuarial cost method used for accounting with the method used for funding. Accounting and funding do not necessarily have to be identical. To the extent the funding method used as a claim on the employer's resources (as a contribution requirement) is consistent with accounting objectives, having them identical or similar would be highly desirable.

There are two reasonable approaches within the framework of Alternative #3.

- 1) With certain exceptions, the cost method the plan uses for funding purposes should be the method used for accounting. Any of the current six cost methods should continue to be permitted for expensing purposes in order to preserve the expense as an accountability benchmark for public officials.

However, certain methods that may be used for expensing should not be used for the measurement of the UAAL recognized on the Statement of Net Assets. These exceptions include the three spread-gain methods: Aggregate, Frozen Attained Age and Frozen Entry Age actuarial cost methods. Spread-gain methods do not include the accumulation of actuarial gains and losses within the UAAL. The Aggregate method does not isolate *any* UAAL within its framework. The UAALs developed under the other two methods do reflect the effects of benefit changes and changes in actuarial assumptions or methods. However, because they do not, by definition, include the value of actuarial gains and losses in their respective UAALs, all three should be excluded from consideration for use in calculating the balance sheet liability. Instead, any one of the immediate-gain methods (or a default immediate gain method such as Entry Age Normal) should be selected for that purpose, while retaining the original spread-gain method for expensing.

It is recognized that this would create an inconsistency that would need to be tolerated and balanced in favor of the worthy goal of recognizing a pension liability on the employer's Statement of Net Assets.

- 2) Require the Entry Age Normal (EAN) cost method as the single actuarial cost method permitted for expensing and liability recognition under Alternative #3. Entry Age Normal is already used by 75 percent to 85 percent of public plans. It is designed to produce normal costs which are level as a

percent of pay, a good benchmark for measuring intergenerational equity. This would improve comparability, but at the expense of recognizing the underlying substantive nature of the transaction between the employer and the plan that might use a different actuarial cost method for defining the funding requirement.

For those plans not using EAN, the annual required contribution and net pension cost derived under EAN would be held out as the benchmark against which the plan and employer would be held accountable, even though the actual funding contributions might be derived with a different method. It might create some confusion, making the employer appear to be either under-contributing or over-contributing. It might simply force most of these plans to adopt EAN as their funding method for practical reasons.

Neither of these approaches is ideal; but that is the natural result of requiring a pension liability to be recognized in the Statement of Net Assets.

Question 6b. *What should be the maximum amortization period or periods permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

The appropriate maximum amortization period depends upon the nature of the liability being amortized and the assessment of appropriate interperiod equity and accountability for that liability. Longer amortization periods lead to more stable expense (and contributions), but may result in cost shifting between generations if the benefits of a change are enjoyed by one generation while the costs are deferred to another. Shorter amortization periods lead to a better funded status, but may result in cost shifting between generations if the cost of the change is paid by one generation, but later generations benefit from the change. Accountability is usually better served by shorter amortization periods.

Different actuarial cost methods use different mechanisms to allocate the cost of an employee's benefits over his or her career either individually or as a group.

The principle of allocating costs over working lifetimes can also be applied in setting appropriate amortization periods for accounting and financial reporting purposes. Amortization over the average future working lifetime expected among affected employees has appeal in terms of both interperiod equity and accountability.

In most cases, this principle is identical to a principle of allocating costs over the period in which the government receives a benefit for the additional cost. A benefit improvement, for example, arguably provides a benefit to the government for the remaining period of service of the employees receiving the benefit. There are some exceptions, such as early retirement windows, where it can be argued that the benefit to the government extends beyond the period of service of the employees receiving the benefit increase.

Another time period that may be used for this purpose is the duration of liabilities. Under this approach, changes in liability are amortized over the period equal to the present value-weighted average time until benefits are to be paid. This principle also reflects interperiod equity and accountability for certain changes in the liability, particularly changes affecting retirees.

Finally, another approach would be simply to reduce the fixed number of years down from the current maximum of 30 years, possibly with a different number of years for different types of changes in the UAAL.

Potential application of these principles in setting a maximum amortization period for different types of changes is discussed below in the response to part (d) of this question.

The period of amortization of the UAAL at transition could remain as scheduled for those UAALs currently established, with separate consideration for those plans using spread-gain methods as discussed earlier.

