

Texas Municipal Retirement System

Actuarial Valuation Report
as of December 31, 2018



May 30, 2019

Board of Trustees
Texas Municipal Retirement System
Austin, Texas

Dear Members of the Board:

Subject: Actuarial Valuation Report (“our Report”) of the Texas Municipal Retirement System (“TMRS”) as of December 31, 2018

This is the December 31, 2018 actuarial valuation of the Texas Municipal Retirement System (“TMRS” or the “System”) which determines the contribution rates for the calendar year beginning January 1, 2020. This report describes the current actuarial condition of TMRS, determines recommended employer contribution rates, and analyzes changes in these contribution rates. The results presented herein may not be applicable for other purposes. This report reflects the benefit provisions and contribution rates in effect for each of the 887 separate employer plans participating in TMRS. Separate liabilities and contribution rates are determined for each of the member cities. Valuations are prepared annually as of December 31st, the last day of the plan year.

The employer contribution rates for the units participating in TMRS are certified annually by the Board of Trustees (the “Board”), which is the intended user of this report. These rates are determined actuarially, based on the plan provisions in effect as of the valuation date and the actuarial assumptions and methodology adopted by the Board. The Board’s current policy is that the contribution rates determined by a given actuarial valuation become effective one (1) year after the valuation date. For example, the rates determined by this December 31, 2018 actuarial valuation will be applicable for the calendar year beginning January 1, 2020 and ending December 31, 2020.

Financing objectives and funding policy

The actuarial cost method and the amortization periods are set by Board policy. Contribution rates and liabilities are computed using the Entry Age Normal actuarial cost method. In TMRS, a city’s actuarially determined contribution rate consists of two components: the employer normal cost contribution rate and the prior service contribution rate, which is the amortization of any unfunded actuarial accrued liability. Both rates are determined as a percentage of active member payroll. In addition, a supplemental death benefit rate is determined annually for each participating employer, if applicable. These supplemental death benefit rates are listed in Section 5 of our Report.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 6.75% on the actuarial valuation of assets) and absent future benefit changes, it is expected that:

1. The employer normal cost as a percentage of payroll will remain level,
2. The unfunded actuarial accrued liability will be fully amortized over the remaining amortization period of each city, and
3. The funded status of each city will converge gradually towards a 100% funded ratio.

The funded ratio of TMRS as a whole is 87.1% and decreased from 87.4% in the prior valuation. This decrease in the funded ratio from the prior valuation is primarily due to benefit enhancements granted during the year and a loss from the investment return on the actuarial value of assets of 6.06% which is less than the assumed rate of 6.75%. This loss was somewhat offset by the upcoming COLA being less than assumed and positive system-wide amortization as the equivalent single funding period decreases. (Please note that each city is responsible for its own assets and liabilities and will have its own funded ratio.) On a market value of assets basis, the funded ratio of TMRS as a whole is 82.1% compared to 90.1% in the prior valuation.

Unless otherwise indicated, each funded status measurement presented in this report is based upon the actuarial accrued liability and the actuarial value of assets. Unless otherwise indicated, with regards to any funded status measurements presented in this report:

1. The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
2. The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets.

Benefit provisions and changes

The benefit provisions reflected in this valuation are those which were in effect as of April 1, 2019. In addition to the 879 plans that are actively participating in TMRS, there are another eight (8) plans that are in inactive status. No new plan provisions occurred during 2018 that impacted the valuation results, other than individual changes adopted by the various municipalities.

Of the 879 active cities, 586 (67%) have adopted annually repeating updated service credits. In addition, 460 (52%) of the cities have adopted annually repeating annuity increases.

However, the larger participating employers have almost all adopted annually repeating benefits. Therefore, of the 111,851 actively contributing members, 90% are covered under an annually repeating updated service credit benefit structure and 71% are covered under an annually repeating annuity

increase structure.

Five municipalities began participation in the System during 2018. Exhibit VI in Section 1 of our Report shows these cities, the number of contributing members, total payroll, and the 2020 retirement rates.

There were 64 cities which modified their pension benefit provisions since the prior valuation. Of these municipalities, 61 adopted changes which increased benefits, while 3 cities adopted changes which decreased benefits. A summary of these changes is provided in Section 7 of our Report, and the impact on each city's calculated retirement rate is shown in Section 3. The aggregate benefit changes and five new cities increased the overall liability of the System by \$281.4 million.

Assumptions and methods

All actuarial assumptions and methods are described under Section 6 of our Report. Except for healthy post-retirement mortality and the mortality assumption used to develop the Annuity Purchase Rates (APRs), the current actuarial assumptions were developed from the actuarial investigation of the experience of TMRS over the four year period from December 31, 2010 to December 31, 2014. These assumptions were adopted in 2015 and were first used in the December 31, 2015 valuation. Healthy post-retirement mortality rates and the APRs used to annuitize members' account balances at retirement were updated based on the mortality experience investigation study dated December 31, 2013. In addition, in conjunction with these changes in 2013, the Board adopted a change in the actuarial cost method from Projected Unit Credit to Entry Age Normal and a one-time change to the amortization policy as described in Section 6 of this report. There have been no changes in the assumption since the prior valuation.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations presented in our Report are intended to provide information for rational decision making. The actuarial assumptions and methods used in our Report comply with the actuarial standards of practice (ASOPs) and the parameters for disclosure that appear in Governmental Accounting Standards Board Statement Number 67.

Data

The TMRS staff supplied data for retired, active and inactive members as of December 31, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The TMRS staff also supplied asset and financial information as of December 31, 2018.

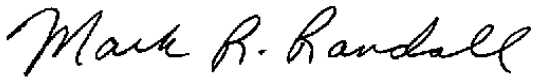
Actuarial Certification

This report is a summary of the actuarial valuation results. Additional detailed results are provided in the TMRS Comprehensive Annual Financial Report (CAFR). All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of the TMRS Act and, where applicable, the Internal Revenue Code and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. They all are Members of the American Academy of Actuaries, meet all of the Qualification Standards of the American Academy of Actuaries, and are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company



Mark R. Randall, MAAA, FCA, EA
Chief Executive Officer



Joseph P. Newton, MAAA, FSA, EA
Pension Market Leader and Actuary



Brad Stewart, MAAA, ASA, EA
Consultant

Table of Contents

Section 1	Executive Summary
Section 2	2020 Contribution Rates, Including a Comparison with 2019 Rates
Section 3	Reconciliation of Full Contribution Rates from Prior Valuation Report
Section 4	Comparison of Expected City Contribution Dollar Amounts for 2019 and 2020
Section 5	Supplemental Death Rates
Section 6	Summary of Actuarial Assumptions and Methods
Section 7	Summary of Benefit Provisions
Section 8	Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution
Section 9	Individual City Reports

SECTION 1

EXECUTIVE SUMMARY

Executive Summary

Pension Trust

Item	2018	2017
Membership		
• Member cities	887	883
• Number of		
- Active members	111,851	110,208
- Retirees and beneficiaries	66,051	62,776
- Inactive members	<u>62,465</u>	<u>57,369</u>
- Total	240,367	230,353
• Valuation Payroll (Projected next year)	\$ 6.664 billion	\$ 6.396 billion
• Prior Year Payroll	\$ 6.444 billion	\$ 6.188 billion
Minimum Contribution Rates	FY 2020	FY 2019
• Straight average	8.96%	8.88%
• Dollar weighted average	13.58%	13.08%
Assets		
• Market value	\$ 27.684 billion	\$ 28.649 billion
• Estimated yield on market value	-3.1%	13.8%
• Member contributions	\$ 427.8 million	\$ 410.5 million
• Employer contributions	881.5 million	838.4 million
• Benefit, refund, and expense payments	1,417.0 million	1,329.9 million
• Net external cash flow	(107.7) million	(81.0) million
Actuarial Information - Pension Trust		
• Actuarial accrued liability (AAL)	\$ 33.731 billion	\$ 31.812 billion
• Unfunded actuarial accrued liability (UAAL)	\$ 4.346 billion	\$ 3.998 billion
• UAAL as % of pay	67.4%	64.6%
• Funded ratio	87.1%	87.4%
• Employer normal cost % - Aggregate	8.61%	8.43%
• Actuarially Determined Employer Contribution -	13.58%	13.09%
• Equivalent Single Amortization Period	18.2 years	18.8 years
Number of Member Cities with:		
• Increase in Full Rate	408	262
• Decrease in Full Rate	435	580
• No change in Full Rate	31	22
• New cities	5	11
• Benefit changes (retirement only)	64	54
Changes in the UAAL		
• Interest	\$ 269.9 million	\$ 280.2 million
• Amortization payments	(303.6) million	(305.6) million
• Asset experience	189.1 million	(92.9) million
• Assumption/Methods changes	0.0 million	0.0 million
• Liability experience	(48.8) million	(13.1) million
• Benefit modifications/New Cities	281.4 million	31.9 million
• Contributions different than actuarially calculated	<u>(39.7) million</u>	<u>(21.7) million</u>
• Total	\$ 348.3 million	\$ (121.2) million

Executive Summary

Supplemental Death Trust

Item	2018	2017
Membership (TMRS Active Cities)		
• Cities with only active coverage	3	3
- Number of members with active only coverage	447	445
• Cities with active and retiree coverage	765	761
- Number of members covered		
- Active members	74,588	73,312
- Retirees	30,453	28,947
- Inactive members	<u>9,555</u>	<u>8,989</u>
- Total	114,596	111,248
- Valuation Payroll (Projected next year)	\$ 4.420 billion	\$ 4.226 billion
- Prior Year Payroll	\$ 4.279 billion	\$ 4.097 billion
Average Contribution Rates For Participating Cities	FY 2020	FY 2019
• Straight Average		
- Active coverage	0.17%	0.17%
- Retiree coverage	0.06%	0.06%
• Dollar Weighted Average		
- Active coverage	0.14%	0.14%
- Retiree coverage	0.04%	0.04%
Actuarial Information - OPEB		
• Actuarial accrued liability (AAL)	\$ 187.0 million	\$ 169.7 million
• Fund Value of Assets	<u>17.3 million</u>	<u>18.9 million</u>
• Unfunded actuarial accrued liability (UAAL)	\$ 169.7 million	\$ 150.8 million
• UAAL as % of pay	4.0%	3.7%
• Funded ratio	9.3%	11.1%

Exhibit I

Summary of Systemwide Actuarial Valuation Results

	December 31, 2018	December 31, 2017
<u>I. Valuation Results for Employer Plans</u>		
1. Actuarial accrued liability (AAL)		
a. Contributing Members	\$ 16,457,149,932	\$ 15,722,570,819
b. Noncontributing Members	2,870,775,962	2,676,526,747
c. Annuitants	<u>14,403,099,618</u>	<u>13,412,028,940</u>
d. Total AAL	\$ 33,731,025,512	\$ 31,811,126,506
2. Actuarial value of assets (AVA)		
a. Benefit Accumulation Fund (Smoothed)	\$ 29,055,971,226	\$ 27,481,720,284
b. Interest Reserve Account	296,780,871	301,294,030
c. Perpetual Endowment	22,069,330	20,472,126
d. Expense Fund	<u>9,884,037</u>	<u>9,648,891</u>
e. Total AVA	\$ 29,384,705,464	\$ 27,813,135,331
3. Total unfunded actuarial accrued liability (UAAL) [1d - 2e]	\$ 4,346,320,048	\$ 3,997,991,175
4. Funded Ratio [2 / 1]	87.1%	87.4%
<u>II. Valuation Results for Pooled Benefits</u>		
1. Actuarial present value of future benefits from the Supplemental Disability Benefits Fund for annuities in effect	\$ 425,555	\$ 460,745
2. Actuarial value of assets of the Supplemental Disability Benefits Fund	<u>\$ 390,771</u>	<u>\$ 433,979</u>
3. Unfunded/(overfunded) actuarial accrued liability [UAAL/(OAAL)] in Supplemental Disability Benefits Fund [1 - 2]	\$ 34,784	\$ 26,766
4. Funded Ratio [2 / 1]	91.8%	94.2%

Exhibit II
Plan Net Assets - Pension Trust
(Assets at Market Value)

	Valuation of	
	December 31, 2018	December 31, 2017
1. Market value of assets at beginning of year	\$ 28,649,374,617	\$ 25,233,205,773
2. Revenue for the year		
a. Contributions		
i. Employee	\$ 427,808,238	\$ 410,527,770
ii. Employer	881,531,535	838,363,116
iii. Total Contributions	\$ 1,309,339,773	\$ 1,248,890,886
b. Net investment income		
i. Interest and dividends	\$ 560,741,408	\$ 477,401,145
ii. Net apprec/(deprec) in fair value of investmen	(1,370,878,016)	3,106,434,028
iii. Net securities lending income	-	-
iv. Investment expenses	(47,986,353)	(86,702,096)
v. Net investment income	\$ (858,122,961)	\$ 3,497,133,077
c. Miscellaneous	\$ 18,501	\$ 47,105
d. Total revenue	\$ 451,235,313	\$ 4,746,071,068
3. Expenditures for the year		
a. Benefit payments		
i. Retirement benefits	\$ (1,159,702,957)	\$ (1,077,485,262)
ii. Disability benefits	(17,060,303)	(17,005,751)
iii. Partial lump sum payments	(158,490,461)	(156,915,521)
iv. Total benefit payments	\$ (1,335,253,721)	\$ (1,251,406,534)
b. Refund of contributions	\$ (64,255,860)	\$ (59,405,912)
c. Administrative expenses	(16,585,866)	(18,124,164)
d. Allocation to supplemental death benefits fund	(885,044)	(965,614)
e. Total expenditures	\$ (1,416,980,491)	\$ (1,329,902,224)
4. Increase in net assets (Item 2d + Item 3e)	\$ (965,745,178)	\$ 3,416,168,844
5. Market value of assets at end of year (Item 1 + Item 4)	\$ 27,683,629,439	\$ 28,649,374,617

Exhibit III
Development of Actuarial Value of Assets
Benefit Accumulation Fund (BAF) Only

	Year Ending December 31, 2018																																																																							
1. Actuarial value of assets at January 1	\$	27,481,720,284																																																																						
2. Net external cash flow																																																																								
a. Employer and employee contributions	\$	1,307,945,535																																																																						
b. Benefits and refunds paid		(1,399,658,846)																																																																						
c. Subtotal	\$	(91,713,311)																																																																						
3. Assumed rate of investment return for 2018		6.75%																																																																						
4. Expected investment return for 2018 (Item 1 x Item 3)	\$	1,855,016,119																																																																						
5. Expected actuarial value of assets at December 31 (Item 1+ Item 2c + Item 4)	\$	29,245,023,092																																																																						
6. Market value of assets at December 31	\$	27,354,504,430																																																																						
7. Difference (Item 6 - Item 5)	\$	(1,890,518,662)																																																																						
8. Development of amounts to be recognized at December 31, 2018:																																																																								
<table><tr><th colspan="7">Remaining Deferrals</th></tr><tr><th>Fiscal</th><th>of Excess (Shortfall)</th><th></th><th></th><th></th><th></th><th></th></tr><tr><th>Year</th><th>of Investment</th><th>Offsetting of</th><th>Net Deferrals</th><th>Years</th><th>Recognized for</th><th>Remaining after</th></tr><tr><th>End</th><th>Income</th><th>Gains/(Losses)</th><th>Remaining</th><th>Remaining</th><th>this valuation</th><th>this valuation</th></tr><tr><th></th><th>(1)</th><th>(2)</th><th>(3) = (1) + (2)</th><th>(4)</th><th>(5) = (3) / (4)</th><th>(6) = (3) - (5)</th></tr><tr><td>2015</td><td>\$ 0</td><td>\$ 0</td><td>\$ 0</td><td>7</td><td>\$ 0</td><td>\$ 0</td></tr><tr><td>2016</td><td>0</td><td>0</td><td>0</td><td>8</td><td>0</td><td>0</td></tr><tr><td>2017</td><td>835,805,307</td><td>(835,805,307)</td><td>0</td><td>9</td><td>0</td><td>0</td></tr><tr><td>2018</td><td>(2,726,323,969)</td><td>835,805,307</td><td>(1,890,518,662)</td><td>10</td><td>(189,051,866)</td><td>(1,701,466,796)</td></tr><tr><td>Total</td><td>\$ (1,890,518,662)</td><td>\$ 0</td><td>\$ (1,890,518,662)</td><td></td><td>\$ (189,051,866)</td><td>\$ (1,701,466,796)</td></tr></table>			Remaining Deferrals							Fiscal	of Excess (Shortfall)						Year	of Investment	Offsetting of	Net Deferrals	Years	Recognized for	Remaining after	End	Income	Gains/(Losses)	Remaining	Remaining	this valuation	this valuation		(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)	2015	\$ 0	\$ 0	\$ 0	7	\$ 0	\$ 0	2016	0	0	0	8	0	0	2017	835,805,307	(835,805,307)	0	9	0	0	2018	(2,726,323,969)	835,805,307	(1,890,518,662)	10	(189,051,866)	(1,701,466,796)	Total	\$ (1,890,518,662)	\$ 0	\$ (1,890,518,662)		\$ (189,051,866)	\$ (1,701,466,796)
Remaining Deferrals																																																																								
Fiscal	of Excess (Shortfall)																																																																							
Year	of Investment	Offsetting of	Net Deferrals	Years	Recognized for	Remaining after																																																																		
End	Income	Gains/(Losses)	Remaining	Remaining	this valuation	this valuation																																																																		
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)																																																																		
2015	\$ 0	\$ 0	\$ 0	7	\$ 0	\$ 0																																																																		
2016	0	0	0	8	0	0																																																																		
2017	835,805,307	(835,805,307)	0	9	0	0																																																																		
2018	(2,726,323,969)	835,805,307	(1,890,518,662)	10	(189,051,866)	(1,701,466,796)																																																																		
Total	\$ (1,890,518,662)	\$ 0	\$ (1,890,518,662)		\$ (189,051,866)	\$ (1,701,466,796)																																																																		
9. Preliminary Actuarial value of assets at December 31 (Item 6 - Item 8)	\$	29,055,971,226																																																																						
10. Corridor Limits																																																																								
a. 85% of market value	\$	23,251,328,766																																																																						
b. 115% of market value		31,457,680,095																																																																						
c. 33% adjustment back to corridor limits (if applicable)		-																																																																						
11. Final actuarial value of assets at December 31 (Item 9 + Item 10c)	\$	29,055,971,226																																																																						
12. Asset gain (loss) for year (Item 11 - Item 5)	\$	(189,051,866)																																																																						
13. Return on the Actuarial Value of Assets		6.06%																																																																						
14. Ratio of actuarial value to market value		106.2%																																																																						

Notes: Remaining deferrals in Column (1) for prior years are from last year's report column (6). The number in the current year is the difference between the remaining deferrals in for prior years and the total Excess/(Shortfall) return shown in Item 7. Column 2 is a direct offset of the current year's excess/(shortfall) return against prior years' excess/(shortfall) of the opposite type.

EXHIBIT IV

Texas Municipal Retirement System

CHANGES IN CONTRIBUTION RATES FROM 2019 TO 2020,
WITHOUT IMPACT OF STATUTORY MAXIMUM OR PHASE-IN
CITIES WITH 500 OR MORE CONTRIBUTING MEMBERS

CITY NAME	RETIREMENT PLAN CONTRIBUTION RATES ONLY				TOTAL CHANGE
	NORMAL COST		PRIOR SERVICE		
	2019	2020	2019	2020	
Abilene	7.63%	7.63%	3.30%	3.42%	0.12%
Allen	10.42%	10.43%	3.61%	3.57%	-0.03%
Amarillo	7.15%	7.12%	5.03%	5.09%	0.03%
Arlington	9.27%	9.26%	6.54%	6.87%	0.32%
Baytown	9.90%	9.86%	7.73%	7.47%	-0.30%
Beaumont	9.74%	9.70%	9.48%	9.71%	0.19%
Brownsville	10.53%	10.56%	6.54%	6.30%	-0.21%
Brownsville PUB	10.20%	10.18%	7.25%	7.03%	-0.24%
Bryan	8.88%	8.86%	6.11%	6.33%	0.20%
Carrollton	8.35%	8.33%	3.60%	3.79%	0.17%
College Station	8.56%	8.53%	4.64%	4.66%	-0.01%
Corpus Christi	9.68%	9.67%	14.93%	14.94%	0.00%
Denton	10.00%	10.03%	7.00%	7.26%	0.29%
Edinburg	8.40%	8.67%	5.84%	5.65%	0.08%
Flower Mound	8.00%	7.90%	2.67%	2.87%	0.10%
Frisco	11.25%	11.16%	2.96%	2.91%	-0.14%
Garland	8.52%	8.51%	2.27%	2.52%	0.24%
Georgetown	9.08%	9.08%	3.15%	3.05%	-0.10%
Grand Prairie	10.71%	10.67%	6.16%	6.16%	-0.04%
Grapevine	11.44%	11.48%	7.14%	7.05%	-0.05%
Irving	9.53%	9.46%	4.81%	5.00%	0.12%
Killeen	5.78%	5.77%	5.20%	5.50%	0.29%
Laredo	9.99%	9.96%	10.79%	10.81%	-0.01%
League City	9.35%	9.35%	5.70%	5.37%	-0.33%
Lewisville	10.20%	10.25%	6.08%	6.32%	0.29%
Longview	7.21%	7.19%	3.54%	3.67%	0.11%
Lubbock	9.91%	9.92%	7.80%	7.65%	-0.14%
McAllen	4.85%	4.83%	2.91%	2.98%	0.05%
McKinney	11.51%	11.51%	3.56%	3.39%	-0.17%
Mesquite	8.13%	8.14%	8.38%	8.48%	0.11%
Midland	8.59%	8.61%	5.62%	5.80%	0.20%
Mission	6.41%	6.45%	2.01%	2.07%	0.10%
New Braunfels	11.21%	11.22%	5.75%	5.63%	-0.11%
North Richland Hills	11.00%	10.98%	5.15%	5.36%	0.19%
Odessa	7.86%	7.90%	5.21%	5.54%	0.37%
Pasadena	9.22%	9.23%	4.23%	4.23%	0.01%
Pearland	10.13%	10.02%	3.17%	3.12%	-0.16%
Pharr	5.25%	5.30%	2.64%	2.56%	-0.03%
Plano	11.34%	11.33%	5.33%	5.38%	0.04%
Port Arthur	7.01%	6.99%	6.79%	6.75%	-0.06%
Richardson	7.96%	7.97%	6.48%	6.75%	0.28%
Round Rock	10.77%	10.78%	4.56%	4.57%	0.02%
San Angelo	8.49%	8.39%	8.97%	9.04%	-0.03%
San Antonio	6.81%	6.78%	4.85%	4.89%	0.01%
San Antonio Water System	2.06%	2.04%	1.54%	1.60%	0.04%
San Marcos	10.38%	10.31%	6.96%	6.98%	-0.05%
Sugar Land	11.08%	11.03%	3.70%	3.57%	-0.18%
Temple	10.10%	10.12%	6.33%	6.79%	0.48%
Tyler	9.23%	9.23%	11.66%	11.76%	0.10%
Victoria	7.70%	7.61%	8.89%	8.69%	-0.29%
Waco	7.54%	7.50%	6.48%	6.83%	0.31%
Wichita Falls	5.49%	5.53%	7.28%	7.75%	0.51%
Average - 52 Cities	8.84%	8.83%	5.74%	5.80%	0.05%

EXHIBIT V

TEXAS MUNICIPAL RETIREMENT SYSTEM

CITIES WITH THE 2020 RETIREMENT RATE (INCLUDING PHASE-IN, IF APPLICABLE)
AT THE STATUTORY MAXIMUM, BASED ON THE DECEMBER 31, 2018 VALUATION

CITY NAME	<u>2019 RETIREMENT PLAN ONLY</u>		<u>2020 RETIREMENT PLAN ONLY</u>		RATE LIMITED TO STATUTORY MAXIMUM
	FULL RATE	PHASE IN MINIMUM	FULL RATE	PHASE IN MINIMUM	
Gruver	12.94%	11.96%	14.49%	14.01%	12.50%
Jewett	9.32%	9.32%	10.60%	10.60%	9.50%

EXHIBIT VI

TEXAS MUNICIPAL RETIREMENT SYSTEM

CITIES BEGINNING PARTICIPATION IN 2018

CITY NUMBER	CITY NAME	PARTICIPATION DATE	CONTRIBUTING MEMBERS	ANNUAL COMPENSATION	NORMAL COST	PRIOR SERVICE	TOTAL
00322	Crowell	10-18	8	\$ 208,957	1.59%	3.94%	5.53%
00527	Gordon	10-18	3	\$ 125,423	1.83%	0.90%	2.73%
00623	Horizon City	01-18	73	\$ 3,069,050	2.81%	3.08%	5.89%
00808	Marquez	11-18	3	\$ 93,490	2.21%	16.60%	18.81%
01183	Simonton	10-18	2	\$ 99,854	1.55%	0.85%	2.40%

