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Maher Duessel 2021 Government Update

GASB 68/75 – The Actuary's View

December 17, 2021

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The Statements

- GASB 67 – Plan accounting for pensions
- GASB 68 – Employer accounting for pensions
- GASB 74 – Plan accounting for OPEB*
- GASB 75 – Employer accounting for OPEB

*Postemployment Benefits Other Than Pension
= Other Postemployment Benefits = OPEB

Date Selection

- Reporting Date (i.e. statement date)
 - GASB 67/74: End of plan year
 - GASB 68/75: End of employer fiscal year



Measurement Date - must be consistent from year to year



Actuarial Valuation Date

- Two examples:
 - June 30 fiscal year
 - December 31 fiscal year, Act 205 pension plan

Example: June 30 fiscal year

	GASB 67 Plan Financial Report	GASB 68 Employer Financial Statement
Reporting Date	December 31, 2020 <ul style="list-style-type: none"> Statement refers to plan year as the "fiscal year" for the plan. 	June 30, 2021
Measurement Date	December 31, 2020 <ul style="list-style-type: none"> Must be the same as the plan-year-end reporting date. Asset value as of this date is used. Liability value is rolled forward from Valuation Date. 	December 31, 2020 <ul style="list-style-type: none"> Can be any date on or after prior fiscal year-end (but consistent with prior year) Asset value as of this date is used. Liability value is rolled forward from Valuation Date. Sponsor contributions after Measurement Date are included in Deferred Outflow.
Actuarial Valuation Date	January 1, 2020 <ul style="list-style-type: none"> Must be no more than 24 months prior to Reporting Date. Liability is rolled forward from Valuation Date to Measurement Date. Significant changes (such as plan amendments) occurring between the Valuation Date and the Measurement Date must be reflected in the liability rollforward. 	January 1, 2020 <ul style="list-style-type: none"> Must be no more than 30 months & 1 day prior to Reporting Date. <ul style="list-style-type: none"> Allows for biennial valuations Liability is rolled forward from Valuation Date to Measurement Date. Significant changes (such as plan amendments) occurring between the Valuation Date and the Measurement Date must be reflected in the liability rollforward.

Example: December 31 fiscal year, Act 205

	GASB 68 (assuming no GASB 67 reporting)	
	Year 1	Year 2
Reporting Date	December 31, 2021	December 31, 2022
Measurement Date	December 31, 2020 <ul style="list-style-type: none"> ▪ Can be any date on or after prior fiscal year-end (but consistent with prior year) <ul style="list-style-type: none"> – <i>Initially chosen instead of FYE because sponsor has a tight year-end schedule</i> ▪ Asset value as of this date is used. ▪ Liability value is rolled forward from Valuation Date. ▪ Sponsor contributions after Measurement Date are included in Deferred Outflow. 	December 31, 2021 <ul style="list-style-type: none"> ▪ Must be consistent with prior year. ▪ Asset value as of this date is used. ▪ Liability value is rolled forward from Valuation Date. ▪ Sponsor contributions after Measurement Date are included in Deferred Outflow.
Actuarial Valuation Date	January 1, 2021 (biennial Act 205) <ul style="list-style-type: none"> ▪ Must be no more than 30 months & 1 day prior to Reporting Date. <ul style="list-style-type: none"> – Prior Act 205 valuation (1/1/2019) falls outside of this range. – 1/1/2021 liability is the same as liability "measured at 12/31/2020". 	January 1, 2021 (biennial Act 205) <ul style="list-style-type: none"> ▪ Liability is rolled forward from Valuation Date to 12/31/2021 Measurement Date. ▪ Significant changes (such as plan amendments) occurring between the Valuation Date and the Measurement Date must be reflected in the liability rollforward.
	<ul style="list-style-type: none"> ▪ Significant changes (such as plan amendments, etc.) occurring after the Measurement Date are not recognized in liability until the following Measurement Date. ▪ Act 205 rules for funding require recognition of changes at the next biennial Valuation Date. This can cause change-recognition to be a year out of sync for accounting vs. funding. 	

What is a Rollforward?

A labor-saving technique to eliminate the need to prepare an entirely new actuarial valuation – including census data collection, programming updates, etc.

