



June 1, 2017

City #01070

City Official
City of Richardson
P.O. Box 830309
Richardson, TX 75083-0309

Subject: 2018 Municipal Contribution Rate

Dear City Official:

Presented below are your city’s contribution requirements to the Texas Municipal Retirement System (TMRS) for Plan Year 2018 (Calendar Year 2018, PY2018) as determined by the December 31, 2016 actuarial valuation. The actuarially determined contribution rates for retirement benefits and Supplemental Death Benefits (SDB), if any, are based on your city’s plan provisions in effect as of April 1, 2017 and the actuarial assumptions and methods adopted by the TMRS Board. Effective January 1, 2018, your city’s monthly contribution rates will be:

	<u>Phase-in Rate</u>	<u>Full Rate</u>
Normal Cost	7.96%	7.96%
Prior Service	<u>6.58%</u>	<u>6.84%</u>
Total Retirement Rate	14.54%	14.80%
Supplemental Death Benefit	<u>0.00%</u>	<u>0.00%</u>
Total Combined Contribution	14.54%	14.80%

Full information on your contribution rate, including an explanation of changes, is contained in the attached report. The Total Retirement Rate shown in the Full Rate column above represents the Actuarially Determined Employer Contribution (ADEC) for PY2018 based on current TMRS funding policy. **The Total Combined Contribution Rate shown in the Phase-in Rate column above represents the minimum required contribution rate to TMRS for PY2018.** The difference represents the portion of your Full Rate that is eligible to be phased in. **Your city must contribute at least the Phase-in Rate, though TMRS highly recommends that each city contribute as much toward the Full Rate as possible.** Please note that if your city chooses to contribute at a rate below the 2018 Full Rate, the contribution shortfall will be reflected in your city’s Unfunded Actuarial Accrued Liability (UAAL) and contribution rate in subsequent years. Cities may also choose to contribute at a rate level above the Full Rate. In lieu of phasing in to the Full Rate, a one-time UAAL re-amortization option is available to certain cities that experienced a net contribution rate increase greater than 0.5% due to the 2015 actuarial changes. See the “Phase-in Rates” section for more information on the phase-in/re-amortization options.

IMPORTANT NOTE: The pension disclosure and financial statement information necessary to assist your city with the financial reporting requirements of the Governmental Accounting Standards Board (GASB) will be provided in a separate document available later this summer.



If you have questions about your rate or if you wish to evaluate potential changes in your TMRS plan, contact TMRS at 800-924-8677.

Sincerely,

Eric W. Davis
Deputy Executive Director

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Summary of Benefit Provisions	A summary of plan provisions for plan years 2016 and 2017.
Amortization Bases and Payments	Information on the amortization bases and payments for your city.
Historical and Projected Accumulation of the BAF Balance	This schedule provides your city with historical cash flows, interest credits and the year-end balance of its Benefit Accumulation Fund (BAF), as well as projected values for calendar/plan years 2017 and 2018.
Reconciliation of Full Retirement Rate from Prior Actuarial Valuation Report	A detailed reconciliation of changes in your city’s Full Retirement Rate (ADEC) since the prior valuation.
Phase-in Rates	An explanation of “Phase-in” including a question and answer section on Phase-in contributions and how they might affect your city. Also included are details of the one-time re-amortization option available to certain cities in lieu of phase-in.

Executive Summary

Valuation as of TMRS Plan Year (PY) Ending	12/31/2016	12/31/2015
Membership as of the Valuation Date		
• Number of		
- Active members	990	981
- Retirees and beneficiaries	655	615
- Inactive members	<u>375</u>	<u>343</u>
- Total	2,020	1,939
• Prior year's payroll provided by TMRS	\$ 68,061,898	\$ 65,693,151
• Valuation Payroll	\$ 71,027,615	\$ 69,001,539
Benefit Accumulation Fund (BAF) Assets		
• Market BAF Balance	\$ 434,371,111	\$ 413,589,829
• BAF crediting rate for PY	6.73%	0.06%
• Interest credited on beginning BAF balance	\$ 27,849,429	\$ 249,838
• Municipal contributions ^	8,980,315	8,975,170
• Member contributions during year	4,767,618	4,599,369
• Benefit and refund payments ^	20,816,080	19,895,866
Actuarial Value of Assets (AVA)		
• Market BAF Balance	\$ 434,371,111	\$ 413,589,829
• Actuarial Value of Assets (AVA)	444,939,761	424,808,953
• AVA as a Percentage of BAF	102.4%	102.7%
• Return on AVA	6.40%	6.70%
Actuarial Information		
• Actuarial accrued liability (AAL)	\$ 501,315,736	\$ 479,358,126
• Actuarial value of assets (AVA)	444,939,761	424,808,953
• Unfunded actuarial accrued liability (UAAL)	56,375,975	54,549,173
• UAAL as % of pay	82.8%	83.0%
• Funded ratio (AVA/AAL)	88.8%	88.6%
• Employer normal cost	7.96%	7.99%
• Prior Service Rate	6.84%	6.59%
Contribution Rates for TMRS Plan Year (PY)		
	2018	2017
• Member	7.00%	7.00%
• Full retirement rate (ADEC)	14.80%	14.58%
• Phase-in retirement rate (minimum)	14.54%	13.82%
• Supplemental Death rate	0.00%	0.00%
Total Employer Contribution Estimates for PY		
	2018	2017
• Projected payroll	\$ 73,158,443	\$ 71,071,585
• Minimum Phase-in contribution rate	14.54%	13.82%
• Estimated employer contribution	\$ 10,637,238	\$ 9,822,093