Question 6c. *Should different maximum amortization periods be set for different types of changes to the unfunded accrued benefit obligation? Why or why not?*

Yes.

Different maximum amortization periods should be set for different types of changes to the unfunded accrued benefit obligation. Accountability for intentional changes to the plan's liability should be based on the principle of allocating the cost over the period in which the government receives a benefit for the change as in the employment exchange. Changes to the liability due to the unexpected experience of the plan or due to changes in actuarial assumptions, however, should be based on the principle of spreading the impact over the duration or over longer period to reflect the opportunity for unfavorable and favorable experience deviations (i.e., actuarial gains and losses) to offset each other.

Question 6d. *If you answered yes to question 6c, what should be the maximum amortization period for benefit changes applied retroactively to past periods of service that were not substantively a part of the employment agreements that established the compensation for services in those periods or were not previously included in the projection of pension benefits? What should be the maximum amortization period for actuarial gains and losses? Why?*

The maximum amortization period for benefit changes applied retroactively to active employees' past periods of service, whether explicitly negotiated or not, should be equal to the affected members' average future working lifetime expected among the affected employees at the time the benefit is adopted. In fact, the same maximum amortization period should be applied to *any* benefit change affecting active employees which changes the actuarial accrued liability of the plan rather than just retroactive benefit improvements. This maximum ensures that benefit changes will be fully paid by the time the employees receiving the benefits are expected to leave covered employment. This preserves some measure of interperiod equity by attempting to allocate the cost of the benefit change to be paid by the generation of taxpayers served by the employees who will receive the benefit. In addition, this methodology will improve accountability by limiting the ability to provide a benefit to a current constituency while deferring the costs of that benefit to future taxpayers. Generally, for most amendments, the average future working lifetime is expected to fall between 10 and 20 years.

If the benefit change is solely for or includes members in pay status, using the standard above would present a challenge. Since there is no future working lifetime for retirees, applying the principle above would require immediate recognition. Presumably, the governmental entity granting an additional benefit to retirees gains some benefit for doing so, at least by indicating to current active members that their needs in retirement will also be considered in the future. It may be more appropriate in these cases to amortize the change in their portion of the UAAL over a period of no more than the average future lifetime or the duration of the liability for the change at the time of the change (i.e., the present value weighted average time until the increase in benefits is expected to be fully paid).

Actuarial gains and losses are due to variances in experience from the best estimate assumptions employed by the actuary. The future is unknown, so the expected costs developed by the actuary are not perfect predictions of the future; but they should represent the median expected outcome. Unlike benefit

changes that are intentional or formulaic actions adopted by the employer or plan, actuarial gains and losses are unavoidable and random. Bias in the actuary's assumptions can influence the general direction of the gains and losses, but gains and losses are unavoidable.

Gains and losses are experienced on all assets and liabilities for both active and retired members. Utilizing the average working lifetime of active members would not be relevant to establishing a maximum amortization period for total gains and losses. Consequently, it is more appropriate to apply the principle of spreading actuarial gains or losses over the average weighted period until benefits are expected to be paid. This period could be measured as the duration of all liabilities at the time of the each remeasurement. In general, the duration of retiree liabilities is expected to be approximately 10-14 years and the duration of active liabilities to be approximately 18 to 20 years. Application of this principle would result in different amortization periods for actuarial gains and losses depending on the maturity of the plan. On average, expected amortization periods would be around 12-18 years for a typical plan.

It should be understood that the specific numbers mentioned above are broad approximations; each plan is different and will have different durations and different average future working lifetimes.

However, some may argue for a longer period to approximate the minimum time over which periodic actuarial gains and losses will generally offset each other through economic cycles. This may serve to satisfy a goal of interperiod equity across generations. There are numerous types of economic cycles that give rise to annual actuarial gains and losses. These include cycles in the broad stock market and its subsets, cycles for price inflation, compensation increases and interest rates, cycles for turnover, and other cycles. The optimal period for capturing cycles that affect pension actuarial gains and losses is not known, but it might need to be longer than the duration of the plan's actuarial liability.

