



June 1, 2015

City #00301

City Official
City of Corinth
3300 Corinth Parkway
Corinth, TX 76208

Subject: 2016 Municipal Contribution Rate

Dear City Official:

Presented below are your city's contribution requirements to the Texas Municipal Retirement System (TMRS) for Plan Year 2016 (Calendar Year 2016, PY2016) as determined by the December 31, 2014 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, 2015 and the actuarial assumptions and methods adopted by the TMRS Board. Effective January 1, 2016, your city's monthly contribution rates will be as follows:

Normal Cost	10.45%
Prior Service	<u>4.57%</u>
Total Retirement Rate	15.02%
Supplemental Death Benefit	<u>0.12%</u>
Total Combined Contribution	15.14%

The contribution rate phase-in of your city's Full Retirement Rate is complete. Therefore, the Phase-in Rate is no longer applicable and the Full Retirement Rate is the minimum required contribution.

Full information on your contribution rate, including an explanation of changes, is contained in the attached report. The Total Retirement Rate shown above represents the Actuarially Determined Employer Contribution (ADEC) for PY2016 based on current TMRS funding policy.

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,

A handwritten signature in blue ink that reads "Eric W. Davis".

Eric W. Davis
Deputy Executive Director

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Executive Summary

Valuation as of TMRS Plan Year (PY) Ending	12/31/2014	12/31/2013
Membership as of the Valuation Date		
• Number of		
- Active members	146	146
- Retirees and beneficiaries	55	47
- Inactive members	<u>75</u>	<u>75</u>
- Total	276	268
• Prior year's payroll provided by TMRS	\$ 8,633,945	\$ 8,028,481
• Valuation Payroll	\$ 8,968,798	\$ 8,529,749
Benefit Accumulation Fund (BAF) Assets		
• Market BAF Balance	\$ 24,169,583	\$ 21,954,178
• BAF crediting rate for PY	5.68%	9.70%
• Interest credited on beginning BAF balance	\$ 1,247,419	\$ 1,853,879
• Municipal contributions	1,209,444	1,084,604
• Member contributions during year	604,376	569,889
• Benefit and refund payments	845,833	657,425
Actuarial Value of Assets (AVA)	\$ 23,407,353	\$ 20,892,219
Return on AVA	7.41%	7.64%
AVA as a Percentage of BAF	96.85%	95.16%
Actuarial Information		
• Actuarial accrued liability (AAL)	\$ 30,491,719	\$ 28,200,256
• Actuarial value of assets (AVA)	23,407,353	20,892,219
• Unfunded actuarial accrued liability (UAAL)	7,084,366	7,308,037
• UAAL as % of pay	82.1%	91.0%
• Funded ratio (AVA/AAL)	76.8%	74.1%
• Employer normal cost	10.45%	10.42%
• Prior Service Rate	4.57%	4.86%
Contribution Rates for TMRS Plan Year (PY)		
• Member	2016 7.00%	2015 7.00%
• Full retirement rate (ADEC)	15.02%	15.28%
• Phase-in retirement rate (minimum)	15.02%	15.13%
• Supplemental Death rate	0.12%	0.10%
Total Employer Contribution Estimates for PY		
• Projected payroll	2016 \$ 9,237,862	2015 \$ 8,785,641
• Minimum Phase-in contribution rate	15.14%	15.23%
• Estimated employer contribution	\$ 1,398,612	\$ 1,338,053

Note: TMRS Plan Year coincides with Calendar Year

Results from prior year reflect the plan provisions used in the 12/31/2014 valuation report.

Calculation of Contribution Requirements

	From Valuation Report as of	
	<u>December 31, 2014</u>	<u>December 31, 2013</u>
1. Prior year's payroll reported to TMRS	\$ 8,633,945	\$ 8,028,481
2. Valuation payroll	8,968,798	8,529,749
3. Employer normal cost rate	10.45%	10.42%
4. Actuarial liabilities		
a. Active members	\$ 20,275,155	\$ 19,046,549
b. Inactive members	2,948,173	2,748,582
c. Annuitants	<u>7,268,391</u>	<u>6,405,125</u>
d. Total actuarial accrued liability	\$ 30,491,719	\$ 28,200,256
5. Actuarial value of assets	<u>23,407,353</u>	<u>20,892,219</u>
6. Unfunded actuarial accrued liability (UAAL) (4d - 5)	\$ 7,084,366	\$ 7,308,037
7. Funded ratio (5 / 4d)	76.8%	74.1%
8. Equivalent Single Amortization Period*	29.0 years	30.0 years
9. Assumed payroll growth rate	3.00%	3.00%
Contribution Rate for TMRS Plan Year:		
	2016	2015
10. Full retirement rate		
a. Normal cost	10.45%	10.42%
b. Prior service	<u>4.57%</u>	<u>4.86%</u>
c. Full retirement rate	15.02%	15.28%
11. Minimum phase-in retirement rate		
a. Full retirement rate (10c)	15.02%	15.28%
b. Less phase-in deferral	<u>(0.00%)</u>	<u>(0.15%)</u>
c. Minimum phase-in retirement rate	15.02%	15.13%
12. Supplemental Death rate	0.12%	0.10%
13. Combined contribution rates		
a. Combined full rate (10c + 12)	15.14%	15.38%
b. Combined phase-in rate (11c + 12)	15.14%	15.23%

* New Losses are laddered on 30-year period.

