

Texas Municipal Retirement System Actuarial Funding Policy Effective December 31, 2015

Background

The primary financial objective of the Texas Municipal Retirement System (“TMRS” or “System”) is to pre-fund the long-term costs of promised benefits to plan members and beneficiaries at an approximate level percent of payroll from year to year. As an agent multiple employer plan with over 860 participating municipalities (employers), administration of the System includes engaging the services of a consulting actuary to assist in establishing contribution rates that will accomplish these funding objectives. The purpose of this Actuarial Funding Policy is to document the current funding policy of TMRS effective with the December 31, 2015 actuarial valuation as established by Statute, Board Rule or Board resolution in consultation with the System’s consulting actuary. The individual participating employer contribution determined annually under this funding policy is called the actuarially determined employer contribution (ADEC) and serves as the basis for determining the Full Retirement Rate contribution under TMRS.

Goals and Objectives

The goals and objectives of this funding policy are to:

1. Outline the funding policy components used in calculating the annual ADEC for each participating employer;
2. Achieve long-term full funding of the cost of promised benefits;
3. Allocate the costs of benefits in a reasonable and equitable manner which promotes the principle of intergenerational equity;
4. Manage and control contribution rate volatility to the extent reasonably possible, consistent with other funding policy goals; and
5. Support transparency and accountability to stakeholders of TMRS.

Actuarially Determined Employer Contribution Funding Policy Components

TMRS Act § 855.405 and § 855.406 require each TMRS participating employer to contribute a monthly amount equal to the normal cost contribution and prior service contribution, respectively, as determined annually by the System’s consulting actuary. The normal cost contribution rate and prior service cost contribution rate are determined by the following three key components of this funding policy which are approved by the Board based on the advice of the actuary:

1. *Actuarial Cost Method* – *The technique used to allocate the total present value of future benefits (PVFB) over an employee’s working career.*

The Entry Age Normal (EAN) cost method is used in determining the normal cost (the portion of the PVFB allocated to the year following the valuation date) and the actuarial accrued liability (the portion of the PVFB allocated to years of service prior to the valuation date) of each active member. The individual EAN normal cost rate is the contribution rate which, if applied to a member’s compensation throughout their anticipated covered service with the employer, would be sufficient to meet all benefits payable on their behalf. The salary-weighted average of the individual rates is the total

normal cost rate. The total Actuarial Accrued Liability (AAL) is the sum of the individual AALs. The Unfunded Actuarial Accrued Liability (UAAL) reflects the difference between the AAL and the Actuarial (Smoothed) Value of Assets (AVA). The prior service contribution rate amortizes the UAAL over the applicable period for that city in accordance with the amortization policy described below.

2. *Asset Smoothing Method* – *The technique used to recognize gains or losses in pension assets over some period of time so as to reduce the effects of market volatility and stabilize contributions.*

The Actuarial Value of Assets (AVA) is based on the Market Value of Assets (MVA) with ten-year smoothing applied. This is accomplished by recognizing each year 10% of the difference between the MVA and the expected AVA, based upon the assumed rate of return. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first, and the net remaining bases continue to be recognized on their original 10 year timeframe. The AVA is further adjusted by 33% of any difference between the initial value and a 15% corridor around the MVA, if necessary. Beginning with the December 31, 2015 actuarial valuation, a System-wide calculation to determine the ratio of the smoothed value to the market value in aggregate will be performed and that ratio will then be applied to each employer's market value of assets in determining their individual actuarial (smoothed) value of assets. Previously, the AVA was determined for each individual employer based on the cash flow and asset levels of that employer.

3. *Amortization Policy* – *The length of time and the structure selected for increasing or decreasing contributions to systematically eliminate any Unfunded Actuarial Accrued Liability (UAAL) or surplus.*

TMRS Act § 855.110(c) allows the Board the authority to set, by rule, open or closed amortization periods up to a maximum of 25 years. TMRS Rule § 123.7(b)(2) allows the Board to extend the amortization period from 25 years to a maximum of 30 years for employers who experience an increase in contribution rates greater than 0.5% as a result of actuarial changes. TMRS Rule § 123.7(d) allows the Board, after consultation with their consulting actuary, to (a) change the amortization period from an open to a closed period, (b) decrease the amortization period, (c) set different amortization periods for different types of benefit enhancements and/or (d) ladder the amortization of the unfunded liabilities. The current Board adopted amortization policy is summarized below:

- a. For underfunded plans with 20 or more active members, the amortization is a level percentage of payroll over a closed period using the process of "laddering" which separately tracks different amortization components or bases. Beginning January 1, 2016, all new losses are amortized over a maximum period of 25 years. Previously, some employers amortized their losses over a 30 year period. The previous maximum 25 or 30 year amortization period for each employer was established in the 2007 actuarial valuation as part of the actuarial changes adopted at that time. Bases created prior to January 1, 2016 continue to be amortized on their original schedule. New gains, including lump sum payments, are offset against and amortized over the same period as the current largest outstanding loss base for the specific employer which, in turn, reduces contribution rate volatility.