Question 6e. *Which amortization method or methods should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

Level dollar or level percent of payroll amortization methods should be permitted. The most common actuarial methods employ assumptions with the objective of allocating normal costs as a level percentage of payroll and many government-sponsored plans structure their budgets and contribution rates as a level percent of payroll. Interperiod equity can also be measured as a level percent of payroll. Consequently, it is important to preserve the level percent of payroll amortization method as an option.

However, regardless of the payroll growth assumption and the length of the amortization period, consideration should be given to requiring that the minimum payment on any amortization of UAAL change resulting from benefit improvements to be at least equal to interest on the amortized liability. The rationale behind this suggestion relates to intergenerational equity. Interest on the unfunded actuarial accrued liability should be charged to the current period. There are two competing applications of the goal of interperiod equity. Level percent of pay amortization is a proxy for intergenerational equity. However, it is level percent of pay amortizations that give rise to negative amortizations, i.e., outstanding liability balances that rise for a period of time instead of decreasing right away. The result---that the current Statement of Activity is not even charged the full amount of interest on any particular liability for a benefit increase---seems to be a violation of interperiod equity. The principle of paying at least interest on liabilities for benefit increases seems to serve interperiod equity better. Liabilities arising from actuarial gains and losses and assumption changes might be considered different. The annual offsetting nature of their incidence seems to diminish the compulsion to pay (on losses) or credit (on gains) at least interest. Finally, consideration should be given to grandfathering liabilities at the time of transition.

Amortization periods should be closed. That is, if an unfunded liability base in year 1 is being amortized over a period of 15 years, in year 2 the remaining portion of that unfunded liability base should be

amortized over 14 years. Any new changes in the UAAL would establish new, closed amortization schedules, or be folded into an existing amortization base of a similar type as long as the period of its amortization is no more than the maximum permitted if established separately.

There is some concern that large negative liabilities arising from years of substantial actuarial gains and/or positive changes in actuarial assumptions or methods might result in large amortization credits; so large that they cause the annual required contribution to be lower than the normal cost. Consideration should be given to requiring the annual required contribution to be no less than the normal cost for the year. This minimum could be lifted if the surplus status were prolonged and not expected, even under conservative forecasts, to reverse.

Question 6f. *What method or methods of determining the actuarial value of plan assets should be permitted for accounting and financial reporting purposes to determine an employer's pension obligation and expense? Why?*

As with the actuarial cost method, any such method for the actuarial value of assets chosen by the plan should be permitted to determine an employer's pension obligation and expense for accounting and financial reporting purposes.

There are several reasons to favor this approach rather than require the use of the market value of assets or some prescriptive smoothing method.

- The actuarial value of assets used in the calculation of the annual required contribution and used as the offset to the AAL to obtain the UAAL is an integral part of the overall actuarial cost method used by the plan. It should not be separated from it because it is an undivided component of the financing exchange process between the employer and the plan.
- Using one method of valuing assets for expensing and another for liability creates an inconsistency in the financial statement's treatment. The recommendation of Alternative 3 already creates various inconsistencies that must be tolerated and balanced in favor of the worthy goal of recognizing a pension funding liability.
- The current market value of assets is not necessarily the best measure from which to project future funding. A reasonable smoothing of assets tracks the general trend of the asset behavior without the volatilities of an annual market value.
- Use of the current market value of assets for expense and/or liability recognition is contrary to the long-term view of the cost allocation inherent in actuarial cost methods for governmental plans. However, if a plan chooses market value of assets for actuarial costing purposes, it should be permitted to do so.
- The use of smoothed asset values dampens the unnecessary volatility that would be expected by the use of the market value of assets in either the expense or liability recognition.
- As with the benefit liabilities, the assets supporting them are not a pass-through to the employer, but are used to adjust the employer's funding obligation each year.
- It is already recommended herein that the Note disclosures include a measure of funded ratio that relates the UAAL to both the actuarial value of assets and to the market value of assets.
- The market value of plan assets can be found in the plan's financial statement.

