



SOCIETY OF ACTUARIES

Article from:

Pension Section News

May 2014 – Issue 83

TEXAS PRB GUIDELINES FOR ACTUARIAL SOUNDNESS AND RECENT GASB CHANGES

By Dan Moore



Dan Moore, FSA, FCA, EA, MSPA, MAAA, is an actuary at Texas Pension Review Board in Austin, Texas. He can be reached at danpmoore@gmail.com.

The Texas Pension Review Board (PRB) is the state agency mandated to oversee all Texas public retirement systems, both state and local, in regard to their actuarial soundness and compliance with state law. The Texas Legislature created the PRB in 1979. In 1984, the PRB adopted its *Guidelines for Actuarial Soundness*, which are consistent and complementary to GASB (Governmental Accounting Standards Board) disclosure requirements (both the current requirements – GASB 25 & 27, and the new requirements – GASB 67 & 68.)

The PRB *Guidelines for Actuarial Soundness* (Guidelines) are guidelines, and do not have the force of a statute. The principal enforcement measure is for the PRB to invite a retirement system to appear before the PRB to explain whether, how and when they plan to return the plan to actuarial soundness.

The PRB revisited the Guidelines in 1996, but did not take action on amending the Guidelines at that time. Around the same time, the Governmental Accounting Standards Board (GASB) was considering a similar proposal. GASB adopted their proposal and began a phase in period from 1996 to 2006 for changing the recommended amortization period from 40 years to 30 years.

In September 2011, the PRB adopted changes to the Guidelines, which are explained below. The current Guidelines are as follows:

PRB Guidelines for Actuarial Soundness

1. The funding of a pension plan should reflect all plan obligations and assets.
2. The allocation of the normal cost portion of the contributions should be level or declining as a percent of payroll over all generations of taxpayers.
3. Funding of the unfunded actuarial accrued liability (UAAL) should be level or

declining as a percent of payroll over the amortization period.

4. Funding should be adequate to amortize the unfunded actuarial accrued liability (UAAL) over a period not to exceed 40 years, with 15–25 years being a more preferable target. Benefit increases should not be adopted if all plan changes being considered cause a material increase in the amortization period and if the resulting amortization period exceeds 25 years.
5. The choice of assumptions should be reasonable, and should comply with applicable actuarial standards.

The primary 2011 changes to the Guidelines were to Guidelines 4 and 5. Previously, Guideline 5 mandated that assumptions be “reasonable in the aggregate.” Now, Guideline 5 refers to applicable actuarial standards, including pension-related Actuarial Standards of Practice (ASOPs) issued by the Actuarial Standards Board of the American Academy of Actuaries.

The change to Guideline 4 was significant because most of the focus of discussion about the PRB Guidelines concerns a pension plan’s amortization period. The 40-year upper limit was retained, but the preferred amortization period was shortened from 25–30 years to 15–25 years. Also, a sentence was added providing a recommended restriction on providing benefit increases in the absence of a funding trajectory paying off the UAAL in 25 years or less.

The PRB amortization period of a plan is a numerical measure of its funding trajectory—i.e., a deterministic forecast of the plan’s future cashflows based on a snapshot of the present. The deterministic forecast includes an asset return at the plan’s expected rate of return, and payroll growth at an assumed rate, with contributions con-

tinuing at the present percentage of payroll. The lower the amortization period, the better the plan's funding trajectory, and vice versa.

Amortization periods for Texas public pension plans range from zero (for a plan with no UAAL—i.e., 100 percent of the actuarial accrued liability (AAL) is funded) to an infinite amortization period (i.e., under the current trajectory of the plan funding, the UAAL will never be paid off). A plan with a zero amortization period must still fund the cost of benefits as they accrue (i.e., the normal cost), and there is no guarantee that the plan will remain 100 percent funded.

A plan with an infinite amortization period, on the other hand, has a funding trajectory that indicates the plan will run out of money at some point in the future. The PRB makes public the amortization period for 93 actuarially funded Texas public pension plans several times a year. As of this writing (February 2014), 12 of the 93 plans have an infinite amortization period, based on the most recently performed actuarial valuation.

A related measurement is the plan's GASB 27 annual required contribution (ARC). Generally, a plan that receives a sponsor contribution at least equal to the ARC will have an amortization period of 30 years or lower. Despite the 'required' in its name, the ARC is not required, but it has become a de facto funding standard for public pension plans.

Most public pension plans require employee contributions, usually (in effect) on a pre-tax basis. The ARC refers to the sponsor contribution (sometimes the term 'total ARC' is used to refer to the sponsor plus employee contribution based on an amortization period of 30 years). So, the ARC is the sponsor contribution (in addition to the employee contributions) needed to fund the

THE PREFERRED AMORTIZATION PERIOD WAS SHORTENED FROM 25–30 YEARS TO 15–25 YEARS. THERE WAS A RECOMMENDATION TO IMPOSE A RESTRICTION ON PROVIDING BENEFIT INCREASES UNLESS THE UAAL IS 25 YEARS OR LESS.

plan's normal cost and amortize the UAAL over 30 years.

