



PERiSCOPE

Public Employee Retirement Systems

New accounting rules for public postretirement benefit plans in the United States are set to take effect soon. Successful implementation of the new rules will require an understanding of a variety of technical concepts regarding the various newly required calculations. Two years ago, in a multipart PERiScope series, we explored these technical topics in detail as they related to Governmental Accounting Standards Board (GASB) Statements 67 and 68. We now take a similar approach with GASB Statements 73, 74, and 75. Milliman has established a GASB 73/74/75 Task Force that will publish a detailed series of educational articles regarding various key implementation and technical issues surrounding these new statements. This series will result in numerous articles in the upcoming months.

GASB 74/75: Depletion date projections

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The Governmental Accounting Standards Board (GASB) released new accounting standards in June 2015 for public pension plans and participating employers. These standards, GASB Statements 74 and 75, have substantially revised the accounting requirements previously mandated under GASB Statements 43 and 45. Required implementation is imminent, with GASB 74 effective for plan fiscal years beginning after June 15, 2016, and GASB 75 effective for employer fiscal years beginning after June 15, 2017.

This article in Milliman's GASB 73/74/75 Task Force miniseries focuses on the determination of a plan's *depletion date*, which is the projected point in the future (if any) when plan assets are no longer sufficient to satisfy benefit obligations. It also looks at the impact on liability calculations that will result from a conclusion that a depletion date exists. Unlike pension plans, many other postemployment benefits (OPEB) plans are not pre-funded through a dedicated trust. These plans, and pension plans that fall under GASB 73, will not have to prepare depletion date analyses. However, GASB 75 (or GASB 73 for pension plans that are not pre-funded) will impact the selection of the discount rate.

New methodology for determining the blended single equivalent discount rate for pre-funded plans

GASB Statements 74 and 75 introduce several new requirements related to the disclosure of OPEB obligations. One of the most significant of them is the methodology for determining the blended discount rate to be used in certain circumstances to measure the total OPEB liability (TOL), defined by the new GASB statements as the actuarial accrued liability calculated using the individual entry age actuarial cost method. The blended discount rate would be used in cases where the plan is projected, under GASB's specified projection methodology, to become insolvent at some point in the future. This is a change from the blended discount rate used for partially pre-funded plans under the prior GASB OPEB Statements 43 and 45.

Did you know? Milliman's GASB 73/74/75 Task Force is releasing a miniseries on technical and implementation issues surrounding GASB 73, 74, and 75. Each article will be released through PERiScope. Look for the following articles in coming months:

- Relationship between valuation date, measurement date, and reporting date
- Balance sheet items and projections from valuation date to measurement date
- Long-term expected investment returns and the money-weighted rate of return
- Calculation of OPEB expense
- GASB 73
- Revised ASOP 6 and Community Rated Plans
- Alternative Measurement Method
- Visit milliman.com/GASB-73-74-75 for the latest resources on the new statements.

Under the new GASB standards, the long-term expected rate of return on investments may be used to discount liabilities *only* to the extent that the plan's fiduciary net position (market value of assets) and future contributions are projected to be sufficient to cover expected benefit payments and expenses for current plan members. A 20-year high-quality (AA/Aa or higher) tax-exempt municipal bond yield or index rate must be used to discount benefit payments for periods when the fiduciary net position is not projected to cover expected benefit payments and expenses. Plans that are projected to have sufficient assets indefinitely will continue to use the long-term expected return on investments to determine liabilities, but will have to substantiate their projected solvency. Plans that are projected to reach a point where assets are not sufficient to cover benefit payments will be required to use a blended single equivalent discount rate, which may differ from the discount rate determined under the prior GASB standard, and may therefore result in higher or lower liability calculations.

Step 1: Project benefit payments

The first step in determining the depletion date is to project future benefit payments based on the benefit terms as of the measurement date (equal to fiscal year-end under GASB 74). The projected benefit payments should be based on all current plan members, including members in payment status, active members, and inactive members owed benefits who are not yet in payment status. Projected benefits should include amounts for automatic and substantively automatic cost-of-living-adjustments (COLAs), future increases in salary (if any benefits are pay-related), and future service (for both benefit eligibility and benefit amounts), regardless of whether they are recognized for funding valuation purposes. Projected benefit payments should reflect expected government-imposed taxes or other assessments. Administrative costs associated with providing OPEB should be excluded from projected benefit payments. Notably, benefits that are expected to be paid to *future* employees should *not* be included in the benefit payment projections, i.e., the projection should be done on a "closed group" rather than "open group" basis.