Accounting by Employers in Cost-Sharing Plans

- Question 7.** *Does the relationship between a cost-sharing employer and the cost-sharing multiple employer plan in which it participates differ enough in economic substance from the relationship that a sole or agent employer has with the plan in which it participates to support different requirements with regard to liability and expense recognition? Which of the following views best represents your view, and why?*
- a. The relationship does differ in economic substance, and current measurement, recognition, and disclosure requirements appropriately account for the pension cost and obligation of an employer in a cost-sharing plan.*
 - b. The relationship does differ in economic substance, and current measurement and recognition requirements are appropriate; however, additional disclosures by cost-sharing employers are needed.*
 - c. The relationship does not differ in economic substance; a cost-sharing employer has a long term pension obligation based on the employment exchange and should measure and recognize its obligation and expense in a manner similar to that for sole and agent employers.*

The relationship does differ in economic substance, and current measurement and recognition requirements are appropriate. However, additional disclosures by cost-sharing employers are needed.

In a sole or agent employer plan, the individual employer is responsible for funding all of the benefits promised to its employees. Future liabilities, contributions, benefit payments, and assets are tracked separately for each individual employer. In contrast, employers participating in a cost-sharing plan make contributions assessed by the plan based on their payroll, but future liabilities, benefit payments, and assets are all pooled at a plan level. Individual employers have no claim to any specific subset of the assets in the plan to pay benefits for their employees. Instead of being responsible for all of the benefits promised to its employees, each individual employer is responsible for making the contributions assessed by the plan.

A cost-sharing plan allows groups of employers to pool together to insure each other against the risks in the pension plan. For example, if an employee of one employer becomes disabled, the additional cost of the disability benefits is shared by all employers in the cost-sharing plan.

Accounting rules should not create any advantage or disadvantage for cost-sharing plans that are not also reflected in the economic substance of the arrangement. Under current rules, the employer expenses the contractually required contributions and provides a reference to the plan's financial statements. The lack of any disclosure of the funded status of the cost-sharing plan or potential future liability for contributions on the employer's financial statements appears to provide an advantage under accounting rules for a cost-sharing plan, particularly if the contractually required contributions do not meet the parameters required for an annual required contribution.

While the UAAL of a sole or agent plan meets the definition of a liability under Concepts Statement No. 4, for a cost-sharing plan it does not. The contractually required contributions of a cost-sharing plan essentially allocate the current payment on the unfunded liability in proportion to current payroll. Changes in the relative size of each employer's payroll effectively reallocate responsibility for any unfunded liability or surplus. So, the individual employer's expected future contractually required contributions are not just a function of updating estimates for new assumptions or experience that differs from assumptions, but also include a reallocation of this estimated liability among the participating employers. Since many of these employers are small, this reallocation can be very significant. For example, a rural fire protection district with two employees that either hires one additional employee or eliminates one employee as a result of budget cuts has its proportion of the unfunded liability payment either increased or decreased by half due to the reallocation among employers.

Consequently, the only liability under Concepts Statement No. 4 for an employer participating in a cost-sharing plan is the cumulative difference between the contractually required contributions and actual contributions, even if the contractually required contributions do not meet the parameters required for an Annual Required Contribution.

If an employer reports an expense equal to the contractually required contributions and a liability equal to any cumulative difference between contractually required contributions and actual contributions, there is an advantage given to employers who participate in a cost-sharing plan. This is because the employer's financial statements provide no direct information about the health of the cost-sharing plan and there is no benchmark to compare the contractually required contributions to a responsible funding strategy. Simply referring users to the plan's financial statements for this information creates enough opacity to impair accountability. Consequently, additional disclosures are recommended in the notes for any employer participating in a cost-sharing plan. These disclosures may include:

- Disclosure of ARC for the cost-sharing plan compared to total contractually required contributions
- Disclosure of total UAAL and funded ratios for the cost-sharing plan
- Disclosure of information showing the relative size of the individual employer to all employers in the cost-sharing plan, such as covered payroll, active and inactive member counts, and contractually required contributions

It should also be noted that if accounting expense is based on something other than reasonable funding parameters, including the use of a discount rate equal to the expected return on assets, there will be no reasonable funding strategy benchmark to compare to the contractually required contributions. Such a lack of a benchmark would serve only to reduce accountability for the responsible financing of the cost-sharing plan's benefits. This measure should be the primary focus of accountability for a cost-sharing plan.

If the accounting expense for a sole or agent employer is not based on a similar benchmark for funding purposes, it would result in a significant advantage for a cost-sharing plan over a sole or agent plan because the employer in the cost-sharing plan would only need to expense only the contractually required contributions. This advantage is not justified by the economic differences between a cost-sharing plan and a sole or agent plan.