SECTION 2

2020 CONTRIBUTION RATES, INCLUDING A COMPARISON WITH 2019 RATES

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
4	Abernathy	18	16	2.60%	1.41%	4.01%	0.29%	4.30%	2.64%	1.21%	3.85%	0.27%	4.12%	-0.18%	4.12%	7.50%
6	Abilene	1,031	1,026	7.63%	3.30%	10.93%	0.25%	11.18%	7.63%	3.42%	11.05%	0.25%	11.30%	0.12%	11.30%	NO MAX
7	Addison	257	263	8.35%	2.34%	10.69%	0.17%	10.86%	8.43%	2.63%	11.06%	0.16%	11.22%	0.36%	11.22%	15.50%
8	Agua Dulce	3	4	2.29%	6.79%	9.08%	0.17%	9.25%	2.13%	5.64%	7.77%	0.16%	7.93%	-1.32%	7.93%	NO MAX
10	Alamo	140	147	4.87%	2.00%	6.87%	0.20%	7.07%	4.99%	1.31%	6.30%	0.19%	6.49%	-0.58%	6.49%	9.50%
12	Alamo Heights	93	97	9.83%	7.01%	16.84%	0.21%	17.05%	9.88%	7.03%	16.91%	0.22%	17.13%	0.08%	17.13%	NO MAX
14	Alba	5	5	1.78%	0.66%	2.44%	0.19%	2.63%	1.76%	0.20%	1.96%	0.21%	2.17%	-0.46%	2.17%	NO MAX
16	Albany	17	16	4.09%	1.15%	5.24%	0.39%	5.63%	4.06%	1.42%	5.48%	0.44%	5.92%	0.29%	5.92%	9.50%
17	Aledo	14	13	7.15%	0.31%	7.46%	0.21%	7.67%	7.04%	0.46%	7.50%	0.17%	7.67%	0.00%	7.67%	NO MAX
18	Alice	208	206	5.26%	-0.45%	4.81%	0.00%	4.81%	5.22%	-0.42%	4.80%	0.00%	4.80%	-0.01%	4.80%	11.50%
19	Allen	737	751	10.42%	3.61%	14.03%	0.15%	14.18%	10.43%	3.57%	14.00%	0.15%	14.15%	-0.03%	14.15%	NO MAX
20	Alpine	72	79	3.61%	-2.55%	1.06%	0.19%	1.25%	3.51%	-2.63%	0.88%	0.19%	1.07%	-0.18%	1.07%	11.50%
22	Alto	13	14	10.46%	1.12%	11.58%	0.25%	11.83%	9.85%	0.90%	10.75%	0.22%	10.97%	-0.86%	10.97%	13.50%
23	Alton	78	83	12.37%	1.53%	13.90%	0.16%	14.06%	12.36%	0.98%	13.34%	0.16%	13.50%	-0.56%	12.80%	13.50%
24	Alvarado	59	64	4.59%	0.60%	5.19%	0.15%	5.34%	4.75%	0.61%	5.36%	0.15%	5.51%	0.17%	5.51%	NO MAX
26	Alvin	210	214	9.98%	6.90%	16.88%	0.16%	17.04%	9.86%	7.14%	17.00%	0.16%	17.16%	0.12%	17.16%	NO MAX
28	Alvord	7	7	4.15%	1.29%	5.44%	0.23%	5.67%	4.98%	0.80%	5.78%	0.30%	6.08%	0.41%	6.08%	NO MAX
30	Amarillo	1,823	1,831	7.15%	5.03%	12.18%	0.00%	12.18%	7.12%	5.09%	12.21%	0.00%	12.21%	0.03%	12.21%	NO MAX
32	Amherst	4	3	4.13%	-4.13%	0.00%	0.00%	0.00%	4.33%	-4.33%	0.00%	0.00%	0.00%	0.00%	0.00%	NO MAX
34	Anahuac	9	11	7.08%	1.67%	8.75%	0.13%	8.88%	7.04%	1.62%	8.66%	0.15%	8.81%	-0.07%	8.81%	NO MAX
36	Andrews	72	70	8.77%	7.20%	15.97%	0.00%	15.97%	8.72%	7.26%	15.98%	0.00%	15.98%	0.01%	15.98%	NO MAX
38	Angleton	120	124	8.54%	3.81%	12.35%	0.23%	12.58%	8.53%	3.68%	12.21%	0.23%	12.44%	-0.14%	12.44%	NO MAX
40	Anna	64	76	13.17%	1.50%	14.67%	0.13%	14.80%	12.78%	1.31%	14.09%	0.13%	14.22%	-0.58%	14.22%	NO MAX
41	Annetta	3	2	9.28%	0.71%	9.99%	0.62%	10.61%	8.60%	0.22%	8.82%	0.10%	8.92%	-1.69%	8.92%	NO MAX
44	Anson	24	25	1.04%	-0.50%	0.54%	0.19%	0.73%	1.14%	-0.57%	0.57%	0.22%	0.79%	0.06%	0.79%	7.50%
45	Anthony	31	31	1.51%	1.48%	2.99%	0.13%	3.12%	1.44%	1.75%	3.19%	0.15%	3.34%	0.22%	3.34%	NO MAX
48	Aransas Pass	105	108	7.29%	2.42%	9.71%	0.20%	9.91%	7.21%	2.58%	9.79%	0.21%	10.00%	0.09%	10.00%	NO MAX
50	Archer City	18	18	3.61%	0.57%	4.18%	0.31%	4.49%	3.63%	0.62%	4.25%	0.34%	4.59%	0.10%	4.59%	9.50%
49	Arcola	12	14	2.01%	2.80%	4.81%	0.18%	4.99%	2.09%	1.96%	4.05%	0.18%	4.23%	-0.76%	4.23%	NO MAX
51	Argyle	26	26	11.26%	2.42%	13.68%	0.00%	13.68%	11.56%	1.86%	13.42%	0.00%	13.42%	-0.26%	13.42%	NO MAX
52	Arlington	2,495	2,551	9.27%	6.54%	15.81%	0.15%	15.96%	9.26%	6.87%	16.13%	0.16%	16.29%	0.33%	16.29%	NO MAX
54	Arp	8	7	2.22%	-0.54%	1.68%	0.18%	1.86%	2.41%	-1.27%	1.14%	0.12%	1.26%	-0.60%	1.26%	7.50%
60	Aspermont	6	6	1.42%	-1.42%	0.00%	0.19%	0.19%	1.41%	-1.41%	0.00%	0.20%	0.20%	0.01%	0.20%	7.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
62	Athens	126	121	8.98%	6.89%	15.87%	0.18%	16.05%	9.05%	6.41%	15.46%	0.16%	15.62%	-0.43%	15.62%	NO MAX
64	Atlanta	41	41	3.49%	0.09%	3.58%	0.21%	3.79%	3.45%	-0.06%	3.39%	0.23%	3.62%	-0.17%	3.62%	7.50%
66	Aubrey	49	63	5.83%	0.30%	6.13%	0.16%	6.29%	5.62%	0.29%	5.91%	0.15%	6.06%	-0.23%	6.06%	13.50%
74	Avinger	2	2	3.00%	-0.93%	2.07%	0.20%	2.27%	3.01%	-0.99%	2.02%	0.22%	2.24%	-0.03%	2.24%	9.50%
75	Azle	117	126	8.73%	3.50%	12.23%	0.18%	12.41%	8.68%	3.82%	12.50%	0.17%	12.67%	0.26%	12.67%	12.50%
77	Baird	11	11	1.57%	-0.70%	0.87%	0.15%	1.02%	1.71%	-0.63%	1.08%	0.17%	1.25%	0.23%	1.25%	NO MAX
78	Balch Springs	168	176	9.44%	4.39%	13.83%	0.15%	13.98%	9.30%	4.30%	13.60%	0.16%	13.76%	-0.22%	13.76%	NO MAX
79	Balcones Heights	55	53	8.73%	-0.16%	8.57%	0.21%	8.78%	8.61%	-0.69%	7.92%	0.21%	8.13%	-0.65%	8.13%	NO MAX
80	Ballinger	37	40	3.30%	0.40%	3.70%	0.29%	3.99%	3.21%	0.35%	3.56%	0.29%	3.85%	-0.14%	3.85%	7.50%
82	Balmorehea	1	1	1.66%	-1.66%	0.00%	0.07%	0.07%	1.66%	-1.66%	0.00%	0.08%	0.08%	0.01%	0.08%	NO MAX
83	Bandera	20	21	11.09%	-0.69%	10.40%	0.41%	10.81%	11.16%	-0.34%	10.82%	0.26%	11.08%	0.27%	11.08%	NO MAX
84	Bangs	15	12	10.86%	1.94%	12.80%	0.35%	13.15%	10.71%	1.62%	12.33%	0.33%	12.66%	-0.49%	12.66%	NO MAX
90	Bartlett	13	12	8.93%	-1.06%	7.87%	0.25%	8.12%	9.25%	-1.03%	8.22%	0.33%	8.55%	0.43%	8.55%	11.50%
91	Bartonville	6	7	7.34%	7.94%	15.28%	0.11%	15.39%	7.16%	8.39%	15.55%	0.11%	15.66%	0.27%	15.11%	NO MAX
92	Bastrop	127	131	8.54%	2.83%	11.37%	0.17%	11.54%	8.46%	2.83%	11.29%	0.18%	11.47%	-0.07%	11.47%	12.50%
94	Bay City	160	159	5.73%	3.78%	9.51%	0.23%	9.74%	5.68%	3.94%	9.62%	0.22%	9.84%	0.10%	9.84%	11.50%
93	Bayou Vista	6	8	3.72%	-0.90%	2.82%	0.19%	3.01%	3.35%	-0.69%	2.66%	0.13%	2.79%	-0.22%	2.79%	NO MAX
96	Baytown	819	834	9.90%	7.73%	17.63%	0.15%	17.78%	9.86%	7.47%	17.33%	0.15%	17.48%	-0.30%	17.48%	NO MAX
98	Beaumont	992	1,000	9.74%	9.48%	19.22%	0.00%	19.22%	9.70%	9.71%	19.41%	0.00%	19.41%	0.19%	19.41%	NO MAX
100	Bedford	339	343	5.63%	3.39%	9.02%	0.00%	9.02%	5.59%	3.33%	8.92%	0.00%	8.92%	-0.10%	8.92%	NO MAX
101	Bee Cave	42	44	8.23%	0.85%	9.08%	0.16%	9.24%	8.21%	0.76%	8.97%	0.15%	9.12%	-0.12%	9.12%	13.50%
102	Beeville	112	97	3.65%	-2.82%	0.83%	0.00%	0.83%	3.63%	-3.20%	0.43%	0.00%	0.43%	-0.40%	0.43%	11.50%
106	Bellaire	156	153	11.22%	9.23%	20.45%	0.20%	20.65%	11.23%	8.97%	20.20%	0.21%	20.41%	-0.24%	20.41%	NO MAX
109	Bellmead	77	74	8.77%	0.04%	8.81%	0.19%	9.00%	8.60%	0.03%	8.63%	0.19%	8.82%	-0.18%	8.82%	12.50%
110	Bells	8	10	1.53%	-1.53%	0.00%	0.11%	0.11%	1.67%	-1.67%	0.00%	0.11%	0.11%	0.00%	0.11%	NO MAX
112	Bellville	54	50	6.25%	9.13%	15.38%	0.25%	15.63%	6.35%	9.43%	15.78%	0.27%	16.05%	0.42%	16.05%	NO MAX
114	Belton	174	170	6.40%	1.50%	7.90%	0.16%	8.06%	6.56%	1.55%	8.11%	0.17%	8.28%	0.22%	8.28%	12.50%
118	Benbrook	122	121	11.42%	4.76%	16.18%	0.14%	16.32%	11.60%	4.84%	16.44%	0.15%	16.59%	0.27%	16.59%	NO MAX
121	Berryville	2	2	3.81%	-0.78%	3.03%	0.40%	3.43%	3.79%	-0.40%	3.39%	0.44%	3.83%	0.40%	3.83%	9.50%
123	Bertram	10	13	1.99%	-0.01%	1.98%	0.00%	1.98%	1.62%	0.08%	1.70%	0.00%	1.70%	-0.28%	1.70%	7.50%
124	Big Lake	24	26	6.89%	10.78%	17.67%	0.23%	17.90%	6.98%	10.53%	17.51%	0.25%	17.76%	-0.14%	17.76%	NO MAX
126	Big Sandy	11	10	1.45%	0.99%	2.44%	0.22%	2.66%	1.36%	1.13%	2.49%	0.22%	2.71%	0.05%	2.71%	7.50%
128	Big Spring	178	175	8.91%	8.28%	17.19%	0.29%	17.48%	8.86%	8.58%	17.44%	0.30%	17.74%	0.26%	17.74%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
132	Bishop	22	23	2.98%	0.53%	3.51%	0.24%	3.75%	2.98%	0.54%	3.52%	0.25%	3.77%	0.02%	3.77%	11.50%
134	Blanco	22	21	6.07%	0.40%	6.47%	0.23%	6.70%	6.07%	0.48%	6.55%	0.18%	6.73%	0.03%	6.73%	13.50%
140	Blooming Grove	5	5	6.68%	3.30%	9.98%	0.14%	10.12%	6.65%	4.13%	10.78%	0.15%	10.93%	0.81%	10.93%	11.50%
142	Blossom	4	4	5.82%	-2.10%	3.72%	0.53%	4.25%	5.81%	-1.70%	4.11%	0.58%	4.69%	0.44%	4.69%	11.50%
143	Blue Mound	23	23	4.51%	0.13%	4.64%	0.10%	4.74%	4.49%	0.19%	4.68%	0.10%	4.78%	0.04%	4.78%	NO MAX
144	Blue Ridge	5	5	2.92%	-1.11%	1.81%	0.25%	2.06%	2.99%	-1.20%	1.79%	0.19%	1.98%	-0.08%	1.98%	NO MAX
148	Boerne	250	259	11.45%	6.89%	18.34%	0.17%	18.51%	11.49%	6.86%	18.35%	0.17%	18.52%	0.01%	18.52%	NO MAX
150	Bogata	9	10	1.57%	-1.57%	0.00%	0.16%	0.16%	1.48%	-1.34%	0.14%	0.16%	0.30%	0.14%	0.30%	7.50%
152	Bonham	113	111	4.43%	0.88%	5.31%	0.00%	5.31%	4.45%	0.70%	5.15%	0.00%	5.15%	-0.16%	5.15%	10.50%
154	Booker	9	10	5.40%	0.45%	5.85%	0.36%	6.21%	5.64%	0.00%	5.64%	0.34%	5.98%	-0.23%	5.98%	9.50%
156	Borger	168	170	9.32%	5.25%	14.57%	0.20%	14.77%	9.18%	4.69%	13.87%	0.19%	14.06%	-0.71%	14.06%	NO MAX
158	Bovina	11	11	1.19%	-1.19%	0.00%	0.18%	0.18%	1.19%	-0.96%	0.23%	0.19%	0.42%	0.24%	0.42%	7.50%
160	Bowie	75	80	7.07%	3.55%	10.62%	0.21%	10.83%	7.04%	2.53%	9.57%	0.25%	9.82%	-1.01%	9.82%	11.50%
162	Boyd	14	16	4.53%	-0.29%	4.24%	0.00%	4.24%	4.29%	-0.19%	4.10%	0.00%	4.10%	-0.14%	4.10%	11.50%
166	Brady	94	98	8.45%	1.79%	10.24%	0.24%	10.48%	8.41%	1.42%	9.83%	0.26%	10.09%	-0.39%	10.09%	12.50%
170	Brazoria	26	28	6.18%	0.51%	6.69%	0.22%	6.91%	5.78%	-0.14%	5.64%	0.21%	5.85%	-1.06%	5.85%	11.50%
172	Breckenridge	65	66	4.66%	2.76%	7.42%	0.27%	7.69%	4.69%	2.24%	6.93%	0.28%	7.21%	-0.48%	7.21%	NO MAX
174	Bremond	7	6	5.71%	10.24%	15.95%	0.26%	16.21%	5.67%	10.30%	15.97%	0.31%	16.28%	0.07%	16.28%	NO MAX
176	Brenham	207	206	5.20%	4.81%	10.01%	0.00%	10.01%	5.02%	4.65%	9.67%	0.00%	9.67%	-0.34%	9.67%	11.50%
177	Bridge City	52	58	9.44%	5.63%	15.07%	0.28%	15.35%	9.34%	5.79%	15.13%	0.28%	15.41%	0.06%	15.41%	NO MAX
178	Bridgeport	59	57	8.87%	5.01%	13.88%	0.15%	14.03%	9.20%	4.47%	13.67%	0.20%	13.87%	-0.16%	13.87%	NO MAX
180	Bronte	3	3	1.95%	11.03%	12.98%	0.17%	13.15%	2.58%	10.51%	13.09%	0.24%	13.33%	0.18%	13.21%	NO MAX
182	Brookshire	40	40	6.89%	1.68%	8.57%	0.19%	8.76%	6.87%	1.81%	8.68%	0.19%	8.87%	0.11%	8.87%	12.50%
184	Brownfield	86	91	5.37%	-0.26%	5.11%	0.00%	5.11%	5.38%	-1.46%	3.92%	0.00%	3.92%	-1.19%	3.92%	NO MAX
186	Brownsboro	10	9	1.85%	8.90%	10.75%	0.37%	11.12%	1.82%	8.59%	10.41%	0.41%	10.82%	-0.30%	10.82%	NO MAX
10188	Brownsville	1,148	1,144	10.53%	6.54%	17.07%	0.18%	17.25%	10.56%	6.30%	16.86%	0.18%	17.04%	-0.21%	17.04%	NO MAX
20188	Brownsville PUB	587	585	10.20%	7.25%	17.45%	0.20%	17.65%	10.18%	7.03%	17.21%	0.21%	17.42%	-0.23%	17.42%	NO MAX
10190	Brownwood	230	227	8.54%	4.59%	13.13%	0.00%	13.13%	8.54%	4.83%	13.37%	0.00%	13.37%	0.24%	13.37%	NO MAX
30190	Brownwood Health Dept.	12	11	8.24%	1.71%	9.95%	0.00%	9.95%	7.94%	2.70%	10.64%	0.00%	10.64%	0.69%	10.64%	NO MAX
20190	Brownwood Public Library	9	10	5.75%	-1.05%	4.70%	0.00%	4.70%	5.37%	-0.93%	4.44%	0.00%	4.44%	-0.26%	4.44%	11.50%
195	Bruceville-Eddy	18	17	5.55%	-0.31%	5.24%	0.16%	5.40%	5.89%	-0.17%	5.72%	0.17%	5.89%	0.49%	5.89%	11.50%
192	Bryan	875	877	8.88%	6.11%	14.99%	0.00%	14.99%	8.86%	6.33%	15.19%	0.00%	15.19%	0.20%	15.19%	NO MAX
193	Bryson	3	3	2.64%	-2.64%	0.00%	0.00%	0.00%	2.95%	-2.95%	0.00%	0.00%	0.00%	0.00%	0.00%	9.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
194	Buda	93	108	11.67%	2.27%	13.94%	0.16%	14.10%	11.75%	2.01%	13.76%	0.17%	13.93%	-0.17%	13.93%	NO MAX
196	Buffalo	15	17	4.72%	0.10%	4.82%	0.38%	5.20%	4.77%	0.05%	4.82%	0.42%	5.24%	0.04%	5.24%	11.50%
198	Bullard	26	27	5.94%	1.74%	7.68%	0.18%	7.86%	5.89%	1.59%	7.48%	0.19%	7.67%	-0.19%	7.67%	11.50%
203	Bulverde	26	27	7.53%	1.52%	9.05%	0.12%	9.17%	8.52%	1.48%	10.00%	0.14%	10.14%	0.97%	10.14%	NO MAX
199	Bunker Hill Village	7	8	9.67%	2.03%	11.70%	0.22%	11.92%	9.52%	0.66%	10.18%	0.20%	10.38%	-1.54%	10.38%	NO MAX
200	Burkburnett	75	72	6.42%	3.72%	10.14%	0.25%	10.39%	6.47%	3.81%	10.28%	0.27%	10.55%	0.16%	10.55%	NO MAX
202	Burleson	328	335	10.39%	4.92%	15.31%	0.14%	15.45%	10.45%	5.02%	15.47%	0.14%	15.61%	0.16%	15.61%	NO MAX
204	Burnet	110	116	9.29%	3.77%	13.06%	0.17%	13.23%	9.23%	3.77%	13.00%	0.16%	13.16%	-0.07%	13.16%	13.50%
206	Burton	1	1	1.64%	8.45%	10.09%	0.11%	10.20%	1.64%	8.72%	10.36%	0.11%	10.47%	0.27%	10.47%	NO MAX
207	Cactus	39	39	5.06%	0.03%	5.09%	0.14%	5.23%	5.15%	0.03%	5.18%	0.15%	5.33%	0.10%	5.33%	13.50%
208	Caddo Mills	13	12	5.56%	0.82%	6.38%	0.17%	6.55%	5.44%	0.35%	5.79%	0.15%	5.94%	-0.61%	5.94%	NO MAX
210	Caldwell	59	58	5.84%	3.48%	9.32%	0.38%	9.70%	5.84%	2.29%	8.13%	0.39%	8.52%	-1.18%	8.52%	11.50%
212	Calvert	11	11	1.96%	-0.92%	1.04%	0.29%	1.33%	2.05%	-0.89%	1.16%	0.33%	1.49%	0.16%	1.49%	NO MAX
214	Cameron	43	41	5.25%	4.84%	10.09%	0.26%	10.35%	5.39%	4.90%	10.29%	0.26%	10.55%	0.20%	10.55%	NO MAX
216	Campbell	2	2	1.70%	40.11%	41.81%	0.19%	42.00%	1.70%	40.05%	41.75%	0.22%	41.97%	-0.03%	41.97%	NO MAX
220	Canadian	20	20	9.39%	6.84%	16.23%	0.18%	16.41%	9.55%	7.55%	17.10%	0.20%	17.30%	0.89%	17.30%	NO MAX
221	Caney City	4	4	1.96%	-0.05%	1.91%	0.08%	1.99%	1.81%	-0.38%	1.43%	0.08%	1.51%	-0.48%	1.51%	NO MAX
222	Canton	69	66	8.10%	3.98%	12.08%	0.21%	12.29%	8.08%	3.53%	11.61%	0.23%	11.84%	-0.45%	11.84%	NO MAX
224	Canyon	90	100	10.52%	4.81%	15.33%	0.21%	15.54%	10.35%	3.77%	14.12%	0.20%	14.32%	-1.22%	14.32%	NO MAX
227	Carmine	2	2	2.68%	-0.01%	2.67%	0.08%	2.75%	2.68%	-0.73%	1.95%	0.08%	2.03%	-0.72%	2.03%	7.50%
228	Carrizo Springs	40	40	4.75%	0.49%	5.24%	0.36%	5.60%	4.81%	0.52%	5.33%	0.30%	5.63%	0.03%	5.63%	9.50%
230	Carrollton	800	802	8.35%	3.60%	11.95%	0.00%	11.95%	8.33%	3.79%	12.12%	0.00%	12.12%	0.17%	12.12%	NO MAX
232	Carthage	73	73	9.07%	9.69%	18.76%	0.27%	19.03%	9.00%	8.97%	17.97%	0.28%	18.25%	-0.78%	18.25%	NO MAX
231	Castle Hills	67	60	7.84%	3.59%	11.43%	0.16%	11.59%	8.46%	3.92%	12.38%	0.17%	12.55%	0.96%	12.55%	NO MAX
234	Castroville	40	42	7.62%	1.44%	9.06%	0.31%	9.37%	7.24%	1.51%	8.75%	0.30%	9.05%	-0.32%	9.05%	11.50%
238	Cedar Hill	336	340	9.69%	4.02%	13.71%	0.15%	13.86%	9.68%	4.11%	13.79%	0.15%	13.94%	0.08%	13.94%	NO MAX
239	Cedar Park	445	473	9.53%	4.79%	14.32%	0.12%	14.44%	9.65%	4.71%	14.36%	0.12%	14.48%	0.04%	14.48%	NO MAX
240	Celeste	4	2	2.35%	5.25%	7.60%	0.24%	7.84%	3.04%	5.89%	8.93%	0.46%	9.39%	1.55%	9.39%	NO MAX
242	Celina	105	147	6.47%	-0.13%	6.34%	0.13%	6.47%	6.55%	-0.08%	6.47%	0.15%	6.62%	0.15%	6.62%	13.50%
244	Center	71	69	9.83%	3.33%	13.16%	0.16%	13.32%	9.83%	2.57%	12.40%	0.18%	12.58%	-0.74%	12.58%	NO MAX
246	Centerville	5	5	6.75%	14.91%	21.66%	0.00%	21.66%	6.84%	15.29%	22.13%	0.00%	22.13%	0.47%	21.92%	NO MAX
247	Chandler	26	26	2.17%	2.53%	4.70%	0.25%	4.95%	2.05%	2.41%	4.46%	0.23%	4.69%	-0.26%	4.69%	NO MAX
248	Charlotte	10	8	4.61%	1.97%	6.58%	0.17%	6.75%	4.66%	-0.87%	3.79%	0.18%	3.97%	-2.78%	3.97%	9.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
249	Chester	2	2	6.90%	-5.36%	1.54%	0.88%	2.42%	6.91%	-6.29%	0.62%	0.95%	1.57%	-0.85%	1.57%	NO MAX
245	Chico	7	7	2.27%	1.73%	4.00%	0.41%	4.41%	2.23%	2.03%	4.26%	0.45%	4.71%	0.30%	4.71%	NO MAX
250	Childress	60	60	9.29%	5.69%	14.98%	0.32%	15.30%	9.17%	6.34%	15.51%	0.31%	15.82%	0.52%	15.82%	NO MAX
251	Chillicothe	6	6	2.02%	7.76%	9.78%	0.20%	9.98%	2.18%	5.15%	7.33%	0.20%	7.53%	-2.45%	7.53%	NO MAX
253	Chireno	6	6	9.70%	10.76%	20.46%	0.24%	20.70%	9.69%	11.39%	21.08%	0.26%	21.34%	0.64%	21.34%	NO MAX
254	Christine	1	1	0.71%	-0.71%	0.00%	0.00%	0.00%	0.71%	-0.71%	0.00%	0.00%	0.00%	0.00%	0.00%	NO MAX
255	Cibolo	123	127	10.97%	1.75%	12.72%	0.15%	12.87%	10.75%	1.74%	12.49%	0.16%	12.65%	-0.22%	12.65%	13.50%
256	Cisco	36	37	6.33%	0.23%	6.56%	0.20%	6.76%	6.24%	0.15%	6.39%	0.21%	6.60%	-0.16%	6.60%	11.50%
258	Clarendon	16	16	2.77%	-1.30%	1.47%	0.60%	2.07%	2.70%	-1.31%	1.39%	0.57%	1.96%	-0.11%	1.96%	9.50%
259	Clarksville	24	26	7.26%	-5.07%	2.19%	0.24%	2.43%	6.74%	-5.18%	1.56%	0.23%	1.79%	-0.64%	1.79%	11.50%
260	Clarksville City	4	4	5.28%	-1.25%	4.03%	0.17%	4.20%	5.23%	-0.83%	4.40%	0.20%	4.60%	0.40%	4.60%	NO MAX
263	Clear Lake Shores	17	18	9.22%	1.66%	10.88%	0.20%	11.08%	9.01%	1.64%	10.65%	0.14%	10.79%	-0.29%	10.79%	12.50%
264	Cleburne	285	286	8.04%	7.65%	15.69%	0.22%	15.91%	8.17%	7.89%	16.06%	0.22%	16.28%	0.37%	16.28%	NO MAX
266	Cleveland	77	83	6.60%	4.17%	10.77%	0.25%	11.02%	6.54%	3.99%	10.53%	0.23%	10.76%	-0.26%	10.76%	11.50%
268	Clifton	25	27	1.95%	-0.19%	1.76%	0.35%	2.11%	1.97%	-0.04%	1.93%	0.38%	2.31%	0.20%	2.31%	7.50%
271	Clute	90	94	9.74%	0.51%	10.25%	0.19%	10.44%	9.73%	0.56%	10.29%	0.16%	10.45%	0.01%	10.45%	13.50%
272	Clyde	32	33	9.55%	3.41%	12.96%	0.20%	13.16%	9.80%	3.18%	12.98%	0.22%	13.20%	0.04%	13.20%	13.50%
274	Coahoma	5	5	6.50%	-0.47%	6.03%	0.23%	6.26%	6.50%	-0.23%	6.27%	0.25%	6.52%	0.26%	6.52%	11.50%
276	Cockrell Hill	32	31	9.29%	-1.11%	8.18%	0.17%	8.35%	9.60%	-1.52%	8.08%	0.20%	8.28%	-0.07%	8.28%	13.50%
278	Coleman	68	67	8.98%	7.56%	16.54%	0.00%	16.54%	9.27%	7.62%	16.89%	0.00%	16.89%	0.35%	16.89%	NO MAX
280	College Station	905	908	8.56%	4.64%	13.20%	0.00%	13.20%	8.53%	4.66%	13.19%	0.00%	13.19%	-0.01%	13.19%	NO MAX
281	Colleyville	185	177	8.73%	-0.17%	8.56%	0.16%	8.72%	8.61%	0.33%	8.94%	0.16%	9.10%	0.38%	9.10%	13.50%
282	Collinsville	8	8	5.49%	-0.04%	5.45%	0.26%	5.71%	5.30%	0.13%	5.43%	0.25%	5.68%	-0.03%	5.68%	12.50%
283	Colmesneil	5	4	3.69%	4.72%	8.41%	0.07%	8.48%	3.70%	5.35%	9.05%	0.09%	9.14%	0.66%	9.14%	NO MAX
284	Colorado City	40	45	8.48%	-0.09%	8.39%	0.40%	8.79%	8.28%	-0.24%	8.04%	0.43%	8.47%	-0.32%	8.47%	12.50%
286	Columbus	38	38	7.79%	4.60%	12.39%	0.22%	12.61%	7.81%	4.65%	12.46%	0.25%	12.71%	0.10%	12.71%	NO MAX
288	Comanche	26	25	3.26%	1.46%	4.72%	0.31%	5.03%	3.28%	1.69%	4.97%	0.34%	5.31%	0.28%	5.31%	7.50%
289	Combes	18	17	1.49%	5.26%	6.75%	0.22%	6.97%	1.57%	5.35%	6.92%	0.24%	7.16%	0.19%	7.16%	NO MAX
290	Commerce	78	75	6.69%	1.87%	8.56%	0.23%	8.79%	6.78%	1.72%	8.50%	0.23%	8.73%	-0.06%	8.73%	11.50%
294	Conroe	419	430	9.65%	6.52%	16.17%	0.00%	16.17%	9.68%	6.56%	16.24%	0.00%	16.24%	0.07%	16.24%	NO MAX
295	Converse	158	165	9.63%	4.12%	13.75%	0.14%	13.89%	9.55%	4.17%	13.72%	0.13%	13.85%	-0.04%	13.85%	NO MAX
298	Cooper	13	13	3.17%	1.76%	4.93%	0.30%	5.23%	3.20%	1.82%	5.02%	0.27%	5.29%	0.06%	5.29%	8.50%
299	Coppell	378	379	11.06%	4.47%	15.53%	0.16%	15.69%	10.86%	4.71%	15.57%	0.15%	15.72%	0.03%	15.72%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
297	Copper Canyon	3	3	10.72%	2.32%	13.04%	0.51%	13.55%	10.70%	2.59%	13.29%	0.55%	13.84%	0.29%	12.24%	NO MAX
300	Copperas Cove	252	244	8.24%	3.72%	11.96%	0.20%	12.16%	8.17%	3.89%	12.06%	0.20%	12.26%	0.10%	12.26%	NO MAX
301	Corinth	143	144	11.08%	4.22%	15.30%	0.14%	15.44%	11.33%	4.01%	15.34%	0.13%	15.47%	0.03%	15.47%	NO MAX
302	Corpus Christi	2,321	2,419	9.68%	14.93%	24.61%	0.00%	24.61%	9.67%	14.94%	24.61%	0.00%	24.61%	0.00%	24.61%	NO MAX
304	Corrigan	29	26	3.85%	-0.02%	3.83%	0.22%	4.05%	4.08%	-0.11%	3.97%	0.25%	4.22%	0.17%	4.22%	11.50%
306	Corsicana	180	176	7.90%	7.61%	15.51%	0.23%	15.74%	7.96%	7.41%	15.37%	0.23%	15.60%	-0.14%	15.60%	NO MAX
308	Cotulla	37	39	4.76%	1.91%	6.67%	0.31%	6.98%	4.76%	1.85%	6.61%	0.32%	6.93%	-0.05%	6.93%	11.50%
310	Crandall	29	30	11.27%	-0.59%	10.68%	0.18%	10.86%	11.03%	-0.35%	10.68%	0.17%	10.85%	-0.01%	10.85%	13.50%
312	Crane	22	25	9.07%	-0.21%	8.86%	0.20%	9.06%	9.72%	-1.71%	8.01%	0.20%	8.21%	-0.85%	8.21%	15.50%
314	Crawford	5	5	1.35%	-0.37%	0.98%	0.00%	0.98%	1.23%	-0.44%	0.79%	0.00%	0.79%	-0.19%	0.79%	7.50%
316	Crockett	54	52	6.58%	1.52%	8.10%	0.30%	8.40%	6.54%	1.55%	8.09%	0.33%	8.42%	0.02%	8.42%	11.50%
318	Crosbyton	9	10	5.78%	-0.91%	4.87%	0.82%	5.69%	5.43%	-0.41%	5.02%	0.77%	5.79%	0.10%	5.79%	10.50%
320	Cross Plains	8	8	5.22%	3.17%	8.39%	0.22%	8.61%	5.21%	2.95%	8.16%	0.18%	8.34%	-0.27%	8.34%	9.50%
321	Cross Roads	9	11	6.82%	0.55%	7.37%	0.07%	7.44%	7.10%	0.45%	7.55%	0.08%	7.63%	0.19%	7.63%	NO MAX
322	Crowell	N/A	8	1.47%	3.60%	5.07%	0.27%	5.34%	1.59%	3.94%	5.53%	0.28%	5.81%	0.47%	5.81%	NO MAX
323	Crowley	111	115	8.30%	2.47%	10.77%	0.13%	10.90%	8.27%	2.68%	10.95%	0.14%	11.09%	0.19%	11.09%	12.50%
324	Crystal City	50	51	4.05%	-3.20%	0.85%	0.00%	0.85%	4.08%	-3.47%	0.61%	0.00%	0.61%	-0.24%	0.61%	13.50%
326	Cuero	93	90	7.01%	3.33%	10.34%	0.28%	10.62%	6.98%	3.50%	10.48%	0.26%	10.74%	0.12%	10.74%	11.50%
328	Cumby	10	10	1.55%	0.63%	2.18%	0.14%	2.32%	1.33%	0.58%	1.91%	0.13%	2.04%	-0.28%	2.04%	NO MAX
332	Daingerfield	17	18	5.53%	0.61%	6.14%	0.00%	6.14%	5.65%	-0.05%	5.60%	0.00%	5.60%	-0.54%	5.60%	9.50%
334	Daisetta	8	7	2.24%	-0.98%	1.26%	0.37%	1.63%	2.29%	-1.37%	0.92%	0.42%	1.34%	-0.29%	1.34%	NO MAX
336	Dalhart	67	67	4.67%	0.01%	4.68%	0.19%	4.87%	4.61%	0.17%	4.78%	0.20%	4.98%	0.11%	4.98%	11.50%
339	Dalworthington Gardens	26	26	10.18%	11.18%	21.36%	0.12%	21.48%	11.57%	9.42%	20.99%	0.13%	21.12%	-0.36%	21.12%	NO MAX
340	Danbury	10	9	4.58%	1.57%	6.15%	0.17%	6.32%	4.66%	1.08%	5.74%	0.19%	5.93%	-0.39%	5.93%	NO MAX
341	Darrouzett	2	3	2.42%	-0.45%	1.97%	0.07%	2.04%	2.87%	1.26%	4.13%	0.34%	4.47%	2.43%	4.47%	NO MAX
344	Dayton	90	97	5.60%	1.68%	7.28%	0.18%	7.46%	5.74%	1.25%	6.99%	0.16%	7.15%	-0.31%	7.15%	13.50%
352	De Leon	12	11	1.34%	0.18%	1.52%	0.19%	1.71%	1.67%	0.09%	1.76%	0.28%	2.04%	0.33%	2.04%	7.50%
10366	DeSoto	349	341	9.33%	1.60%	10.93%	0.17%	11.10%	9.35%	1.59%	10.94%	0.19%	11.13%	0.03%	11.13%	NO MAX
346	Decatur	110	114	10.77%	3.88%	14.65%	0.25%	14.90%	10.73%	3.57%	14.30%	0.25%	14.55%	-0.35%	14.55%	NO MAX
348	Deer Park	305	305	10.30%	3.80%	14.10%	0.18%	14.28%	10.30%	3.48%	13.78%	0.20%	13.98%	-0.30%	13.98%	NO MAX
350	Dekalb	15	14	3.61%	-0.58%	3.03%	0.19%	3.22%	3.67%	-1.24%	2.43%	0.20%	2.63%	-0.59%	2.63%	9.50%
354	Del Rio	472	477	3.68%	3.76%	7.44%	0.21%	7.65%	3.69%	3.76%	7.45%	0.22%	7.67%	0.02%	7.67%	NO MAX
353	Dell City	3	2	5.24%	5.11%	10.35%	0.13%	10.48%	5.42%	3.75%	9.17%	0.20%	9.37%	-1.11%	9.37%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
356	Denison	216	228	8.43%	3.74%	12.17%	0.00%	12.17%	8.36%	3.80%	12.16%	0.00%	12.16%	-0.01%	12.16%	NO MAX
358	Denton	1,246	1,265	10.00%	7.00%	17.00%	0.18%	17.18%	10.03%	7.26%	17.29%	0.17%	17.46%	0.28%	17.46%	NO MAX
360	Denver City	26	24	6.54%	4.76%	11.30%	0.28%	11.58%	6.59%	4.58%	11.17%	0.24%	11.41%	-0.17%	11.41%	NO MAX
362	Deport	4	3	2.17%	1.01%	3.18%	0.46%	3.64%	1.60%	0.28%	1.88%	0.14%	2.02%	-1.62%	2.02%	NO MAX
370	Devine	40	45	5.90%	10.51%	16.41%	0.16%	16.57%	5.99%	10.63%	16.62%	0.16%	16.78%	0.21%	16.78%	NO MAX
371	Diboll	40	39	9.84%	4.20%	14.04%	0.20%	14.24%	10.01%	4.66%	14.67%	0.19%	14.86%	0.62%	14.86%	NO MAX
372	Dickens	2	2	3.43%	-0.92%	2.51%	0.18%	2.69%	2.82%	-0.85%	1.97%	0.07%	2.04%	-0.65%	2.04%	NO MAX
373	Dickinson	103	92	7.77%	1.69%	9.46%	0.18%	9.64%	7.67%	1.82%	9.49%	0.19%	9.68%	0.04%	9.68%	13.50%
374	Dilley	33	37	6.90%	3.35%	10.25%	0.23%	10.48%	6.91%	3.23%	10.14%	0.18%	10.32%	-0.16%	10.32%	12.50%
376	Dimmitt	32	28	7.33%	-3.61%	3.72%	0.00%	3.72%	7.39%	-3.37%	4.02%	0.00%	4.02%	0.30%	4.02%	12.50%
382	Donna	131	138	7.41%	3.80%	11.21%	0.00%	11.21%	7.49%	3.57%	11.06%	0.00%	11.06%	-0.15%	11.06%	13.50%
379	Double Oak	11	11	5.98%	0.67%	6.65%	0.19%	6.84%	6.49%	0.56%	7.05%	0.33%	7.38%	0.54%	7.38%	NO MAX
383	Dripping Springs	21	24	5.37%	0.99%	6.36%	0.10%	6.46%	5.22%	0.75%	5.97%	0.11%	6.08%	-0.38%	6.08%	NO MAX
385	Driscoll	8	7	1.89%	0.04%	1.93%	0.11%	2.04%	1.95%	0.00%	1.95%	0.29%	2.24%	0.20%	2.24%	NO MAX
384	Dublin	39	43	9.18%	3.25%	12.43%	0.19%	12.62%	9.35%	3.08%	12.43%	0.21%	12.64%	0.02%	12.64%	NO MAX
386	Dumas	113	111	4.89%	0.64%	5.53%	0.20%	5.73%	4.88%	0.68%	5.56%	0.20%	5.76%	0.03%	5.76%	9.50%
388	Duncanville	257	257	5.69%	1.96%	7.65%	0.00%	7.65%	5.66%	2.01%	7.67%	0.00%	7.67%	0.02%	7.67%	NO MAX
394	Eagle Lake	26	24	7.05%	2.26%	9.31%	0.25%	9.56%	7.36%	1.54%	8.90%	0.31%	9.21%	-0.35%	9.21%	12.50%
396	Eagle Pass	412	412	6.89%	1.51%	8.40%	0.22%	8.62%	6.84%	1.70%	8.54%	0.21%	8.75%	0.13%	8.75%	11.50%
397	Early	27	27	3.86%	-0.38%	3.48%	0.17%	3.65%	3.78%	-0.56%	3.22%	0.14%	3.36%	-0.29%	3.36%	9.50%
399	Earth	7	5	1.85%	3.21%	5.06%	0.27%	5.33%	2.15%	2.94%	5.09%	0.38%	5.47%	0.14%	5.47%	NO MAX
393	East Bernard	4	5	3.63%	1.74%	5.37%	0.19%	5.56%	3.46%	1.56%	5.02%	0.19%	5.21%	-0.35%	5.21%	NO MAX
401	East Mountain	1	1	13.01%	-1.31%	11.70%	0.28%	11.98%	13.89%	-0.81%	13.08%	0.28%	13.36%	1.38%	13.36%	NO MAX
395	East Tawakoni	9	9	5.85%	0.04%	5.89%	0.23%	6.12%	5.90%	-0.63%	5.27%	0.23%	5.50%	-0.62%	5.50%	NO MAX
398	Eastland	40	40	7.27%	1.85%	9.12%	0.32%	9.44%	7.13%	1.85%	8.98%	0.31%	9.29%	-0.15%	9.29%	11.50%
402	Ector	4	4	2.24%	-0.24%	2.00%	0.37%	2.37%	2.23%	-0.29%	1.94%	0.40%	2.34%	-0.03%	2.34%	NO MAX
406	Eden	9	9	3.31%	-0.45%	2.86%	0.30%	3.16%	3.36%	-0.42%	2.94%	0.34%	3.28%	0.12%	3.28%	7.50%
408	Edgewood	11	11	1.84%	1.19%	3.03%	0.29%	3.32%	1.84%	0.85%	2.69%	0.32%	3.01%	-0.31%	3.01%	NO MAX
410	Edinburg	818	792	8.40%	5.84%	14.24%	0.15%	14.39%	8.67%	5.65%	14.32%	0.15%	14.47%	0.08%	14.47%	NO MAX
412	Edna	36	36	5.86%	4.95%	10.81%	0.27%	11.08%	5.86%	4.81%	10.67%	0.29%	10.96%	-0.12%	10.96%	NO MAX
414	El Campo	106	109	6.17%	4.43%	10.60%	0.19%	10.79%	6.19%	4.35%	10.54%	0.20%	10.74%	-0.05%	10.74%	NO MAX
416	Eldorado	20	21	4.88%	2.33%	7.21%	0.33%	7.54%	5.05%	2.16%	7.21%	0.36%	7.57%	0.03%	7.57%	10.50%
418	Electra	27	26	1.69%	0.55%	2.24%	0.29%	2.53%	1.60%	0.75%	2.35%	0.29%	2.64%	0.11%	2.64%	7.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
420	Elgin	81	84	9.78%	4.18%	13.96%	0.27%	14.23%	9.79%	3.97%	13.76%	0.27%	14.03%	-0.20%	14.03%	NO MAX
422	Elkhart	6	7	3.53%	1.51%	5.04%	0.00%	5.04%	3.40%	1.83%	5.23%	0.00%	5.23%	0.19%	5.23%	NO MAX
427	Elmendorf	13	16	1.38%	0.07%	1.45%	0.10%	1.55%	1.49%	0.09%	1.58%	0.11%	1.69%	0.14%	1.69%	NO MAX
432	Emory	21	24	6.42%	0.10%	6.52%	0.21%	6.73%	6.52%	0.22%	6.74%	0.20%	6.94%	0.21%	6.94%	13.50%
436	Ennis	197	193	11.79%	5.11%	16.90%	0.18%	17.08%	11.77%	4.94%	16.71%	0.18%	16.89%	-0.19%	16.89%	NO MAX
439	Eules	384	382	11.17%	6.34%	17.51%	0.00%	17.51%	11.15%	6.55%	17.70%	0.00%	17.70%	0.19%	17.70%	NO MAX
440	Eustace	7	7	5.15%	3.82%	8.97%	0.20%	9.17%	5.80%	4.83%	10.63%	0.24%	10.87%	1.70%	10.87%	13.50%
441	Everman	50	48	7.53%	2.03%	9.56%	0.31%	9.87%	7.20%	2.19%	9.39%	0.31%	9.70%	-0.17%	9.70%	11.50%
443	Fair Oaks Ranch	54	62	10.37%	1.35%	11.72%	0.14%	11.86%	10.38%	1.33%	11.71%	0.14%	11.85%	-0.01%	11.85%	13.50%
442	Fairfield	35	31	8.28%	-0.19%	8.09%	0.27%	8.36%	8.03%	-0.86%	7.17%	0.27%	7.44%	-0.92%	7.44%	13.50%
445	Fairview	68	71	9.30%	1.36%	10.66%	0.16%	10.82%	9.42%	1.35%	10.77%	0.17%	10.94%	0.12%	10.94%	NO MAX
20444	Falfurrias	45	42	2.61%	0.70%	3.31%	0.23%	3.54%	2.52%	0.81%	3.33%	0.22%	3.55%	0.01%	3.55%	9.50%
446	Falls City	4	4	4.87%	2.76%	7.63%	0.17%	7.80%	5.18%	2.67%	7.85%	0.21%	8.06%	0.26%	8.06%	NO MAX
448	Farmers Branch	398	398	10.03%	8.46%	18.49%	0.13%	18.62%	10.07%	8.93%	19.00%	0.14%	19.14%	0.52%	19.14%	NO MAX
450	Farmersville	35	33	6.94%	1.63%	8.57%	0.23%	8.80%	6.94%	1.80%	8.74%	0.23%	8.97%	0.17%	8.97%	NO MAX
451	Farwell	7	7	11.30%	3.02%	14.32%	0.14%	14.46%	11.29%	3.95%	15.24%	0.16%	15.40%	0.94%	15.40%	NO MAX
452	Fate	47	46	9.39%	0.51%	9.90%	0.11%	10.01%	10.46%	0.28%	10.74%	0.11%	10.85%	0.84%	10.85%	NO MAX
454	Fayetteville	4	4	1.99%	0.98%	2.97%	0.00%	2.97%	2.02%	1.20%	3.22%	0.00%	3.22%	0.25%	3.22%	NO MAX
456	Ferris	39	42	4.92%	0.39%	5.31%	0.19%	5.50%	5.02%	0.43%	5.45%	0.20%	5.65%	0.15%	5.65%	9.50%
458	Flatonia	19	20	10.30%	5.36%	15.66%	0.23%	15.89%	10.17%	5.77%	15.94%	0.19%	16.13%	0.24%	16.13%	NO MAX
460	Florence	10	11	4.50%	-0.25%	4.25%	0.14%	4.39%	4.82%	-0.48%	4.34%	0.18%	4.52%	0.13%	4.52%	NO MAX
20462	Floresville	65	64	6.66%	3.89%	10.55%	0.00%	10.55%	6.57%	3.69%	10.26%	0.00%	10.26%	-0.29%	10.26%	11.50%
463	Flower Mound	583	586	8.00%	2.67%	10.67%	0.13%	10.80%	7.90%	2.87%	10.77%	0.14%	10.91%	0.11%	10.91%	13.50%
464	Floydada	21	21	6.95%	3.14%	10.09%	0.23%	10.32%	6.63%	3.37%	10.00%	0.26%	10.26%	-0.06%	10.26%	NO MAX
468	Forest Hill	83	85	10.13%	3.22%	13.35%	0.14%	13.49%	9.83%	2.99%	12.82%	0.14%	12.96%	-0.53%	12.96%	13.50%
470	Forney	143	153	11.11%	2.36%	13.47%	0.13%	13.60%	11.26%	2.54%	13.80%	0.13%	13.93%	0.33%	13.93%	NO MAX
472	Fort Stockton	120	126	6.32%	3.65%	9.97%	0.29%	10.26%	6.36%	3.28%	9.64%	0.27%	9.91%	-0.35%	9.91%	11.50%
476	Franklin	14	12	3.80%	-0.56%	3.24%	0.00%	3.24%	3.74%	-0.63%	3.11%	0.00%	3.11%	-0.13%	3.11%	11.50%
478	Frankston	12	13	1.68%	-0.22%	1.46%	0.18%	1.64%	1.66%	-0.21%	1.45%	0.18%	1.63%	-0.01%	1.63%	NO MAX
480	Fredericksburg	169	160	6.89%	4.79%	11.68%	0.23%	11.91%	6.91%	5.15%	12.06%	0.23%	12.29%	0.38%	12.29%	NO MAX
482	Freeport	120	120	8.50%	5.15%	13.65%	0.15%	13.80%	9.06%	5.24%	14.30%	0.17%	14.47%	0.67%	14.47%	NO MAX
481	Freer	16	18	3.65%	3.40%	7.05%	0.34%	7.39%	3.53%	3.47%	7.00%	0.37%	7.37%	-0.02%	7.37%	NO MAX
483	Friendswood	210	208	10.93%	4.76%	15.69%	0.21%	15.90%	10.94%	4.90%	15.84%	0.19%	16.03%	0.13%	16.03%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
484	Friona	22	23	6.34%	2.79%	9.13%	0.18%	9.31%	6.20%	2.86%	9.06%	0.18%	9.24%	-0.07%	9.24%	NO MAX
486	Frisco	1,129	1,205	11.25%	2.96%	14.21%	0.13%	14.34%	11.16%	2.91%	14.07%	0.13%	14.20%	-0.14%	14.20%	NO MAX
487	Fritch	21	19	8.17%	-5.29%	2.88%	0.17%	3.05%	7.35%	-5.57%	1.78%	0.15%	1.93%	-1.12%	1.93%	13.50%
488	Frost	3	3	3.37%	2.21%	5.58%	0.00%	5.58%	3.37%	3.61%	6.98%	0.00%	6.98%	1.40%	6.98%	7.50%
491	Fulshear	49	46	7.17%	0.76%	7.93%	0.13%	8.06%	7.17%	0.52%	7.69%	0.14%	7.83%	-0.23%	7.83%	NO MAX
493	Fulton	6	5	7.03%	12.12%	19.15%	0.27%	19.42%	6.82%	15.77%	22.59%	0.27%	22.86%	3.44%	22.86%	NO MAX
492	Gainesville	211	219	5.53%	6.55%	12.08%	0.21%	12.29%	5.45%	6.72%	12.17%	0.19%	12.36%	0.07%	12.36%	NO MAX
494	Galena Park	73	82	9.24%	3.08%	12.32%	0.22%	12.54%	9.07%	3.07%	12.14%	0.21%	12.35%	-0.19%	12.35%	NO MAX
498	Ganado	10	10	11.89%	1.70%	13.59%	0.42%	14.01%	12.00%	1.16%	13.16%	0.44%	13.60%	-0.41%	13.60%	NO MAX
499	Garden Ridge	29	27	6.20%	1.56%	7.76%	0.19%	7.95%	5.94%	1.45%	7.39%	0.23%	7.62%	-0.33%	7.62%	11.50%
500	Garland	2,005	2,037	8.52%	2.27%	10.79%	0.21%	11.00%	8.51%	2.52%	11.03%	0.21%	11.24%	0.24%	11.24%	NO MAX
502	Garrison	7	8	10.73%	8.01%	18.74%	0.14%	18.88%	11.07%	5.43%	16.50%	0.14%	16.64%	-2.24%	16.64%	NO MAX
503	Gary	4	4	3.76%	3.34%	7.10%	0.00%	7.10%	3.78%	3.44%	7.22%	0.00%	7.22%	0.12%	7.22%	7.50%