Note: TMRS Plan Year coincides with Calendar Year

Results from prior year reflect the plan provisions used in the 12/31/2016 valuation report.

^ Excludes contributions to/benefit payments from the IRC §415(m) Full Benefit Arrangement fund.

Calculation of Contribution Requirements

	From Valuation Report as of	
	<u>December 31, 2016</u>	<u>December 31, 2015</u>
1. Prior year's payroll reported to TMRS	\$ 68,061,898	\$ 65,693,151
2. Valuation payroll	71,027,615	69,001,539
3. Employer normal cost rate	7.96%	7.99%
4. Actuarial liabilities		
a. Active members	\$ 234,169,638	\$ 226,449,249
b. Inactive members	38,492,753	36,296,339
c. Annuitants	<u>228,653,345</u>	<u>216,612,538</u>
d. Total actuarial accrued liability	\$ 501,315,736	\$ 479,358,126
5. Actuarial value of assets	<u>444,939,761</u>	<u>424,808,953</u>
6. Unfunded actuarial accrued liability (UAAL) (4d - 5)	\$ 56,375,975	\$ 54,549,173
7. Funded ratio (5 / 4d)	88.8%	88.6%
8. Equivalent Single Amortization Period*	15.3 years	16.0 years
9. Assumed payroll growth rate	3.0%	3.0%
Contribution Rate for TMRS Plan Year:		
	2018	2017
10. Full retirement rate		
a. Normal cost	7.96%	7.99%
b. Prior service	<u>6.84%</u>	<u>6.59%</u>
c. Full retirement rate	14.80%	14.58%
11. Minimum phase-in retirement rate		
a. Full retirement rate (10c)	14.80%	14.58%
b. Less phase-in deferral	<u>(0.26%)</u>	<u>(0.76%)</u>
c. Minimum phase-in retirement rate	14.54%	13.82%
12. Supplemental Death rate	0.00%	0.00%
13. Combined contribution rates		
a. Combined full rate (10c + 12)	14.80%	14.58%
b. Combined phase-in rate (11c + 12)	14.54%	13.82%

* New Losses are laddered on 25-year period.

Summary of Benefit Provisions

The plan provisions are adopted by the governing body of the City, within the options available in the state statutes governing TMRS. Plan provisions for the City were as follows:

	Plan Year 2017	Plan Year 2016
Employee deposit rate	7%	7%
Matching ratio (city to employee)	2 to 1	2 to 1
Years required for vesting	5	5
Retirement Eligibility (Age /Service)	60/5, 0/25	60/5, 0/25
Updated Service Credit	50% Repeating	50% Repeating
Annuity Increase (to retirees)	50% of CPI Repeating	50% of CPI Repeating
Supplemental Death Benefit to Active Employees	No	No
Supplemental Death Benefit to Retirees	No	No

Amortization Bases and Payments

Year Established	Description	Years Remaining	Base	Payment
2013	2013 Valuation (Fresh Start)	14	\$50,011,312	\$4,607,795
2014	Lump Sum/Excess Contributions 2014	14	(40,907)	(3,769)
2014	2014 Experience	14	(2,968,501)	(273,503)
2015	2015 Experience	14	(470,288)	(43,330)
2015	2015 Actuarial Changes	29	7,003,345	393,710
2016	2016 Experience	25	<u>2,841,014</u>	<u>174,447</u>
	Total		56,375,975	4,855,350