It is recognized that under Alternative 3, recommended herein, there is an inconsistency between the balance sheet liabilities for sole and agent employers compared to those for cost sharing employers. For basically the same long-term promise, sole and agent employers have a UAAL recognized as a liability on their Statement of Net Assets, whereas, cost-sharing employers have none. Nevertheless, it is believed that the inability of cost-sharing plans to develop their own UAAL should not prevent sole and agent employers from doing so. Conversely, the ability for sole and agent employers to develop their own UAALs for liability recognition should not compel cost sharing employers to develop artificial calculations of theirs.

Issues Specific to Reporting by Plans

Question 8. *Which of the following should a pension plan report as its liability in regard to pension benefits, and why?*

- A liability for benefits currently due and payable*
- The accrued benefit obligation, however measured.*

Both.

The plan's balance sheet should reflect the present value of the liability it owes to plan members for the payment of future benefits they have accrued to the measurement date. The plan has taken on that obligation in the exchange it made with the employer.

Furthermore, consideration could be given to advancing the plan's balance sheet further by recognizing, as a plan asset, the debt the employer owes to the plan, as long as it is reasonably expected to be paid over time as scheduled. If the employer's balance sheet is going to recognize the UAAL as a liability the employer owes to the plan, then the plan should recognize that same amount as an asset on its balance sheet¹⁹. It can be considered as the value of the call that the plan has on the employer for the prior year's cost allocation.

Finally, it might be useful to present a reconciliation entry to connect the market value of the plan's assets to its actuarial value of assets. If the employer's UAAL (using an actuarial value of assets) is recorded as an asset on the plan's balance sheet and the plan's assets on hand are presented at market value, then there might need to be a reconciliation item between market value and actuarial value. These two suggestions are not necessarily actuarial in nature, but are submitted as matters for consideration.

Question 9. *Should a presentation of changes in the unfunded accrued benefit obligation be a required part of general purpose financial reporting? Why or why not?*

Yes, for reasons of accountability and decision usefulness. While such information might be available in other communications such as actuarial reports or other reports filed with other government entities, changes in the UAAL, especially those resulting from plan benefit changes need to be disclosed in a convenient location to let users know the incidence and magnitude of these changes.

A reconciliation of the liability from the previous valuation to the current one should be presented, identifying and quantifying the sources of change as arising from actuarially expected changes, changes in plan benefits, actuarial gains or losses, and changes in actuarial assumptions or methods

Question 9a. *If yes, which financial report(s) should contain that presentation: the employer's, the plan's, or both? Why?*

As mentioned in response to Question 1, a reconciliation of the changes in the UAAL should be presented in the employer's financial statement and changes in the PVAB presented in the plan's financial statement. Again, the employer's funding liability (represented by the UAAL) is different from the plan's liability (represented by the PVAB).

Inherent in any definition of PVAB is the attribution of the benefits to years of service. There are numerous issues to consider before deciding on the exact method. The private sector's use of ABO may not be the right set of rules for attributing the benefits to years of service. Other options include the Vested Benefit Obligation (VBO) and the Contractual Benefit Obligation (CBO). Further details and discussions on this topic of attribution in the PVAB are beyond the scope of this response. Whatever set of rules for attribution, the PVAB should be a present value discounted using the same long-term rate of return used for funding purposes. Unless plan termination is under serious consideration, the PVAB

¹⁹ Between the actuarial value of assets on hand and the debt owed the plan from the employer, the total of such assets equals the actuarial accrued liability (AAL) under the plan's actuarial cost method (or the EAN cost method as the case may be). This total AAL usually is larger than the PVAB calculated using a long-term expected rate of return. Any excess represents a reserve held for benefits accruing in the future.

should not be valued on a market-based settlement perspective. The plan's liability on its balance sheet should be an expected cost to the plan, a best estimate of the future.

Some may advocate disclosure in the employer financial statements of both types of liabilities and changes therein. That is likely to result in more confusion than understanding. The employer and plan financial statement should be taken as a whole to understand the whole.

Question 9b. *If yes, should the presentation be a basic financial statement, a note to the basic financial statements, or required supplementary information? Why?*

Reconciliations, as described, should not be part of the basic financial statement; they should be considered disclosures in the Notes or in the RSI as best judged by the GASB Members.