504	Gatesville	74	77	9.55%	5.50%	15.05%	0.23%	15.28%	9.29%	5.59%	14.88%	0.23%	15.11%	-0.17%	15.11%	NO MAX
505	George West	28	32	4.37%	1.79%	6.16%	0.17%	6.33%	4.42%	1.37%	5.79%	0.19%	5.98%	-0.35%	5.98%	NO MAX
506	Georgetown	653	685	9.08%	3.15%	12.23%	0.13%	12.36%	9.08%	3.05%	12.13%	0.13%	12.26%	-0.10%	12.26%	13.50%
510	Giddings	65	68	9.02%	9.81%	18.83%	0.28%	19.11%	9.18%	9.01%	18.19%	0.28%	18.47%	-0.64%	18.47%	NO MAX
512	Gilmer	49	51	8.60%	5.06%	13.66%	0.23%	13.89%	8.68%	4.66%	13.34%	0.22%	13.56%	-0.33%	13.56%	NO MAX
514	Gladewater	55	57	7.09%	1.11%	8.20%	0.19%	8.39%	7.23%	1.39%	8.62%	0.20%	8.82%	0.43%	8.82%	11.50%
516	Glen Rose	29	25	11.69%	2.88%	14.57%	0.31%	14.88%	11.62%	2.98%	14.60%	0.27%	14.87%	-0.01%	14.87%	NO MAX
517	Glenn Heights	73	79	4.88%	-1.94%	2.94%	0.14%	3.08%	4.84%	-1.97%	2.87%	0.14%	3.01%	-0.07%	3.01%	12.50%
518	Godley	11	11	1.68%	0.85%	2.53%	0.18%	2.71%	1.69%	0.94%	2.63%	0.19%	2.82%	0.11%	2.82%	8.50%
519	Goldsmith	4	4	1.67%	1.95%	3.62%	0.41%	4.03%	1.63%	1.57%	3.20%	0.43%	3.63%	-0.40%	3.63%	7.50%
520	Goldthwaite	11	11	10.37%	11.88%	22.25%	0.26%	22.51%	10.37%	13.13%	23.50%	0.26%	23.76%	1.25%	23.76%	NO MAX
522	Goliad	15	14	6.92%	-2.59%	4.33%	0.23%	4.56%	7.00%	-2.01%	4.99%	0.26%	5.25%	0.69%	5.25%	NO MAX
524	Gonzales	106	99	6.28%	4.40%	10.68%	0.23%	10.91%	6.28%	4.17%	10.45%	0.26%	10.71%	-0.20%	10.71%	NO MAX
527	Gordon	N/A	3	1.59%	0.94%	2.53%	0.11%	2.64%	1.83%	0.90%	2.73%	0.11%	2.84%	0.20%	2.84%	NO MAX
530	Gorman	7	7	1.75%	6.80%	8.55%	0.14%	8.69%	2.06%	7.11%	9.17%	0.44%	9.61%	0.92%	9.61%	NO MAX
532	Graford	3	3	2.09%	0.79%	2.88%	0.24%	3.12%	2.07%	0.80%	2.87%	0.27%	3.14%	0.02%	3.14%	NO MAX
10534	Graham	84	88	6.92%	3.52%	10.44%	0.32%	10.76%	6.85%	3.50%	10.35%	0.31%	10.66%	-0.10%	10.66%	NO MAX
536	Granbury	157	165	10.03%	5.94%	15.97%	0.23%	16.20%	9.99%	5.68%	15.67%	0.21%	15.88%	-0.32%	15.88%	NO MAX
540	Grand Prairie	1,313	1,337	10.71%	6.16%	16.87%	0.18%	17.05%	10.67%	6.16%	16.83%	0.17%	17.00%	-0.05%	17.00%	NO MAX
542	Grand Saline	22	25	7.38%	1.04%	8.42%	0.30%	8.72%	7.09%	0.24%	7.33%	0.24%	7.57%	-1.15%	7.57%	11.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
544	Grandview	16	16	7.29%	-1.10%	6.19%	0.00%	6.19%	7.22%	-0.72%	6.50%	0.00%	6.50%	0.31%	6.50%	11.50%
546	Granger	9	10	2.17%	-1.52%	0.65%	0.00%	0.65%	2.29%	-1.47%	0.82%	0.00%	0.82%	0.17%	0.82%	7.50%
547	Granite Shoals	31	32	4.62%	0.39%	5.01%	0.26%	5.27%	4.65%	0.15%	4.80%	0.24%	5.04%	-0.23%	5.04%	NO MAX
548	Grapeland	8	7	3.51%	0.21%	3.72%	0.00%	3.72%	3.77%	0.33%	4.10%	0.00%	4.10%	0.38%	4.10%	7.50%
550	Grapevine	575	586	11.44%	7.14%	18.58%	0.00%	18.58%	11.48%	7.05%	18.53%	0.00%	18.53%	-0.05%	18.53%	NO MAX
552	Greenville	320	321	7.43%	3.37%	10.80%	0.26%	11.06%	7.27%	3.73%	11.00%	0.25%	11.25%	0.19%	11.25%	NO MAX
551	Gregory	9	12	6.23%	-2.14%	4.09%	0.25%	4.34%	6.37%	-2.41%	3.96%	0.27%	4.23%	-0.11%	4.23%	9.50%
553	Grey Forest	39	38	9.47%	5.91%	15.38%	0.22%	15.60%	9.43%	6.33%	15.76%	0.20%	15.96%	0.36%	15.96%	NO MAX
556	Groesbeck	30	30	1.33%	1.17%	2.50%	0.22%	2.72%	1.30%	1.20%	2.50%	0.23%	2.73%	0.01%	2.73%	NO MAX
558	Groom	4	5	3.28%	-0.38%	2.90%	0.00%	2.90%	3.02%	-0.31%	2.71%	0.00%	2.71%	-0.19%	2.71%	7.50%
559	Groves	97	101	7.28%	2.04%	9.32%	0.00%	9.32%	6.87%	2.26%	9.13%	0.00%	9.13%	-0.19%	9.13%	NO MAX
560	Groveton	11	11	2.11%	-0.12%	1.99%	0.37%	2.36%	2.12%	-0.09%	2.03%	0.39%	2.42%	0.06%	2.42%	7.50%
562	Gruver	5	5	7.50%	5.44%	12.94%	0.00%	12.94%	7.74%	6.75%	14.49%	0.00%	14.49%	1.55%	14.01%	12.50%
563	Gun Barrel City	39	39	5.42%	-0.32%	5.10%	0.19%	5.29%	5.53%	-0.83%	4.70%	0.20%	4.90%	-0.39%	4.90%	11.50%
564	Gunter	8	9	5.38%	-1.42%	3.96%	0.17%	4.13%	5.37%	-1.23%	4.14%	0.17%	4.31%	0.18%	4.31%	NO MAX
568	Hale Center	11	11	1.90%	0.06%	1.96%	0.23%	2.19%	1.91%	0.07%	1.98%	0.25%	2.23%	0.04%	2.23%	NO MAX
570	Hallettsville	34	35	6.88%	4.89%	11.77%	0.27%	12.04%	6.89%	4.95%	11.84%	0.28%	12.12%	0.08%	12.12%	NO MAX
572	Hallsville	17	20	1.58%	1.44%	3.02%	0.22%	3.24%	1.79%	1.14%	2.93%	0.23%	3.16%	-0.08%	3.16%	NO MAX
574	Haltom City	259	254	10.56%	8.28%	18.84%	0.18%	19.02%	10.62%	8.43%	19.05%	0.19%	19.24%	0.22%	19.24%	NO MAX
576	Hamilton	27	30	11.46%	6.42%	17.88%	0.26%	18.14%	9.85%	5.25%	15.10%	0.27%	15.37%	-2.77%	15.37%	NO MAX
578	Hamlin	15	15	7.87%	6.06%	13.93%	0.33%	14.26%	7.80%	3.89%	11.69%	0.30%	11.99%	-2.27%	11.99%	NO MAX
580	Happy	2	2	8.36%	-0.03%	8.33%	0.37%	8.70%	8.36%	-0.21%	8.15%	0.40%	8.55%	-0.15%	8.55%	NO MAX
581	Harker Heights	215	213	10.03%	4.86%	14.89%	0.14%	15.03%	9.97%	4.80%	14.77%	0.15%	14.92%	-0.11%	14.92%	NO MAX
10582	Harlingen	179	167	4.96%	5.53%	10.49%	0.35%	10.84%	4.97%	6.69%	11.66%	0.37%	12.03%	1.19%	12.03%	15.50%
20582	Harlingen Waterworks Sys	135	135	1.99%	-0.12%	1.87%	0.26%	2.13%	2.02%	-0.10%	1.92%	0.26%	2.18%	0.05%	2.18%	9.50%
583	Hart	5	5	1.12%	2.81%	3.93%	0.00%	3.93%	1.12%	2.85%	3.97%	0.00%	3.97%	0.04%	3.97%	NO MAX
586	Haskell	19	18	1.74%	-1.74%	0.00%	0.19%	0.19%	2.01%	-2.01%	0.00%	0.19%	0.19%	0.00%	0.19%	9.50%
587	Haslet	24	25	8.91%	-0.12%	8.79%	0.18%	8.97%	8.82%	-0.19%	8.63%	0.20%	8.83%	-0.14%	8.83%	15.50%
588	Hawkins	10	8	8.65%	6.14%	14.79%	0.22%	15.01%	8.74%	-2.68%	6.06%	0.21%	6.27%	-8.74%	6.27%	NO MAX
585	Hays	1	1	10.07%	-6.87%	3.20%	0.64%	3.84%	10.08%	-1.65%	8.43%	0.34%	8.77%	4.93%	8.77%	NO MAX
590	Hearne	56	53	9.04%	6.04%	15.08%	0.23%	15.31%	9.12%	5.86%	14.98%	0.27%	15.25%	-0.06%	15.25%	NO MAX
591	Heath	49	49	9.55%	1.59%	11.14%	0.20%	11.34%	9.69%	1.86%	11.55%	0.20%	11.75%	0.41%	11.75%	13.50%
592	Hedley	2	1	4.72%	-0.60%	4.12%	0.38%	4.50%	5.44%	-2.99%	2.45%	0.74%	3.19%	-1.31%	3.19%	11.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
595	Hedwig Village	29	29	4.97%	2.25%	7.22%	0.25%	7.47%	4.99%	2.34%	7.33%	0.25%	7.58%	0.11%	7.58%	NO MAX
593	Helotes	72	70	5.24%	1.48%	6.72%	0.13%	6.85%	5.14%	1.43%	6.57%	0.13%	6.70%	-0.15%	6.70%	12.50%
594	Hemphill	24	24	4.90%	2.88%	7.78%	0.38%	8.16%	4.60%	2.73%	7.33%	0.35%	7.68%	-0.48%	7.68%	11.50%
596	Hempstead	76	70	6.35%	1.55%	7.90%	0.23%	8.13%	6.28%	1.50%	7.78%	0.25%	8.03%	-0.10%	8.03%	NO MAX
598	Henderson	121	122	9.29%	7.11%	16.40%	0.16%	16.56%	9.49%	6.62%	16.11%	0.16%	16.27%	-0.29%	16.27%	NO MAX
600	Henrietta	17	17	9.94%	4.86%	14.80%	0.24%	15.04%	9.96%	4.78%	14.74%	0.24%	14.98%	-0.06%	14.98%	NO MAX
602	Hereford	94	92	6.53%	4.03%	10.56%	0.22%	10.78%	6.50%	3.84%	10.34%	0.24%	10.58%	-0.20%	10.58%	11.50%
605	Hewitt	91	91	10.88%	4.88%	15.76%	0.12%	15.88%	10.51%	4.97%	15.48%	0.12%	15.60%	-0.28%	15.60%	NO MAX
609	Hickory Creek	21	19	10.16%	1.91%	12.07%	0.09%	12.16%	10.05%	1.90%	11.95%	0.11%	12.06%	-0.10%	12.06%	13.50%
606	Hico	13	14	8.17%	0.13%	8.30%	0.25%	8.55%	7.89%	0.41%	8.30%	0.19%	8.49%	-0.06%	8.49%	13.50%
607	Hidalgo	150	148	9.62%	3.11%	12.73%	0.00%	12.73%	9.46%	3.20%	12.66%	0.00%	12.66%	-0.07%	12.66%	13.50%
608	Higgins	3	2	4.03%	-0.57%	3.46%	0.25%	3.71%	4.71%	-0.64%	4.07%	0.39%	4.46%	0.75%	4.46%	NO MAX
610	Highland Park	118	120	6.31%	-0.90%	5.41%	0.00%	5.41%	6.28%	-0.64%	5.64%	0.00%	5.64%	0.23%	5.64%	NO MAX
611	Highland Village	153	150	10.51%	2.84%	13.35%	0.15%	13.50%	10.47%	2.84%	13.31%	0.15%	13.46%	-0.04%	13.46%	NO MAX
613	Hill Country Village	15	15	4.24%	-0.53%	3.71%	0.14%	3.85%	4.21%	-0.42%	3.79%	0.14%	3.93%	0.08%	3.93%	11.50%
612	Hillsboro	98	105	6.10%	4.95%	11.05%	0.00%	11.05%	6.17%	5.11%	11.28%	0.00%	11.28%	0.23%	11.28%	NO MAX
619	Hilshire Village	2	2	5.76%	7.23%	12.99%	0.22%	13.21%	5.62%	5.36%	10.98%	0.24%	11.22%	-1.99%	11.22%	NO MAX
614	Hitchcock	51	41	3.98%	0.25%	4.23%	0.25%	4.48%	4.12%	0.06%	4.18%	0.23%	4.41%	-0.07%	4.41%	11.50%
615	Holland	7	8	6.00%	2.00%	8.00%	0.48%	8.48%	6.06%	1.02%	7.08%	0.54%	7.62%	-0.86%	7.62%	10.50%
616	Holliday	10	9	2.80%	-0.08%	2.72%	0.00%	2.72%	2.87%	-0.23%	2.64%	0.00%	2.64%	-0.08%	2.64%	9.50%
617	Hollywood Park	38	38	6.79%	2.01%	8.80%	0.17%	8.97%	6.77%	2.04%	8.81%	0.20%	9.01%	0.04%	9.01%	10.50%
618	Hondo	111	109	6.83%	1.55%	8.38%	0.17%	8.55%	6.80%	1.42%	8.22%	0.18%	8.40%	-0.15%	8.40%	11.50%
620	Honey Grove	10	10	6.50%	1.25%	7.75%	0.34%	8.09%	6.85%	0.44%	7.29%	0.34%	7.63%	-0.46%	7.63%	9.50%
622	Hooks	14	14	8.02%	5.47%	13.49%	0.28%	13.77%	7.94%	5.52%	13.46%	0.18%	13.64%	-0.13%	13.64%	13.50%
623	Horizon City	N/A	73	2.75%	3.11%	5.86%	0.07%	5.93%	2.81%	3.08%	5.89%	0.12%	6.01%	0.08%	6.01%	NO MAX
626	Howe	15	16	5.48%	-0.06%	5.42%	0.32%	5.74%	5.59%	-0.34%	5.25%	0.34%	5.59%	-0.15%	5.59%	11.50%
627	Hubbard	12	12	1.37%	-0.58%	0.79%	0.23%	1.02%	1.45%	-0.68%	0.77%	0.26%	1.03%	0.01%	1.03%	NO MAX
628	Hudson	15	15	3.96%	0.40%	4.36%	0.20%	4.56%	3.95%	0.22%	4.17%	0.19%	4.36%	-0.20%	4.36%	NO MAX
629	Hudson Oaks	21	22	9.86%	2.10%	11.96%	0.12%	12.08%	9.84%	2.36%	12.20%	0.13%	12.33%	0.25%	12.33%	13.50%
630	Hughes Springs	12	12	10.43%	-1.35%	9.08%	0.30%	9.38%	10.45%	-1.82%	8.63%	0.33%	8.96%	-0.42%	8.96%	NO MAX
632	Humble	197	200	9.49%	3.94%	13.43%	0.16%	13.59%	9.56%	4.05%	13.61%	0.17%	13.78%	0.19%	13.78%	NO MAX
633	Hunters Creek Village	8	8	9.13%	7.10%	16.23%	0.35%	16.58%	9.07%	8.08%	17.15%	0.36%	17.51%	0.93%	17.22%	NO MAX
634	Huntington	19	20	10.03%	4.09%	14.12%	0.21%	14.33%	9.86%	4.41%	14.27%	0.21%	14.48%	0.15%	14.48%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
636	Huntsville	244	252	8.19%	10.18%	18.37%	0.21%	18.58%	8.16%	10.42%	18.58%	0.22%	18.80%	0.22%	18.80%	NO MAX
637	Hurst	399	398	7.99%	2.97%	10.96%	0.00%	10.96%	7.96%	3.15%	11.11%	0.00%	11.11%	0.15%	11.11%	NO MAX
638	Hutchins	66	67	7.51%	1.19%	8.70%	0.12%	8.82%	7.63%	1.44%	9.07%	0.13%	9.20%	0.38%	9.20%	11.50%
640	Hutto	111	137	11.90%	0.19%	12.09%	0.12%	12.21%	11.88%	0.16%	12.04%	0.11%	12.15%	-0.06%	12.15%	NO MAX
641	Huxley	10	10	2.99%	-1.73%	1.26%	0.24%	1.50%	3.09%	-2.19%	0.90%	0.26%	1.16%	-0.34%	1.16%	9.50%
642	Idalou	13	14	3.73%	0.62%	4.35%	0.07%	4.42%	3.73%	0.32%	4.05%	0.06%	4.11%	-0.31%	4.11%	NO MAX
643	Ingleside	75	78	7.24%	2.63%	9.87%	0.32%	10.19%	7.23%	1.64%	8.87%	0.31%	9.18%	-1.01%	9.18%	11.50%
646	Ingram	12	12	4.72%	1.02%	5.74%	0.00%	5.74%	4.63%	1.10%	5.73%	0.00%	5.73%	-0.01%	5.73%	9.50%
647	Iowa Colony	8	8	5.03%	14.28%	19.31%	0.45%	19.76%	5.43%	8.72%	14.15%	0.49%	14.64%	-5.12%	14.64%	NO MAX
644	Iowa Park	42	44	6.96%	7.73%	14.69%	0.23%	14.92%	7.09%	7.67%	14.76%	0.23%	14.99%	0.07%	14.99%	NO MAX
645	Iraan	6	6	6.69%	10.31%	17.00%	0.48%	17.48%	6.61%	10.97%	17.58%	0.51%	18.09%	0.61%	18.09%	NO MAX
648	Irving	1,450	1,486	9.53%	4.81%	14.34%	0.18%	14.52%	9.46%	5.00%	14.46%	0.18%	14.64%	0.12%	14.64%	NO MAX
650	Italy	16	18	1.70%	1.39%	3.09%	0.24%	3.33%	1.85%	1.14%	2.99%	0.26%	3.25%	-0.08%	3.25%	NO MAX
652	Itasca	19	19	11.97%	-1.60%	10.37%	0.23%	10.60%	12.06%	-1.36%	10.70%	0.26%	10.96%	0.36%	10.96%	13.50%
654	Jacinto City	56	57	4.63%	3.15%	7.78%	0.32%	8.10%	4.58%	3.39%	7.97%	0.34%	8.31%	0.21%	8.31%	9.50%
656	Jacksboro	40	40	9.88%	4.37%	14.25%	0.22%	14.47%	10.49%	4.43%	14.92%	0.21%	15.13%	0.66%	15.13%	NO MAX
658	Jacksonville	135	127	7.51%	3.25%	10.76%	0.19%	10.95%	7.35%	3.26%	10.61%	0.19%	10.80%	-0.15%	10.80%	NO MAX
660	Jasper	119	117	5.17%	3.77%	8.94%	0.23%	9.17%	5.29%	3.80%	9.09%	0.27%	9.36%	0.19%	9.36%	15.50%
664	Jefferson	19	19	2.27%	-1.05%	1.22%	0.31%	1.53%	2.39%	-1.50%	0.89%	0.34%	1.23%	-0.30%	1.23%	NO MAX
665	Jersey Village	93	92	10.09%	4.64%	14.73%	0.16%	14.89%	10.20%	3.85%	14.05%	0.19%	14.24%	-0.65%	14.24%	NO MAX
666	Jewett	6	5	5.17%	4.15%	9.32%	0.26%	9.58%	4.80%	5.80%	10.60%	0.15%	10.75%	1.17%	10.75%	9.50%
668	Joaquin	5	7	1.92%	2.75%	4.67%	0.44%	5.11%	1.89%	2.67%	4.56%	0.40%	4.96%	-0.15%	4.96%	NO MAX
670	Johnson City	16	15	6.52%	3.57%	10.09%	0.19%	10.28%	6.59%	3.19%	9.78%	0.18%	9.96%	-0.32%	9.96%	10.50%
673	Jones Creek	6	8	3.01%	3.43%	6.44%	0.24%	6.68%	2.90%	3.12%	6.02%	0.21%	6.23%	-0.45%	6.23%	NO MAX
675	Jonestown	26	27	6.29%	0.71%	7.00%	0.20%	7.20%	6.58%	0.74%	7.32%	0.22%	7.54%	0.34%	7.54%	NO MAX
677	Josephine	7	8	5.85%	0.50%	6.35%	0.09%	6.44%	5.92%	0.03%	5.95%	0.09%	6.04%	-0.40%	6.04%	NO MAX
671	Joshua	36	36	5.87%	0.10%	5.97%	0.10%	6.07%	5.97%	-0.27%	5.70%	0.10%	5.80%	-0.27%	5.80%	13.50%
672	Jourdanton	41	39	5.17%	0.87%	6.04%	0.26%	6.30%	5.42%	0.66%	6.08%	0.33%	6.41%	0.11%	6.41%	9.50%
674	Junction	20	24	10.41%	4.30%	14.71%	0.24%	14.95%	10.31%	4.22%	14.53%	0.24%	14.77%	-0.18%	14.77%	NO MAX
676	Justin	30	32	6.40%	1.26%	7.66%	0.00%	7.66%	6.44%	0.99%	7.43%	0.00%	7.43%	-0.23%	7.43%	13.50%
678	Karnes City	29	28	5.83%	2.96%	8.79%	0.21%	9.00%	5.80%	2.94%	8.74%	0.16%	8.90%	-0.10%	8.90%	NO MAX
680	Katy	200	232	11.23%	2.82%	14.05%	0.17%	14.22%	11.35%	2.27%	13.62%	0.15%	13.77%	-0.45%	13.77%	NO MAX
682	Kaufman	62	55	9.73%	4.19%	13.92%	0.20%	14.12%	9.92%	4.86%	14.78%	0.22%	15.00%	0.88%	15.00%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members LAST YEAR THIS YEAR		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
683	Keene	44	46	8.92%	3.10%	12.02%	0.17%	12.19%	9.20%	2.97%	12.17%	0.17%	12.34%	0.15%	12.34%	NO MAX
681	Keller	287	285	10.19%	5.26%	15.45%	0.14%	15.59%	10.15%	5.68%	15.83%	0.13%	15.96%	0.37%	15.96%	NO MAX
685	Kemah	36	35	6.26%	0.78%	7.04%	0.16%	7.20%	6.42%	0.51%	6.93%	0.18%	7.11%	-0.09%	7.11%	NO MAX
684	Kemp	19	19	5.97%	-0.93%	5.04%	0.00%	5.04%	6.02%	-0.23%	5.79%	0.00%	5.79%	0.75%	5.79%	11.50%
686	Kenedy	43	49	3.13%	1.10%	4.23%	0.20%	4.43%	3.08%	0.85%	3.93%	0.17%	4.10%	-0.33%	4.10%	7.50%
688	Kennedale	72	72	10.82%	3.03%	13.85%	0.25%	14.10%	10.58%	2.99%	13.57%	0.23%	13.80%	-0.30%	13.80%	NO MAX
690	Kerens	11	11	2.06%	6.26%	8.32%	0.20%	8.52%	2.18%	5.97%	8.15%	0.18%	8.33%	-0.19%	8.33%	NO MAX
692	Kermit	52	52	9.19%	6.97%	16.16%	0.26%	16.42%	9.04%	6.67%	15.71%	0.26%	15.97%	-0.45%	15.97%	NO MAX
10694	Kerrville	304	305	7.60%	2.45%	10.05%	0.19%	10.24%	7.61%	2.52%	10.13%	0.19%	10.32%	0.08%	10.32%	15.50%
20694	Kerrville PUB	56	53	8.78%	3.26%	12.04%	0.18%	12.22%	8.74%	3.32%	12.06%	0.17%	12.23%	0.01%	12.23%	NO MAX
10696	Kilgore	155	155	9.86%	4.35%	14.21%	0.24%	14.45%	9.95%	3.83%	13.78%	0.25%	14.03%	-0.42%	14.03%	NO MAX
698	Killeen	947	956	5.78%	5.20%	10.98%	0.17%	11.15%	5.77%	5.50%	11.27%	0.18%	11.45%	0.30%	11.45%	13.50%
700	Kingsville	260	260	6.58%	2.10%	8.68%	0.00%	8.68%	6.58%	2.22%	8.80%	0.00%	8.80%	0.12%	8.80%	NO MAX
701	Kirby	54	59	10.82%	3.83%	14.65%	0.11%	14.76%	11.03%	3.74%	14.77%	0.12%	14.89%	0.13%	14.89%	NO MAX
702	Kirbyville	25	24	3.04%	2.42%	5.46%	0.34%	5.80%	3.19%	2.63%	5.82%	0.38%	6.20%	0.40%	6.20%	7.50%
704	Knox City	8	8	4.11%	-1.53%	2.58%	0.44%	3.02%	3.91%	-1.54%	2.37%	0.45%	2.82%	-0.20%	2.82%	9.50%
706	Kosse	4	4	2.01%	3.17%	5.18%	0.15%	5.33%	2.00%	3.36%	5.36%	0.20%	5.56%	0.23%	5.56%	NO MAX
708	Kountze	24	25	1.30%	0.03%	1.33%	0.17%	1.50%	1.28%	0.10%	1.38%	0.15%	1.53%	0.03%	1.53%	NO MAX
709	Kress	1	1	2.91%	-2.91%	0.00%	0.00%	0.00%	2.91%	-2.91%	0.00%	0.00%	0.00%	0.00%	0.00%	NO MAX
699	Krugerville	10	9	7.71%	0.91%	8.62%	0.12%	8.74%	7.71%	0.46%	8.17%	0.12%	8.29%	-0.45%	8.29%	NO MAX
707	Krum	32	37	6.79%	0.02%	6.81%	0.14%	6.95%	6.57%	0.00%	6.57%	0.14%	6.71%	-0.24%	6.71%	13.50%
710	Kyle	197	200	10.46%	2.03%	12.49%	0.12%	12.61%	10.56%	1.96%	12.52%	0.12%	12.64%	0.03%	12.64%	13.50%
725	La Coste	8	8	2.05%	-0.57%	1.48%	0.00%	1.48%	2.02%	-0.72%	1.30%	0.00%	1.30%	-0.18%	1.30%	7.50%
714	La Feria	53	55	4.97%	6.08%	11.05%	0.22%	11.27%	4.89%	6.34%	11.23%	0.24%	11.47%	0.20%	11.47%	NO MAX
716	La Grange	64	66	9.45%	5.38%	14.83%	0.27%	15.10%	9.32%	4.74%	14.06%	0.28%	14.34%	-0.76%	14.34%	NO MAX
723	La Grulla	27	24	6.55%	-0.91%	5.64%	0.18%	5.82%	6.81%	-1.68%	5.13%	0.19%	5.32%	-0.50%	5.32%	11.50%
732	La Joya	39	36	1.49%	4.72%	6.21%	0.20%	6.41%	1.53%	5.30%	6.83%	0.25%	7.08%	0.67%	7.08%	NO MAX
721	La Marque	117	114	9.95%	4.84%	14.79%	0.17%	14.96%	9.56%	4.36%	13.92%	0.16%	14.08%	-0.88%	14.08%	NO MAX
728	La Porte	373	370	9.30%	6.23%	15.53%	0.17%	15.70%	9.28%	6.10%	15.38%	0.17%	15.55%	-0.15%	15.55%	NO MAX
731	La Vernia	17	21	2.11%	1.17%	3.28%	0.16%	3.44%	2.05%	1.07%	3.12%	0.15%	3.27%	-0.17%	3.27%	NO MAX
711	Lacy-Lakeview	47	50	9.44%	4.92%	14.36%	0.21%	14.57%	9.43%	4.97%	14.40%	0.21%	14.61%	0.04%	14.61%	NO MAX
712	Ladonia	2	2	9.55%	-5.01%	4.54%	0.49%	5.03%	7.87%	-4.61%	3.26%	0.37%	3.63%	-1.40%	3.63%	NO MAX
713	Lago Vista	88	90	6.73%	1.04%	7.77%	0.23%	8.00%	6.80%	1.32%	8.12%	0.24%	8.36%	0.36%	8.36%	12.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
705	Laguna Vista	17	17	4.80%	-0.25%	4.55%	0.16%	4.71%	4.80%	-0.48%	4.32%	0.17%	4.49%	-0.22%	4.49%	NO MAX
717	Lake Dallas	28	31	9.98%	2.56%	12.54%	0.16%	12.70%	10.43%	2.63%	13.06%	0.18%	13.24%	0.54%	13.24%	13.50%
718	Lake Jackson	216	221	8.23%	3.75%	11.98%	0.21%	12.19%	8.08%	3.96%	12.04%	0.21%	12.25%	0.06%	12.25%	NO MAX
719	Lake Worth	91	97	10.22%	6.69%	16.91%	0.16%	17.07%	10.44%	5.61%	16.05%	0.15%	16.20%	-0.87%	16.20%	NO MAX
727	Lakeport	6	6	3.14%	-3.14%	0.00%	0.10%	0.10%	2.84%	-2.84%	0.00%	0.10%	0.10%	0.00%	0.10%	NO MAX
715	Lakeside	15	16	7.47%	0.66%	8.13%	0.33%	8.46%	7.54%	1.01%	8.55%	0.34%	8.89%	0.43%	8.89%	12.50%
729	Lakeside City	4	5	1.96%	0.51%	2.47%	0.20%	2.67%	2.07%	0.01%	2.08%	0.27%	2.35%	-0.32%	2.35%	NO MAX
720	Lakeway	110	109	10.28%	3.64%	13.92%	0.18%	14.10%	10.12%	3.78%	13.90%	0.17%	14.07%	-0.03%	14.07%	15.50%
722	Lamesa	77	75	5.04%	-0.59%	4.45%	0.00%	4.45%	5.05%	-0.29%	4.76%	0.00%	4.76%	0.31%	4.76%	13.50%
724	Lampasas	114	116	9.62%	5.62%	15.24%	0.19%	15.43%	9.65%	5.90%	15.55%	0.20%	15.75%	0.32%	15.75%	NO MAX
726	Lancaster	247	265	8.53%	4.86%	13.39%	0.13%	13.52%	8.61%	4.84%	13.45%	0.14%	13.59%	0.07%	13.59%	NO MAX
730	Laredo	2,089	2,136	9.99%	10.79%	20.78%	0.21%	20.99%	9.96%	10.81%	20.77%	0.21%	20.98%	-0.01%	20.98%	NO MAX
733	Lavon	18	18	6.13%	0.26%	6.39%	0.16%	6.55%	6.10%	0.41%	6.51%	0.17%	6.68%	0.13%	6.68%	NO MAX
736	League City	508	518	9.35%	5.70%	15.05%	0.17%	15.22%	9.35%	5.37%	14.72%	0.17%	14.89%	-0.33%	14.89%	15.50%
737	Leander	271	289	9.81%	2.42%	12.23%	0.14%	12.37%	9.80%	2.24%	12.04%	0.14%	12.18%	-0.19%	12.18%	13.50%
735	Lefors	3	4	1.61%	2.33%	3.94%	0.07%	4.01%	1.68%	2.37%	4.05%	0.09%	4.14%	0.13%	4.14%	NO MAX
739	Leon Valley	103	107	10.83%	6.06%	16.89%	0.18%	17.07%	10.84%	6.28%	17.12%	0.20%	17.32%	0.25%	17.32%	NO MAX
738	Leonard	14	16	2.32%	-0.39%	1.93%	0.21%	2.14%	1.94%	-0.79%	1.15%	0.17%	1.32%	-0.82%	1.32%	9.50%
740	Levelland	95	90	8.47%	3.22%	11.69%	0.20%	11.89%	8.77%	2.67%	11.44%	0.19%	11.63%	-0.26%	11.63%	NO MAX
742	Lewisville	758	776	10.20%	6.08%	16.28%	0.00%	16.28%	10.25%	6.32%	16.57%	0.00%	16.57%	0.29%	16.57%	NO MAX
744	Lexington	13	11	6.38%	2.17%	8.55%	0.00%	8.55%	6.34%	2.48%	8.82%	0.00%	8.82%	0.27%	8.82%	NO MAX
746	Liberty	94	96	5.49%	12.34%	17.83%	0.00%	17.83%	5.39%	12.09%	17.48%	0.00%	17.48%	-0.35%	17.48%	NO MAX
745	Liberty Hill	22	31	6.78%	0.09%	6.87%	0.21%	7.08%	6.89%	0.19%	7.08%	0.20%	7.28%	0.20%	7.28%	NO MAX
748	Lindale	53	54	8.22%	6.39%	14.61%	0.00%	14.61%	8.32%	6.47%	14.79%	0.00%	14.79%	0.18%	14.79%	NO MAX
750	Linden	15	15	1.89%	-0.66%	1.23%	0.36%	1.59%	1.92%	-0.64%	1.28%	0.30%	1.58%	-0.01%	1.58%	7.50%
755	Lipan	4	4	1.88%	0.58%	2.46%	0.25%	2.71%	1.87%	0.59%	2.46%	0.27%	2.73%	0.02%	2.73%	NO MAX
751	Little Elm	232	245	10.96%	2.22%	13.18%	0.13%	13.31%	11.13%	2.34%	13.47%	0.12%	13.59%	0.28%	13.59%	13.50%
752	Littlefield	57	57	6.34%	2.91%	9.25%	0.26%	9.51%	6.48%	2.45%	8.93%	0.26%	9.19%	-0.32%	9.19%	11.50%
753	Live Oak	111	109	10.40%	7.55%	17.95%	0.18%	18.13%	10.56%	7.70%	18.26%	0.19%	18.45%	0.32%	18.45%	NO MAX
757	Liverpool	4	5	1.99%	0.69%	2.68%	0.22%	2.90%	1.82%	0.12%	1.94%	0.20%	2.14%	-0.76%	2.14%	NO MAX
754	Livingston	83	79	8.83%	5.98%	14.81%	0.23%	15.04%	8.69%	6.87%	15.56%	0.23%	15.79%	0.75%	15.79%	NO MAX
756	Llano	44	47	7.87%	6.80%	14.67%	0.28%	14.95%	7.64%	6.95%	14.59%	0.29%	14.88%	-0.07%	14.88%	NO MAX
758	Lockhart	134	136	7.41%	5.59%	13.00%	0.26%	13.26%	7.35%	5.46%	12.81%	0.24%	13.05%	-0.21%	13.05%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members LAST YEAR THIS YEAR		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
760	Lockney	3	7	2.74%	-2.74%	0.00%	0.52%	0.52%	2.61%	-2.61%	0.00%	0.32%	0.32%	-0.20%	0.32%	7.50%
765	Lone Star	11	11	3.35%	-1.22%	2.13%	0.19%	2.32%	3.18%	-0.64%	2.54%	0.18%	2.72%	0.40%	2.72%	7.50%
766	Longview	663	648	7.21%	3.54%	10.75%	0.21%	10.96%	7.19%	3.67%	10.86%	0.22%	11.08%	0.12%	11.08%	15.50%
768	Loraine	3	2	2.99%	-0.36%	2.63%	0.06%	2.69%	4.08%	-0.69%	3.39%	0.14%	3.53%	0.84%	3.53%	NO MAX
769	Lorena	18	19	9.02%	1.66%	10.68%	0.19%	10.87%	9.04%	1.74%	10.78%	0.20%	10.98%	0.11%	10.98%	12.50%
770	Lorenzo	8	9	5.11%	-3.07%	2.04%	0.00%	2.04%	5.29%	-3.04%	2.25%	0.00%	2.25%	0.21%	2.25%	9.50%
771	Los Fresnos	55	54	4.96%	2.05%	7.01%	0.17%	7.18%	4.98%	2.36%	7.34%	0.19%	7.53%	0.35%	7.53%	11.50%
773	Lott	7	7	1.44%	-0.24%	1.20%	0.09%	1.29%	1.48%	-0.24%	1.24%	0.10%	1.34%	0.05%	1.34%	NO MAX
774	Lovelady	3	3	6.66%	2.29%	8.95%	0.12%	9.07%	6.23%	1.42%	7.65%	0.13%	7.78%	-1.29%	7.78%	NO MAX
778	Lubbock	1,751	1,758	9.91%	7.80%	17.71%	0.00%	17.71%	9.92%	7.65%	17.57%	0.00%	17.57%	-0.14%	17.57%	NO MAX
779	Lucas	37	39	10.64%	2.19%	12.83%	0.12%	12.95%	10.68%	1.82%	12.50%	0.13%	12.63%	-0.32%	12.63%	15.50%
782	Lufkin	366	356	8.50%	7.84%	16.34%	0.23%	16.57%	8.46%	7.71%	16.17%	0.22%	16.39%	-0.18%	16.39%	NO MAX
784	Luling	84	85	5.93%	3.37%	9.30%	0.30%	9.60%	5.81%	2.79%	8.60%	0.30%	8.90%	-0.70%	8.90%	11.50%
785	Lumberton	40	42	10.47%	6.12%	16.59%	0.22%	16.81%	10.48%	5.50%	15.98%	0.23%	16.21%	-0.60%	16.21%	NO MAX
786	Lyford	17	17	1.42%	2.79%	4.21%	0.00%	4.21%	1.31%	2.76%	4.07%	0.00%	4.07%	-0.14%	4.07%	NO MAX
787	Lytle	23	23	6.46%	3.28%	9.74%	0.19%	9.93%	6.30%	3.93%	10.23%	0.20%	10.43%	0.50%	10.43%	11.50%
790	Madisonville	37	38	6.66%	2.51%	9.17%	0.34%	9.51%	6.69%	2.80%	9.49%	0.31%	9.80%	0.29%	9.80%	11.50%
791	Magnolia	31	30	2.06%	-0.39%	1.67%	0.31%	1.98%	2.01%	-0.39%	1.62%	0.34%	1.96%	-0.02%	1.96%	8.50%
792	Malakoff	27	26	6.26%	1.43%	7.69%	0.26%	7.95%	6.16%	1.48%	7.64%	0.25%	7.89%	-0.06%	7.89%	13.50%
796	Manor	67	71	5.63%	3.24%	8.87%	0.11%	8.98%	5.69%	3.42%	9.11%	0.12%	9.23%	0.25%	9.23%	NO MAX
798	Mansfield	490	486	10.84%	4.11%	14.95%	0.15%	15.10%	10.88%	4.51%	15.39%	0.16%	15.55%	0.45%	15.55%	NO MAX
799	Manvel	45	49	6.19%	5.41%	11.60%	0.14%	11.74%	6.02%	4.68%	10.70%	0.11%	10.81%	-0.93%	10.81%	13.50%
800	Marble Falls	106	115	7.51%	1.86%	9.37%	0.19%	9.56%	7.49%	2.27%	9.76%	0.19%	9.95%	0.39%	9.95%	13.50%
802	Marfa	38	39	4.24%	-1.55%	2.69%	0.38%	3.07%	4.25%	-1.04%	3.21%	0.35%	3.56%	0.49%	3.56%	11.50%
804	Marion	11	10	5.70%	-0.50%	5.20%	0.38%	5.58%	5.74%	-2.32%	3.42%	0.43%	3.85%	-1.73%	3.85%	11.50%
806	Marlin	59	54	6.77%	2.14%	8.91%	0.27%	9.18%	6.84%	1.87%	8.71%	0.27%	8.98%	-0.20%	8.98%	11.50%
808	Marquez	N/A	3	2.20%	13.77%	15.97%	0.27%	16.24%	2.21%	16.60%	18.81%	0.25%	19.06%	2.82%	19.06%	NO MAX
810	Marshall	181	185	10.03%	6.14%	16.17%	0.25%	16.42%	9.95%	6.17%	16.12%	0.24%	16.36%	-0.06%	16.36%	NO MAX
812	Mart	13	14	5.35%	-3.72%	1.63%	0.28%	1.91%	5.17%	-3.14%	2.03%	0.25%	2.28%	0.37%	2.28%	9.50%
813	Martindale	3	3	6.01%	7.32%	13.33%	0.17%	13.50%	6.03%	5.99%	12.02%	0.19%	12.21%	-1.29%	12.21%	NO MAX
814	Mason	30	28	4.83%	2.07%	6.90%	0.32%	7.22%	4.69%	1.88%	6.57%	0.34%	6.91%	-0.31%	6.91%	9.50%
816	Matador	4	3	1.62%	4.76%	6.38%	0.26%	6.64%	1.78%	6.18%	7.96%	0.36%	8.32%	1.68%	8.32%	NO MAX
818	Mathis	55	47	5.91%	-1.60%	4.31%	0.27%	4.58%	5.53%	-1.89%	3.64%	0.25%	3.89%	-0.69%	3.89%	13.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
820	Maud	7	9	1.66%	1.96%	3.62%	0.10%	3.72%	1.88%	1.59%	3.47%	0.18%	3.65%	-0.07%	3.65%	NO MAX
822	Maypearl	5	6	2.46%	0.24%	2.70%	0.29%	2.99%	2.37%	0.32%	2.69%	0.28%	2.97%	-0.02%	2.97%	7.50%
824	McAllen	1,584	1,584	4.85%	2.91%	7.76%	0.00%	7.76%	4.83%	2.98%	7.81%	0.00%	7.81%	0.05%	7.81%	13.50%
826	McCamey	13	12	2.96%	-1.32%	1.64%	0.19%	1.83%	2.82%	-1.15%	1.67%	0.15%	1.82%	-0.01%	1.82%	9.50%
828	McGregor	57	57	8.67%	1.20%	9.87%	0.25%	10.12%	8.65%	1.00%	9.65%	0.28%	9.93%	-0.19%	9.93%	12.50%
830	McKinney	1,030	1,116	11.51%	3.56%	15.07%	0.13%	15.20%	11.51%	3.39%	14.90%	0.13%	15.03%	-0.17%	15.03%	NO MAX
832	McLean	6	6	1.83%	0.35%	2.18%	0.25%	2.43%	2.15%	0.43%	2.58%	0.34%	2.92%	0.49%	2.92%	NO MAX
833	McLendon-Chisholm	2	7	3.14%	5.39%	8.53%	0.79%	9.32%	1.94%	-0.42%	1.52%	0.08%	1.60%	-7.72%	1.60%	NO MAX
834	Meadow	5	6	1.90%	2.66%	4.56%	0.15%	4.71%	1.90%	2.34%	4.24%	0.15%	4.39%	-0.32%	4.39%	NO MAX
831	Meadowlakes	17	19	2.50%	-0.09%	2.41%	0.20%	2.61%	2.47%	-0.09%	2.38%	0.21%	2.59%	-0.02%	2.59%	NO MAX
835	Meadows Place	27	29	6.00%	3.66%	9.66%	0.14%	9.80%	5.86%	3.68%	9.54%	0.14%	9.68%	-0.12%	9.68%	13.50%
837	Melissa	50	54	9.30%	3.80%	13.10%	0.17%	13.27%	9.36%	3.48%	12.84%	0.16%	13.00%	-0.27%	13.00%	NO MAX
1501	Memorial Villages PD	43	43	6.51%	4.52%	11.03%	0.17%	11.20%	6.46%	5.15%	11.61%	0.18%	11.79%	0.59%	11.79%	NO MAX
840	Memphis	20	18	4.84%	-1.32%	3.52%	0.28%	3.80%	4.74%	-1.15%	3.59%	0.25%	3.84%	0.04%	3.84%	NO MAX
842	Menard	9	9	3.49%	-3.49%	0.00%	0.00%	0.00%	3.43%	-3.43%	0.00%	0.00%	0.00%	0.00%	0.00%	NO MAX
844	Mercedes	108	106	10.56%	7.56%	18.12%	0.18%	18.30%	10.83%	7.26%	18.09%	0.19%	18.28%	-0.02%	18.28%	NO MAX
846	Meridian	10	10	4.00%	-0.84%	3.16%	0.11%	3.27%	4.08%	-1.12%	2.96%	0.13%	3.09%	-0.18%	3.09%	11.50%
848	Merkel	16	14	8.09%	3.60%	11.69%	0.14%	11.83%	8.12%	3.38%	11.50%	0.15%	11.65%	-0.18%	11.65%	NO MAX
852	Mertzson	4	5	4.57%	8.64%	13.21%	0.14%	13.35%	4.74%	7.07%	11.81%	0.17%	11.98%	-1.37%	11.98%	NO MAX
854	Mesquite	1,103	1,117	8.13%	8.38%	16.51%	0.00%	16.51%	8.14%	8.48%	16.62%	0.00%	16.62%	0.11%	16.62%	NO MAX
856	Mexia	99	95	9.78%	2.51%	12.29%	0.17%	12.46%	9.86%	2.25%	12.11%	0.21%	12.32%	-0.14%	12.32%	13.50%
858	Miami	3	3	2.78%	11.07%	13.85%	0.40%	14.25%	2.78%	8.68%	11.46%	0.45%	11.91%	-2.34%	11.91%	NO MAX
860	Midland	761	731	8.59%	5.62%	14.21%	0.21%	14.42%	8.61%	5.80%	14.41%	0.22%	14.63%	0.21%	14.63%	NO MAX
862	Midlothian	217	240	11.02%	3.27%	14.29%	0.14%	14.43%	11.39%	3.37%	14.76%	0.14%	14.90%	0.47%	14.90%	NO MAX
863	Milano	1	1	3.73%	7.04%	10.77%	0.57%	11.34%	3.72%	7.77%	11.49%	0.64%	12.13%	0.79%	12.13%	NO MAX
864	Miles	4	3	2.09%	-2.09%	0.00%	0.25%	0.25%	2.43%	-2.43%	0.00%	0.33%	0.33%	0.08%	0.33%	7.50%
865	Milford	6	7	3.39%	5.77%	9.16%	0.17%	9.33%	3.41%	5.02%	8.43%	0.15%	8.58%	-0.75%	8.58%	NO MAX
868	Mineola	50	48	5.23%	-1.05%	4.18%	0.19%	4.37%	5.23%	-0.69%	4.54%	0.17%	4.71%	0.34%	4.71%	11.50%
870	Mineral Wells	168	164	6.91%	1.92%	8.83%	0.26%	9.09%	6.74%	2.08%	8.82%	0.24%	9.06%	-0.03%	9.06%	11.50%
874	Mission	676	693	6.41%	2.01%	8.42%	0.16%	8.58%	6.45%	2.07%	8.52%	0.15%	8.67%	0.09%	8.67%	12.50%
875	Missouri City	336	346	5.59%	3.34%	8.93%	0.13%	9.06%	5.50%	3.36%	8.86%	0.14%	9.00%	-0.06%	9.00%	15.50%
876	Monahans	62	64	5.34%	2.32%	7.66%	0.25%	7.91%	5.27%	2.09%	7.36%	0.25%	7.61%	-0.30%	7.61%	NO MAX
887	Mont Belvieu	78	96	10.44%	5.40%	15.84%	0.16%	16.00%	9.89%	4.47%	14.36%	0.13%	14.49%	-1.51%	14.49%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
877	Montgomery	24	23	6.63%	-0.50%	6.13%	0.00%	6.13%	6.82%	-0.77%	6.05%	0.00%	6.05%	-0.08%	6.05%	13.50%
878	Moody	12	12	1.52%	1.90%	3.42%	0.19%	3.61%	1.43%	0.86%	2.29%	0.19%	2.48%	-1.13%	2.48%	7.50%
883	Morgan's Point	11	12	8.97%	0.26%	9.23%	0.12%	9.35%	9.04%	0.98%	10.02%	0.12%	10.14%	0.79%	10.14%	NO MAX
882	Morgan's Point Resort	26	30	9.95%	2.22%	12.17%	0.20%	12.37%	9.74%	2.08%	11.82%	0.17%	11.99%	-0.38%	11.99%	13.50%
884	Morton	9	9	6.49%	-2.18%	4.31%	0.20%	4.51%	6.66%	-2.63%	4.03%	0.22%	4.25%	-0.26%	4.25%	NO MAX
886	Moulton	9	10	4.36%	0.79%	5.15%	0.16%	5.31%	4.60%	0.13%	4.73%	0.21%	4.94%	-0.37%	4.94%	NO MAX
890	Mount Enterprise	2	1	1.78%	0.13%	1.91%	0.12%	2.03%	2.17%	0.29%	2.46%	0.19%	2.65%	0.62%	2.65%	NO MAX
892	Mt. Pleasant	162	160	10.26%	4.83%	15.09%	0.18%	15.27%	10.01%	4.97%	14.98%	0.17%	15.15%	-0.12%	15.15%	NO MAX
894	Mt. Vernon	21	24	8.68%	2.53%	11.21%	0.25%	11.46%	8.77%	2.63%	11.40%	0.26%	11.66%	0.20%	11.66%	13.50%
896	Muenster	13	12	5.15%	-3.73%	1.42%	0.00%	1.42%	5.10%	-3.46%	1.64%	0.00%	1.64%	0.22%	1.64%	11.50%
898	Muleshoe	35	32	9.03%	8.81%	17.84%	0.21%	18.05%	8.81%	10.29%	19.10%	0.22%	19.32%	1.27%	19.32%	NO MAX
901	Munday	7	8	1.44%	2.13%	3.57%	0.15%	3.72%	1.55%	1.83%	3.38%	0.18%	3.56%	-0.16%	3.56%	NO MAX
903	Murphy	116	119	11.68%	2.43%	14.11%	0.13%	14.24%	11.66%	2.32%	13.98%	0.16%	14.14%	-0.10%	14.14%	15.50%
10904	Nacogdoches	303	309	8.35%	6.64%	14.99%	0.20%	15.19%	8.34%	5.81%	14.15%	0.20%	14.35%	-0.84%	14.35%	NO MAX
906	Naples	11	8	3.34%	-1.41%	1.93%	0.22%	2.15%	3.47%	-1.30%	2.17%	0.31%	2.48%	0.33%	2.48%	9.50%
907	Nash	19	20	8.76%	8.87%	17.63%	0.16%	17.79%	8.96%	8.58%	17.54%	0.19%	17.73%	-0.06%	17.73%	NO MAX
905	Nassau Bay	44	40	9.63%	6.03%	15.66%	0.15%	15.81%	9.49%	6.25%	15.74%	0.18%	15.92%	0.11%	15.92%	NO MAX
909	Natalia	12	10	2.11%	1.02%	3.13%	0.21%	3.34%	2.13%	1.04%	3.17%	0.26%	3.43%	0.09%	3.43%	NO MAX
908	Navasota	77	72	5.81%	2.20%	8.01%	0.19%	8.20%	5.87%	1.73%	7.60%	0.22%	7.82%	-0.38%	7.82%	11.50%
910	Nederland	118	120	8.16%	-1.81%	6.35%	0.00%	6.35%	8.14%	-1.67%	6.47%	0.00%	6.47%	0.12%	6.47%	NO MAX
912	Needville	18	18	3.83%	0.36%	4.19%	0.42%	4.61%	3.76%	0.45%	4.21%	0.48%	4.69%	0.08%	4.69%	9.50%
914	New Boston	35	39	3.07%	-1.44%	1.63%	0.23%	1.86%	3.16%	-1.09%	2.07%	0.23%	2.30%	0.44%	2.30%	7.50%
10916	New Braunfels	587	612	11.21%	5.75%	16.96%	0.14%	17.10%	11.22%	5.63%	16.85%	0.15%	17.00%	-0.10%	17.00%	NO MAX
20916	New Braunfels Utilities	272	292	9.87%	7.55%	17.42%	0.16%	17.58%	10.02%	7.20%	17.22%	0.15%	17.37%	-0.21%	17.37%	NO MAX
915	New Deal	4	4	2.43%	-1.89%	0.54%	0.00%	0.54%	2.35%	-1.63%	0.72%	0.00%	0.72%	0.18%	0.72%	7.50%