Example: 1/1/2021 valuation results rolled forward to 12/31/2021 measurement date

$$\begin{aligned} & \text{Pension/OPEB Liability at 1/1/2021 (from valuation run)} \\ + & \text{ Service Cost at 1/1/2021 (from valuation run)} \\ + & \text{ Interest (at discount rate)} \\ - & \text{ Benefit Payments} \\ = & \text{ Pension/OPEB Liability at 12/31/2021} \end{aligned}$$

What is a Rollforward?

$$\text{Liab}_{\text{val}} + \text{SvcCost}_{\text{val}} + \text{Int.} - \text{BenPmts} = \text{Liab}_{\text{EOY}}$$

What are these pieces?

- Liability = value of benefits assigned to prior years
 - Using entry age normal cost method
 - Annual benefit cost per individual is level percentage of pay over the individual's career
 - even if the benefit is not pay-related!
- Service Cost = value of benefit assigned to current year
 - A/K/A “normal cost”
 - Service Cost = \$0 for:
 - Retired or other inactive participant
 - Active participant at or over assumed retirement age

What is a Rollforward?

$$\text{Liab}_{\text{val}} + \text{SvcCost}_{\text{val}} + \text{Int.} - \text{BenPmts} = \text{Liab}_{\text{EOY}}$$

What are these pieces? *continued*

- Interest
 - Using the discount rate
 - Full year on Liability and Service Cost
 - Partial year on benefit payments
 - Often 13/24 for monthly pension payments
 - Typically 1/2 for OPEB or other payouts not on a fixed schedule

What is a Rollforward?

$$\text{Liab}_{\text{val}} + \text{SvcCost}_{\text{val}} + \text{Int.} - \text{BenPmts} = \text{Liab}_{\text{EOY}}$$

What are these pieces? *continued*

- Benefit Payments, typically:
 - For pension: Actual payments (from the trust statement)
 - For OPEB:
 - Unfunded: Projected claim payments as determined by the actuary for the most recent actuarial valuation
 - Used instead of premiums to reflect implicit subsidies for retiree benefits
 - With OPEB trust: Actual payments from the trust

What is a Rollforward?

$$\text{Liab}_{\text{val}} + \text{SvcCost}_{\text{val}} + \text{Int.} - \text{BenPmts} = \text{Liab}_{\text{val}+1}$$

$$\text{Liab}_{\text{val}+1} + \text{SvcCost}_{\text{val}+1} + \text{Int.} - \text{BenPmts}_{\text{val}+1} = \text{Liab}_{\text{val}+2}$$

Rollforward is repeated when there is a biennial valuation.

- Projecting 2nd year Service Cost (“val+1” above) requires care
 - Not as simple as adding interest and/or assumed salary increase

When is this rollforward not valid?

- If there is any plan change, assumption change, or significant change in plan population.

Then what?

- Re-run the valuation reflecting the change
 - Incrementally if there is more than one change
 - Use rollforward above to project to Measurement Date

Discount Rate Selection

For unfunded OPEB:

- “yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale)” *GASB 75 para. 155*
 - Selected as of the Measurement Date
- Discount rate methodology (i.e. which index?) was set by each employer upon implementation of GASB 75
- Results in an assumption change each year (technically, an “input” change)
 - Re-run the base valuation at new discount rate
 - Roll forward to Measurement Date
- Example: Fidelity Fixed Income Market Data for Municipal GO AA Yield Curve at 20 Years

12/31/2016	3.81%	12/31/2019	2.75%
12/31/2017	3.31%	12/31/2020	2.00%
12/31/2018	3.71%	11/30/2021	1.86%

Discount Rate Selection

For Pension Plans with no projected insufficiency:

- “long-term expected rate of return on pension plan investments that are expected to be used to finance the payment of benefits” *GASB 68 para. 26a.*
- Whose expected return?
 - Investment consultant opinion
 - vs. Actuarial standards
 - vs. Sponsor’s need to manage results
- What is “long-term”?
 - Long-term for most plans is 30+ years, as promised benefit payments will continue far beyond that period
 - Many investment consultants will provide return expectations only extending for 10 years

Discount Rate Selection

For Pension Plans with no projected insufficiency - *continued*:

- “long-term expected rate of return should be determined net of pension plan investment expense but without reduction for pension plan administrative expense” *GASB 68 para. 30*
- For Act 205 plans:
 - Expense component of MMO typically includes all expenses, including investment expense.
 - This means the assumed rate of return for funding is theoretically a gross return, determined before reduction for investment expense.
 - Therefore, using a different (lower) discount rate for GASB vs. funding will better conform to GASB’s definition for the discount rate.
- This refinement may not be in widespread use.

