



June 1, 2017

City #01129

City Official
City of Sachse
3815 B Sachse Rd
Sachse, TX 75048

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:

Normal Cost	11.16%
Prior Service	<u>3.35%</u>
Total Retirement Rate	14.51%
Supplemental Death Benefit	<u>0.15%</u>
Total Combined Contribution	14.66%

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 PY2018 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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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.

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	143	136
- Retirees and beneficiaries	63	56
- Inactive members	<u>125</u>	<u>117</u>
- Total	331	309
• Prior year's payroll provided by TMRS	\$ 8,440,501	\$ 7,432,025
• Valuation Payroll	\$ 8,269,010	\$ 7,529,475
Benefit Accumulation Fund (BAF) Assets		
• Market BAF Balance	\$ 22,046,492	\$ 19,733,180
• BAF crediting rate for PY	6.73%	0.06%
• Interest credited on beginning BAF balance	\$ 1,328,751	\$ 11,246
• Municipal contributions	1,132,714	982,512
• Member contributions during year	590,835	520,242
• Benefit and refund payments	738,987	670,519
Actuarial Value of Assets (AVA)		
• Market BAF Balance	\$ 22,046,492	\$ 19,733,180
• Actuarial Value of Assets (AVA)	22,582,904	20,268,466
• AVA as a Percentage of BAF	102.4%	102.7%
• Return on AVA	6.56%	6.63%
Actuarial Information		
• Actuarial accrued liability (AAL)	\$ 27,288,179	\$ 24,245,784
• Actuarial value of assets (AVA)	22,582,904	20,268,466
• Unfunded actuarial accrued liability (UAAL)	4,705,275	3,977,318
• UAAL as % of pay	55.7%	53.5%
• Funded ratio (AVA/AAL)	82.8%	83.6%
• Employer normal cost	11.16%	11.03%
• Prior Service Rate	3.35%	3.02%
Contribution Rates for TMRS Plan Year (PY)		
• Member	2018 7.00%	2017 7.00%
• Full retirement rate (ADEC)	14.51%	14.05%
• Supplemental Death rate	0.15%	0.13%
Total Employer Contribution Estimates for PY		
• Projected payroll	\$ 8,517,080	\$ 7,755,359
• Combined contribution rate	14.66%	14.18%
• Estimated employer contribution	\$ 1,248,604	\$ 1,099,710

Note: TMRS Plan Year coincides with Calendar Year

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

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	\$ 8,440,501	\$ 7,432,025
2. Valuation payroll	8,269,010	7,529,475
3. Employer normal cost rate	11.16%	11.03%
4. Actuarial liabilities		
a. Active members	\$ 13,526,570	\$ 11,872,439
b. Inactive members	5,373,643	4,888,825
c. Annuitants	<u>8,387,966</u>	<u>7,484,520</u>
d. Total actuarial accrued liability	\$ 27,288,179	\$ 24,245,784
5. Actuarial value of assets	<u>22,582,904</u>	<u>20,268,466</u>
6. Unfunded actuarial accrued liability (UAAL) (4d - 5)	\$ 4,705,275	\$ 3,977,318
7. Funded ratio (5 / 4d)	82.8%	83.6%
8. Equivalent Single Amortization Period*	26.8 years	28.2 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	11.16%	11.03%
b. Prior service	<u>3.35%</u>	<u>3.02%</u>
c. Full retirement rate	14.51%	14.05%
11. Supplemental Death rate	0.15%	0.13%
12. Combined contribution rates (10c + 11)	14.66%	14.18%

* 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, 0/20	60/5, 0/20
Updated Service Credit	100% Repeating Transfers	100% Repeating Transfers
Annuity Increase (to retirees)	70% of CPI Repeating	70% of CPI Repeating
Supplemental Death Benefit to Active Employees	Yes	Yes
Supplemental Death Benefit to Retirees	Yes	Yes

Amortization Bases and Payments

Year Established	Description	Years Remaining	Base	Payment
2013	2013 Valuation (Fresh Start)	27	\$3,938,549	\$230,813
2014	2014 Experience	27	(135,009)	(7,912)
2015	2015 Experience	29	23,747	1,335
2015	2015 Actuarial Changes	29	183,182	10,298
2016	2016 Experience	25	<u>694,806</u>	<u>42,663</u>
	Total		4,705,275	277,197

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)		
2014	\$ 6,546,680	11.77%	\$ 770,437	\$ 458,268	\$ (469,835)	\$ 758,870	\$ 974,792	\$ 18,889,700
2015	\$ 7,432,025	13.22%	\$ 982,512	\$ 520,242	\$ (670,519)	\$ 832,235	\$ 11,246	\$ 19,733,180
2016	\$ 8,440,501	13.42%	\$ 1,132,714	\$ 590,835	\$ (738,987)	\$ 984,562	\$ 1,328,751	\$ 22,046,492
2017	\$ 8,269,010	14.05%	\$ 1,161,796	\$ 578,831	\$ (1,004,611)	\$ 736,016	\$ 1,488,138	\$ 24,270,646
2018	\$ 8,517,080	14.51%	\$ 1,235,828	\$ 596,196	\$ (963,810)	\$ 868,214	\$ 1,638,269	\$ 26,777,129

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 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)	14.05 %
Benefit changes	0.00 %
Return on Actuarial Value of Assets	0.03
Contribution lag	(0.06)
Payroll growth	(0.22)
Normal cost	0.13
Liability growth	0.58
Total change	0.46 %
Full Rate from 12/31/2016 Valuation (PY 2018 Rate)	14.51 %

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 6.56%. 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, 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.**

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.