923	New Fairview	1	1	1.05%	9.37%	10.42%	0.13%	10.55%	1.05%	9.64%	10.69%	0.13%	10.82%	0.27%	10.53%	NO MAX
918	New London	8	8	3.76%	0.11%	3.87%	0.00%	3.87%	3.77%	-0.38%	3.39%	0.00%	3.39%	-0.48%	3.39%	7.50%
919	New Summerfield	10	9	8.08%	1.46%	9.54%	0.00%	9.54%	7.94%	-0.24%	7.70%	0.00%	7.70%	-1.84%	7.70%	13.50%
917	New Waverly	5	4	5.11%	1.27%	6.38%	0.32%	6.70%	5.30%	2.33%	7.63%	0.37%	8.00%	1.30%	8.00%	9.50%
913	Newark	4	6	2.10%	1.05%	3.15%	0.12%	3.27%	1.72%	1.23%	2.95%	0.11%	3.06%	-0.21%	3.06%	NO MAX
920	Newton	23	21	10.46%	10.05%	20.51%	0.23%	20.74%	10.52%	10.62%	21.14%	0.28%	21.42%	0.68%	21.42%	NO MAX
922	Nixon	18	19	1.25%	-0.55%	0.70%	0.21%	0.91%	1.24%	-0.60%	0.64%	0.19%	0.83%	-0.08%	0.83%	NO MAX
924	Nocona	19	20	6.67%	3.16%	9.83%	0.26%	10.09%	6.61%	3.50%	10.11%	0.31%	10.42%	0.33%	10.42%	11.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
925	Nolanville	15	16	1.72%	0.60%	2.32%	0.14%	2.46%	1.69%	0.43%	2.12%	0.13%	2.25%	-0.21%	2.25%	NO MAX
928	Normangee	3	4	4.65%	-2.36%	2.29%	0.28%	2.57%	4.80%	-3.93%	0.87%	0.20%	1.07%	-1.50%	1.07%	11.50%
931	North Richland Hills	540	544	11.00%	5.15%	16.15%	0.00%	16.15%	10.98%	5.36%	16.34%	0.00%	16.34%	0.19%	16.34%	NO MAX
930	Northlake	30	33	8.96%	1.54%	10.50%	0.10%	10.60%	8.74%	1.23%	9.97%	0.10%	10.07%	-0.53%	10.07%	NO MAX
935	O'Donnell	3	3	1.67%	5.36%	7.03%	0.18%	7.21%	1.67%	5.80%	7.47%	0.20%	7.67%	0.46%	7.67%	NO MAX
936	Oak Point	26	27	5.73%	1.39%	7.12%	0.13%	7.25%	6.25%	1.24%	7.49%	0.12%	7.61%	0.36%	7.61%	NO MAX
937	Oak Ridge North	43	41	9.06%	2.76%	11.82%	0.20%	12.02%	8.85%	2.55%	11.40%	0.20%	11.60%	-0.42%	11.60%	NO MAX
942	Odem	12	15	5.14%	3.98%	9.12%	0.40%	9.52%	5.26%	4.44%	9.70%	0.36%	10.06%	0.54%	10.06%	NO MAX
944	Odessa	713	692	7.86%	5.21%	13.07%	0.20%	13.27%	7.90%	5.54%	13.44%	0.20%	13.64%	0.37%	13.64%	NO MAX
945	Oglesby	2	2	1.11%	-0.58%	0.53%	0.17%	0.70%	1.11%	-0.04%	1.07%	0.18%	1.25%	0.55%	1.25%	NO MAX
949	Old River-Winfree	1	1	2.39%	-2.39%	0.00%	0.00%	0.00%	2.39%	-2.39%	0.00%	0.00%	0.00%	0.00%	0.00%	7.50%
950	Olmos Park	38	36	3.89%	-1.29%	2.60%	0.00%	2.60%	3.82%	-1.17%	2.65%	0.00%	2.65%	0.05%	2.65%	11.50%
951	Olney	19	21	5.70%	0.65%	6.35%	0.18%	6.53%	6.46%	0.44%	6.90%	0.24%	7.14%	0.61%	7.14%	NO MAX
953	Omaha	6	6	2.09%	3.21%	5.30%	0.28%	5.58%	1.94%	3.20%	5.14%	0.23%	5.37%	-0.21%	5.37%	NO MAX
954	Onalaska	12	12	2.96%	-0.33%	2.63%	0.15%	2.78%	2.98%	-0.89%	2.09%	0.15%	2.24%	-0.54%	2.24%	9.50%
958	Orange	152	148	10.75%	5.05%	15.80%	0.00%	15.80%	10.11%	5.05%	15.16%	0.00%	15.16%	-0.64%	15.16%	NO MAX
960	Orange Grove	10	9	8.57%	-1.46%	7.11%	0.17%	7.28%	8.39%	-1.19%	7.20%	0.17%	7.37%	0.09%	7.37%	12.50%
959	Ore City	9	9	1.58%	-0.13%	1.45%	0.14%	1.59%	1.33%	-0.31%	1.02%	0.11%	1.13%	-0.46%	1.13%	7.50%
962	Overton	20	21	4.57%	-1.34%	3.23%	0.18%	3.41%	4.70%	-1.54%	3.16%	0.19%	3.35%	-0.06%	3.35%	12.50%
961	Ovilla	25	28	8.41%	1.18%	9.59%	0.14%	9.73%	8.26%	1.57%	9.83%	0.16%	9.99%	0.26%	9.99%	13.50%
963	Oyster Creek	23	23	8.42%	2.60%	11.02%	0.21%	11.23%	8.20%	2.56%	10.76%	0.22%	10.98%	-0.25%	10.98%	13.50%
964	Paducah	7	4	4.87%	-3.76%	1.11%	0.32%	1.43%	4.49%	-4.49%	0.00%	0.29%	0.29%	-1.14%	0.29%	9.50%
966	Palacios	34	33	11.04%	6.41%	17.45%	0.28%	17.73%	10.83%	6.44%	17.27%	0.27%	17.54%	-0.19%	17.54%	NO MAX
968	Palestine	185	168	7.80%	5.62%	13.42%	0.20%	13.62%	7.79%	5.79%	13.58%	0.21%	13.79%	0.17%	13.79%	NO MAX
970	Palmer	23	23	8.68%	2.79%	11.47%	0.10%	11.57%	8.93%	2.11%	11.04%	0.11%	11.15%	-0.42%	11.15%	13.50%
969	Palmhurst	29	25	5.67%	0.27%	5.94%	0.09%	6.03%	5.64%	0.09%	5.73%	0.11%	5.84%	-0.19%	5.84%	NO MAX
971	Palmview	61	67	1.19%	0.73%	1.92%	0.10%	2.02%	1.16%	0.83%	1.99%	0.09%	2.08%	0.06%	2.08%	NO MAX
972	Pampa	156	151	9.06%	12.37%	21.43%	0.25%	21.68%	9.13%	12.35%	21.48%	0.25%	21.73%	0.05%	21.73%	NO MAX
974	Panhandle	16	18	7.19%	5.15%	12.34%	0.00%	12.34%	7.09%	4.16%	11.25%	0.00%	11.25%	-1.09%	11.25%	NO MAX
973	Panorama Village	12	12	6.49%	0.09%	6.58%	0.48%	7.06%	6.19%	0.09%	6.28%	0.41%	6.69%	-0.37%	6.69%	12.50%
975	Pantego	43	42	10.96%	6.53%	17.49%	0.16%	17.65%	10.62%	6.55%	17.17%	0.16%	17.33%	-0.32%	17.33%	NO MAX
976	Paris	254	246	4.19%	2.76%	6.95%	0.25%	7.20%	4.14%	3.04%	7.18%	0.25%	7.43%	0.23%	7.43%	NO MAX
977	Parker	23	25	7.47%	4.74%	12.21%	0.19%	12.40%	7.82%	4.60%	12.42%	0.17%	12.59%	0.19%	12.59%	13.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
978	Pasadena	1,007	1,020	9.22%	4.23%	13.45%	0.23%	13.68%	9.23%	4.23%	13.46%	0.24%	13.70%	0.02%	13.70%	NO MAX
983	Pearland	666	681	10.13%	3.17%	13.30%	0.12%	13.42%	10.02%	3.12%	13.14%	0.12%	13.26%	-0.16%	13.26%	15.50%
984	Pearsall	65	66	3.11%	1.24%	4.35%	0.17%	4.52%	3.14%	1.55%	4.69%	0.18%	4.87%	0.35%	4.87%	8.50%
988	Pecos City	117	127	5.99%	0.07%	6.06%	0.26%	6.32%	5.98%	0.16%	6.14%	0.21%	6.35%	0.03%	6.35%	11.50%
989	Pelican Bay	12	15	1.52%	3.49%	5.01%	0.11%	5.12%	1.39%	2.96%	4.35%	0.09%	4.44%	-0.68%	4.44%	NO MAX
991	Penitas	40	36	3.22%	1.11%	4.33%	0.07%	4.40%	3.17%	0.94%	4.11%	0.09%	4.20%	-0.20%	4.20%	NO MAX
994	Perryton	79	80	7.97%	6.74%	14.71%	0.27%	14.98%	8.00%	6.96%	14.96%	0.27%	15.23%	0.25%	15.23%	NO MAX
1000	Pflugerville	335	345	9.98%	3.35%	13.33%	0.14%	13.47%	10.04%	3.42%	13.46%	0.14%	13.60%	0.13%	13.60%	NO MAX
1002	Pharr	573	618	5.25%	2.64%	7.89%	0.13%	8.02%	5.30%	2.56%	7.86%	0.14%	8.00%	-0.02%	8.00%	NO MAX
1004	Pilot Point	46	50	9.74%	2.35%	12.09%	0.13%	12.22%	9.54%	1.96%	11.50%	0.15%	11.65%	-0.57%	11.65%	12.50%
1005	Pinehurst	21	21	11.53%	7.85%	19.38%	0.24%	19.62%	11.54%	8.28%	19.82%	0.25%	20.07%	0.45%	20.07%	NO MAX
1003	Pineland	13	14	5.18%	2.73%	7.91%	0.30%	8.21%	5.21%	1.03%	6.24%	0.25%	6.49%	-1.72%	6.49%	NO MAX
1001	Piney Point Village	7	5	6.50%	0.45%	6.95%	0.23%	7.18%	6.63%	0.29%	6.92%	0.23%	7.15%	-0.03%	7.15%	NO MAX
1006	Pittsburg	34	35	9.22%	5.17%	14.39%	0.22%	14.61%	9.51%	3.85%	13.36%	0.21%	13.57%	-1.04%	13.57%	NO MAX
1007	Plains	9	8	7.57%	-1.00%	6.57%	0.23%	6.80%	5.03%	-0.81%	4.22%	0.22%	4.44%	-2.36%	4.44%	NO MAX
1008	Plainview	133	137	9.18%	3.89%	13.07%	0.00%	13.07%	9.28%	2.99%	12.27%	0.00%	12.27%	-0.80%	12.27%	NO MAX
1010	Plano	2,346	2,410	11.34%	5.33%	16.67%	0.00%	16.67%	11.33%	5.38%	16.71%	0.00%	16.71%	0.04%	16.71%	NO MAX
1012	Pleasanton	103	101	9.30%	6.49%	15.79%	0.16%	15.95%	9.12%	6.10%	15.22%	0.16%	15.38%	-0.57%	15.38%	NO MAX
1013	Point	10	11	9.92%	3.75%	13.67%	0.00%	13.67%	10.51%	2.61%	13.12%	0.00%	13.12%	-0.55%	13.12%	NO MAX
1017	Ponder	14	14	5.47%	0.64%	6.11%	0.40%	6.51%	5.49%	0.73%	6.22%	0.42%	6.64%	0.13%	6.64%	NO MAX
1014	Port Aransas	118	109	8.56%	2.99%	11.55%	0.22%	11.77%	8.36%	3.31%	11.67%	0.24%	11.91%	0.14%	11.91%	12.50%
11016	Port Arthur	518	556	7.01%	6.79%	13.80%	0.25%	14.05%	6.99%	6.75%	13.74%	0.25%	13.99%	-0.06%	13.99%	NO MAX
1018	Port Isabel	75	72	4.13%	-0.16%	3.97%	0.18%	4.15%	4.08%	-0.40%	3.68%	0.17%	3.85%	-0.30%	3.85%	9.50%
1020	Port Lavaca	91	84	4.57%	1.24%	5.81%	0.24%	6.05%	4.61%	1.28%	5.89%	0.25%	6.14%	0.09%	6.14%	9.50%
1022	Port Neches	95	95	8.84%	3.83%	12.67%	0.00%	12.67%	8.96%	4.23%	13.19%	0.00%	13.19%	0.52%	13.19%	NO MAX
1019	Portland	131	133	8.17%	5.47%	13.64%	0.20%	13.84%	8.06%	5.12%	13.18%	0.23%	13.41%	-0.43%	13.41%	NO MAX
1024	Post	19	20	6.55%	8.74%	15.29%	0.48%	15.77%	6.70%	7.56%	14.26%	0.43%	14.69%	-1.08%	14.69%	NO MAX
1026	Poteet	27	26	3.67%	-1.49%	2.18%	0.19%	2.37%	3.73%	-1.59%	2.14%	0.18%	2.32%	-0.05%	2.32%	9.50%
1028	Poth	10	10	2.36%	2.11%	4.47%	0.32%	4.79%	2.34%	1.93%	4.27%	0.34%	4.61%	-0.18%	4.61%	9.50%
1030	Pottsboro	19	20	6.50%	0.22%	6.72%	0.17%	6.89%	6.45%	0.30%	6.75%	0.18%	6.93%	0.04%	6.93%	13.50%
1031	Prairie View	17	21	2.12%	3.13%	5.25%	0.21%	5.46%	1.99%	2.29%	4.28%	0.20%	4.48%	-0.98%	4.48%	NO MAX
1032	Premont	20	18	1.64%	-1.64%	0.00%	0.24%	0.24%	1.92%	-1.92%	0.00%	0.30%	0.30%	0.06%	0.30%	7.50%
1029	Presidio	44	42	1.44%	-0.57%	0.87%	0.23%	1.10%	1.47%	-0.72%	0.75%	0.22%	0.97%	-0.13%	0.97%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1033	Primera	17	18	1.26%	-1.20%	0.06%	0.16%	0.22%	1.15%	-1.15%	0.00%	0.13%	0.13%	-0.09%	0.13%	7.50%
1034	Princeton	71	83	10.04%	0.71%	10.75%	0.11%	10.86%	10.06%	0.69%	10.75%	0.12%	10.87%	0.01%	10.87%	13.50%
1036	Prosper	168	189	12.24%	1.31%	13.55%	0.00%	13.55%	12.16%	1.38%	13.54%	0.00%	13.54%	-0.01%	13.54%	15.50%
1037	Providence Village	7	8	5.36%	2.14%	7.50%	0.21%	7.71%	5.70%	1.89%	7.59%	0.20%	7.79%	0.08%	7.79%	NO MAX
1042	Quanah	15	12	4.98%	4.38%	9.36%	0.36%	9.72%	5.03%	4.05%	9.08%	0.31%	9.39%	-0.33%	9.39%	NO MAX
1045	Queen City	10	12	2.77%	-1.00%	1.77%	0.32%	2.09%	2.62%	-0.91%	1.71%	0.34%	2.05%	-0.04%	2.05%	7.50%
1044	Quinlan	15	18	9.98%	0.03%	10.01%	0.09%	10.10%	10.14%	-0.18%	9.96%	0.11%	10.07%	-0.03%	10.07%	12.50%
1047	Quintana	1	3	2.29%	0.26%	2.55%	0.09%	2.64%	2.40%	0.47%	2.87%	0.17%	3.04%	0.40%	3.04%	NO MAX
1046	Quitaque	4	4	1.40%	3.52%	4.92%	0.20%	5.12%	1.38%	3.22%	4.60%	0.25%	4.85%	-0.27%	4.85%	NO MAX
1048	Quitman	22	23	6.23%	-0.74%	5.49%	0.22%	5.71%	6.26%	-0.69%	5.57%	0.23%	5.80%	0.09%	5.80%	11.50%
1050	Ralls	10	11	5.28%	1.22%	6.50%	0.51%	7.01%	5.72%	2.03%	7.75%	0.57%	8.32%	1.31%	8.32%	9.50%
1051	Rancho Viejo	10	10	5.08%	1.83%	6.91%	0.10%	7.01%	5.08%	1.63%	6.71%	0.11%	6.82%	-0.19%	6.82%	11.50%
1052	Ranger	19	21	8.99%	-2.35%	6.64%	0.00%	6.64%	8.95%	-1.06%	7.89%	0.00%	7.89%	1.25%	7.89%	12.50%
1054	Rankin	5	3	1.91%	-0.67%	1.24%	0.29%	1.53%	1.29%	-0.58%	0.71%	0.22%	0.93%	-0.60%	0.93%	7.50%
1055	Ransom Canyon	11	12	5.23%	10.16%	15.39%	0.24%	15.63%	5.17%	10.57%	15.74%	0.25%	15.99%	0.36%	15.99%	NO MAX
1058	Raymondville	70	70	4.28%	-2.81%	1.47%	0.29%	1.76%	4.36%	-3.38%	0.98%	0.26%	1.24%	-0.52%	1.24%	15.50%
1061	Red Oak	92	99	5.89%	1.29%	7.18%	0.13%	7.31%	5.81%	1.29%	7.10%	0.13%	7.23%	-0.08%	7.23%	13.50%
1062	Redwater	7	7	2.61%	0.47%	3.08%	0.15%	3.23%	2.60%	0.59%	3.19%	0.16%	3.35%	0.12%	3.35%	NO MAX
1064	Refugio	28	29	0.93%	-0.93%	0.00%	0.00%	0.00%	1.05%	-1.05%	0.00%	0.00%	0.00%	0.00%	0.00%	7.50%
1065	Reklaw	7	5	8.54%	7.99%	16.53%	0.33%	16.86%	8.18%	8.58%	16.76%	0.30%	17.06%	0.20%	17.06%	NO MAX
1066	Reno (Lamar County)	12	14	5.56%	-1.39%	4.17%	0.10%	4.27%	5.54%	-1.14%	4.40%	0.10%	4.50%	0.23%	4.50%	11.50%
1069	Reno (Parker County)	16	17	4.70%	-0.55%	4.15%	0.20%	4.35%	4.55%	-0.44%	4.11%	0.20%	4.31%	-0.04%	4.31%	NO MAX
1067	Rhome	14	17	7.17%	0.43%	7.60%	0.19%	7.79%	6.98%	0.14%	7.12%	0.14%	7.26%	-0.53%	7.26%	13.50%
1068	Rice	10	12	1.57%	-0.50%	1.07%	0.12%	1.19%	1.62%	-0.42%	1.20%	0.13%	1.33%	0.14%	1.33%	7.50%
1070	Richardson	1,001	991	7.96%	6.48%	14.44%	0.00%	14.44%	7.97%	6.75%	14.72%	0.00%	14.72%	0.28%	14.72%	NO MAX
1073	Richland Hills	73	79	11.62%	3.85%	15.47%	0.26%	15.73%	11.71%	3.92%	15.63%	0.21%	15.84%	0.11%	15.84%	NO MAX
1074	Richland Springs	1	1	5.65%	-5.65%	0.00%	0.23%	0.23%	5.65%	-5.65%	0.00%	0.25%	0.25%	0.02%	0.25%	NO MAX
1076	Richmond	149	159	10.37%	4.30%	14.67%	0.16%	14.83%	10.35%	4.28%	14.63%	0.17%	14.80%	-0.03%	14.80%	NO MAX
1077	Richwood	23	27	7.96%	3.09%	11.05%	0.13%	11.18%	7.93%	3.16%	11.09%	0.14%	11.23%	0.05%	11.23%	NO MAX
1072	Riesel	8	7	1.21%	4.77%	5.98%	0.15%	6.13%	1.09%	4.74%	5.83%	0.18%	6.01%	-0.12%	6.01%	NO MAX
1075	Rio Grande City	156	142	5.73%	1.30%	7.03%	0.14%	7.17%	5.79%	1.04%	6.83%	0.14%	6.97%	-0.20%	6.97%	NO MAX
1079	Rio Vista	7	7	2.47%	1.30%	3.77%	0.11%	3.88%	2.43%	1.90%	4.33%	0.11%	4.44%	0.56%	4.44%	NO MAX
1080	Rising Star	7	7	1.96%	-1.96%	0.00%	0.27%	0.27%	1.88%	-1.82%	0.06%	0.28%	0.34%	0.07%	0.34%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1082	River Oaks	56	56	9.96%	3.80%	13.76%	0.28%	14.04%	10.31%	4.08%	14.39%	0.28%	14.67%	0.63%	14.67%	NO MAX
1084	Roanoke	125	124	12.77%	4.68%	17.45%	0.00%	17.45%	12.82%	4.52%	17.34%	0.00%	17.34%	-0.11%	17.34%	NO MAX
1088	Robert Lee	2	6	1.10%	4.30%	5.40%	0.28%	5.68%	1.27%	4.26%	5.53%	0.13%	5.66%	-0.02%	5.66%	NO MAX
1089	Robinson	69	68	8.50%	5.35%	13.85%	0.19%	14.04%	8.55%	5.04%	13.59%	0.21%	13.80%	-0.24%	13.80%	NO MAX
21090	Robstown	108	98	4.39%	1.74%	6.13%	0.14%	6.27%	4.38%	1.41%	5.79%	0.13%	5.92%	-0.35%	5.92%	9.50%
11090	Robstown Utility Systems	41	43	5.00%	7.76%	12.76%	0.33%	13.09%	4.98%	7.74%	12.72%	0.30%	13.02%	-0.07%	13.02%	NO MAX
1092	Roby	2	2	6.37%	-4.56%	1.81%	0.57%	2.38%	6.37%	-3.11%	3.26%	0.59%	3.85%	1.47%	3.85%	NO MAX
1096	Rockdale	46	47	7.05%	2.25%	9.30%	0.35%	9.65%	7.01%	1.98%	8.99%	0.37%	9.36%	-0.29%	9.36%	11.50%
1098	Rockport	113	114	11.87%	5.58%	17.45%	0.24%	17.69%	11.32%	6.55%	17.87%	0.26%	18.13%	0.44%	18.13%	NO MAX
1100	Rocksprings	7	7	1.90%	-1.38%	0.52%	0.00%	0.52%	2.48%	-1.17%	1.31%	0.00%	1.31%	0.79%	1.31%	NO MAX
1102	Rockwall	271	273	11.83%	3.93%	15.76%	0.15%	15.91%	11.87%	3.58%	15.45%	0.15%	15.60%	-0.31%	15.60%	NO MAX
1104	Rogers	9	8	5.32%	3.20%	8.52%	0.00%	8.52%	5.41%	3.27%	8.68%	0.00%	8.68%	0.16%	8.68%	NO MAX
1105	Rollingwood	14	16	9.06%	2.14%	11.20%	0.21%	11.41%	9.13%	2.75%	11.88%	0.28%	12.16%	0.75%	12.16%	13.50%
1106	Roma	136	127	6.72%	3.94%	10.66%	0.24%	10.90%	6.75%	3.44%	10.19%	0.27%	10.46%	-0.44%	10.46%	11.50%
1109	Roscoe	7	8	2.02%	0.12%	2.14%	0.39%	2.53%	2.08%	0.22%	2.30%	0.42%	2.72%	0.19%	2.72%	NO MAX
1112	Rosebud	11	12	2.02%	-0.12%	1.90%	0.31%	2.21%	2.03%	-0.08%	1.95%	0.31%	2.26%	0.05%	2.26%	NO MAX
1114	Rosenberg	254	251	9.90%	6.45%	16.35%	0.12%	16.47%	9.79%	6.40%	16.19%	0.12%	16.31%	-0.16%	16.31%	NO MAX
1116	Rotan	6	6	1.34%	-1.34%	0.00%	0.26%	0.26%	1.40%	-1.40%	0.00%	0.28%	0.28%	0.02%	0.28%	NO MAX
1118	Round Rock	927	947	10.77%	4.56%	15.33%	0.14%	15.47%	10.78%	4.57%	15.35%	0.14%	15.49%	0.02%	15.49%	NO MAX
1119	Rowlett	381	389	9.42%	3.40%	12.82%	0.00%	12.82%	9.46%	3.59%	13.05%	0.00%	13.05%	0.23%	13.05%	NO MAX
1120	Royse City	63	71	12.45%	3.53%	15.98%	0.17%	16.15%	12.12%	3.23%	15.35%	0.17%	15.52%	-0.63%	15.52%	NO MAX
1122	Rule	3	3	5.23%	3.65%	8.88%	0.20%	9.08%	5.27%	-3.10%	2.17%	0.15%	2.32%	-6.76%	2.32%	11.50%
1123	Runaway Bay	15	18	3.53%	-1.75%	1.78%	0.22%	2.00%	3.32%	-1.59%	1.73%	0.21%	1.94%	-0.06%	1.94%	9.50%
1124	Runge	4	3	4.63%	14.22%	18.85%	0.71%	19.56%	4.44%	14.22%	18.66%	0.54%	19.20%	-0.36%	19.20%	NO MAX
1126	Rusk	40	38	6.56%	0.02%	6.58%	0.19%	6.77%	6.59%	-0.58%	6.01%	0.21%	6.22%	-0.55%	6.22%	10.50%
1128	Sabinal	13	12	3.27%	-0.15%	3.12%	0.36%	3.48%	3.32%	-0.08%	3.24%	0.42%	3.66%	0.18%	3.66%	9.50%
1129	Sachse	142	149	11.13%	3.66%	14.79%	0.15%	14.94%	10.91%	3.73%	14.64%	0.13%	14.77%	-0.17%	14.77%	NO MAX
1131	Saginaw	141	150	11.33%	10.00%	21.33%	0.18%	21.51%	11.52%	10.15%	21.67%	0.19%	21.86%	0.35%	21.86%	NO MAX
1130	Saint Jo	6	5	6.42%	-1.29%	5.13%	0.30%	5.43%	6.22%	-3.68%	2.54%	0.33%	2.87%	-2.56%	2.87%	10.50%
1133	Salado	10	10	7.40%	-1.15%	6.25%	0.20%	6.45%	6.85%	-1.15%	5.70%	0.22%	5.92%	-0.53%	5.92%	NO MAX
1132	San Angelo	718	715	8.49%	8.97%	17.46%	0.00%	17.46%	8.39%	9.04%	17.43%	0.00%	17.43%	-0.03%	17.43%	NO MAX
21136	San Antonio	6,939	7,028	6.81%	4.85%	11.66%	0.00%	11.66%	6.78%	4.89%	11.67%	0.00%	11.67%	0.01%	11.67%	NO MAX
11136	San Antonio Water System	1,698	1,709	2.06%	1.54%	3.60%	0.00%	3.60%	2.04%	1.60%	3.64%	0.00%	3.64%	0.04%	3.64%	5.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
		LAST YEAR	THIS YEAR	WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
1138	San Augustine	29	28	7.51%	0.83%	8.34%	0.24%	8.58%	7.46%	0.73%	8.19%	0.26%	8.45%	-0.13%	8.45%	13.50%
1140	San Benito	159	160	3.80%	1.71%	5.51%	0.21%	5.72%	3.85%	1.42%	5.27%	0.21%	5.48%	-0.24%	5.48%	11.50%
1144	San Felipe	4	4	1.79%	2.67%	4.46%	0.19%	4.65%	1.79%	2.83%	4.62%	0.20%	4.82%	0.17%	4.82%	NO MAX
1148	San Juan	211	213	2.79%	-0.24%	2.55%	0.17%	2.72%	2.76%	-0.27%	2.49%	0.17%	2.66%	-0.06%	2.66%	10.50%
1150	San Marcos	631	650	10.38%	6.96%	17.34%	0.15%	17.49%	10.31%	6.98%	17.29%	0.16%	17.45%	-0.04%	17.45%	NO MAX
1152	San Saba	46	45	6.15%	2.16%	8.31%	0.28%	8.59%	6.04%	2.42%	8.46%	0.29%	8.75%	0.16%	8.75%	10.50%
1146	Sanger	65	70	6.23%	1.68%	7.91%	0.14%	8.05%	6.28%	1.88%	8.16%	0.15%	8.31%	0.26%	8.31%	12.50%
1153	Sansom Park	33	30	7.01%	-0.86%	6.15%	0.14%	6.29%	7.13%	-1.10%	6.03%	0.13%	6.16%	-0.13%	6.16%	11.50%
1155	Santa Fe	62	59	6.73%	4.89%	11.62%	0.00%	11.62%	6.63%	5.20%	11.83%	0.00%	11.83%	0.21%	11.83%	NO MAX
1158	Savoy	2	3	4.57%	-4.57%	0.00%	0.30%	0.30%	4.16%	-4.16%	0.00%	0.25%	0.25%	-0.05%	0.25%	10.50%
1159	Schertz	322	328	10.47%	5.57%	16.04%	0.12%	16.16%	10.35%	5.45%	15.80%	0.12%	15.92%	-0.24%	15.92%	NO MAX
1160	Schulenburg	37	37	9.84%	11.59%	21.43%	0.26%	21.69%	9.93%	11.57%	21.50%	0.25%	21.75%	0.06%	21.75%	NO MAX
1161	Seabrook	94	95	9.62%	5.95%	15.57%	0.15%	15.72%	9.61%	6.27%	15.88%	0.16%	16.04%	0.32%	16.04%	NO MAX
1162	Seadrift	13	13	1.33%	2.76%	4.09%	0.17%	4.26%	1.37%	2.27%	3.64%	0.19%	3.83%	-0.43%	3.83%	NO MAX
1164	Seagoville	96	96	7.71%	3.15%	10.86%	0.20%	11.06%	7.86%	3.08%	10.94%	0.22%	11.16%	0.10%	11.16%	13.50%
1166	Seagraves	16	17	7.85%	2.17%	10.02%	0.51%	10.53%	7.67%	2.55%	10.22%	0.46%	10.68%	0.15%	10.68%	NO MAX
1167	Sealy	55	57	10.12%	4.45%	14.57%	0.15%	14.72%	9.80%	5.06%	14.86%	0.18%	15.04%	0.32%	15.04%	NO MAX
1168	Seguin	381	374	10.44%	11.79%	22.23%	0.19%	22.42%	10.41%	11.81%	22.22%	0.19%	22.41%	-0.01%	22.41%	NO MAX
1169	Selma	91	85	11.17%	3.49%	14.66%	0.13%	14.79%	11.17%	3.47%	14.64%	0.11%	14.75%	-0.04%	14.75%	NO MAX
1170	Seminole	58	56	8.52%	4.37%	12.89%	0.23%	13.12%	8.68%	3.35%	12.03%	0.25%	12.28%	-0.84%	12.28%	NO MAX
1171	Seven Points	19	19	9.00%	-6.40%	2.60%	0.18%	2.78%	9.00%	-7.89%	1.11%	0.20%	1.31%	-1.47%	1.31%	13.50%
1172	Seymour	39	32	3.54%	3.49%	7.03%	0.35%	7.38%	3.47%	3.73%	7.20%	0.39%	7.59%	0.21%	7.59%	8.50%
1165	Shady Shores	2	2	7.77%	1.49%	9.26%	0.07%	9.33%	7.74%	1.77%	9.51%	0.07%	9.58%	0.25%	9.58%	NO MAX
1177	Shallowater	15	14	4.49%	0.01%	4.50%	0.14%	4.64%	4.57%	-0.01%	4.56%	0.16%	4.72%	0.08%	4.72%	10.50%
1174	Shamrock	22	12	3.08%	4.76%	7.84%	0.49%	8.33%	3.09%	5.66%	8.75%	0.73%	9.48%	1.15%	9.48%	NO MAX
1173	Shavano Park	50	49	11.52%	2.30%	13.82%	0.13%	13.95%	10.79%	2.56%	13.35%	0.14%	13.49%	-0.46%	13.49%	13.50%
1175	Shenandoah	47	49	11.46%	5.47%	16.93%	0.14%	17.07%	11.38%	6.86%	18.24%	0.14%	18.38%	1.31%	18.38%	NO MAX
1181	Shepherd	11	11	4.96%	-2.26%	2.70%	0.19%	2.89%	4.95%	-2.36%	2.59%	0.21%	2.80%	-0.09%	2.80%	11.50%
1176	Sherman	418	439	8.70%	5.22%	13.92%	0.20%	14.12%	8.71%	5.63%	14.34%	0.20%	14.54%	0.42%	14.54%	NO MAX
1178	Shiner	30	32	3.47%	4.24%	7.71%	0.36%	8.07%	3.44%	4.56%	8.00%	0.36%	8.36%	0.29%	8.36%	NO MAX
1179	Shoreacres	13	10	6.11%	-1.43%	4.68%	0.25%	4.93%	6.28%	-1.79%	4.49%	0.28%	4.77%	-0.16%	4.77%	9.50%
1180	Silsbee	65	63	9.70%	8.79%	18.49%	0.00%	18.49%	9.83%	9.14%	18.97%	0.00%	18.97%	0.48%	18.97%	NO MAX
1182	Silverton	4	4	5.97%	-1.50%	4.47%	0.20%	4.67%	5.96%	-0.57%	5.39%	0.21%	5.60%	0.93%	5.60%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1183	Simonton	N/A	2	1.70%	0.89%	2.59%	0.05%	2.64%	1.55%	0.85%	2.40%	0.04%	2.44%	-0.20%	2.44%	NO MAX
1184	Sinton	54	51	8.29%	4.58%	12.87%	0.23%	13.10%	8.12%	4.21%	12.33%	0.21%	12.54%	-0.56%	12.54%	NO MAX
1185	Skellytown	4	6	4.41%	-3.86%	0.55%	0.20%	0.75%	4.27%	-2.36%	1.91%	0.24%	2.15%	1.40%	2.15%	9.50%
1186	Slaton	46	46	6.40%	0.12%	6.52%	0.27%	6.79%	6.48%	0.31%	6.79%	0.26%	7.05%	0.26%	7.05%	12.50%
1188	Smithville	62	62	4.93%	1.93%	6.86%	0.25%	7.11%	5.00%	1.94%	6.94%	0.27%	7.21%	0.10%	7.21%	9.50%
1189	Smyer	3	2	6.22%	4.17%	10.39%	0.17%	10.56%	5.69%	3.99%	9.68%	0.18%	9.86%	-0.70%	9.86%	13.50%
1190	Snyder	86	79	9.90%	3.77%	13.67%	0.23%	13.90%	9.86%	3.77%	13.63%	0.24%	13.87%	-0.03%	13.87%	NO MAX
1191	Somerset	12	12	2.94%	-0.35%	2.59%	0.22%	2.81%	3.00%	-0.32%	2.68%	0.45%	3.13%	0.32%	3.13%	9.50%
1192	Somerville	13	15	5.71%	-0.50%	5.21%	0.48%	5.69%	5.37%	-1.12%	4.25%	0.37%	4.62%	-1.07%	4.62%	9.50%
1194	Sonora	31	31	6.68%	1.61%	8.29%	0.28%	8.57%	6.46%	1.99%	8.45%	0.28%	8.73%	0.16%	8.73%	NO MAX
1196	Sour Lake	14	13	6.42%	-0.73%	5.69%	0.37%	6.06%	6.22%	-0.99%	5.23%	0.24%	5.47%	-0.59%	5.47%	13.50%
1198	South Houston	118	115	6.43%	3.57%	10.00%	0.25%	10.25%	6.36%	3.47%	9.83%	0.28%	10.11%	-0.14%	10.11%	NO MAX
1199	South Padre Island	171	168	11.14%	1.67%	12.81%	0.16%	12.97%	11.18%	1.75%	12.93%	0.16%	13.09%	0.12%	13.09%	13.50%
1197	Southlake	321	345	9.53%	2.82%	12.35%	0.14%	12.49%	9.54%	2.91%	12.45%	0.13%	12.58%	0.09%	12.58%	13.50%
1200	Southmayd	7	9	1.59%	4.04%	5.63%	0.09%	5.72%	1.62%	3.55%	5.17%	0.12%	5.29%	-0.43%	5.29%	NO MAX
1202	Southside Place	23	23	8.39%	3.41%	11.80%	0.20%	12.00%	8.49%	3.12%	11.61%	0.22%	11.83%	-0.17%	11.83%	NO MAX
1204	Spearman	24	25	8.94%	2.44%	11.38%	0.26%	11.64%	8.96%	2.42%	11.38%	0.28%	11.66%	0.02%	11.66%	13.50%
1201	Splendora	24	24	2.56%	2.63%	5.19%	0.17%	5.36%	2.67%	2.92%	5.59%	0.18%	5.77%	0.41%	5.77%	NO MAX
1205	Spring Valley Village	38	40	6.07%	0.82%	6.89%	0.16%	7.05%	6.15%	0.76%	6.91%	0.16%	7.07%	0.02%	7.07%	NO MAX
1203	Springtown	40	43	10.31%	-1.17%	9.14%	0.17%	9.31%	10.80%	-1.49%	9.31%	0.17%	9.48%	0.17%	9.48%	13.50%
1206	Spur	10	11	2.56%	2.10%	4.66%	0.24%	4.90%	2.48%	2.69%	5.17%	0.21%	5.38%	0.48%	5.38%	NO MAX
1207	Stafford	173	182	11.53%	2.91%	14.44%	0.18%	14.62%	11.39%	2.74%	14.13%	0.18%	14.31%	-0.31%	14.31%	NO MAX
1208	Stamford	22	25	5.75%	-0.49%	5.26%	0.47%	5.73%	5.56%	-0.60%	4.96%	0.39%	5.35%	-0.38%	5.35%	9.50%
1210	Stanton	18	21	4.60%	3.15%	7.75%	0.21%	7.96%	4.61%	3.05%	7.66%	0.20%	7.86%	-0.10%	7.86%	9.50%
1211	Star Harbor	4	5	7.92%	2.56%	10.48%	0.47%	10.95%	7.72%	2.98%	10.70%	0.42%	11.12%	0.17%	11.12%	NO MAX
1212	Stephenville	156	155	7.40%	-1.04%	6.36%	0.20%	6.56%	7.40%	-0.73%	6.67%	0.20%	6.87%	0.31%	6.87%	NO MAX
1213	Sterling City	7	6	1.23%	-0.03%	1.20%	0.00%	1.20%	1.15%	-0.04%	1.11%	0.00%	1.11%	-0.09%	1.11%	7.50%
1214	Stinnett	17	16	2.71%	-2.71%	0.00%	0.21%	0.21%	2.44%	-2.44%	0.00%	0.21%	0.21%	0.00%	0.21%	9.50%
1216	Stockdale	8	8	2.69%	2.77%	5.46%	0.35%	5.81%	2.71%	2.82%	5.53%	0.38%	5.91%	0.10%	5.91%	NO MAX
1218	Stratford	13	13	5.54%	0.77%	6.31%	0.29%	6.60%	5.60%	-0.43%	5.17%	0.31%	5.48%	-1.12%	5.48%	NO MAX
1224	Sudan	8	8	1.37%	-0.11%	1.26%	0.00%	1.26%	1.49%	0.02%	1.51%	0.00%	1.51%	0.25%	1.51%	7.50%
1225	Sugar Land	757	750	11.08%	3.70%	14.78%	0.15%	14.93%	11.03%	3.57%	14.60%	0.16%	14.76%	-0.17%	14.76%	NO MAX
1226	Sulphur Springs	143	148	5.17%	2.33%	7.50%	0.24%	7.74%	5.14%	2.63%	7.77%	0.24%	8.01%	0.27%	8.01%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1228	Sundown	13	13	6.92%	4.31%	11.23%	0.20%	11.43%	7.01%	4.74%	11.75%	0.21%	11.96%	0.53%	11.96%	NO MAX
1229	Sunnyvale	39	45	9.48%	2.15%	11.63%	0.25%	11.88%	9.73%	1.83%	11.56%	0.21%	11.77%	-0.11%	11.77%	NO MAX
1230	Sunray	13	8	12.96%	5.55%	18.51%	0.20%	18.71%	9.44%	5.00%	14.44%	0.33%	14.77%	-3.94%	14.77%	NO MAX
1227	Sunrise Beach Village	10	10	1.43%	-0.15%	1.28%	0.13%	1.41%	1.42%	-0.08%	1.34%	0.14%	1.48%	0.07%	1.48%	7.50%
1231	Sunset Valley	29	31	10.46%	2.84%	13.30%	0.12%	13.42%	10.57%	2.61%	13.18%	0.12%	13.30%	-0.12%	13.30%	13.50%
1233	Surfside Beach	22	20	2.38%	-1.02%	1.36%	0.23%	1.59%	2.32%	-0.98%	1.34%	0.26%	1.60%	0.01%	1.60%	9.50%
1232	Sweeny	23	23	9.96%	7.24%	17.20%	0.31%	17.51%	9.93%	7.18%	17.11%	0.32%	17.43%	-0.08%	17.43%	NO MAX
1234	Sweetwater	108	105	9.55%	8.10%	17.65%	0.26%	17.91%	9.47%	8.26%	17.73%	0.24%	17.97%	0.06%	17.97%	NO MAX
1264	TMRS	107	114	11.18%	4.77%	15.95%	0.17%	16.12%	11.17%	4.57%	15.74%	0.19%	15.93%	-0.19%	15.93%	NO MAX
1236	Taft	24	22	12.27%	4.64%	16.91%	0.36%	17.27%	12.96%	4.92%	17.88%	0.31%	18.19%	0.92%	18.19%	NO MAX
1238	Tahoka	19	19	4.15%	-2.70%	1.45%	0.30%	1.75%	3.97%	-3.97%	0.00%	0.29%	0.29%	-1.46%	0.29%	11.50%
1240	Talty	6	4	2.77%	5.37%	8.14%	0.44%	8.58%	2.70%	8.19%	10.89%	0.59%	11.48%	2.90%	11.48%	NO MAX
1241	Tatum	10	10	1.38%	0.41%	1.79%	0.15%	1.94%	1.42%	0.39%	1.81%	0.17%	1.98%	0.04%	1.98%	7.50%
1246	Taylor	148	153	7.59%	4.29%	11.88%	0.24%	12.12%	7.46%	4.10%	11.56%	0.22%	11.78%	-0.34%	11.78%	NO MAX
1248	Teague	20	21	8.85%	0.38%	9.23%	0.33%	9.56%	9.21%	-0.17%	9.04%	0.24%	9.28%	-0.28%	9.28%	13.50%
1252	Temple	677	669	10.10%	6.33%	16.43%	0.20%	16.63%	10.12%	6.79%	16.91%	0.20%	17.11%	0.48%	17.11%	NO MAX
1254	Tenaha	7	10	1.25%	-1.15%	0.10%	0.19%	0.29%	1.62%	-1.32%	0.30%	0.16%	0.46%	0.17%	0.46%	7.50%
1256	Terrell	176	178	10.68%	5.00%	15.68%	0.21%	15.89%	10.61%	5.28%	15.89%	0.21%	16.10%	0.21%	16.10%	NO MAX
1258	Terrell Hills	49	50	9.90%	5.42%	15.32%	0.20%	15.52%	9.69%	5.69%	15.38%	0.18%	15.56%	0.04%	15.56%	NO MAX
31263	Tex Municipal League IEBP	137	141	4.38%	1.84%	6.22%	0.22%	6.44%	4.26%	1.66%	5.92%	0.21%	6.13%	-0.31%	6.13%	12.50%
21263	Tex Municipal League IRP	245	245	10.13%	0.26%	10.39%	0.21%	10.60%	10.13%	0.38%	10.51%	0.21%	10.72%	0.12%	10.72%	NO MAX
21260	Texarkana	210	202	9.61%	6.42%	16.03%	0.00%	16.03%	9.44%	6.12%	15.56%	0.00%	15.56%	-0.47%	15.56%	NO MAX
11260	Texarkana Police Dept	91	87	10.36%	4.65%	15.01%	0.00%	15.01%	10.24%	4.18%	14.42%	0.00%	14.42%	-0.59%	14.42%	NO MAX
31260	Texarkana Water Utilities	153	163	9.47%	6.60%	16.07%	0.00%	16.07%	9.39%	6.73%	16.12%	0.00%	16.12%	0.05%	16.12%	NO MAX
1262	Texas City	399	414	9.69%	6.49%	16.18%	0.00%	16.18%	9.68%	6.56%	16.24%	0.00%	16.24%	0.06%	16.24%	NO MAX
11263	Texas Municipal League	32	34	7.41%	8.63%	16.04%	0.18%	16.22%	7.60%	7.25%	14.85%	0.19%	15.04%	-1.18%	15.04%	NO MAX
1267	The Colony	327	344	9.65%	3.36%	13.01%	0.14%	13.15%	9.66%	3.26%	12.92%	0.14%	13.06%	-0.09%	13.06%	NO MAX
1269	Thompsons	3	3	2.03%	2.17%	4.20%	0.20%	4.40%	2.03%	2.28%	4.31%	0.23%	4.54%	0.14%	4.54%	NO MAX
1268	Thorndale	6	7	6.53%	1.05%	7.58%	0.34%	7.92%	6.40%	1.69%	8.09%	0.34%	8.43%	0.51%	8.43%	9.50%
1272	Thrall	5	4	3.97%	4.39%	8.36%	0.42%	8.78%	3.95%	3.46%	7.41%	0.45%	7.86%	-0.92%	7.86%	NO MAX
1274	Three Rivers	43	41	9.99%	13.37%	23.36%	0.39%	23.75%	9.94%	12.70%	22.64%	0.34%	22.98%	-0.77%	22.98%	NO MAX
1276	Throckmorton	4	5	5.61%	-1.05%	4.56%	0.25%	4.81%	5.46%	-0.55%	4.91%	0.22%	5.13%	0.32%	5.13%	9.50%
1277	Tiki Island	7	8	2.24%	1.34%	3.58%	0.18%	3.76%	2.37%	1.39%	3.76%	0.23%	3.99%	0.23%	3.99%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
LAST YEAR	THIS YEAR	NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1278	Timpson	9	9	2.57%	-0.41%	2.16%	0.44%	2.60%	2.58%	-0.57%	2.01%	0.46%	2.47%	-0.13%	2.47%	7.50%
1280	Tioga	10	10	1.93%	-0.47%	1.46%	0.12%	1.58%	1.89%	-0.43%	1.46%	0.13%	1.59%	0.01%	1.59%	9.50%
1283	Tolar	6	5	7.15%	1.81%	8.96%	0.11%	9.07%	7.09%	0.65%	7.74%	0.15%	7.89%	-1.18%	7.89%	NO MAX
1286	Tom Bean	7	8	3.62%	-1.20%	2.42%	0.12%	2.54%	3.89%	-1.21%	2.68%	0.15%	2.83%	0.29%	2.83%	10.50%
1284	Tomball	166	174	9.87%	3.62%	13.49%	0.19%	13.68%	9.86%	3.63%	13.49%	0.20%	13.69%	0.01%	13.69%	NO MAX
1290	Trent	2	2	5.37%	2.81%	8.18%	0.48%	8.66%	5.36%	2.52%	7.88%	0.53%	8.41%	-0.25%	8.41%	11.50%
1292	Trenton	5	5	5.03%	-2.19%	2.84%	0.33%	3.17%	5.05%	-1.63%	3.42%	0.34%	3.76%	0.59%	3.76%	9.50%
1293	Trinidad	5	5	2.04%	1.20%	3.24%	0.44%	3.68%	2.12%	0.95%	3.07%	0.42%	3.49%	-0.19%	3.49%	7.50%
1294	Trinity	28	25	6.30%	0.62%	6.92%	0.34%	7.26%	6.18%	0.68%	6.86%	0.30%	7.16%	-0.10%	7.16%	11.50%
1295	Trophy Club	75	77	10.43%	2.52%	12.95%	0.15%	13.10%	10.85%	2.24%	13.09%	0.17%	13.26%	0.16%	13.26%	NO MAX
1296	Troup	21	23	4.72%	0.61%	5.33%	0.28%	5.61%	4.68%	0.68%	5.36%	0.31%	5.67%	0.06%	5.67%	9.50%
1297	Troy	13	13	9.73%	2.10%	11.83%	0.43%	12.26%	9.84%	1.27%	11.11%	0.40%	11.51%	-0.75%	11.51%	13.50%
1298	Tulia	38	39	8.39%	2.11%	10.50%	0.24%	10.74%	8.45%	2.24%	10.69%	0.24%	10.93%	0.19%	10.93%	NO MAX
1299	Turkey	3	4	2.27%	2.92%	5.19%	0.30%	5.49%	2.19%	2.99%	5.18%	0.41%	5.59%	0.10%	5.59%	NO MAX
1301	Tye	14	15	4.95%	2.30%	7.25%	0.17%	7.42%	4.73%	2.17%	6.90%	0.17%	7.07%	-0.35%	7.07%	NO MAX
1304	Tyler	668	665	9.23%	11.66%	20.89%	0.23%	21.12%	9.23%	11.76%	20.99%	0.24%	21.23%	0.11%	21.23%	NO MAX
1305	Universal City	130	132	10.23%	8.23%	18.46%	0.18%	18.64%	10.24%	8.33%	18.57%	0.18%	18.75%	0.11%	18.75%	NO MAX
1306	University Park	207	215	6.02%	4.16%	10.18%	0.00%	10.18%	5.98%	3.47%	9.45%	0.00%	9.45%	-0.73%	9.45%	NO MAX
1308	Uvalde	166	165	4.56%	1.37%	5.93%	0.17%	6.10%	4.52%	1.44%	5.96%	0.18%	6.14%	0.04%	6.14%	9.50%
1312	Valley Mills	7	8	1.93%	-0.04%	1.89%	0.12%	2.01%	2.37%	-0.05%	2.32%	0.19%	2.51%	0.50%	2.51%	NO MAX
1313	Valley View	6	5	1.33%	0.84%	2.17%	0.07%	2.24%	1.87%	-0.04%	1.83%	0.14%	1.97%	-0.27%	1.97%	NO MAX
1314	Van	20	20	7.40%	-0.08%	7.32%	0.24%	7.56%	7.47%	-0.29%	7.18%	0.25%	7.43%	-0.13%	7.43%	12.50%
1316	Van Alstyne	31	40	7.58%	2.08%	9.66%	0.14%	9.80%	7.74%	2.01%	9.75%	0.17%	9.92%	0.12%	9.92%	12.50%
1318	Van Horn	23	24	4.63%	3.22%	7.85%	0.19%	8.04%	4.66%	3.54%	8.20%	0.20%	8.40%	0.36%	8.40%	9.50%
1320	Vega	5	6	11.65%	13.14%	24.79%	0.18%	24.97%	10.81%	12.48%	23.29%	0.18%	23.47%	-1.50%	23.47%	NO MAX
1324	Venus	23	23	10.40%	0.13%	10.53%	0.00%	10.53%	10.25%	0.29%	10.54%	0.00%	10.54%	0.01%	10.54%	13.50%
1326	Vernon	91	90	7.03%	4.95%	11.98%	0.30%	12.28%	7.37%	4.92%	12.29%	0.32%	12.61%	0.33%	12.61%	NO MAX
1328	Victoria	579	579	7.70%	8.89%	16.59%	0.19%	16.78%	7.61%	8.69%	16.30%	0.19%	16.49%	-0.29%	16.49%	NO MAX
1329	Vidor	67	68	9.35%	4.89%	14.24%	0.20%	14.44%	9.71%	4.51%	14.22%	0.24%	14.46%	0.02%	14.46%	NO MAX
1500	Village Fire Department	47	48	3.65%	2.44%	6.09%	0.13%	6.22%	3.66%	2.63%	6.29%	0.14%	6.43%	0.21%	6.43%	NO MAX
1327	Village of the Hills	1	1	5.59%	0.59%	6.18%	0.06%	6.24%	5.60%	0.56%	6.16%	0.06%	6.22%	-0.02%	6.22%	NO MAX
1330	Waco	1,438	1,422	7.54%	6.48%	14.02%	0.00%	14.02%	7.50%	6.83%	14.33%	0.00%	14.33%	0.31%	14.33%	NO MAX
1332	Waelder	15	19	2.22%	0.50%	2.72%	0.26%	2.98%	2.28%	0.47%	2.75%	0.25%	3.00%	0.02%	3.00%	7.50%