Development of Actuarial Value of Assets

	Year Ending	
	12/31/2014	12/31/2013
1. Actuarial value of assets (AVA) as of January 1	\$ 20,892,219	\$ 18,483,323
2. a. Employer Contributions	\$ 1,209,444	\$ 1,084,604
b. Member Contributions	604,376	569,889
c. Benefit and Refund Payments	<u>845,833</u>	<u>657,425</u>
d. Net external cash flow	\$ 967,987	\$ 997,068
3. Expected assets as of December 31 (includes earnings equal to 7.0% of 1.)	\$ 23,322,661	\$ 20,774,224
4. Actual BAF balance as of December 31	\$ <u>24,169,583</u>	\$ <u>21,954,178</u>
5. Deferred earnings/(shortfall) (4. – 3.)	\$ 846,922	\$ 1,179,954
6. Deferred earnings/(shortfall) recognized (10% x 5.)	\$ 84,692	\$ 117,995
7. Preliminary actuarial value of assets as of December 31 (3. + 6.)	\$ 23,407,353	\$ 20,892,219
8. a. 85% of market value of assets (85% x 4.)	\$ 20,544,146	\$ 18,661,051
b. 115% of market value of assets (115% x 4.)	27,795,020	25,247,305
9. Actuarial value of assets (AVA) as of December 31 (7. perhaps partially limited by 8.)	\$ 23,407,353	\$ 20,892,219

Note:

To help mitigate the natural year-to-year fluctuations (positive and negative) in the investment markets, the TMRS actuary has recommended “asset smoothing.” Nearly all public sector retirement systems employ some form of smoothing. Smoothing does not impact long-term plan costs or funded positions but does impact timing of investment gain and loss recognition. The TMRS Board of Trustees has adopted a 10-year smoothing method with a 15% corridor to determine the System’s actuarial value of assets (AVA). This “smoothing method” is intended to help reduce the volatility of the contribution rates from one year to the next. The corridors detailed above on line 8 keep the AVA within a certain range of the market value of assets.

Expected and actual BAF balances as of December 31 may be off a dollar due to rounding.

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 (4)	Member Contributions for the Year (5)	Benefit Payments (6)	External Cash Flow for the Year (7)	Interest Credit (8)	BAF Balance ^b (9)
		(4) / (2)				(4) + (5) + (6)		
2012	\$ 7,989,936	12.95%	\$ 1,034,694	\$ 559,595	\$ (586,954)	\$ 1,007,335	\$ 1,637,541	\$ 19,103,229
2013	\$ 8,028,481	13.51%	\$ 1,084,604	\$ 569,889	\$ (657,425)	\$ 997,068	\$ 1,853,879	\$ 21,954,178
2014	\$ 8,633,945	14.01%	\$ 1,209,444	\$ 604,376	\$ (845,833)	\$ 967,987	\$ 1,247,419	\$ 24,169,583
2015	\$ 8,968,798	15.13%	\$ 1,356,979	\$ 627,816	\$ (731,021)	\$ 1,253,774	\$ 1,691,871	\$ 27,115,228
2016	\$ 9,237,862	15.02%	\$ 1,387,527	\$ 646,650	\$ (773,564)	\$ 1,260,613	\$ 1,898,066	\$ 30,273,907

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.

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 2015 to 2016, 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 12/31/2013 Valuation (PY 2015 Rate)	15.28 %
Benefit changes	0.00 %
Return on Actuarial Value of Assets	(0.06)
Contribution lag	0.06
Payroll growth	(0.09)
Normal cost	0.03
Liability growth	(0.20)
Total change	(0.26) %
Full Rate from 12/31/2014 Valuation (PY 2016 Rate)	15.02 %

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 7.0%. For the year ending December 31, 2014, the return on an AVA basis was 7.41%. The impact may show as 0.00% due to rounding.

Contribution Lag - 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, 2014 set the rate effective for Calendar Year 2016). **The impact of the “Contribution Lag” is expected to become immaterial once a city is contributing the Full Rate and the Full Rate stabilizes.**

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 are 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.