Step 2: Project plan assets

The second step in determining the depletion date is to project the plan's fiduciary net position. The assets are projected forward, taking into account expected inflows (contributions) and outflows (benefit payments and expenses) associated with

current members. Unlike the benefit payment projection discussed above, GASB *does* allow for the inclusion of expected contributions for *future* members to the extent that such contributions exceed their expected service cost (allocated cost of benefits earned). Therefore, contributions associated with future members that are used to write down the unfunded liability will be included in the projection of the plan's fiduciary net position.

Contribution inflows (contributions) may come from the employer, the members, or a non-employer source. For plans where the contribution rate is set in statute or there exists a formal written contribution policy, and it is reasonable to assume that the contribution will continue to be made, GASB states that application of professional judgment should consider the most recent five years of contribution history when projecting contributions for this purpose. If there is not a statutory contribution basis or a formal funding policy, then the amount of the projected contribution is limited to no more than the average of the most recent five-year period. The basis for the average (for example, percentage of the payroll contributed or percentage of the actuarially determined contribution made) is a matter of professional judgment. It is advisable for plans that do not currently have a formal funding policy to consider adopting one prior to implementing GASB Statements 74 and 75.

Step 3: Determine the single equivalent discount rate

If Step 1 and Step 2 demonstrate that assets are projected to be sufficient to cover benefit payments for all periods, then the long-term expected rate of return on investments may be used to discount all future benefit payments when calculating the total OPEB liability under GASB Statements 74 and 75. However, if Step 1 and Step 2 indicate that there is a date at which plan assets are depleted, the plan actuary must calculate a blended discount rate. This blended discount rate is obtained by 1) calculating the present value of future benefits (as described in Step 1) using the long-term expected rate of return on investments for benefit payments expected to be paid up to the depletion date, and 2) a municipal bond rate for benefit payments expected to be paid after the depletion date. The *single* discount rate that produces the same present value as the total of the dual discount rate payment streams (see Figure 1 on page 3) must then be solved for. This single equivalent discount rate will be used to calculate the total OPEB liability for GASB purposes.

Figure 1 illustrates a plan that is projected to deplete its assets sometime during 2045 (30 years after the valuation date; projected benefit payments for current members are typically projected for a 75- to 100-year period, depending on plan demographics). The projected benefit payments expected to be covered by plan assets (represented by the curve on the left side of the vertical line) are discounted at the long-term expected rate of return on investments of 7.0%. The benefit payments expected to be paid after plan assets are depleted (represented by the curve on the right side of the vertical line) are discounted using a municipal bond rate of 3.5% (for illustrative purposes). The single equivalent discount rate is then calculated so that when applied to all projected benefit payments, it results in the same present value as the sum of the separately discounted funded and unfunded benefit payments. In this case, the resulting single equivalent discount rate is 5.32%, which is the rate to be used to determine the total OPEB liability.

For plans that are projected to reach a depletion date, the impact on the total OPEB liability can range from insignificant to substantial. For instance, the plan shown in Figure 1 would have a total OPEB liability of \$28.5 million using a blended discount rate of 5.5% determined under the prior GASB methodology, compared with a total OPEB liability of \$29.2 million, with a depletion date in 2045, under the new methodology, an increase of 2.5%. The impact for any given plan will depend on the projected payouts (i.e., the shape of the curve in Figure 1), on when the depletion date is expected to occur, and on the spread between the long-term expected rate of return on investments and current municipal bond rates.

Alternative evaluations of sufficiency

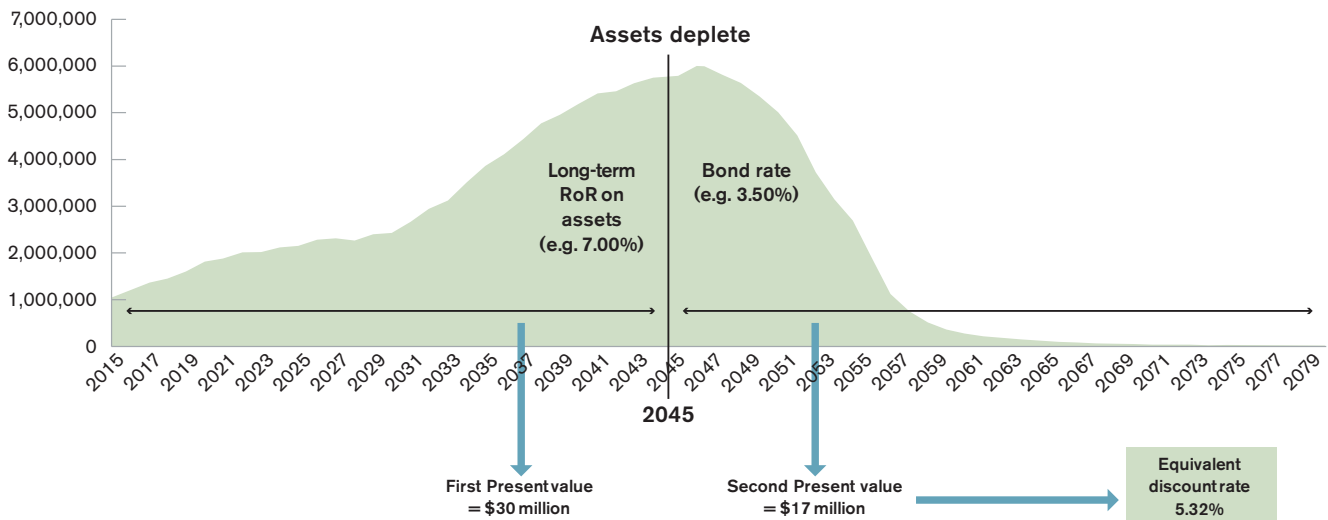
As illustrated in the example above, determining the discount rate under GASB Statements 74 and 75 will often require that the actuary perform complex projections of future benefit payments and asset values for pre-funded OPEB plans. GASB Statement 74 (paragraph 51) and 75 (paragraph 38) allow for alternative