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members LAST YEAR THIS YEAR		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
				RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE	TOTAL	NORMAL COST	PRIOR SERVICE	TOTAL											
1334	Wake Village	24	27	9.74%	3.37%	13.11%	0.28%	13.39%	9.30%	3.54%	12.84%	0.23%	13.07%	-0.32%	13.07%	NO MAX
1336	Waller	31	34	4.07%	-0.17%	3.90%	0.32%	4.22%	4.11%	-0.15%	3.96%	0.34%	4.30%	0.08%	4.30%	9.50%
1337	Wallis	14	16	3.17%	-0.53%	2.64%	0.26%	2.90%	3.06%	-0.66%	2.40%	0.19%	2.59%	-0.31%	2.59%	8.50%
1338	Walnut Springs	2	2	1.52%	2.01%	3.53%	0.15%	3.68%	1.54%	2.39%	3.93%	0.16%	4.09%	0.41%	4.09%	NO MAX
1340	Waskom	16	16	3.23%	3.50%	6.73%	0.22%	6.95%	3.23%	3.60%	6.83%	0.24%	7.07%	0.12%	7.07%	7.50%
1341	Watauga	157	162	9.62%	3.88%	13.50%	0.18%	13.68%	10.15%	4.05%	14.20%	0.17%	14.37%	0.69%	14.37%	NO MAX
1342	Waxahachie	251	275	9.66%	5.30%	14.96%	0.20%	15.16%	9.87%	5.49%	15.36%	0.19%	15.55%	0.39%	15.55%	NO MAX
1344	Weatherford	360	359	9.38%	3.87%	13.25%	0.17%	13.42%	9.42%	3.95%	13.37%	0.17%	13.54%	0.12%	13.54%	NO MAX
1345	Webster	165	162	11.99%	5.42%	17.41%	0.21%	17.62%	12.10%	5.60%	17.70%	0.21%	17.91%	0.29%	17.91%	NO MAX
1346	Weimar	25	27	9.19%	8.03%	17.22%	0.27%	17.49%	9.03%	7.86%	16.89%	0.25%	17.14%	-0.35%	17.14%	NO MAX
1350	Wellington	13	13	4.86%	-0.82%	4.04%	0.50%	4.54%	4.81%	-0.54%	4.27%	0.51%	4.78%	0.24%	4.78%	NO MAX
1352	Wells	2	6	3.35%	-1.90%	1.45%	0.00%	1.45%	3.54%	-0.58%	2.96%	0.00%	2.96%	1.51%	2.96%	7.50%
1354	Weslaco	234	228	5.28%	2.72%	8.00%	0.16%	8.16%	5.30%	2.97%	8.27%	0.18%	8.45%	0.29%	8.45%	NO MAX
1356	West	20	20	3.60%	-2.04%	1.56%	0.28%	1.84%	3.63%	-2.23%	1.40%	0.21%	1.61%	-0.23%	1.61%	9.50%
1358	West Columbia	35	34	5.16%	-1.90%	3.26%	0.00%	3.26%	5.18%	-1.99%	3.19%	0.00%	3.19%	-0.07%	3.19%	11.50%
1359	West Lake Hills	23	23	11.87%	4.12%	15.99%	0.26%	16.25%	11.61%	4.79%	16.40%	0.27%	16.67%	0.42%	16.67%	NO MAX
1361	West Orange	21	24	9.85%	10.18%	20.03%	0.00%	20.03%	10.00%	10.02%	20.02%	0.00%	20.02%	-0.01%	20.02%	NO MAX
1365	West Tawakoni	15	18	5.27%	4.29%	9.56%	0.25%	9.81%	5.20%	3.86%	9.06%	0.22%	9.28%	-0.53%	9.28%	NO MAX
1364	West Univ. Place	118	126	8.65%	4.19%	12.84%	0.19%	13.03%	8.65%	4.24%	12.89%	0.18%	13.07%	0.04%	13.07%	NO MAX
1363	Westlake	41	43	9.47%	2.33%	11.80%	0.19%	11.99%	9.44%	2.33%	11.77%	0.19%	11.96%	-0.03%	11.96%	NO MAX
1362	Westover Hills	22	24	2.09%	0.20%	2.29%	0.29%	2.58%	2.00%	0.35%	2.35%	0.30%	2.65%	0.07%	2.65%	9.50%
1366	Westworth Village	48	45	10.67%	1.08%	11.75%	0.19%	11.94%	10.51%	1.23%	11.74%	0.20%	11.94%	0.00%	11.94%	13.50%
1368	Wharton	103	100	4.78%	1.10%	5.88%	0.22%	6.10%	4.78%	0.92%	5.70%	0.23%	5.93%	-0.17%	5.93%	9.50%
1370	Wheeler	8	7	6.93%	0.76%	7.69%	0.11%	7.80%	7.08%	0.88%	7.96%	0.14%	8.10%	0.30%	8.10%	NO MAX
1372	White Deer	5	5	3.47%	4.61%	8.08%	0.60%	8.68%	3.75%	5.81%	9.56%	0.79%	10.35%	1.67%	10.35%	NO MAX
1377	White Oak	45	43	11.34%	2.76%	14.10%	0.21%	14.31%	11.76%	2.64%	14.40%	0.24%	14.64%	0.33%	14.64%	NO MAX
1378	White Settlement	114	114	9.45%	7.48%	16.93%	0.16%	17.09%	9.69%	7.38%	17.07%	0.16%	17.23%	0.14%	17.23%	NO MAX
1374	Whiteface	3	2	5.47%	-3.91%	1.56%	0.34%	1.90%	5.68%	-4.05%	1.63%	0.47%	2.10%	0.20%	2.10%	NO MAX
1375	Whitehouse	42	44	6.77%	2.22%	8.99%	0.18%	9.17%	6.67%	1.99%	8.66%	0.17%	8.83%	-0.34%	8.83%	11.50%
1376	Whitesboro	49	48	4.97%	2.25%	7.22%	0.24%	7.46%	4.97%	1.41%	6.38%	0.25%	6.63%	-0.83%	6.63%	9.50%
1380	Whitewright	21	20	3.65%	-0.78%	2.87%	0.13%	3.00%	3.74%	-0.61%	3.13%	0.14%	3.27%	0.27%	3.27%	9.50%
1382	Whitney	19	20	3.40%	0.82%	4.22%	0.18%	4.40%	3.35%	0.72%	4.07%	0.19%	4.26%	-0.14%	4.26%	7.50%
1384	Wichita Falls	988	968	5.49%	7.28%	12.77%	0.00%	12.77%	5.53%	7.75%	13.28%	0.00%	13.28%	0.51%	13.28%	NO MAX