Discount Rate Selection

For Pension Plans with no projected insufficiency - *continued*:

- Example for prior slide:
 - Interest rate for Act 205 funding is 7.00%
 - Investment expenses are approximately 25 basis points.
 - Use $7.00\% - 0.25\% = 6.75\%$ for GASB 68 liability calculations.
 - GASB 68 Total Pension Liability at 1/1/2021 will be larger than Accrued Liability at 1/1/2021 for Act 205 funding purposes.

Discount Rate Selection

For Pension Plan with a projected insufficiency or OPEB plan with a dedicated trust:

- Projection of benefit payments and asset balances is needed to determine “crossover” point where fund will be insufficient to make benefit payments.
- Calculate liability using two-tiered discount rate:
 - Expected rate of return for period during which trust is projected to be sufficient to make benefit payments
 - Municipal bond rate as described on Slide 11 for years after projected crossover
- *Then*, determine a single discount rate that reproduces above liability result.
 - Use this single equivalent rate for GASB disclosure.

Discount Rate Selection

Projected insufficiency:

- Pension plans being funded using a standard actuarial cost method (e.g. Act 205 plans, using entry age normal funding method) are never projected to be insufficient, if sponsor always contributes actuarially determined contribution
 - Crossover demonstration is not necessary.
- Example of a pension plan that could be projected to be insufficient:
 - Employer contribution is a fixed percent of pay, established by Pension Board

Mortality Assumption Updates

- Pub-2010 tables
 - Released by the Society of Actuaries in 2019
 - Based exclusively on public-sector pension plan experience
 - Three job categories:
 - Teachers
 - Public Safety
 - General
 - Additional variations for above-median and below-median income
 - Salary for active employees
 - Benefits for retired employees
 - Still more variations for:
 - Disabled
 - Contingent survivors
 - Employees vs. retirees
 - Based on experience from 2008-2013
 - “2010” refers to the central year for the study

Mortality Assumption Updates

- Pri-2012 tables
 - Latest update for private retirement plans
 - Released by the Society of Actuaries in 2019
 - Successor to RP-2014/2006 → RP-2000 → GAR-1994 → GAM-1983
 - Additional variations for:
 - Blue collar and white collar
 - Bottom-quartile and top-quartile income (alternative to collar color)
 - Still more variations for:
 - Disabled
 - Contingent survivors
 - Employees vs. retirees
 - Pri-2012 may be judged as a better fit for some larger governmental plans

Mortality Assumption Updates

- Mortality Improvement
 - Adds a second dimension to age-based mortality rates
 - Year of birth also affects mortality rates
 - Example: Mortality rate at age 65 will be greater for a person born in 1956 than for a person born in 1996
 - “Improvement” due to medical advances, etc.
- MP-2014 mortality improvement scale was introduced with RP-2014 tables
 - Successor to Scale BB → Scale AA, etc.
 - Older improvement assumptions used a static projection from the base year of the table to a specified future year (to produce a single set of adjusted age-based mortality rates).
 - Preferred approach is “fully generational”, using two-dimensional rates as described above.

Mortality Assumption Updates

- MP improvement scale is updated annually
 - Released in late fall by the SOA, reflecting additional year(s) of experience
 - Newest version is MP-2021 (released October 2021)
 - MP scale works in tandem with *both* Pri-2021 and Pub-2010.
- Many private-sector employers will incorporate MP-2021 into their 12/31/2021 ASC 715 accounting disclosures
 - Their auditors insist! (newest standard assumption available)
 - Different improvement assumption is used for private-employer funding, in accordance with IRS rules.
- For governmental plan funding and GASB, mortality assumption can be stated as including the annual update to the MP scale.
 - Change to the MP scale is treated as an experience change, not an assumption change.