Historical and Projected Accumulation of the BAF Balance

Year Ending December 31, (1)	Payroll for the Year (2)	Effective Retirement Contribution Rate ^a (3)	Employer Contributions for the Year ^c (4)	Member Contributions for the Year (5)	Benefit Payments ^c (6)	External Cash Flow for the Year (7)	Interest Credit (8)	BAF Balance ^b (9)
		(4) / (2)				(4) + (5) + (6)		
2014	\$ 64,872,361	14.22%	\$ 9,222,224	\$ 4,541,066	\$ (20,174,037)	\$ (6,410,747)	\$ 22,907,491	\$ 419,661,319
2015	\$ 65,693,151	13.66%	\$ 8,975,170	\$ 4,599,369	\$ (19,895,866)	\$ (6,321,327)	\$ 249,838	\$ 413,589,829
2016	\$ 68,061,898	13.19%	\$ 8,980,315	\$ 4,767,618	\$ (20,816,080)	\$ (7,068,147)	\$ 27,849,429	\$ 434,371,111
2017	\$ 71,027,615	13.82%	\$ 9,816,016	\$ 4,971,933	\$ (24,342,611)	\$ (9,554,662)	\$ 29,320,050	\$ 454,136,499
2018	\$ 73,158,443	14.54%	\$ 10,637,238	\$ 5,121,091	\$ (25,629,790)	\$ (9,871,461)	\$ 30,654,214	\$ 474,919,252

a. Effective retirement contribution rate is the actual rate determined by dividing the employer contribution received by the payroll paid.

b. BAF Balance may be off a dollar due to rounding.

c. Excludes contributions to/benefit payments from the IRC §415(m) Full Benefit Arrangement fund.

Reconciliation of Full Retirement Rate from Prior Actuarial Valuation Report

Actuarial valuations are based on long-term assumptions, and actual results in a specific year can, and almost certainly will, differ as actual experience deviates from the assumptions. The following table provides a detailed breakdown of changes in the retirement portion of your city’s contribution rate. This analysis reconciles the change in the retirement portion (ADEC) of your city’s contribution rate from 2017 to 2018, but will not reflect any change in the cost of the Supplemental Death Benefit (SDB), if your city currently has this provision. (Any changes in the cost of the SDB are primarily due to the changes in the average age of your city’s employee group and/or the number of covered retirees.) Following the table below is a brief description of the common sources for deviation from the expected.

Change in Full Retirement Rate	
Full Rate from 12/31/2015 Valuation (PY 2017 Rate)	14.58 %
Benefit changes	0.00 %
Return on Actuarial Value of Assets	0.13
Contribution lag/phase in	0.09
Payroll growth	0.01
Normal cost	(0.03)
Liability growth	0.02
Total change	0.22 %
Full Rate from 12/31/2016 Valuation (PY 2018 Rate)	14.80 %

Benefit Changes - Shows the increase or decrease in the contribution rate associated with any modifications made to the member city’s TMRS plan provisions. This will also include any changes to the amortization period adopted by ordinance.

Return on Actuarial Value of Assets (AVA) - Shows the change in the contribution rate associated with the return on the AVA being different than the assumed 6.75%. For the year ending December 31, 2016, the return on an AVA basis was 6.40%. The impact may show as 0.00% due to rounding.

Contribution Lag/Phase In - Shows the total increase or decrease in the contribution rate associated with the phase in of contributions and/or any additional contributions above the full rate. The effect of the “Contribution Lag” is also included here and refers to the time delay between the actuarial valuation date and the date the contribution rate becomes effective. For TMRS member cities, the “Contribution Lag” is one year (i.e., the Actuarial Valuation as of December 31, 2016 sets the rate effective for Calendar Year 2018). **The impact of the “Contribution Lag” is expected to become immaterial once a city is contributing the Full Rate and the Full Rate stabilizes.**

If a city chooses to contribute the minimum phase-in contribution, the difference between the Full Rate and the Phase-in Rate will be reflected as an actuarial loss in the next valuation's UAAL. This will increase the Full Rate for future valuations.

Cities should carefully consider whether to pay the minimum Phase-in Rate, the Full Rate, or a rate somewhere in between. If a city begins to contribute the Full Rate immediately, the actuarial valuation anticipates that the Full Rate will stabilize for the duration of the amortization period. However, if the minimum phase-in contribution schedule is utilized, the ultimate Full Rate would be expected to be higher than the current Full Rate. For more information on the impact of the phase-in, please refer to the "Phase-in Rates" section.

Payroll Growth - Shows the increase or decrease in the contribution rate associated with higher or lower than expected growth in the member city's overall payroll. The amortization payments were calculated assuming payroll grows at 3.0% per year. Overall payroll growth in excess of 3.0% will typically cause a decrease in the prior service rate.

Normal Cost - Shows the increase or decrease in the contribution rate associated with changes in the average normal cost rate for the individual city's population. The normal cost rate for an employee is the contribution rate which, if applied to a member's compensation throughout their period of anticipated covered service with the municipality, 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.

Liability Growth - Shows the increase or decrease in the contribution rate associated with larger or lower than expected growth in the member city's overall plan liabilities. The most significant sources for variance will be individual salary increases compared to the assumption and turnover.