SECTION 2
TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION RESULTS AS OF DECEMBER 31, 2018

CITY NUMBER	CITY NAME	Contributing Members		2019 RATES					2020 RATES					GRAND TOTAL CHANGE	GRAND TOTAL WITH PHASE-IN	MAX RATE (RET ONLY)
				WITHOUT MAXIMUM OR PHASE-IN					WITHOUT MAXIMUM OR PHASE-IN							
		LAST YEAR	THIS YEAR	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL	RETIREMENT PLAN			SUPPL DEATH	GRAND TOTAL			
NORMAL COST	PRIOR SERVICE			TOTAL	NORMAL COST	PRIOR SERVICE			TOTAL							
1386	Willis	40	41	8.09%	1.86%	9.95%	0.18%	10.13%	7.99%	1.47%	9.46%	0.18%	9.64%	-0.49%	9.64%	13.50%
1387	Willow Park	35	37	6.42%	0.81%	7.23%	0.12%	7.35%	6.63%	0.78%	7.41%	0.13%	7.54%	0.19%	7.54%	NO MAX
1388	Wills Point	30	29	6.26%	6.14%	12.40%	0.19%	12.59%	6.29%	5.72%	12.01%	0.21%	12.22%	-0.37%	12.22%	NO MAX
1390	Wilmer	51	50	4.80%	-0.10%	4.70%	0.16%	4.86%	4.56%	-0.08%	4.48%	0.11%	4.59%	-0.27%	4.59%	12.50%
1392	Wimberley	7	10	4.74%	3.13%	7.87%	0.20%	8.07%	4.35%	2.21%	6.56%	0.17%	6.73%	-1.34%	6.73%	NO MAX
1393	Windcrest	66	65	6.69%	0.71%	7.40%	0.21%	7.61%	6.55%	0.72%	7.27%	0.21%	7.48%	-0.13%	7.48%	10.50%
1395	Winfield	2	2	2.95%	0.55%	3.50%	0.32%	3.82%	3.15%	0.66%	3.81%	0.36%	4.17%	0.35%	4.17%	NO MAX
1396	Wink	8	10	6.98%	0.46%	7.44%	0.30%	7.74%	7.58%	0.27%	7.85%	0.28%	8.13%	0.39%	8.13%	NO MAX
1398	Winnsboro	37	40	6.71%	2.23%	8.94%	0.24%	9.18%	6.73%	2.37%	9.10%	0.25%	9.35%	0.17%	9.35%	11.50%
1399	Winona	5	5	10.43%	-10.43%	0.00%	0.19%	0.19%	10.60%	-8.66%	1.94%	0.21%	2.15%	1.96%	2.15%	13.50%
1400	Winters	14	15	7.63%	2.22%	9.85%	0.36%	10.21%	7.87%	2.54%	10.41%	0.34%	10.75%	0.54%	10.75%	11.50%
1403	Wolfforth	29	28	6.95%	4.15%	11.10%	0.19%	11.29%	6.94%	4.55%	11.49%	0.21%	11.70%	0.41%	11.70%	NO MAX
1409	Woodcreek	3	3	7.69%	-0.02%	7.67%	0.67%	8.34%	7.69%	0.34%	8.03%	0.71%	8.74%	0.40%	8.74%	NO MAX
1404	Woodsboro	12	12	3.58%	-2.53%	1.05%	0.18%	1.23%	3.55%	-2.81%	0.74%	0.17%	0.91%	-0.32%	0.91%	7.50%
1406	Woodville	33	33	9.56%	7.96%	17.52%	0.26%	17.78%	9.48%	7.91%	17.39%	0.26%	17.65%	-0.13%	17.65%	NO MAX
1407	Woodway	81	85	9.05%	7.41%	16.46%	0.15%	16.61%	9.20%	7.57%	16.77%	0.16%	16.93%	0.32%	16.93%	NO MAX
1408	Wortham	8	8	6.60%	-0.71%	5.89%	0.13%	6.02%	6.20%	-0.84%	5.36%	0.07%	5.43%	-0.59%	5.43%	12.50%
1410	Wylie	313	324	10.77%	4.07%	14.84%	0.12%	14.96%	10.55%	4.20%	14.75%	0.11%	14.86%	-0.10%	14.86%	NO MAX
1412	Yoakum	84	81	8.21%	7.52%	15.73%	0.28%	16.01%	8.07%	8.07%	16.14%	0.28%	16.42%	0.41%	16.42%	NO MAX
1414	Yorktown	14	9	1.39%	-0.47%	0.92%	0.37%	1.29%	1.17%	-0.32%	0.85%	0.60%	1.45%	0.16%	1.45%	7.50%
1415	Zavalla	8	9	3.71%	-3.69%	0.02%	0.00%	0.02%	3.77%	-3.68%	0.09%	0.00%	0.09%	0.07%	0.09%	9.50%

SECTION 3

RECONCILIATION OF FULL CONTRIBUTION RATES FROM PRIOR VALUATION REPORT

Section 3

Texas Municipal Retirement System

Changes in Full Retirement Rate from Prior Actuarial Valuation Report

The following Schedule provides detail of the reconciliation in the Full Rate for each participating employer from the prior valuation. 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 is a brief explanation of the most common sources for deviation.

Benefit Changes - Shows the increase or decrease in the contribution rate associated with any modifications made to the member city's TMRS plan provisions.

Assumption & Method Changes - Shows the increase or decrease in the contribution rate associated with actuarial assumption and method changes made, if any, as of the current valuation date and approved by the Board of Trustees.

Return on Actuarial Value of Assets - Shows the change in the contribution rate associated with the return on the Actuarial Value of Assets (AVA) being different than the assumed 6.75%. For the year ending December 31, 2018 the System-wide return on an AVA basis was 6.06%, but the returns will vary by City.

Contribution Lag/Phase In & Fully Amortized Prior Bases - Shows the total increase or decrease in the contribution rate associated with the phase in of city contribution rates and any additional contributions above the full rate that the city made to its plan. The effect of the "Contribution Lag" is included here, as well, and refers to the time delay between the actuarial valuation date and the date the contribution rate becomes effective. For TMRS member cities, the "Lag" is one year (i.e. the Actuarial Valuation as of December 31, 2018 set the rate effective for Calendar Year 2020.) The Phase In amount reflects contributing a portion of the full rate increase due to changes in the December 31, 2013 and December 31, 2015 actuarial valuations phased in at a rate of 0.50% per year. In addition, it shows the impact of the bases which became fully amortized as of this valuation, since payments for those bases are no longer part of the calculation of the prior service rate.

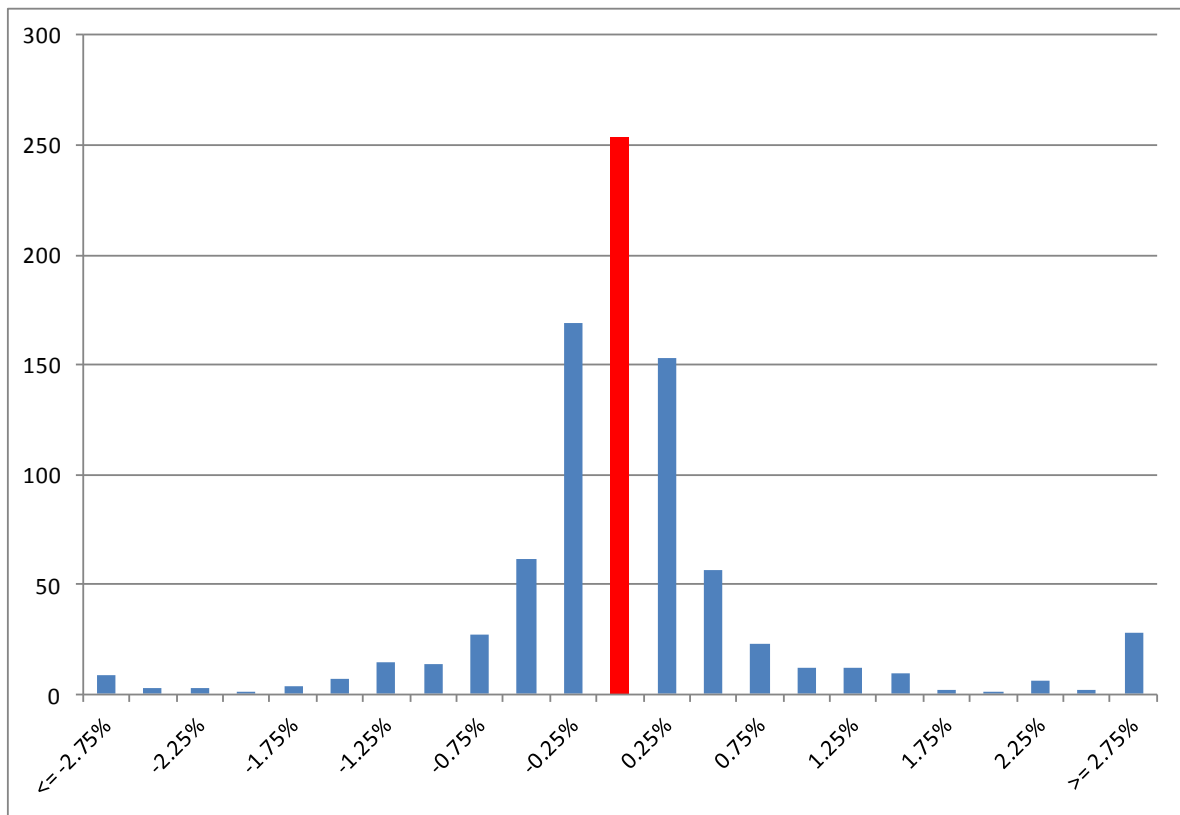
Payroll Growth - Shows the increase or decrease in the contribution rate associated with larger or lower than expected growth in the member city's overall payroll. The amortization payments are calculated assuming payroll grows at a city's assumed rate each year. For most cities the assumed payroll growth is 3.0%. Overall payroll growth in excess of the assumed rate will typically cause a decrease in the amortization 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 normal cost rate for the employer is the pay-weighted average of the individual normal cost rates and will generally increase (decrease) as the average entry age of the group increases (decreases).

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 than assumed. The most significant sources for variance will be individual salary increases compared to the assumption and turnover.

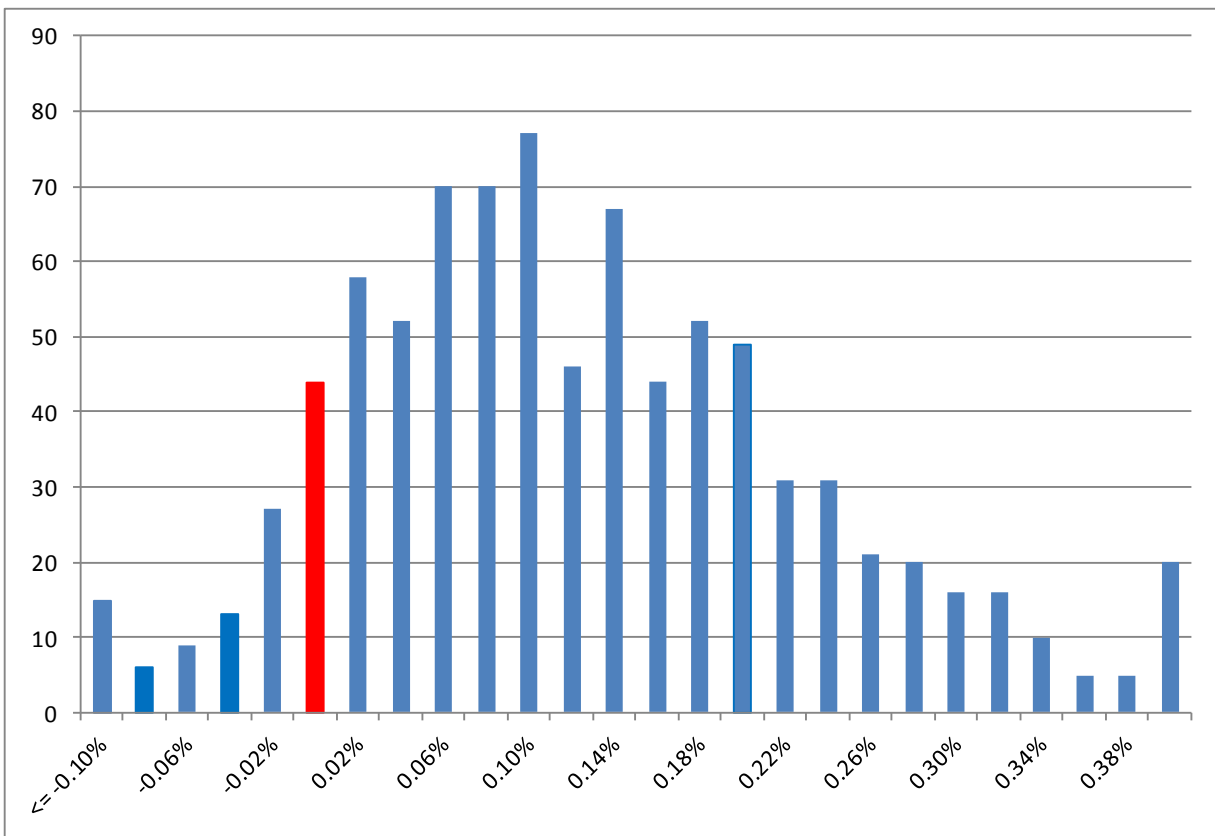
Distribution of Changes

Total Changes in Full Retirement Rate



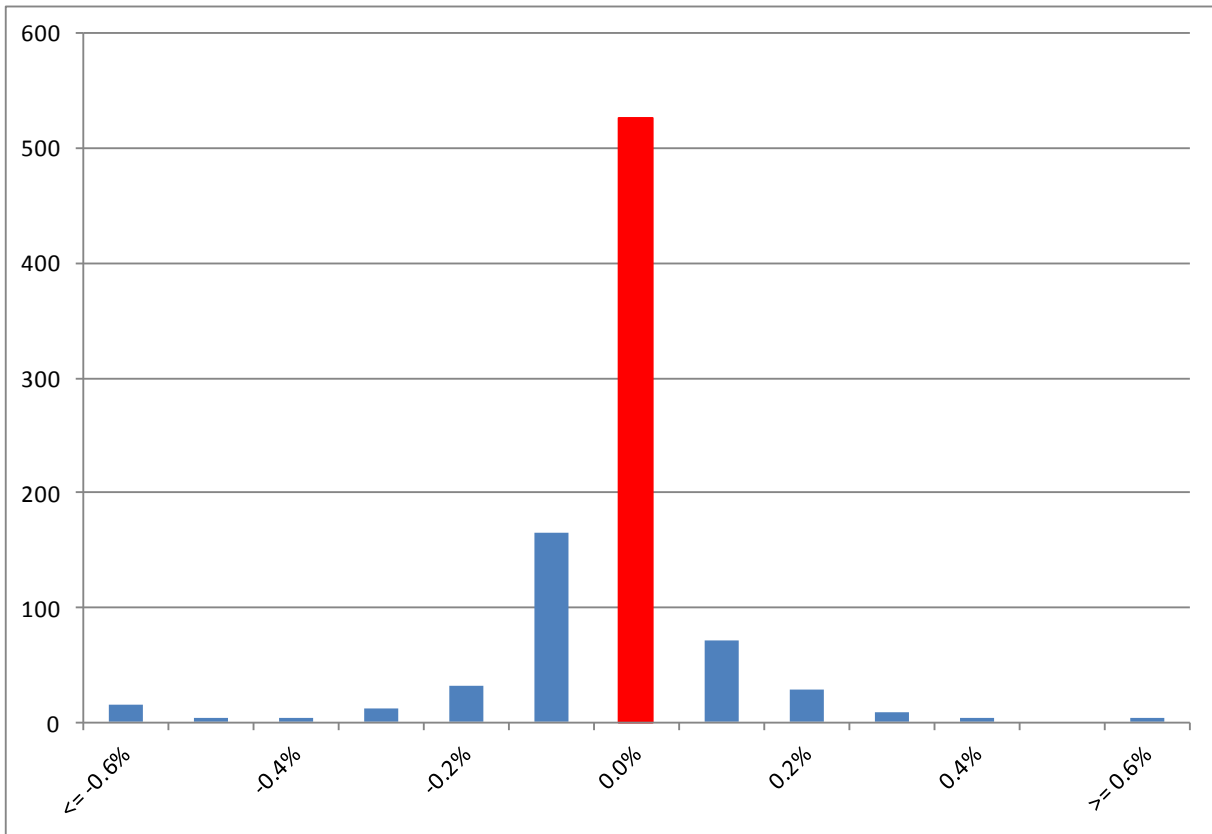
Distribution of Changes

Change Due to Return on Actuarial Value of Assets



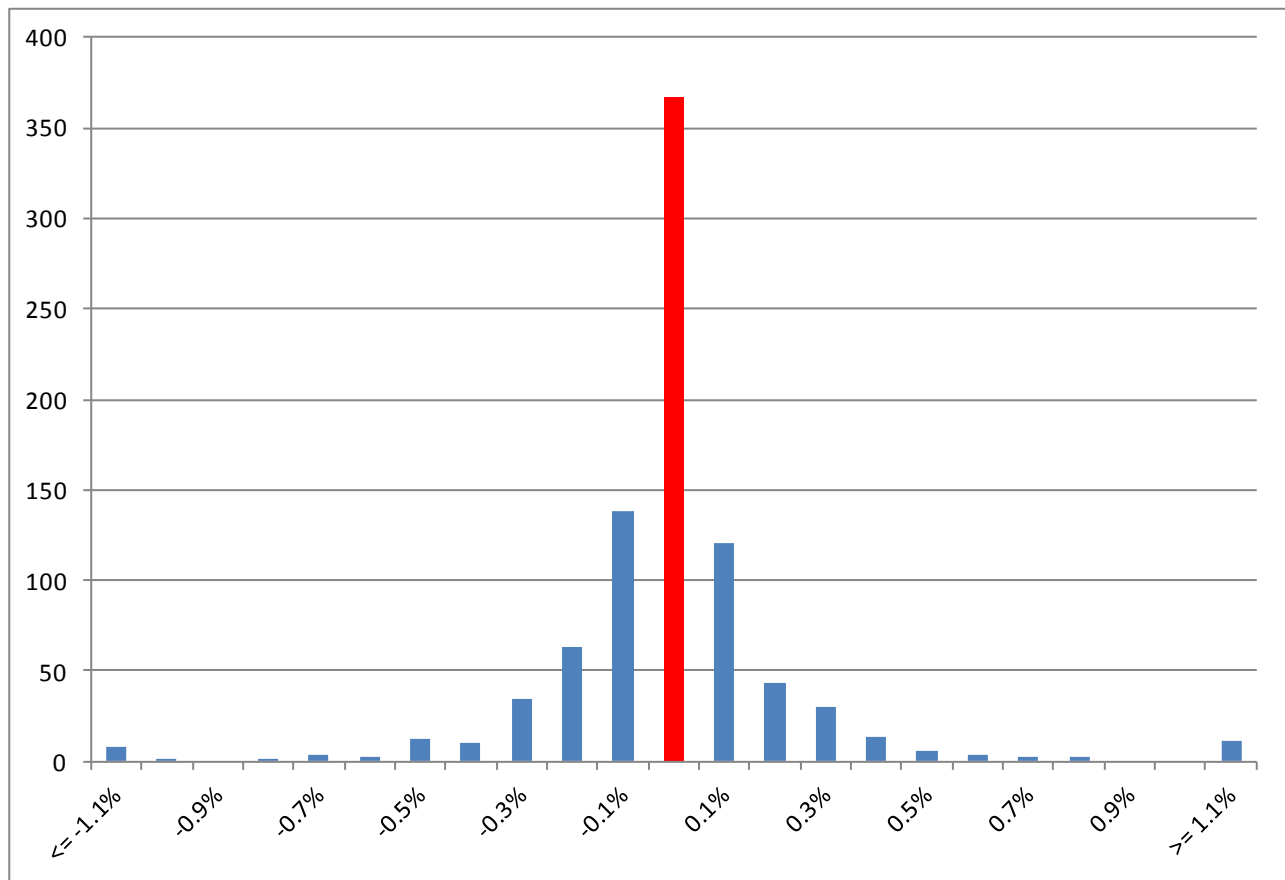
Distribution of Changes

Change Due to Contributions Different than Actuarial Rate and/or Fully Amortized Prior Bases