Some plan sponsors contribute on a closed amortization period basis; their amortization period decreases by one each year. Others contribute on a rolling amortization period basis; their amortization period stays the same—generally at 30 years. Others contribute a fixed percentage of payroll, which may be more or less than the GASB 27 ARC. The amortization period for these plans may change significantly from year to year.

Two examples of plans to which the sponsor contributes a fixed percentage of payroll are the two largest Texas retirement systems: Teacher Retirement System (TRS) and Employees Retirement System (ERS). 2013 legislation improved the funding trajectory for both of these plans. TRS went from having an infinite amortization period to a 28-year amortization period. ERS's amortization period remained at infinite, but the projected asset depletion date was pushed back to 2052.

The focus of the PRB Guidelines has always been on funding—i.e., are the benefits promised under the plan being funded adequately? GASB disclosures have provided a consistent, complementary measure in the GASB 27 ARC. A few words are in order about the coming changes in the GASB disclosure requirements, as the GASB pension focus will shift from a de facto funding standard to strictly disclosure.

GASB 67 mandates disclosures for public pension plans, and GASB 68 mandates disclosures for public pension plan sponsors (employers and non-employers). In short, GASB disclosures will still be consistent and complementary to the PRB amortization period, but GASB’s spotlight will soon shine more brightly on plans whose funding trajectory is the poorest. Under GASB’s new disclosures, plans with a poor funding trajectory must disclose their projected asset depletion date, assigned by GASB 67 Paragraph 31b(1)(e) and GASB 68 Paragraph 30. This projected asset depletion date is used in the calculation of the weighted av-

erage GASB 67/68 discount rate (resulting in an increased plan sponsor balance sheet liability for plans that have a projected asset depletion date). The disclosure of this date is illustrated in GASB 67 Appendix C, Illustration 2, Table 3, and in GASB 68 Appendix C, Illustration 1, Table 3.

The group of plans with an infinite PRB amortization period is likely to highly overlap the group of plans disclosing a projected asset depletion date. As the devil may be in the details, here is a summary of the differences between the calculations that indicate a plan with a PRB infinite amortization peri-

Calculation Differences		
Calculation Input	PRB Amortization Period	GASB 67/68 Projected Plan Asset Depletion Date
Cost method	Cost method used for funding ^a	EAN percent of pay ^a
Asset valuation	Actuarial Value of Assets ^b (AVA) used in the actuarial valuation	Market Value of Assets (MVA)
Projected contributions	Actual contribution for the year for which actuarial valuation is performed, projected as a level percent of payroll; and if applicable, legislated future contribution rate changes	Per GASB 68 Paragraph 28 ^c
Plan provisions	Ad hoc COLAs ^d not assumed to repeat	Certain ad hoc COLAs ^d assumed to repeat
Employee group	Future new entrants excluded	Fixed-rate sponsor + employee contributions in excess of normal cost for future new entrants may be included

^a A variety of cost methods may be used to calculate a plan’s recommended contribution. One method, EAN percent of pay, is the Entry Age Normal cost method, with the normal cost determined as a level percent of an employee’s pay throughout his career. This method is required for GASB 67/68 disclosure.

^b Actuarial Value of Assets (AVA) may be set at market value. More often, AVA is a smoothed value, intended to track the market value of assets with fewer up and down fluctuations.

^c GASB 68 Paragraph 28: Other than certain described circumstances (for which (actuarial) professional judgment should be applied), an average of the contributions over the most recent five year period should be projected as a level percent of pay or of ARC.

^d An ad hoc COLA (cost of living adjustment) is a one-time, permanent increase in the level of retiree benefits authorized by a plan amendment or board action.



sure of the direction public pension plans are heading is the first step in keeping them on a sustainable course. The disclosure of Texas’ public pension plans’ PRB amortization periods will soon be supplemented by a GASB 67/68 disclosure of whether the plan is on a trajectory to deplete its assets, and if so, when. ■

od and whether the plan has a GASB 67/68 projected plan asset depletion date:

Under the PRB Guidelines, a plan may have an infinite amortization period. Starting in 2015, (i.e., for fiscal years ending 6/30/2014 and later), such a plan will also make disclosures under GASB 67, which will provide a further calibration of the funding trajectory; namely, whether and when the plan’s assets are expected to be depleted. To be sure, additional disclosures will be required by GASB 67/68, but the projected asset depletion date is one that will likely resonate with public pension plan stakeholders. Also, public pension plans are free to continue to use the GASB 27 ARC calculation, even after the requirement to do so goes away.

The PRB Guidelines for Actuarial Soundness have guided the funding of Texas public pension plans for 30 years. The 2010-2011 review process for the Guidelines revealed wide support among stakeholders for the PRB amortization period as a robust, meaningful measure of funding trajectory. Louis Brandeis remarked that “sunlight is said to be the best of disinfectants”; public disclo-