evaluations of projected solvency, if such evaluation can reliably be made. Alternative evaluations may reduce or eliminate the need for complex projections for some plans. GASB does not specify a particular method for making an alternative evaluation of sufficiency. It is left to professional judgment. Ultimately, the determination of whether an alternative approach is warranted will be made by the plan’s actuary and the auditor. From a practical standpoint, a good candidate for an alternative approach would be a plan that is relatively well funded, where contributions are based on a conservative, actuarially based funding policy. For example, the plan actuary may be able to demonstrate to the auditor’s satisfaction that a plan that is 80% funded, with a solid track record of adhering to a funding policy based on contributing the normal cost plus a 15-year closed amortization of unfunded liabilities, is mathematically certain to remain solvent if the actuarial assumptions are met. It is important to note that plans using “rolling amortization,” where the unfunded liabilities are effectively refinanced by resetting the remaining payment years with each valuation, may project to have a depletion date even if the annual required contribution (ARC) is consistently made.

Unfunded plans

The selection of the discount rate for unfunded plans will also be impacted by the implementation of GASB 75. Under GASB 45, the discount rate for unfunded plans was determined based on the long-term expected rate of return on the plan sponsor’s general account, which typically consists of cash equivalents and low-risk governmental fixed income investments. Under GASB 75, the discount rate is required to be based on a 20-year high-quality (AA/Aa or higher) tax-exempt municipal bond yield or index rate. Although the method for determining the discount rate will be different, the resulting discount rate may be in a similar range, for fiscal years ending in 2015, typically between 3% and 4% for many plan sponsors of unfunded OPEB plans. Similar to unfunded OPEB plans, unfunded pension plans are also required to use a municipal bond yield or index under GASB 73.

FIGURE 1: EXAMPLE OF BIFURCATED DUAL DISCOUNT RATES: PLAN IS PROJECTED TO RUN OUT OF ASSETS IN 2045



Timing of calculations

GASB Statements 74 and 75 allow for an actuarial valuation date that is different from either the plan's fiscal year-end or the employer's measurement date for OPEB financial reporting. However, the total OPEB liability may not be able to be finalized until after the respective fiscal year-end or measurement date. For plans projected to reach a depletion date, which includes all non-pre-funded plans, the municipal bond yield or index rate must be determined as of the plan's fiscal year-end for GASB 74 reporting or the employer's measurement date for GASB 75 reporting. Consideration should also be given to other factors that potentially could impact the calculation of the single equivalent discount rate, such as changes in the plan's net funded position that have occurred since the valuation date. A separate article in this miniseries on GASB Statements 74 and 75 explores the relationship between the valuation date, measurement date, and reporting date in detail.

Implementation considerations

Funded plans that do not have contribution rates dictated by statute or contractual terms should consider adopting a formal written funding policy in order to avoid having projected contributions limited to the average of the previous five years.

Plans that are subject to statutory contribution requirements that are not sufficient to achieve solvency for the indefinite future may wish to start discussions on revising the statutory contribution basis or preparing the end users of the financial statements for the implications of an anticipated depletion date.

Plans that provide an ad hoc COLA or other benefit provision that may not be granted every year should begin discussions as to whether the benefit should be considered "substantively automatic" for GASB purposes. This may be a complicated question, and sufficient time should be allowed to ensure the agreement of staff and auditors.

If it is likely that a projected depletion date exists, the plan sponsor or retirement board may need to formally adopt a mechanism for selecting the municipal bond yield or index rate that will be used by the actuary throughout the remaining GASB calculations. Milliman's actuaries can work with the plan's other professional advisors to provide guidance on identifying possible sources of municipal bond rates.

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