Phase-in Rates

Phase-in Policy

After the actuarial changes first reflected in the December 31, 2013 actuarial valuation, any city that experienced a contribution rate increase in excess of 0.5% due to the 2013 actuarial changes was given the option to phase in contributions 0.5% per year until the full retirement rate is reached. Subsequently, at the December 2015 meeting and based on the results of the 2015 experience study, the TMRS Board of Trustees approved a new set of actuarial assumptions to be first reflected in the December 31, 2015 actuarial valuation. At the same time, the Board also approved a phase-in policy to help manage the potential impact of the 2015 actuarial changes on contribution rates. Specifically, any city that experienced a net contribution rate increase in excess of 0.5% due to the 2015 actuarial changes is eligible to phase in 0.5% per year until the full retirement rate is reached. For this purpose, the net contribution rate increase is the contribution rate increase resulting solely from the 2015 change in actuarial assumptions adjusted by the contribution rate decrease attributable to experience gains, if any.

Your city is eligible for a contribution rate phase-in due to one or both of the phase-in options discussed above.

Re-Amortization Option

At the December 2015 meeting, the TMRS Board also approved, in lieu of phase-in, a one-time re-amortization option for those cities with underfunded plans that experienced a net contribution rate increase (defined above) in excess of 0.5% due to the 2015 actuarial changes. These cities 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 period amortization is rounded up to the next integer, not to exceed 30 years, in determining the final contribution rate. There are two years remaining for eligible cities to request the re-amortization option. A request for this one-time re-amortization option may be made in 2017 or 2018 and will be applied prospectively for the next calendar year (2018 or 2019, as applicable). For more details regarding the re-amortization option and its availability for your city, please contact Leslee Hardy, TMRS Director of Actuarial Services, at lhardy@tmrs.com.

What rate should my city pay?

Your city must contribute at least the Phase-in Rate and should consider paying more than this amount.

Can my city contribute more than the Phase-in Rate?

You may contribute at any rate you choose, but you must contribute at least the Phase-in Rate. Your city may choose to pay (1) the Full Rate, (2) a rate between the Phase-in Rate and the Full Rate, or (3) a rate above the Full Rate. The TMRS Act was amended effective January 1, 2008 to allow cities to make additional contributions to TMRS.

What is the impact of paying the Phase-in Rate or a rate below the Full Rate?

Each year that the actual contribution rate is less than the Full Rate, the difference generates an actuarial loss in the following year's actuarial valuation, which must be amortized as part of the UAAL by an increase in the Prior Service Rate. All other things being equal, the Full Rate for each successive year of the phase-in period will reflect the cumulative increases in the Prior Service Rate from all prior years. Cities that pay the Phase-in Rate or any rate less than the Full Rate are also likely to see their funding ratio decline or increase at a slower rate each year.

What is the impact of contributions in excess of the Full Rate?

Contributions above the Full Rate will have the exact opposite effect on your city as described above for contributions less than the Full Rate. Specifically, the amortization of actuarial gains created by additional contributions will decrease the Full Rate (by a decrease in the Prior Service Rate) in the following year's actuarial valuation. Cities that make contributions in excess of the Full Rate should also see their funding ratios improve more rapidly.

Can my city pay the Full Rate this year and change to the Phase-in Rate in a later year?

Yes. For any year in which your city is eligible to phase in the full retirement rate, TMRS will send you a rate letter showing both the Phase-in Rate and the Full Rate. The Phase-in Rate will be the minimum rate you must pay. As mentioned earlier, a city should consider paying more than the Phase-in Rate.

If my city makes plan changes that increase the cost of our plan (benefit improvements), can we phase in those additional costs?

No. The contribution rate increase due to benefit improvements will not change the Phase-in Amount used in determining the Phase-in Rate. The Phase-in Rate will increase by the same amount as the Full Rate. The Phase-in Rate was intended to assist those cities that needed additional time to budget for the Full Rate. Any city making plan changes should consider paying the Full Rate.

If my city makes changes that decrease the cost of our plan (benefit reductions), will our Phase-in Rate be affected?

Yes. Reductions in the Full Rate because of a plan benefit reduction will change the amount being phased in and the Phase-in Rate beginning with the year the plan changes are effective. The portion of the amount being phased in and not yet recognized will be reduced by the decrease in the Full Rate. If the decrease in the Full Rate due to reductions in plan benefits exceeds the remaining phase-in balance, your required contribution rate will be the reduced Full Rate based on the new plan provisions.

If I make a plan change in 2017, will my 2018 contribution rate be recalculated?

Yes. 2018 contribution rates will be re-determined for cities that adopt changes in plan benefits before the end of calendar year 2017.