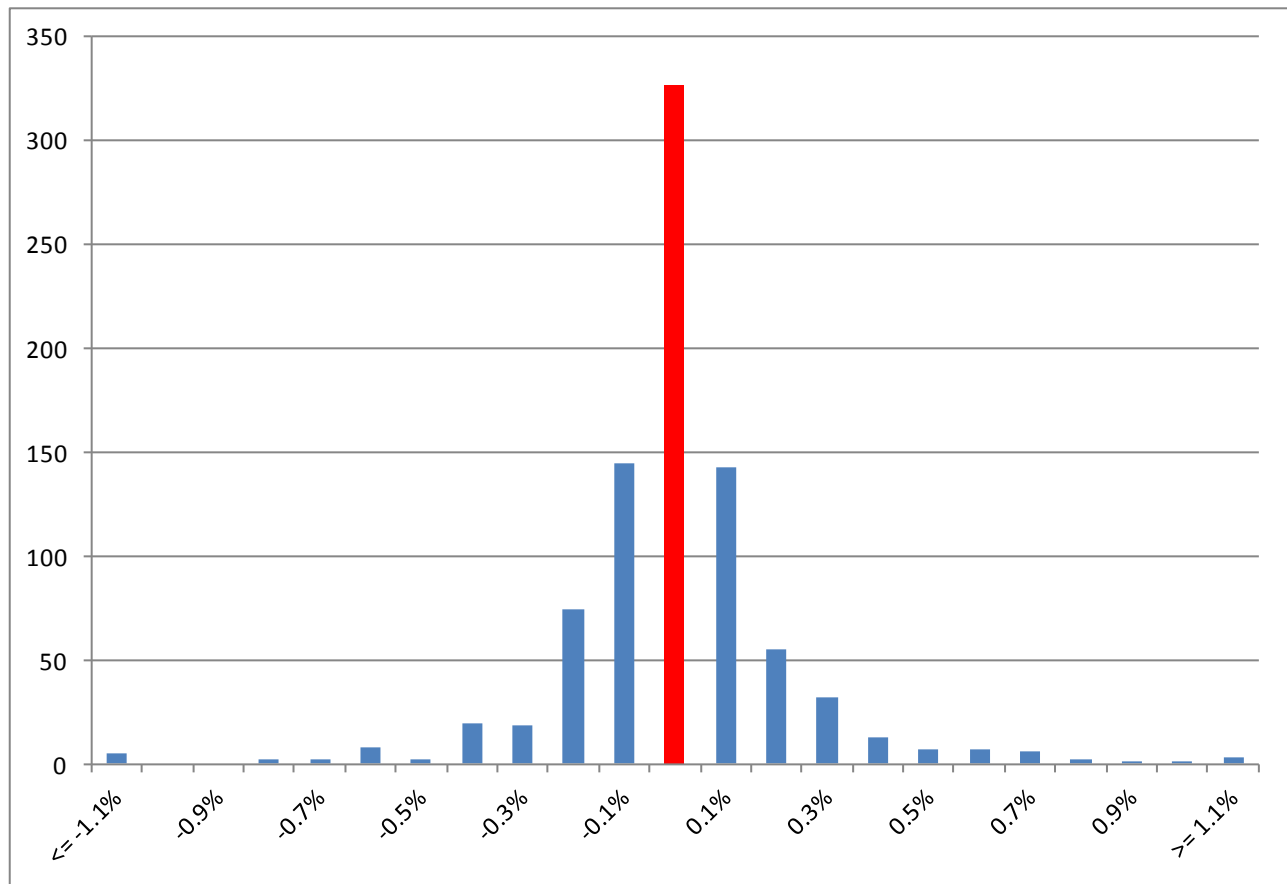
Distribution of Changes

Change Due to Payroll Growing Faster or Slower than Expected



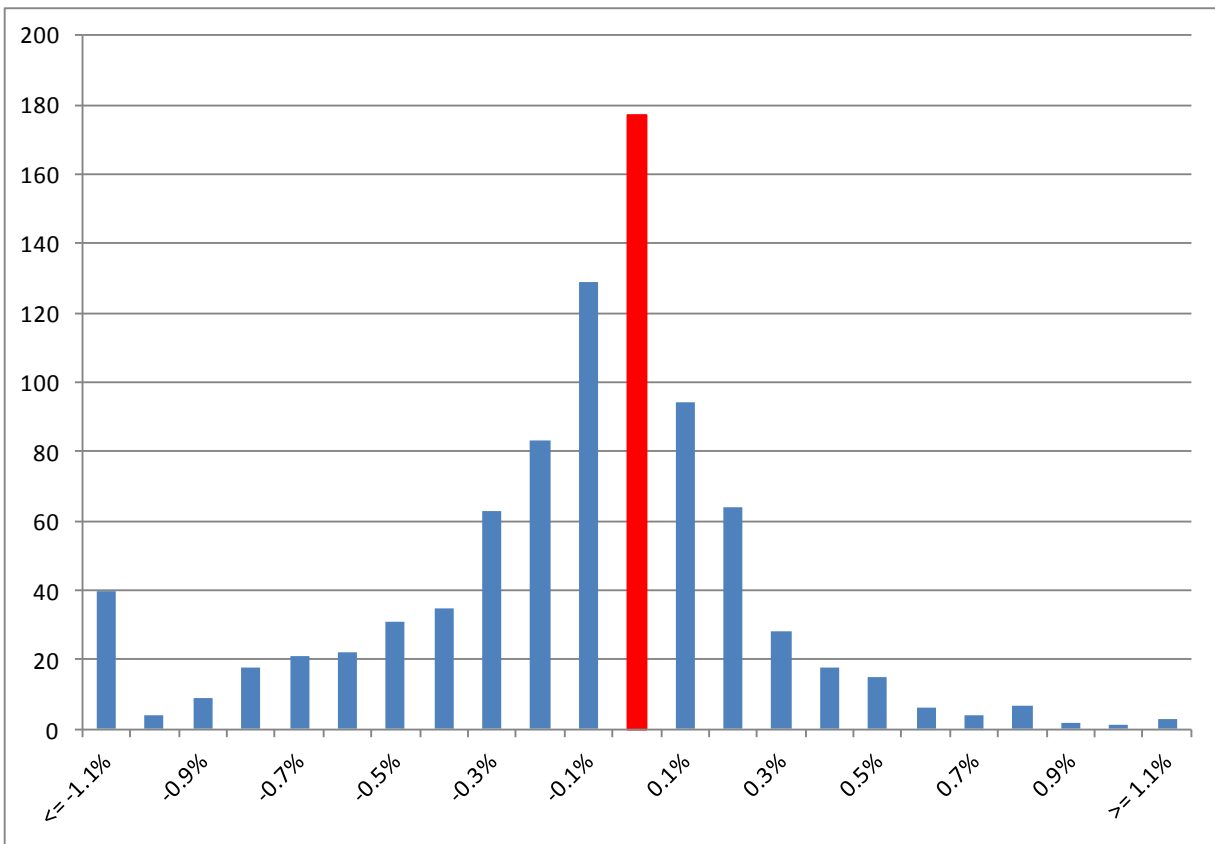
Distribution of Changes

Change Normal Cost Rate



Distribution of Changes

Change Due to Liability Experience



Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Fully Amortized Prior Bases					
4	Abernathy	4.01%	0.00%	0.00%	0.10%	0.00%	0.09%	0.04%	-0.39%	-0.16%	3.85%
6	Abilene	10.93%	0.00%	0.00%	0.27%	-0.01%	0.00%	0.00%	-0.14%	0.12%	11.05%
7	Addison	10.69%	0.00%	0.00%	0.32%	0.03%	-0.01%	0.08%	-0.05%	0.37%	11.06%
8	Agua Dulce	9.08%	0.00%	0.00%	-0.11%	-0.03%	-1.21%	-0.16%	0.20%	-1.31%	7.77%
10	Alamo	6.87%	0.00%	0.00%	0.07%	-0.03%	-0.07%	0.12%	-0.66%	-0.57%	6.30%
12	Alamo Heights	16.84%	0.00%	0.00%	0.13%	0.01%	0.18%	0.05%	-0.30%	0.07%	16.91%
14	Alba	2.44%	0.00%	0.00%	0.09%	-0.47%	0.00%	-0.02%	-0.08%	-0.48%	1.96%
16	Albany	5.24%	0.00%	0.00%	0.05%	0.03%	0.00%	-0.03%	0.19%	0.24%	5.48%
17	Aledo	7.46%	0.00%	0.00%	0.04%	0.02%	0.02%	-0.11%	0.07%	0.04%	7.50%
18	Alice	4.81%	0.00%	0.00%	0.20%	-0.01%	-0.01%	-0.04%	-0.15%	-0.01%	4.80%
19	Allen	14.03%	0.00%	0.00%	0.09%	-0.09%	-0.08%	0.01%	0.04%	-0.03%	14.00%
20	Alpine	1.06%	0.00%	0.00%	0.12%	0.01%	0.09%	-0.10%	-0.30%	-0.18%	0.88%
22	Alto	11.58%	0.00%	0.00%	0.14%	0.02%	-0.19%	-0.61%	-0.19%	-0.83%	10.75%
23	Alton	13.90%	0.00%	0.00%	0.02%	0.06%	-0.04%	-0.01%	-0.59%	-0.56%	13.34%
24	Alvarado	5.19%	0.00%	0.00%	0.03%	-0.03%	-0.04%	0.16%	0.05%	0.17%	5.36%
26	Alvin	16.88%	0.00%	0.00%	0.18%	-0.02%	0.17%	-0.12%	-0.09%	0.12%	17.00%
28	Alvord	5.44%	0.00%	0.00%	0.08%	-0.04%	-0.01%	0.83%	-0.52%	0.34%	5.78%
30	Amarillo	12.18%	0.00%	0.00%	0.23%	0.00%	0.02%	-0.03%	-0.19%	0.03%	12.21%
32	Amherst	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
34	Anahuac	8.75%	0.00%	0.00%	0.19%	-0.25%	-0.74%	-0.04%	0.75%	-0.09%	8.66%
36	Andrews	15.97%	0.00%	0.00%	0.26%	-0.04%	-0.17%	-0.05%	0.01%	0.01%	15.98%
38	Angleton	12.35%	0.00%	0.00%	0.15%	0.04%	0.10%	-0.01%	-0.42%	-0.14%	12.21%
40	Anna	14.67%	0.00%	0.00%	-0.01%	-0.13%	-0.24%	-0.39%	0.19%	-0.58%	14.09%
41	Annetta	9.99%	0.00%	0.00%	-0.10%	0.42%	0.05%	-0.68%	-0.86%	-1.17%	8.82%
44	Anson	0.54%	0.00%	0.00%	0.07%	-0.05%	0.03%	0.10%	-0.12%	0.03%	0.57%
45	Anthony	2.99%	0.00%	0.00%	0.03%	0.02%	0.22%	-0.07%	0.00%	0.20%	3.19%
48	Aransas Pass	9.71%	0.00%	0.00%	0.10%	-0.07%	0.12%	-0.08%	0.01%	0.08%	9.79%
50	Archer City	4.18%	0.00%	0.00%	0.01%	0.00%	0.01%	0.02%	0.03%	0.07%	4.25%
49	Arcola	4.81%	0.00%	0.00%	-0.03%	-0.15%	-0.30%	0.08%	-0.36%	-0.76%	4.05%
51	Argyle	13.68%	0.00%	0.00%	0.09%	-0.24%	-0.25%	0.30%	-0.16%	-0.26%	13.42%
52	Arlington	15.81%	0.00%	0.00%	0.26%	-0.02%	-0.14%	-0.01%	0.23%	0.32%	16.13%
54	Arp	1.68%	0.00%	0.00%	0.16%	-0.01%	-0.03%	0.19%	-0.85%	-0.54%	1.14%
60	Aspermont	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
62	Athens	20.79%	-4.92%	0.00%	0.17%	-0.31%	0.10%	0.07%	-0.44%	-5.33%	15.46%
64	Atlanta	3.58%	0.00%	0.00%	0.09%	-0.05%	0.00%	-0.04%	-0.19%	-0.19%	3.39%
66	Aubrey	6.13%	0.00%	0.00%	0.01%	-0.10%	-0.06%	-0.21%	0.14%	-0.22%	5.91%
74	Avinger	2.07%	0.00%	0.00%	0.03%	0.01%	-0.01%	0.01%	-0.09%	-0.05%	2.02%
75	Azle	12.23%	0.00%	0.00%	0.09%	-0.03%	-0.09%	-0.05%	0.35%	0.27%	12.50%
77	Baird	0.87%	0.00%	0.00%	0.07%	0.00%	-0.01%	0.14%	0.01%	0.21%	1.08%
78	Balch Springs	13.83%	0.00%	0.00%	0.06%	-0.03%	-0.05%	-0.14%	-0.07%	-0.23%	13.60%
79	Balcones Heights	15.76%	-7.19%	0.00%	0.19%	-0.45%	-0.02%	-0.12%	-0.25%	-7.84%	7.92%
80	Ballinger	3.70%	0.00%	0.00%	0.24%	0.00%	0.00%	-0.09%	-0.29%	-0.14%	3.56%
82	Balморhea	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
83	Bandera	10.40%	0.00%	0.00%	0.11%	-0.05%	0.04%	0.07%	0.25%	0.42%	10.82%
84	Bangs	12.80%	0.00%	0.00%	0.18%	0.14%	0.12%	-0.15%	-0.76%	-0.47%	12.33%
90	Bartlett	7.87%	0.00%	0.00%	0.07%	0.12%	-0.15%	0.32%	-0.01%	0.35%	8.22%
91	Bartonville	15.28%	0.00%	0.00%	0.06%	0.11%	0.17%	-0.18%	0.11%	0.27%	15.55%
92	Bastrop	11.37%	0.00%	0.00%	0.05%	-0.06%	-0.14%	-0.08%	0.15%	-0.08%	11.29%
94	Bay City	9.51%	0.00%	0.00%	0.20%	0.00%	0.03%	-0.05%	-0.07%	0.11%	9.62%
93	Bayou Vista	2.82%	0.00%	0.00%	0.05%	-0.10%	0.13%	-0.37%	0.13%	-0.16%	2.66%
96	Baytown	17.63%	0.00%	0.00%	0.18%	-0.07%	-0.40%	-0.04%	0.03%	-0.30%	17.33%
98	Beaumont	19.22%	0.00%	0.00%	0.30%	0.02%	0.18%	-0.04%	-0.27%	0.19%	19.41%
100	Bedford	9.02%	0.00%	0.00%	-0.01%	-0.02%	-0.03%	-0.04%	0.00%	-0.10%	8.92%
101	Bee Cave	9.08%	0.00%	0.00%	0.01%	-0.07%	-0.03%	-0.02%	0.00%	-0.11%	8.97%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
102	Beeville	0.83%	0.00%	0.00%	0.15%	0.00%	-0.42%	-0.02%	-0.11%	-0.40%	0.43%
106	Bellaire	20.45%	0.00%	0.00%	0.34%	0.02%	0.05%	0.01%	-0.67%	-0.25%	20.20%
109	Bellmead	8.81%	0.00%	0.00%	0.13%	-0.01%	0.00%	-0.17%	-0.13%	-0.18%	8.63%
110	Bells	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
112	Bellville	15.38%	0.00%	0.00%	0.22%	0.08%	0.32%	0.10%	-0.32%	0.40%	15.78%
114	Belton	7.48%	0.42%	0.00%	0.10%	0.02%	-0.01%	0.16%	-0.06%	0.63%	8.11%
118	Benbrook	16.18%	0.00%	0.00%	0.19%	0.03%	0.06%	0.18%	-0.20%	0.26%	16.44%
121	Berryville	3.03%	0.00%	0.00%	0.14%	0.03%	-0.02%	-0.02%	0.23%	0.36%	3.39%
123	Bertram	1.98%	0.00%	0.00%	0.06%	-0.01%	-0.01%	-0.37%	0.05%	-0.28%	1.70%
124	Big Lake	17.67%	0.00%	0.00%	0.13%	0.05%	-0.44%	0.09%	0.01%	-0.16%	17.51%
126	Big Sandy	2.44%	0.00%	0.00%	0.18%	-0.01%	0.03%	-0.09%	-0.06%	0.05%	2.49%
128	Big Spring	17.19%	0.00%	0.00%	0.22%	0.01%	0.29%	-0.05%	-0.22%	0.25%	17.44%
132	Bishop	3.51%	0.00%	0.00%	0.15%	-0.02%	-0.02%	0.00%	-0.10%	0.01%	3.52%
134	Blanco	1.59%	4.88%	0.00%	0.03%	0.25%	-0.05%	0.00%	-0.15%	4.96%	6.55%
140	Blooming Grove	9.98%	0.00%	0.00%	0.13%	-0.01%	0.00%	-0.03%	0.71%	0.80%	10.78%
142	Blossom	3.72%	0.00%	0.00%	0.20%	-0.24%	0.05%	-0.01%	0.39%	0.39%	4.11%
143	Blue Mound	4.64%	0.00%	0.00%	-0.01%	-0.01%	-0.02%	-0.02%	0.10%	0.04%	4.68%
144	Blue Ridge	1.81%	0.00%	0.00%	0.00%	0.02%	0.00%	0.07%	-0.11%	-0.02%	1.79%
148	Boerne	18.34%	0.00%	0.00%	0.07%	-0.05%	-0.15%	0.04%	0.10%	0.01%	18.35%
150	Bogata	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.04%	0.14%	0.14%
152	Bonham	5.31%	0.00%	0.00%	0.14%	0.01%	0.03%	0.02%	-0.36%	-0.16%	5.15%
154	Booker	5.85%	0.00%	0.00%	0.08%	-0.03%	0.00%	0.24%	-0.50%	-0.21%	5.64%
156	Borger	14.57%	0.00%	0.00%	0.19%	-0.03%	-0.08%	-0.14%	-0.64%	-0.70%	13.87%
158	Bovina	0.00%	0.00%	0.00%	0.06%	0.00%	0.01%	0.00%	0.16%	0.23%	0.23%
160	Bowie	10.62%	0.00%	0.00%	0.22%	0.02%	0.04%	-0.03%	-1.30%	-1.05%	9.57%
162	Boyd	4.24%	0.00%	0.00%	0.03%	0.02%	0.01%	-0.24%	0.04%	-0.14%	4.10%
166	Brady	10.24%	0.00%	0.00%	0.07%	-0.05%	-0.06%	-0.04%	-0.33%	-0.41%	9.83%
170	Brazoria	6.69%	0.00%	0.00%	0.14%	-0.11%	0.00%	-0.40%	-0.68%	-1.05%	5.64%
172	Breckenridge	7.42%	0.00%	0.00%	0.17%	-0.08%	0.00%	0.03%	-0.61%	-0.49%	6.93%
174	Bremond	15.95%	0.00%	0.00%	0.01%	0.02%	0.40%	-0.04%	-0.37%	0.02%	15.97%
176	Brenham	9.72%	0.29%	0.00%	0.18%	0.02%	0.09%	-0.18%	-0.45%	-0.05%	9.67%
177	Bridge City	15.07%	0.00%	0.00%	0.21%	-0.02%	-0.06%	-0.10%	0.03%	0.06%	15.13%
178	Bridgeport	13.88%	0.00%	0.00%	0.14%	0.07%	0.18%	0.33%	-0.93%	-0.21%	13.67%
180	Bronte	12.98%	0.00%	0.00%	0.15%	-0.12%	-0.23%	0.63%	-0.32%	0.11%	13.09%
182	Brookshire	5.68%	2.89%	0.00%	0.10%	0.15%	-0.08%	-0.02%	-0.04%	3.00%	8.68%
184	Brownfield	5.11%	0.00%	0.00%	0.20%	-0.59%	0.02%	0.01%	-0.83%	-1.19%	3.92%
186	Brownsboro	10.75%	0.00%	0.00%	-0.07%	-0.11%	1.90%	-0.03%	-2.03%	-0.34%	10.41%
10188	Brownsville	17.07%	0.00%	0.00%	0.26%	0.03%	0.16%	0.03%	-0.69%	-0.21%	16.86%
20188	Brownsville PUB	17.45%	0.00%	0.00%	0.15%	-0.26%	-0.11%	-0.02%	0.00%	-0.24%	17.21%
10190	Brownwood	13.13%	0.00%	0.00%	0.19%	0.00%	0.12%	0.00%	-0.07%	0.24%	13.37%
30190	Brownwood Health Dept.	9.95%	0.00%	0.00%	0.17%	-0.01%	0.05%	-0.30%	0.78%	0.69%	10.64%
20190	Brownwood Public Library	4.70%	0.00%	0.00%	0.07%	0.01%	0.00%	-0.38%	0.04%	-0.26%	4.44%
195	Bruceville-Eddy	5.24%	0.00%	0.00%	0.06%	-0.02%	0.01%	0.34%	0.09%	0.48%	5.72%
192	Bryan	14.99%	0.00%	0.00%	0.20%	-0.03%	-0.02%	-0.02%	0.07%	0.20%	15.19%
193	Bryson	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
194	Buda	13.94%	0.00%	0.00%	-0.02%	-0.20%	-0.28%	0.08%	0.24%	-0.18%	13.76%
196	Buffalo	4.82%	0.00%	0.00%	0.11%	-0.01%	0.00%	0.05%	-0.15%	0.00%	4.82%
198	Bullard	7.68%	0.00%	0.00%	0.01%	-0.04%	-0.11%	-0.05%	-0.01%	-0.20%	7.48%
203	Bulverde	9.05%	0.00%	0.00%	0.01%	-0.04%	-0.07%	0.99%	0.06%	0.95%	10.00%
199	Bunker Hill Village	11.70%	0.00%	0.00%	0.37%	0.06%	0.00%	-0.15%	-1.80%	-1.52%	10.18%
200	Burkburnett	10.14%	0.00%	0.00%	0.20%	0.04%	0.05%	0.05%	-0.20%	0.14%	10.28%
202	Burleson	15.31%	0.00%	0.00%	0.10%	-0.01%	-0.02%	0.06%	0.03%	0.16%	15.47%
204	Burnet	13.06%	0.00%	0.00%	0.13%	-0.02%	-0.09%	-0.06%	-0.02%	-0.06%	13.00%
206	Burton	10.09%	0.00%	0.00%	-0.11%	0.15%	0.15%	0.00%	0.08%	0.27%	10.36%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
207	Cactus	5.09%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.09%	0.03%	0.09%	5.18%
208	Caddo Mills	6.38%	0.00%	0.00%	0.01%	-0.01%	-0.02%	-0.12%	-0.45%	-0.59%	5.79%
210	Caldwell	9.32%	0.00%	0.00%	0.52%	-0.03%	-0.03%	0.00%	-1.65%	-1.19%	8.13%
212	Calvert	1.04%	0.00%	0.00%	0.03%	-0.01%	0.04%	0.09%	-0.03%	0.12%	1.16%
214	Cameron	10.09%	0.00%	0.00%	0.13%	0.03%	0.21%	0.14%	-0.31%	0.20%	10.29%
216	Campbell	41.81%	0.00%	0.00%	-0.54%	0.58%	0.00%	0.00%	-0.10%	-0.06%	41.75%
220	Canadian	16.23%	0.00%	0.00%	0.12%	0.08%	0.27%	0.16%	0.24%	0.87%	17.10%
221	Caney City	1.91%	0.00%	0.00%	-0.02%	-0.03%	-0.02%	-0.15%	-0.26%	-0.48%	1.43%
222	Canton	12.08%	0.00%	0.00%	0.11%	-0.01%	0.03%	-0.02%	-0.58%	-0.47%	11.61%
224	Canyon	15.33%	0.00%	0.00%	0.23%	-0.14%	-0.29%	-0.17%	-0.84%	-1.21%	14.12%
227	Carmine	2.67%	0.00%	0.00%	0.10%	0.04%	-0.02%	0.00%	-0.84%	-0.72%	1.95%
228	Carrizo Springs	5.24%	0.00%	0.00%	0.19%	0.00%	0.01%	0.06%	-0.17%	0.09%	5.33%
230	Carrollton	11.95%	0.00%	0.00%	0.33%	-0.05%	0.00%	-0.02%	-0.09%	0.17%	12.12%
232	Carthage	18.76%	0.00%	0.00%	0.40%	0.17%	0.24%	-0.07%	-1.53%	-0.79%	17.97%
231	Castle Hills	11.43%	0.00%	0.00%	0.20%	0.02%	0.16%	0.62%	-0.05%	0.95%	12.38%
234	Castroville	9.06%	0.00%	0.00%	0.12%	0.02%	0.06%	-0.38%	-0.13%	-0.31%	8.75%
238	Cedar Hill	13.71%	0.00%	0.00%	0.14%	-0.02%	-0.04%	-0.01%	0.01%	0.08%	13.79%
239	Cedar Park	14.32%	0.00%	0.00%	0.04%	-0.04%	-0.25%	0.12%	0.17%	0.04%	14.36%
240	Celeste	7.60%	0.00%	0.00%	0.01%	0.26%	0.55%	0.69%	-0.18%	1.33%	8.93%
242	Celina	6.34%	0.00%	0.00%	-0.02%	-0.12%	0.02%	0.08%	0.17%	0.13%	6.47%
244	Center	13.16%	0.00%	0.00%	0.14%	-0.08%	0.09%	0.00%	-0.91%	-0.76%	12.40%
246	Centerville	21.66%	0.00%	0.00%	0.21%	0.68%	0.10%	0.09%	-0.61%	0.47%	22.13%
247	Chandler	4.70%	0.00%	0.00%	0.00%	-0.02%	-0.16%	-0.12%	0.06%	-0.24%	4.46%
248	Charlotte	6.58%	0.00%	0.00%	0.09%	-0.11%	0.00%	0.05%	-2.82%	-2.79%	3.79%
249	Chester	1.54%	0.00%	0.00%	0.43%	-0.32%	0.07%	0.01%	-1.11%	-0.92%	0.62%
245	Chico	4.00%	0.00%	0.00%	0.09%	0.08%	-0.09%	-0.04%	0.22%	0.26%	4.26%
250	Childress	14.98%	0.00%	0.00%	0.15%	0.03%	0.33%	-0.12%	0.14%	0.53%	15.51%
251	Chillicothe	9.78%	0.00%	0.00%	-0.15%	-0.78%	-0.83%	0.16%	-0.85%	-2.45%	7.33%
253	Chireno	20.46%	0.00%	0.00%	0.40%	0.12%	0.05%	-0.01%	0.06%	0.62%	21.08%
254	Christine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
255	Cibolo	12.72%	0.00%	0.00%	0.00%	-0.04%	-0.01%	-0.22%	0.04%	-0.23%	12.49%
256	Cisco	6.56%	0.00%	0.00%	0.11%	0.02%	-0.01%	-0.09%	-0.20%	-0.17%	6.39%
258	Clarendon	1.47%	0.00%	0.00%	0.06%	0.00%	0.00%	-0.07%	-0.07%	-0.08%	1.39%
259	Clarksville	2.19%	0.00%	0.00%	0.18%	-0.07%	0.08%	-0.52%	-0.30%	-0.63%	1.56%
260	Clarksville City	4.03%	0.00%	0.00%	0.44%	0.06%	0.02%	-0.05%	-0.10%	0.37%	4.40%
263	Clear Lake Shores	10.88%	0.00%	0.00%	0.01%	-0.07%	-0.03%	-0.21%	0.07%	-0.23%	10.65%
264	Cleburne	15.69%	0.00%	0.00%	0.22%	0.06%	0.18%	0.13%	-0.22%	0.37%	16.06%
266	Cleveland	10.77%	0.00%	0.00%	0.13%	0.00%	-0.04%	-0.06%	-0.27%	-0.24%	10.53%
268	Clifton	1.76%	0.00%	0.00%	0.09%	0.01%	0.00%	0.02%	0.05%	0.17%	1.93%
271	Clute	10.25%	0.00%	0.00%	0.20%	-0.06%	-0.03%	-0.01%	-0.06%	0.04%	10.29%
272	Clyde	12.96%	0.00%	0.00%	0.09%	-0.04%	-0.20%	0.25%	-0.08%	0.02%	12.98%
274	Coahoma	6.03%	0.00%	0.00%	0.14%	0.00%	0.00%	0.00%	0.10%	0.24%	6.27%
276	Cockrell Hill	8.18%	0.00%	0.00%	0.09%	0.00%	-0.02%	0.31%	-0.48%	-0.10%	8.08%
278	Coleman	16.54%	0.00%	0.00%	0.23%	-0.01%	-0.06%	0.29%	-0.10%	0.35%	16.89%
280	College Station	13.20%	0.00%	0.00%	0.18%	-0.03%	-0.08%	-0.03%	-0.05%	-0.01%	13.19%
281	Colleyville	8.56%	0.00%	0.00%	0.18%	-0.01%	0.01%	-0.12%	0.32%	0.38%	8.94%
282	Collinsville	5.45%	0.00%	0.00%	0.03%	-0.05%	-0.02%	-0.19%	0.21%	-0.02%	5.43%
283	Colmesneil	8.41%	0.00%	0.00%	0.09%	0.09%	0.37%	0.01%	0.08%	0.64%	9.05%
284	Colorado City	8.39%	0.00%	0.00%	0.16%	-0.02%	0.00%	-0.20%	-0.29%	-0.35%	8.04%
286	Columbus	12.39%	0.00%	0.00%	0.15%	-0.09%	-0.05%	0.02%	0.04%	0.07%	12.46%
288	Comanche	4.72%	0.00%	0.00%	0.13%	0.02%	0.15%	0.02%	-0.07%	0.25%	4.97%
289	Combes	6.75%	0.00%	0.00%	-0.04%	0.03%	0.20%	0.08%	-0.10%	0.17%	6.92%
290	Commerce	8.56%	0.00%	0.00%	0.18%	-0.03%	-0.02%	0.09%	-0.28%	-0.06%	8.50%
294	Conroe	16.17%	0.00%	0.00%	0.20%	0.01%	0.08%	0.03%	-0.25%	0.07%	16.24%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
295	Converse	13.75%	0.00%	0.00%	0.10%	-0.08%	-0.21%	-0.08%	0.24%	-0.03%	13.72%
298	Cooper	4.93%	0.00%	0.00%	0.19%	-0.01%	0.04%	0.03%	-0.16%	0.09%	5.02%
299	Coppell	15.53%	0.00%	0.00%	0.17%	0.02%	0.02%	-0.20%	0.03%	0.04%	15.57%
297	Copper Canyon	13.04%	0.00%	0.00%	0.06%	-0.08%	-0.01%	-0.02%	0.30%	0.25%	13.29%
300	Copperas Cove	11.96%	0.00%	0.00%	0.19%	0.02%	0.15%	-0.07%	-0.19%	0.10%	12.06%
301	Corinth	15.30%	0.00%	0.00%	0.10%	-0.03%	-0.01%	0.25%	-0.27%	0.04%	15.34%
302	Corpus Christi	9.57%	15.04%	0.00%	0.26%	0.15%	-0.02%	-0.01%	-0.38%	15.04%	24.61%
304	Corrigan	3.83%	0.00%	0.00%	0.05%	-0.02%	0.00%	0.23%	-0.12%	0.14%	3.97%
306	Corsicana	15.51%	0.00%	0.00%	0.31%	-0.11%	-0.07%	0.06%	-0.33%	-0.14%	15.37%
308	Cotulla	6.67%	0.00%	0.00%	0.05%	-0.02%	-0.06%	0.00%	-0.03%	-0.06%	6.61%
310	Crandall	10.68%	0.00%	0.00%	0.05%	-0.06%	0.03%	-0.24%	0.22%	0.00%	10.68%
312	Crane	8.86%	0.00%	0.00%	0.26%	-0.15%	0.17%	0.65%	-1.78%	-0.85%	8.01%
314	Crawford	0.98%	0.00%	0.00%	0.03%	0.02%	-0.04%	-0.12%	-0.08%	-0.19%	0.79%
316	Crockett	8.10%	0.00%	0.00%	0.24%	-0.02%	0.02%	-0.04%	-0.21%	-0.01%	8.09%
318	Crosbyton	4.87%	0.00%	0.00%	0.28%	0.00%	0.01%	-0.35%	0.21%	0.15%	5.02%
320	Cross Plains	8.39%	0.00%	0.00%	0.29%	0.23%	0.40%	-0.01%	-1.14%	-0.23%	8.16%
321	Cross Roads	7.37%	0.00%	0.00%	-0.07%	-0.24%	-0.23%	0.28%	0.44%	0.18%	7.55%
323	Crowley	10.77%	0.00%	0.00%	0.08%	-0.04%	-0.13%	-0.03%	0.30%	0.18%	10.95%
324	Crystal City	0.85%	0.00%	0.00%	0.15%	-0.03%	-0.12%	0.03%	-0.27%	-0.24%	0.61%
326	Cuero	10.34%	0.00%	0.00%	0.09%	0.00%	0.08%	-0.03%	0.00%	0.14%	10.48%
328	Cumby	2.18%	0.00%	0.00%	0.02%	0.00%	-0.04%	-0.22%	-0.03%	-0.27%	1.91%
332	Daingerfield	6.14%	0.00%	0.00%	0.15%	0.00%	0.00%	0.12%	-0.81%	-0.54%	5.60%
334	Daisetta	1.26%	0.00%	0.00%	0.03%	0.01%	-0.28%	0.05%	-0.15%	-0.34%	0.92%
336	Dalhart	4.68%	0.00%	0.00%	0.13%	0.01%	0.00%	-0.06%	0.02%	0.10%	4.78%
339	Dalworthington Gardens	21.36%	0.00%	0.00%	0.15%	0.15%	0.45%	1.39%	-2.51%	-0.37%	20.99%
340	Danbury	6.15%	0.00%	0.00%	0.04%	0.05%	0.13%	0.08%	-0.71%	-0.41%	5.74%
341	Darrouzett	1.97%	0.00%	0.00%	0.42%	-0.03%	-0.08%	0.45%	1.40%	2.16%	4.13%
344	Dayton	7.28%	0.00%	0.00%	0.05%	-0.05%	-0.07%	0.14%	-0.36%	-0.29%	6.99%
352	De Leon	1.52%	0.00%	0.00%	0.07%	-0.02%	0.00%	0.33%	-0.14%	0.24%	1.76%
10366	DeSoto	10.93%	0.00%	0.00%	0.23%	0.02%	0.05%	0.02%	-0.31%	0.01%	10.94%
346	Decatur	14.65%	0.00%	0.00%	0.09%	0.00%	-0.01%	-0.04%	-0.39%	-0.35%	14.30%
348	Deer Park	14.10%	0.00%	0.00%	0.29%	-0.01%	-0.02%	0.00%	-0.58%	-0.32%	13.78%
350	Dekalb	3.03%	0.00%	0.00%	0.05%	-0.01%	0.01%	0.06%	-0.71%	-0.60%	2.43%
354	Del Rio	7.44%	0.00%	0.00%	0.04%	0.03%	0.11%	0.01%	-0.18%	0.01%	7.45%
353	Dell City	10.35%	0.00%	0.00%	0.68%	-0.39%	-1.56%	0.18%	-0.09%	-1.18%	9.17%
356	Denison	12.17%	0.00%	0.00%	0.26%	-0.05%	-0.14%	-0.07%	-0.01%	-0.01%	12.16%
358	Denton	17.00%	0.00%	0.00%	0.17%	-0.01%	0.01%	0.03%	0.09%	0.29%	17.29%
360	Denver City	11.30%	0.00%	0.00%	0.87%	-0.10%	0.42%	0.05%	-1.37%	-0.13%	11.17%
362	Deport	3.18%	0.00%	0.00%	0.10%	-0.35%	-0.25%	-0.57%	-0.23%	-1.30%	1.88%
370	Devine	16.41%	0.00%	0.00%	0.01%	-0.03%	-0.35%	0.09%	0.49%	0.21%	16.62%
371	Diboll	14.04%	0.00%	0.00%	0.25%	0.07%	0.60%	0.17%	-0.46%	0.63%	14.67%
372	Dickens	2.51%	0.00%	0.00%	0.00%	0.04%	-0.03%	-0.61%	0.06%	-0.54%	1.97%
373	Dickinson	8.89%	0.57%	0.00%	0.09%	0.01%	0.07%	-0.10%	-0.04%	0.60%	9.49%
374	Dilley	7.99%	2.26%	0.00%	0.05%	0.10%	-0.12%	0.01%	-0.15%	2.15%	10.14%
376	Dimmitt	3.72%	0.00%	0.00%	0.22%	-0.05%	-0.16%	0.06%	0.23%	0.30%	4.02%
382	Donna	8.61%	2.60%	0.00%	0.01%	0.07%	-0.32%	0.08%	0.01%	2.45%	11.06%
379	Double Oak	5.47%	1.18%	0.00%	0.00%	0.08%	0.01%	0.51%	-0.20%	1.58%	7.05%
383	Dripping Springs	6.36%	0.00%	0.00%	-0.02%	-0.08%	-0.11%	-0.15%	-0.03%	-0.39%	5.97%
385	Driscoll	1.93%	0.00%	0.00%	-0.01%	0.01%	0.00%	0.06%	-0.04%	0.02%	1.95%
384	Dublin	12.43%	0.00%	0.00%	0.06%	-0.09%	-0.33%	0.17%	0.19%	0.00%	12.43%
386	Dumas	5.53%	0.00%	0.00%	0.13%	-0.03%	0.01%	-0.01%	-0.07%	0.03%	5.56%
388	Duncanville	7.65%	0.00%	0.00%	0.34%	-0.02%	-0.05%	-0.03%	-0.22%	0.02%	7.67%
394	Eagle Lake	9.31%	0.00%	0.00%	0.17%	0.06%	0.12%	0.31%	-1.07%	-0.41%	8.90%
396	Eagle Pass	8.40%	0.00%	0.00%	0.17%	-0.02%	-0.04%	-0.05%	0.08%	0.14%	8.54%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Return on AVA	Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes		Fully Amortized Prior Bases						
397	Early	3.48%	0.00%	0.00%	0.09%	0.00%	-0.01%	-0.08%	-0.26%	-0.26%	-0.26%	3.22%
399	Earth	5.06%	0.00%	0.00%	0.04%	-0.03%	-0.06%	0.30%	-0.22%	0.03%	0.03%	5.09%
393	East Bernard	5.37%	0.00%	0.00%	-0.05%	-0.19%	-0.29%	-0.17%	0.35%	-0.35%	-0.35%	5.02%
401	East Mountain	11.70%	0.00%	0.00%	0.23%	0.35%	-0.47%	0.88%	0.39%	1.38%	1.38%	13.08%
395	East Tawakoni	5.89%	0.00%	0.00%	0.13%	-0.03%	0.00%	0.05%	-0.77%	-0.62%	-0.62%	5.27%
398	Eastland	9.12%	0.00%	0.00%	0.08%	-0.03%	-0.02%	-0.14%	-0.03%	-0.14%	-0.14%	8.98%
402	Ector	2.00%	0.00%	0.00%	0.03%	0.01%	-0.01%	-0.01%	-0.08%	-0.06%	-0.06%	1.94%
406	Eden	2.86%	0.00%	0.00%	0.21%	0.02%	-0.10%	0.05%	-0.10%	0.08%	0.08%	2.94%
408	Edgewood	3.03%	0.00%	0.00%	0.03%	-0.02%	-0.03%	0.00%	-0.32%	-0.34%	-0.34%	2.69%
410	Edinburg	14.24%	0.00%	0.00%	0.10%	0.02%	0.05%	0.27%	-0.36%	0.08%	0.08%	14.32%
412	Edna	10.81%	0.00%	0.00%	0.23%	0.01%	0.30%	0.00%	-0.68%	-0.14%	-0.14%	10.67%
414	El Campo	10.60%	0.00%	0.00%	0.19%	-0.03%	-0.16%	0.02%	-0.08%	-0.06%	-0.06%	10.54%
416	Eldorado	7.21%	0.00%	0.00%	0.14%	0.00%	0.01%	0.17%	-0.32%	0.00%	0.00%	7.21%
418	Electra	2.24%	0.00%	0.00%	0.10%	0.01%	0.03%	-0.09%	0.06%	0.11%	0.11%	2.35%
420	Elgin	13.96%	0.00%	0.00%	0.06%	-0.02%	-0.08%	0.01%	-0.17%	-0.20%	-0.20%	13.76%
422	Elkhart	5.04%	0.00%	0.00%	0.18%	-0.01%	0.08%	-0.13%	0.07%	0.19%	0.19%	5.23%
427	Elmendorf	1.45%	0.00%	0.00%	-0.02%	-0.03%	-0.02%	0.11%	0.09%	0.13%	0.13%	1.58%
432	Emory	4.50%	2.02%	0.00%	0.06%	0.10%	-0.01%	0.10%	-0.03%	2.24%	2.24%	6.74%
436	Ennis	16.90%	0.00%	0.00%	0.25%	-0.06%	-0.08%	-0.02%	-0.28%	-0.19%	-0.19%	16.71%
439	Eules	17.51%	0.00%	0.00%	0.25%	0.00%	0.02%	-0.02%	-0.06%	0.19%	0.19%	17.70%
440	Eustace	8.97%	0.00%	0.00%	0.14%	-0.04%	0.31%	0.65%	0.60%	1.66%	1.66%	10.63%
441	Everman	9.56%	0.00%	0.00%	0.11%	0.02%	0.07%	-0.33%	-0.04%	-0.17%	-0.17%	9.39%
443	Fair Oaks Ranch	11.72%	0.00%	0.00%	0.01%	-0.14%	-0.21%	0.01%	0.32%	-0.01%	-0.01%	11.71%
442	Fairfield	8.09%	0.00%	0.00%	0.17%	0.03%	-0.05%	-0.25%	-0.82%	-0.92%	-0.92%	7.17%
445	Fairview	10.66%	0.00%	0.00%	-0.01%	-0.04%	-0.08%	0.12%	0.12%	0.11%	0.11%	10.77%
20444	Falfurrias	3.31%	0.00%	0.00%	0.06%	0.02%	0.04%	-0.09%	-0.01%	0.02%	0.02%	3.33%
446	Falls City	7.63%	0.00%	0.00%	0.00%	-0.14%	0.10%	0.31%	-0.05%	0.22%	0.22%	7.85%
448	Farmers Branch	18.49%	0.00%	0.00%	0.37%	0.02%	-0.06%	0.04%	0.14%	0.51%	0.51%	19.00%
450	Farmersville	8.57%	0.00%	0.00%	0.11%	0.00%	0.06%	0.00%	0.00%	0.17%	0.17%	8.74%
451	Farwell	14.32%	0.00%	0.00%	0.22%	-0.05%	0.10%	-0.01%	0.66%	0.92%	0.92%	15.24%
452	Fate	9.90%	0.00%	0.00%	-0.02%	-0.09%	-0.01%	1.07%	-0.11%	0.84%	0.84%	10.74%
454	Fayetteville	2.97%	0.00%	0.00%	0.08%	0.08%	-0.39%	0.03%	0.45%	0.25%	0.25%	3.22%
456	Ferris	5.31%	0.00%	0.00%	0.09%	-0.02%	0.00%	0.10%	-0.03%	0.14%	0.14%	5.45%
458	Flatonia	15.66%	0.00%	0.00%	0.16%	-0.11%	0.13%	-0.13%	0.23%	0.28%	0.28%	15.94%
460	Florence	4.25%	0.00%	0.00%	0.03%	-0.04%	0.11%	0.32%	-0.33%	0.09%	0.09%	4.34%
20462	Floresville	10.55%	0.00%	0.00%	0.06%	-0.08%	-0.18%	-0.09%	0.00%	-0.29%	-0.29%	10.26%
463	Flower Mound	10.67%	0.00%	0.00%	0.09%	-0.02%	-0.09%	-0.10%	0.22%	0.10%	0.10%	10.77%
464	Floydada	10.09%	0.00%	0.00%	0.26%	0.05%	0.25%	-0.32%	-0.33%	-0.09%	-0.09%	10.00%
468	Forest Hill	13.35%	0.00%	0.00%	0.14%	-0.05%	-0.15%	-0.30%	-0.17%	-0.53%	-0.53%	12.82%
470	Forney	13.47%	0.00%	0.00%	0.02%	-0.09%	-0.25%	0.15%	0.50%	0.33%	0.33%	13.80%
472	Fort Stockton	9.97%	0.00%	0.00%	0.13%	0.00%	0.03%	0.04%	-0.53%	-0.33%	-0.33%	9.64%
476	Franklin	3.24%	0.00%	0.00%	0.05%	0.01%	-0.04%	-0.06%	-0.09%	-0.13%	-0.13%	3.11%
478	Frankston	1.46%	0.00%	0.00%	0.02%	-0.06%	0.00%	-0.02%	0.05%	-0.01%	-0.01%	1.45%
480	Fredericksburg	9.59%	2.09%	0.00%	0.16%	0.12%	0.14%	0.02%	-0.06%	2.47%	2.47%	12.06%
482	Freeport	13.65%	0.00%	0.00%	0.13%	-0.01%	0.06%	0.56%	-0.09%	0.65%	0.65%	14.30%
481	Freer	7.05%	0.00%	0.00%	0.04%	0.04%	0.08%	-0.12%	-0.09%	-0.05%	-0.05%	7.00%
483	Friendswood	15.69%	0.00%	0.00%	0.18%	-0.02%	-0.06%	0.01%	0.04%	0.15%	0.15%	15.84%
484	Friona	9.13%	0.00%	0.00%	0.24%	-0.22%	0.06%	-0.14%	-0.01%	-0.07%	-0.07%	9.06%
486	Frisco	14.21%	0.00%	0.00%	0.03%	-0.05%	-0.18%	-0.09%	0.15%	-0.14%	-0.14%	14.07%
487	Fritch	2.88%	0.00%	0.00%	0.10%	0.02%	-0.03%	-0.82%	-0.37%	-1.10%	-1.10%	1.78%
488	Frost	5.58%	0.00%	0.00%	0.30%	0.22%	0.37%	0.00%	0.51%	1.40%	1.40%	6.98%
491	Fulshear	7.93%	0.00%	0.00%	-0.03%	-0.02%	-0.01%	0.00%	-0.18%	-0.24%	-0.24%	7.69%
493	Fulton	19.15%	0.00%	0.00%	0.05%	0.56%	3.04%	-0.21%	0.00%	3.44%	3.44%	22.59%
492	Gainesville	9.19%	2.89%	0.00%	0.16%	0.15%	0.03%	-0.08%	-0.17%	2.98%	2.98%	12.17%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
494	Galena Park	12.32%	0.00%	0.00%	0.23%	0.01%	0.00%	-0.17%	-0.25%	-0.18%	12.14%
498	Ganado	13.59%	0.00%	0.00%	0.31%	0.03%	0.01%	0.11%	-0.89%	-0.43%	13.16%
499	Garden Ridge	7.76%	0.00%	0.00%	0.02%	0.00%	0.00%	-0.26%	-0.13%	-0.37%	7.39%
500	Garland	10.79%	0.00%	0.00%	0.29%	-0.02%	-0.03%	-0.01%	0.01%	0.24%	11.03%
502	Garrison	18.74%	0.00%	0.00%	0.30%	-0.12%	-0.49%	0.34%	-2.27%	-2.24%	16.50%
503	Gary	7.10%	0.00%	0.00%	0.11%	0.00%	0.01%	0.02%	-0.02%	0.12%	7.22%
504	Gatesville	15.05%	0.00%	0.00%	0.18%	0.00%	0.08%	-0.26%	-0.17%	-0.17%	14.88%
505	George West	6.16%	0.00%	0.00%	0.04%	0.02%	0.00%	0.05%	-0.48%	-0.37%	5.79%
506	Georgetown	12.23%	0.00%	0.00%	0.07%	-0.03%	-0.11%	0.00%	-0.03%	-0.10%	12.13%
510	Giddings	18.83%	0.00%	0.00%	0.19%	-0.11%	-0.28%	0.16%	-0.60%	-0.64%	18.19%
512	Gilmer	13.66%	0.00%	0.00%	0.15%	0.03%	0.04%	0.08%	-0.62%	-0.32%	13.34%
514	Gladewater	2.56%	5.64%	0.00%	0.12%	0.30%	0.01%	0.14%	-0.15%	6.06%	8.62%
516	Glen Rose	14.57%	0.00%	0.00%	0.08%	0.02%	0.08%	-0.07%	-0.08%	0.03%	14.60%
517	Glenn Heights	3.13%	-0.19%	0.00%	0.09%	-0.04%	0.09%	-0.04%	-0.17%	-0.26%	2.87%
518	Godley	2.53%	0.00%	0.00%	0.02%	-0.01%	-0.07%	0.01%	0.15%	0.10%	2.63%
519	Goldsmith	3.62%	0.00%	0.00%	0.07%	-0.25%	-0.14%	-0.04%	-0.06%	-0.42%	3.20%
520	Goldthwaite	22.25%	0.00%	0.00%	0.47%	-0.02%	1.16%	0.00%	-0.36%	1.25%	23.50%
522	Goliad	2.19%	2.14%	0.00%	0.18%	0.05%	0.29%	0.08%	0.06%	2.80%	4.99%
524	Gonzales	10.68%	0.00%	0.00%	0.15%	0.07%	0.29%	0.00%	-0.74%	-0.23%	10.45%
530	Gorman	8.55%	0.00%	0.00%	-0.09%	-0.22%	0.40%	0.31%	0.22%	0.62%	9.17%
532	Graford	2.88%	0.00%	0.00%	0.00%	0.01%	0.00%	-0.02%	0.00%	-0.01%	2.87%
10534	Graham	10.44%	0.00%	0.00%	0.18%	-0.08%	-0.05%	-0.07%	-0.07%	-0.09%	10.35%
536	Granbury	15.97%	0.00%	0.00%	0.16%	-0.05%	-0.31%	-0.04%	-0.06%	-0.30%	15.67%
540	Grand Prairie	15.91%	0.96%	0.00%	0.22%	0.03%	-0.10%	-0.04%	-0.15%	0.92%	16.83%
542	Grand Saline	4.23%	4.19%	0.00%	0.22%	0.24%	-0.01%	-0.29%	-1.25%	3.10%	7.33%
544	Grandview	6.19%	0.00%	0.00%	0.06%	-0.02%	0.05%	-0.07%	0.29%	0.31%	6.50%
546	Granger	0.65%	0.00%	0.00%	0.09%	0.00%	0.18%	0.12%	-0.22%	0.17%	0.82%
547	Granite Shoals	5.01%	0.00%	0.00%	0.02%	0.02%	0.00%	0.03%	-0.28%	-0.21%	4.80%
548	Grapeland	3.72%	0.00%	0.00%	0.19%	-0.01%	0.04%	0.26%	-0.10%	0.38%	4.10%
550	Grapevine	18.58%	0.00%	0.00%	0.20%	-0.03%	-0.10%	0.04%	-0.16%	-0.05%	18.53%
552	Greenville	10.80%	0.00%	0.00%	0.27%	-0.03%	0.02%	-0.16%	0.10%	0.20%	11.00%
551	Gregory	4.09%	0.00%	0.00%	0.03%	0.01%	-0.06%	0.14%	-0.25%	-0.13%	3.96%
553	Grey Forest	15.38%	0.00%	0.00%	0.17%	0.01%	-0.02%	-0.04%	0.26%	0.38%	15.76%
556	Groesbeck	2.50%	0.00%	0.00%	0.04%	0.01%	0.01%	-0.03%	-0.03%	0.00%	2.50%
558	Groom	2.90%	0.00%	0.00%	0.07%	-0.08%	0.08%	-0.26%	0.00%	-0.19%	2.71%
559	Groves	9.32%	0.00%	0.00%	0.29%	0.03%	0.05%	-0.41%	-0.15%	-0.19%	9.13%
560	Groveton	1.99%	0.00%	0.00%	0.02%	0.03%	-0.01%	0.01%	-0.01%	0.04%	2.03%
562	Gruver	12.94%	0.00%	0.00%	0.44%	0.19%	0.12%	0.24%	0.56%	1.55%	14.49%
563	Gun Barrel City	5.10%	0.00%	0.00%	0.07%	-0.06%	-0.04%	0.11%	-0.48%	-0.40%	4.70%
564	Gunter	3.96%	0.00%	0.00%	0.00%	0.04%	0.10%	-0.01%	0.05%	0.18%	4.14%
568	Hale Center	1.96%	0.00%	0.00%	0.02%	0.00%	0.00%	0.01%	-0.01%	0.02%	1.98%
570	Hallettsville	11.77%	0.00%	0.00%	0.17%	-0.02%	0.06%	0.01%	-0.15%	0.07%	11.84%
572	Hallsville	3.02%	0.00%	0.00%	0.01%	-0.02%	-0.15%	0.21%	-0.14%	-0.09%	2.93%
574	Haltom City	18.84%	0.00%	0.00%	0.26%	0.03%	0.18%	0.06%	-0.32%	0.21%	19.05%
576	Hamilton	17.88%	0.00%	0.00%	0.21%	-0.09%	-0.53%	-1.61%	-0.76%	-2.78%	15.10%
578	Hamlin	13.93%	0.00%	0.00%	0.28%	0.04%	0.20%	-0.07%	-2.69%	-2.24%	11.69%
580	Happy	8.33%	0.00%	0.00%	0.22%	-0.82%	0.00%	0.00%	0.42%	-0.18%	8.15%
581	Harker Heights	14.89%	0.00%	0.00%	0.10%	0.00%	-0.02%	-0.06%	-0.14%	-0.12%	14.77%
10582	Harlingen	10.49%	0.00%	0.00%	0.69%	-0.05%	0.45%	0.01%	0.07%	1.17%	11.66%
20582	Harlingen Waterworks Sys	1.87%	0.00%	0.00%	0.21%	0.00%	-0.01%	0.03%	-0.18%	0.05%	1.92%
583	Hart	3.93%	0.00%	0.00%	0.04%	-0.06%	-0.14%	0.00%	0.20%	0.04%	3.97%
586	Haskell	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
587	Haslet	8.79%	0.00%	0.00%	0.02%	-0.05%	0.01%	-0.09%	-0.05%	-0.16%	8.63%
588	Hawkins	14.79%	0.00%	0.00%	0.18%	0.01%	0.09%	0.09%	-9.10%	-8.73%	6.06%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
585	Hays	3.20%	0.00%	0.00%	0.52%	-0.90%	1.42%	0.01%	4.18%	5.23%	8.43%
590	Hearne	15.08%	0.00%	0.00%	0.11%	-0.09%	-0.05%	0.08%	-0.15%	-0.10%	14.98%
591	Heath	11.14%	0.00%	0.00%	0.06%	-0.03%	-0.05%	0.14%	0.29%	0.41%	11.55%
592	Hedley	4.12%	0.00%	0.00%	0.13%	0.15%	-1.62%	0.72%	-1.05%	-1.67%	2.45%
595	Hedwig Village	7.22%	0.00%	0.00%	0.10%	-0.01%	-0.01%	0.02%	0.01%	0.11%	7.33%
593	Helotes	6.57%	0.15%	0.00%	0.03%	0.00%	-0.02%	-0.10%	-0.06%	0.00%	6.57%
594	Hemphill	7.78%	0.00%	0.00%	0.08%	-0.01%	0.02%	-0.30%	-0.24%	-0.45%	7.33%
596	Hempstead	7.90%	0.00%	0.00%	0.10%	-0.02%	0.01%	-0.07%	-0.14%	-0.12%	7.78%
598	Henderson	15.15%	1.25%	0.00%	0.18%	-0.01%	-0.04%	0.20%	-0.62%	0.96%	16.11%
600	Henrietta	14.80%	0.00%	0.00%	0.13%	0.02%	0.03%	0.02%	-0.26%	-0.06%	14.74%
602	Hereford	10.56%	0.00%	0.00%	0.17%	0.02%	0.13%	-0.03%	-0.51%	-0.22%	10.34%
605	Hewitt	15.76%	0.00%	0.00%	0.10%	0.00%	-0.01%	-0.37%	0.00%	-0.28%	15.48%
609	Hickory Creek	12.07%	0.00%	0.00%	0.05%	-0.03%	-0.05%	-0.11%	0.02%	-0.12%	11.95%
606	Hico	4.83%	3.47%	0.00%	0.14%	0.21%	-0.03%	-0.28%	-0.04%	3.47%	8.30%
607	Hidalgo	12.73%	0.00%	0.00%	0.07%	0.02%	0.01%	-0.16%	-0.01%	-0.07%	12.66%
608	Higgins	3.46%	0.00%	0.00%	0.28%	0.01%	-0.05%	0.68%	-0.31%	0.61%	4.07%
610	Highland Park	5.41%	0.00%	0.00%	0.31%	-0.07%	0.02%	-0.03%	0.00%	0.23%	5.64%
611	Highland Village	13.35%	0.00%	0.00%	0.10%	-0.01%	-0.01%	-0.04%	-0.08%	-0.04%	13.31%
613	Hill Country Village	3.71%	0.00%	0.00%	0.07%	-0.01%	0.02%	-0.03%	0.03%	0.08%	3.79%
612	Hillsboro	11.05%	0.00%	0.00%	0.12%	0.00%	0.09%	0.07%	-0.05%	0.23%	11.28%
619	Hilshire Village	12.99%	0.00%	0.00%	-0.38%	-2.11%	-0.16%	-0.14%	0.78%	-2.01%	10.98%
614	Hitchcock	4.23%	0.00%	0.00%	0.07%	0.03%	0.00%	0.14%	-0.29%	-0.05%	4.18%
615	Holland	8.00%	0.00%	0.00%	0.10%	0.02%	0.00%	0.06%	-1.10%	-0.92%	7.08%
616	Holliday	2.72%	0.00%	0.00%	0.04%	0.01%	-0.02%	0.07%	-0.18%	-0.08%	2.64%
617	Hollywood Park	8.80%	0.00%	0.00%	0.08%	-0.04%	-0.14%	-0.02%	0.13%	0.01%	8.81%
618	Hondo	8.38%	0.00%	0.00%	0.13%	-0.04%	-0.03%	-0.03%	-0.19%	-0.16%	8.22%
620	Honey Grove	7.75%	0.00%	0.00%	0.23%	-0.03%	0.03%	0.35%	-1.04%	-0.46%	7.29%
622	Hooks	13.49%	0.00%	0.00%	0.08%	-0.02%	-0.05%	-0.08%	0.04%	-0.03%	13.46%
626	Howe	5.42%	0.00%	0.00%	0.11%	-0.16%	0.02%	0.11%	-0.25%	-0.17%	5.25%
627	Hubbard	0.79%	0.00%	0.00%	0.04%	0.01%	-0.04%	0.08%	-0.11%	-0.02%	0.77%
628	Hudson	4.36%	0.00%	0.00%	0.04%	-0.01%	-0.02%	-0.01%	-0.19%	-0.19%	4.17%
629	Hudson Oaks	11.96%	0.00%	0.00%	0.02%	-0.09%	-0.02%	-0.02%	0.35%	0.24%	12.20%
630	Hughes Springs	9.08%	0.00%	0.00%	0.28%	-0.32%	-0.05%	0.02%	-0.38%	-0.45%	8.63%
632	Humble	13.43%	0.00%	0.00%	0.17%	-0.01%	0.00%	0.07%	-0.05%	0.18%	13.61%
633	Hunters Creek Village	16.23%	0.00%	0.00%	0.08%	-0.12%	-0.29%	-0.06%	1.31%	0.92%	17.15%
634	Huntington	14.12%	0.00%	0.00%	0.15%	0.00%	0.03%	-0.17%	0.14%	0.15%	14.27%
636	Huntsville	18.37%	0.00%	0.00%	0.23%	-0.01%	0.11%	-0.03%	-0.09%	0.21%	18.58%
637	Hurst	10.85%	0.11%	0.00%	0.27%	0.04%	0.07%	-0.03%	-0.20%	0.26%	11.11%
638	Hutchins	8.70%	0.00%	0.00%	0.05%	-0.05%	-0.09%	0.12%	0.34%	0.37%	9.07%
640	Hutto	12.09%	0.00%	0.00%	0.00%	-0.23%	-0.04%	-0.02%	0.24%	-0.05%	12.04%
641	Huxley	1.26%	0.00%	0.00%	0.15%	-0.01%	-0.06%	0.10%	-0.54%	-0.36%	0.90%
642	Idalou	4.35%	0.00%	0.00%	0.03%	0.03%	0.02%	0.00%	-0.38%	-0.30%	4.05%
643	Ingleside	9.87%	0.00%	0.00%	0.04%	-0.87%	0.08%	-0.01%	-0.24%	-1.00%	8.87%
646	Ingram	5.74%	0.00%	0.00%	0.08%	0.00%	0.00%	-0.09%	0.00%	-0.01%	5.73%
647	Iowa Colony	19.31%	0.00%	0.00%	-0.31%	-1.63%	-2.48%	0.40%	-1.14%	-5.16%	14.15%
644	Iowa Park	14.69%	0.00%	0.00%	0.32%	-0.07%	0.08%	0.13%	-0.39%	0.07%	14.76%
645	Iraan	17.00%	0.00%	0.00%	0.33%	-0.02%	-0.07%	-0.08%	0.42%	0.58%	17.58%
648	Irving	14.34%	0.00%	0.00%	0.31%	-0.02%	-0.09%	-0.07%	-0.01%	0.12%	14.46%
650	Italy	3.09%	0.00%	0.00%	0.02%	0.01%	-0.19%	0.15%	-0.09%	-0.10%	2.99%
652	Itasca	10.37%	0.00%	0.00%	0.10%	-0.08%	0.15%	0.09%	0.07%	0.33%	10.70%
654	Jacinto City	7.78%	0.00%	0.00%	0.11%	0.03%	0.04%	-0.05%	0.06%	0.19%	7.97%
656	Jacksboro	14.25%	0.00%	0.00%	0.12%	0.02%	0.08%	0.61%	-0.16%	0.67%	14.92%
658	Jacksonville	10.76%	0.00%	0.00%	0.19%	-0.04%	-0.01%	-0.16%	-0.13%	-0.15%	10.61%
660	Jasper	8.94%	0.00%	0.00%	0.19%	-0.04%	-0.07%	0.12%	-0.05%	0.15%	9.09%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Return on AVA	Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes		Fully Amortized Prior Bases						
664	Jefferson	1.22%	0.00%	0.00%	0.08%	-0.47%	0.06%	0.12%	-0.12%	-0.33%	0.89%	
665	Jersey Village	14.73%	0.00%	0.00%	0.14%	-0.04%	-0.02%	0.11%	-0.87%	-0.68%	14.05%	
666	Jewett	9.32%	0.00%	0.00%	0.53%	0.11%	0.43%	-0.37%	0.58%	1.28%	10.60%	
668	Joaquin	4.67%	0.00%	0.00%	0.06%	-0.12%	-0.56%	-0.03%	0.54%	-0.11%	4.56%	
670	Johnson City	10.09%	0.00%	0.00%	0.08%	0.00%	-0.15%	0.07%	-0.31%	-0.31%	9.78%	
673	Jones Creek	6.44%	0.00%	0.00%	0.09%	-0.15%	-0.48%	-0.11%	0.23%	-0.42%	6.02%	
675	Jonestown	7.00%	0.00%	0.00%	0.01%	0.00%	-0.02%	0.29%	0.04%	0.32%	7.32%	
677	Josephine	6.35%	0.00%	0.00%	-0.02%	-0.19%	-0.07%	0.07%	-0.19%	-0.40%	5.95%	
671	Joshua	5.97%	0.00%	0.00%	0.06%	0.01%	0.00%	0.10%	-0.44%	-0.27%	5.70%	
672	Jourdanton	6.04%	0.00%	0.00%	0.07%	0.02%	0.02%	0.25%	-0.32%	0.04%	6.08%	
674	Junction	14.71%	0.00%	0.00%	0.23%	-0.20%	-0.69%	-0.10%	0.58%	-0.18%	14.53%	
676	Justin	7.66%	0.00%	0.00%	0.00%	-0.12%	-0.09%	0.04%	-0.06%	-0.23%	7.43%	
678	Karnes City	5.23%	3.56%	0.00%	0.06%	0.23%	0.13%	-0.03%	-0.44%	3.51%	8.74%	
680	Katy	14.05%	0.00%	0.00%	0.09%	-0.13%	-0.33%	0.12%	-0.18%	-0.43%	13.62%	
682	Kaufman	9.30%	4.62%	0.00%	0.19%	0.28%	0.25%	0.19%	-0.05%	5.48%	14.78%	
683	Keene	12.02%	0.00%	0.00%	0.16%	0.11%	0.28%	0.28%	-0.68%	0.15%	12.17%	
681	Keller	15.45%	0.00%	0.00%	0.17%	0.03%	0.20%	-0.04%	0.02%	0.38%	15.83%	
685	Kemah	7.04%	0.00%	0.00%	0.09%	-0.03%	-0.01%	0.16%	-0.32%	-0.11%	6.93%	
684	Kemp	5.04%	0.00%	0.00%	0.02%	0.01%	0.01%	0.05%	0.66%	0.75%	5.79%	
686	Kenedy	4.23%	0.00%	0.00%	0.02%	-0.01%	0.01%	-0.05%	-0.27%	-0.30%	3.93%	
688	Kennedale	13.85%	0.00%	0.00%	0.10%	0.03%	0.15%	-0.24%	-0.32%	-0.28%	13.57%	
690	Kerens	8.32%	0.00%	0.00%	-0.04%	0.02%	-0.21%	0.12%	-0.06%	-0.17%	8.15%	
692	Kermit	16.16%	0.00%	0.00%	0.15%	-0.01%	-0.26%	-0.15%	-0.18%	-0.45%	15.71%	
10694	Kerrville	10.05%	0.00%	0.00%	0.20%	0.00%	-0.02%	0.01%	-0.11%	0.08%	10.13%	
20694	Kerrville PUB	12.04%	0.00%	0.00%	0.29%	-0.07%	0.16%	-0.04%	-0.32%	0.02%	12.06%	
10696	Kilgore	14.21%	0.00%	0.00%	0.23%	-0.04%	0.00%	0.09%	-0.71%	-0.43%	13.78%	
698	Killeen	9.91%	1.07%	0.00%	0.15%	0.12%	0.23%	-0.01%	-0.20%	1.36%	11.27%	
700	Kingsville	8.68%	0.00%	0.00%	0.22%	0.01%	0.03%	0.00%	-0.14%	0.12%	8.80%	
701	Kirby	14.65%	0.00%	0.00%	0.12%	0.00%	-0.12%	0.21%	-0.09%	0.12%	14.77%	
702	Kirbyville	5.46%	0.00%	0.00%	0.09%	0.00%	0.00%	0.15%	0.12%	0.36%	5.82%	
704	Knox City	2.58%	0.00%	0.00%	0.10%	-0.02%	0.05%	-0.20%	-0.14%	-0.21%	2.37%	
706	Kosse	5.18%	0.00%	0.00%	-0.08%	0.05%	-0.02%	-0.01%	0.24%	0.18%	5.36%	
708	Kountze	1.33%	0.00%	0.00%	0.02%	-0.01%	0.00%	-0.02%	0.06%	0.05%	1.38%	
709	Kress	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
699	Krugerville	8.62%	0.00%	0.00%	-0.06%	-0.04%	0.01%	0.00%	-0.36%	-0.45%	8.17%	
707	Krum	5.73%	1.08%	0.00%	0.00%	-0.02%	0.00%	-0.22%	0.00%	0.84%	6.57%	
710	Kyle	12.49%	0.00%	0.00%	0.01%	-0.05%	-0.14%	0.10%	0.11%	0.03%	12.52%	
725	La Coste	1.48%	0.00%	0.00%	0.03%	0.00%	-0.01%	-0.03%	-0.17%	-0.18%	1.30%	
714	La Feria	11.05%	0.00%	0.00%	0.10%	0.08%	0.19%	-0.08%	-0.11%	0.18%	11.23%	
716	La Grange	14.83%	0.00%	0.00%	0.23%	-0.02%	-0.01%	-0.13%	-0.84%	-0.77%	14.06%	
723	La Grulla	5.64%	0.00%	0.00%	0.06%	0.07%	-0.31%	0.26%	-0.59%	-0.51%	5.13%	
732	La Joya	6.21%	0.00%	0.00%	0.01%	0.07%	0.61%	0.04%	-0.11%	0.62%	6.83%	
721	La Marque	14.79%	0.00%	0.00%	0.13%	-0.06%	-0.17%	-0.39%	-0.38%	-0.87%	13.92%	
728	La Porte	15.53%	0.00%	0.00%	0.36%	-0.01%	0.07%	-0.02%	-0.55%	-0.15%	15.38%	
731	La Vernia	3.28%	0.00%	0.00%	-0.03%	-0.10%	-0.20%	-0.06%	0.23%	-0.16%	3.12%	
711	Lacy-Lakeview	14.36%	0.00%	0.00%	0.10%	-0.01%	0.05%	-0.01%	-0.09%	0.04%	14.40%	
712	Ladonia	4.54%	0.00%	0.00%	0.13%	0.07%	0.18%	-1.68%	0.02%	-1.28%	3.26%	
713	Lago Vista	7.77%	0.00%	0.00%	0.06%	-0.04%	-0.03%	0.07%	0.29%	0.35%	8.12%	
705	Laguna Vista	4.55%	0.00%	0.00%	0.02%	-0.06%	0.03%	0.00%	-0.22%	-0.23%	4.32%	
717	Lake Dallas	12.54%	0.00%	0.00%	0.18%	-0.05%	-0.08%	0.45%	0.02%	0.52%	13.06%	
718	Lake Jackson	11.98%	0.00%	0.00%	0.22%	-0.01%	-0.01%	-0.15%	0.01%	0.06%	12.04%	
719	Lake Worth	13.29%	3.62%	0.00%	0.12%	0.16%	-0.27%	0.22%	-1.09%	2.76%	16.05%	
727	Lakeport	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
715	Lakeside	8.13%	0.00%	0.00%	0.02%	-0.02%	-0.06%	0.07%	0.41%	0.42%	8.55%	