- b. For underfunded plans with fewer than 20 active members, the maximum amortization period described in (a) above for amortizing new losses is decreased by 1 year for each active member less than 20. Beginning in 2011, new employers with fewer than 20 active members have their initial UAAL amortized under this same "small city" methodology. New gains, including lump sum payments, are offset against and amortized over the same period as the current largest outstanding loss base for the specific employer which, in turn, reduces contribution rate volatility.
- c. For overfunded plans, a 25 year open amortization period is used. Once a plan reaches an overfunded status, all prior non-ad hoc bases are erased and one surplus base is established. This provides for adequate surplus management and reduces contribution rate volatility.
- d. Ad hoc benefit enhancements create a separate UAAL base or ladder and are amortized on a level dollar basis over individual closed periods equal to the minimum of 15 years or the remaining life expectancy of the group.
- e. For the December 31, 2013 valuation, there was a one-time change in the amortization policy for underfunded plans implemented in conjunction with the actuarial changes adopted by the Board at that time. An initial ADEC was developed using the methodology described in items (1), (2) and (3)(a)-(3)(d) above. All individual non-ad hoc UAAL bases were then aggregated and a single equivalent amortization period was determined. In an effort to minimize any contribution rate volatility associated with the 2013 actuarial changes, the single equivalent amortization period for all non-ad hoc bases was further adjusted in accordance with TMRS statute and Board rule. For employers with an initial rate decrease due to the actuarial changes, the single amortization period was shortened to the extent necessary, and possible, to keep rates from decreasing. Employers with an initial rate increase greater than 0.5% due to the actuarial changes had the single amortization period extended up to a maximum of 30 years to keep rates from increasing. For employers with an initial rate increase less than or equal to 0.5% due to the actuarial changes, the single amortization period was extended up to a maximum of 25 years to keep rates from increasing. In calculating the final full contribution rate, the single amortization period calculated in the prior steps was then rounded up to the next integer, not to exceed 25 or 30 years, as applicable.
- f. For the December 31, 2015 actuarial valuation, a one-time re-amortization option was extended to certain employers with underfunded plans in conjunction with the actuarial assumption changes adopted by the Board as part of the 2015 experience study. Specifically, employers with a net contribution rate increase greater than 0.5% have a one-time option to instruct TMRS to aggregate and re-amortize all individual non-ad hoc UAAL bases up to a maximum of 30 years to offset any net contribution rate increases back to the limit of 0.5%. The resulting single amortization period is rounded up to the next integer, not to exceed 30 years, in determining the final full contribution rate. For this purpose, the net contribution rate increase is the contribution rate increase resulting solely from the change in actuarial assumptions adjusted by the contribution rate decrease attributable to experience gains, if any. Instruction for this one-time re-amortization option is available for three years (2016-2018) and will be applied prospectively for the next calendar year beginning January 1, 2017, 2018 or 2019, as applicable.
- g. For plans closed to new members, a 20 year level dollar amortization schedule is applicable with the consulting actuary's discretion to use a lower period, if necessary, to be re-evaluated annually.

Actuarially Determined Employer Contribution Phase-in Policy

TMRS Rule § 123.7(b)(1) allows the Board to phase-in contribution rate increases resulting from changes in the actuarial cost method and/or assumptions over a reasonable period of time. The current Board adopted contribution phase-in policy is summarized below:

1. Contribution rate increases in excess of 0.5% resulting from the 2013 actuarial changes in cost method and assumptions are to be phased in at a maximum of 0.5% per year until the ADEC rate is attained. Calendar year 2015 is the first year in which a phase-in contribution different than the ADEC is available from the 2013 actuarial changes.
2. Net contribution rate increases (described in item 3(f) of the Amortization Policy above) in excess of 0.5% resulting from the 2015 change in actuarial assumptions are to be phased in at a maximum of 0.5% per year until the ADEC rate is attained. Any remaining 2013 phase-in balance will be combined with the 2015 net contribution rate increase above 0.5% in determining the final 2015 phase-in balance. Calendar year 2017 is the first year in which a phase-in contribution different than the ADEC is available from the 2015 actuarial changes.

Actuarial Assumptions for Actuarial Valuation and Funding Purposes

TMRS Act § 855.205(c) requires that at least once every 5 years, the System's actuary perform an actuarial experience investigation study and make recommendations to the Board based on the results of the experience study. TMRS generally performs an experience study once every 4 years. The recommendations for actuarial assumptions to be used in the annual actuarial valuations are grouped into the following two major categories:

1. Economic assumptions – including investment return, individual salary increases, overall payroll growth, etc.
2. Demographic assumptions – including rates of termination, forfeiture, service retirement, disability retirement, mortality, etc.

Actuarial assumptions adopted by the Board for use in the actuarial valuation affect only the timing of contributions. The ultimate contribution level is determined by the benefits and expense actually paid offset by actual investment returns. To the extent that actual experience deviates from the assumptions, experience gains and losses will occur. These gains (or losses) then serve to decrease (or increase) the future contribution requirements.

The actuarial assumptions represent the Board's best estimate of anticipated experience under TMRS and are intended to be long term in nature. In developing the actuarial assumption set, the Board considers not only past experience, but also trends, external forces and future expectations.