Mortality Assumption Updates

- COVID-19
 - Actuaries must *consider* the impact on mortality.
 - COVID can affect other items, like healthcare utilization (for OPEB), hours worked and related pay levels.
 - Generally, actuaries are taking a wait-and-see approach.
 - No adjustment to standard tables until longer-term experience is available.
 - Short-term gains & losses will be recognized.
 - Commentary on COVID considerations is included in disclosure information provided by many actuaries.
 - General experience for OPEB in 2020: Losses related to COVID illness and treatments were offset by decreased utilization of other services.
 - Going forward: Potential gains & losses from excess deaths, unexpected employee terminations, disability incidence, effects on hours worked and related pay levels may offset each other to varying degrees.

For OPEB: Plan Change vs. Experience Change

- Expense refresher
 - OPEB Expense for a year is the change in Net OPEB Liability from beginning to end of the year, with adjustments
 - Liability changes attributable to (a) differences between expected and actual experience and (b) changes of assumptions and inputs are spread over future periods using average expected remaining service lives for all participants
 - Recognition is via deferred outflows or inflows
 - Average expected remaining service includes 0's for retirees
 - Liability changes attributable to “changes in benefit terms” (plan changes) are recognized immediately in OPEB expense
 - Same rules apply to GASB 68 Pension Expense

For OPEB: Plan Change vs. Experience Change

Cowden interpretations

- What constitutes a plan change?
 - Retiree medical plan provisions are complicated(!)
 - Certain year-to-year changes are more appropriately designated as plan experience rather than a change in benefit terms.
- Benefit modifications that are always plan changes:
 - Eligibility for benefits, including employee classifications and age/service requirements
 - Portion of the premium paid by retiree and plan sponsor
 - Duration of the benefit after it begins
 - Permitted dependent coverage
 - Network management type, such as change to an HMO or PPO

For OPEB: Plan Change vs. Experience Change

Cowden interpretations

- Benefit modifications that are always plan changes - *continued*
 - The ability to select among various plan options
 - e.g., HMO vs. PPO or among PPOs with different out-of-pocket features
 - Discontinuance or addition of a benefit
 - e.g., drop pharmacy coverage, add vision benefit or HRA
 - Any change subject to collective bargaining
 - Any assumption change caused directly by a change in benefit terms
 - See GASB 75 Implementation Guide Q&A 4.119

For OPEB: Plan Change vs. Experience Change

Cowden interpretations

- Modifications that are not plan changes – instead are experience or assumption/input changes
 - Provider and network changes
 - e.g., Highmark vs. UPMC, doctors included in and out of network
 - Formulary and pharmacy benefit administrator changes
 - e.g., re-categorization of individual drugs
 - Year-to-year changes in premium rates
 - Change in method of funding
 - e.g., switch between self-insurance and fully-insured benefits
 - Healthcare law changes
 - e.g., changes to, then repeal of, the Cadillac Tax
 - Other law changes referenced by the Plan
 - e.g., Social Security, Medicare, PSERS

For OPEB: Plan Change vs. Experience Change

- The gray area:
 - Changes to deductibles, coinsurance, and copayments; more
- Establishment of criteria to evaluate such changes is recommended
 - With auditor concurrence!
- Does the plan sponsor have a regular history of certain changes?
 - If so, the change may already be reflected in assumptions
- Is the change significant?
 - Percent or dollar increase threshold could be set.
 - Examples of potentially significant changes:
 - Deductible change of \$50 or more; co-pay change of \$5 or more
 - Likely minor changes:
 - Offerings for which there is no credible published cost information, such as telemedicine, new therapies, or acupuncture coverage

For OPEB: Allocation Between Groups

- Benefit provisions can vary among employee groups (especially bargaining units)
- Treat as single plan or multiple plans for GASB 75?
 - Assuming no OPEB Trust
- Multiple plan treatment can be messy – especially in relation to OPEB Expense elements that require amortization over average future service and tracking of deferred outflows/inflows
- Consider single plan treatment with:
 - Average future service determined for combined participant groups
 - Experience-difference and assumption-change components of OPEB Expense proportionally allocated
 - All other change pieces can be calculated directly for each group

Questions/Comments

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