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Return on AVA	Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes		Fully Amortized Prior Bases						
729	Lakeside City	2.47%	0.00%	0.00%	0.06%	0.04%	0.00%	0.11%	-0.60%		-0.39%	2.08%
720	Lakeway	13.92%	0.00%	0.00%	0.04%	-0.04%	-0.13%	-0.16%	0.27%		-0.02%	13.90%
722	Lamesa	4.45%	0.00%	0.00%	0.28%	-0.02%	0.02%	0.01%	0.02%		0.31%	4.76%
724	Lampasas	15.24%	0.00%	0.00%	0.14%	0.02%	0.04%	0.03%	0.08%		0.31%	15.55%
726	Lancaster	13.39%	0.00%	0.00%	0.17%	-0.04%	-0.28%	0.08%	0.13%		0.06%	13.45%
730	Laredo	20.78%	0.00%	0.00%	0.13%	-0.01%	-0.14%	-0.03%	0.04%		-0.01%	20.77%
733	Lavon	5.28%	1.11%	0.00%	0.01%	0.04%	0.00%	-0.03%	0.10%		1.23%	6.51%
736	League City	15.05%	0.00%	0.00%	0.15%	0.00%	-0.13%	0.00%	-0.35%		-0.33%	14.72%
737	Leander	12.23%	0.00%	0.00%	0.00%	-0.08%	-0.20%	-0.01%	0.10%		-0.19%	12.04%
735	Lefors	3.94%	0.00%	0.00%	-0.06%	-0.06%	0.18%	0.07%	-0.02%		0.11%	4.05%
739	Leon Valley	13.25%	3.64%	0.00%	0.31%	0.13%	-0.47%	0.01%	0.25%		3.87%	17.12%
738	Leonard	1.93%	0.00%	0.00%	0.05%	-0.03%	0.02%	-0.38%	-0.44%		-0.78%	1.15%
740	Levelland	11.69%	0.00%	0.00%	0.32%	-0.04%	0.01%	0.30%	-0.84%		-0.25%	11.44%
742	Lewisville	16.28%	0.00%	0.00%	0.19%	0.00%	-0.04%	0.05%	0.09%		0.29%	16.57%
744	Lexington	8.55%	0.00%	0.00%	0.27%	-0.02%	-0.12%	-0.04%	0.18%		0.27%	8.82%
746	Liberty	17.83%	0.00%	0.00%	0.05%	-0.03%	0.34%	-0.10%	-0.61%		-0.35%	17.48%
745	Liberty Hill	6.87%	0.00%	0.00%	-0.06%	-0.28%	-0.08%	0.11%	0.52%		0.21%	7.08%
748	Lindale	14.61%	0.00%	0.00%	0.05%	0.03%	-0.07%	0.10%	0.07%		0.18%	14.79%
750	Linden	1.23%	0.00%	0.00%	0.08%	-0.01%	-0.01%	0.03%	-0.04%		0.05%	1.28%
755	Lipan	2.46%	0.00%	0.00%	0.03%	-0.01%	-0.01%	-0.01%	0.00%		0.00%	2.46%
751	Little Elm	13.18%	0.00%	0.00%	0.00%	-0.13%	-0.22%	0.17%	0.47%		0.29%	13.47%
752	Littlefield	9.25%	0.00%	0.00%	0.22%	-0.02%	-0.04%	0.14%	-0.62%		-0.32%	8.93%
753	Live Oak	17.95%	0.00%	0.00%	0.19%	-0.07%	0.07%	0.16%	-0.04%		0.31%	18.26%
757	Liverpool	2.68%	0.00%	0.00%	-0.04%	-0.16%	-0.03%	-0.17%	-0.34%		-0.74%	1.94%
754	Livingston	14.81%	0.00%	0.00%	0.23%	-0.12%	-0.01%	-0.14%	0.79%		0.75%	15.56%
756	Llano	14.67%	0.00%	0.00%	0.12%	-0.04%	-0.09%	-0.23%	0.16%		-0.08%	14.59%
758	Lockhart	13.00%	0.00%	0.00%	0.20%	-0.04%	-0.16%	-0.06%	-0.13%		-0.19%	12.81%
760	Lockney	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%
765	Lone Star	2.13%	0.00%	0.00%	0.19%	-0.02%	0.03%	-0.17%	0.38%		0.41%	2.54%
766	Longview	10.75%	0.00%	0.00%	0.22%	0.02%	0.09%	-0.02%	-0.20%		0.11%	10.86%
768	Loraine	2.63%	0.00%	0.00%	0.06%	0.03%	-0.10%	1.09%	-0.32%		0.76%	3.39%
769	Lorena	6.67%	4.01%	0.00%	0.06%	0.20%	-0.18%	0.02%	0.00%		4.11%	10.78%
770	Lorenzo	2.04%	0.00%	0.00%	0.09%	-0.08%	0.17%	0.18%	-0.15%		0.21%	2.25%
771	Los Fresnos	3.21%	3.80%	0.00%	0.07%	0.23%	0.00%	0.02%	0.01%		4.13%	7.34%
773	Lott	1.20%	0.00%	0.00%	0.01%	-0.03%	0.03%	0.04%	-0.01%		0.04%	1.24%
774	Lovelady	8.95%	0.00%	0.00%	0.02%	0.08%	0.05%	-0.43%	-1.02%		-1.30%	7.65%
778	Lubbock	17.71%	0.00%	0.00%	0.33%	0.00%	0.00%	0.01%	-0.48%		-0.14%	17.57%
779	Lucas	12.83%	0.00%	0.00%	-0.01%	-0.15%	-0.22%	0.04%	0.01%		-0.33%	12.50%
782	Lufkin	16.34%	0.00%	0.00%	0.26%	0.02%	0.06%	-0.04%	-0.47%		-0.17%	16.17%
784	Luling	9.30%	0.00%	0.00%	0.14%	-0.09%	-0.30%	-0.12%	-0.33%		-0.70%	8.60%
785	Lumberton	16.59%	0.00%	0.00%	0.14%	0.01%	0.03%	0.01%	-0.80%		-0.61%	15.98%
786	Lyford	4.21%	0.00%	0.00%	0.01%	-0.06%	0.12%	-0.11%	-0.10%		-0.14%	4.07%
787	Lytle	9.74%	0.00%	0.00%	0.06%	-0.01%	0.08%	-0.16%	0.52%		0.49%	10.23%
790	Madisonville	9.17%	0.00%	0.00%	0.09%	0.01%	0.13%	0.03%	0.06%		0.32%	9.49%
791	Magnolia	1.67%	0.00%	0.00%	0.02%	0.00%	0.00%	-0.05%	-0.02%		-0.05%	1.62%
792	Malakoff	7.46%	0.23%	0.00%	0.05%	-0.02%	-0.08%	-0.10%	0.10%		0.18%	7.64%
796	Manor	4.24%	4.63%	0.00%	0.00%	0.26%	-0.22%	0.06%	0.14%		4.87%	9.11%
798	Mansfield	14.95%	0.00%	0.00%	0.12%	-0.06%	-0.09%	0.04%	0.43%		0.44%	15.39%
799	Manvel	11.60%	0.00%	0.00%	-0.02%	-0.15%	-0.45%	-0.17%	-0.11%		-0.90%	10.70%
800	Marble Falls	5.78%	3.59%	0.00%	0.13%	0.21%	-0.07%	-0.02%	0.14%		3.98%	9.76%
802	Marfa	2.69%	0.00%	0.00%	0.09%	0.00%	0.20%	0.01%	0.22%		0.52%	3.21%
804	Marion	5.20%	0.00%	0.00%	0.12%	0.01%	-0.29%	0.04%	-1.66%		-1.78%	3.42%
806	Marlin	8.91%	0.00%	0.00%	0.11%	-0.12%	-0.16%	0.07%	-0.10%		-0.20%	8.71%
810	Marshall	16.17%	0.00%	0.00%	0.35%	-0.01%	0.04%	-0.08%	-0.35%		-0.05%	16.12%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
812	Mart	1.63%	0.00%	0.00%	0.14%	-0.02%	0.30%	-0.18%	0.16%	0.40%	2.03%
813	Martindale	13.33%	0.00%	0.00%	-0.10%	-0.61%	-1.12%	0.02%	0.50%	-1.31%	12.02%
814	Mason	6.90%	0.00%	0.00%	0.15%	0.04%	0.10%	-0.14%	-0.48%	-0.33%	6.57%
816	Matador	6.38%	0.00%	0.00%	0.11%	0.21%	1.23%	0.16%	-0.13%	1.58%	7.96%
818	Mathis	4.31%	0.00%	0.00%	0.08%	-0.02%	-0.01%	-0.38%	-0.34%	-0.67%	3.64%
820	Maud	3.62%	0.00%	0.00%	-0.03%	-0.01%	-0.16%	0.22%	-0.17%	-0.15%	3.47%
822	Maypearl	2.70%	0.00%	0.00%	0.06%	0.07%	0.02%	-0.09%	-0.07%	-0.01%	2.69%
824	McAllen	7.76%	0.00%	0.00%	0.14%	0.01%	0.04%	-0.02%	-0.12%	0.05%	7.81%
826	McCamey	1.64%	0.00%	0.00%	0.10%	0.02%	-0.07%	-0.14%	0.12%	0.03%	1.67%
828	McGregor	9.87%	0.00%	0.00%	0.08%	-0.03%	-0.03%	-0.02%	-0.22%	-0.22%	9.65%
830	McKinney	15.07%	0.00%	0.00%	0.07%	-0.06%	-0.19%	0.00%	0.01%	-0.17%	14.90%
832	McLean	2.18%	0.00%	0.00%	0.16%	0.00%	0.02%	0.32%	-0.10%	0.40%	2.58%
833	McLendon-Chisholm	8.53%	0.00%	0.00%	-0.14%	-6.03%	0.26%	-1.20%	0.10%	-7.01%	1.52%
834	Meadow	4.56%	0.00%	0.00%	-0.07%	-0.06%	-0.31%	0.00%	0.12%	-0.32%	4.24%
831	Meadowlakes	2.41%	0.00%	0.00%	0.01%	0.01%	0.00%	-0.03%	-0.02%	-0.03%	2.38%
835	Meadows Place	8.81%	0.85%	0.00%	0.18%	0.03%	-0.20%	-0.14%	0.01%	0.73%	9.54%
837	Melissa	13.10%	0.00%	0.00%	-0.02%	-0.17%	-0.34%	0.06%	0.21%	-0.26%	12.84%
1501	Memorial Villages PD	11.03%	0.00%	0.00%	0.19%	0.05%	0.33%	-0.05%	0.06%	0.58%	11.61%
840	Memphis	3.52%	0.00%	0.00%	0.20%	-0.04%	0.06%	-0.10%	-0.05%	0.07%	3.59%
842	Menard	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
844	Mercedes	18.12%	0.00%	0.00%	0.16%	0.06%	0.19%	0.27%	-0.71%	-0.03%	18.09%
846	Meridian	3.16%	0.00%	0.00%	0.07%	-0.02%	0.05%	0.08%	-0.38%	-0.20%	2.96%
848	Merkel	11.69%	0.00%	0.00%	0.08%	-0.11%	-0.08%	0.03%	-0.11%	-0.19%	11.50%
852	Mertzon	13.21%	0.00%	0.00%	0.08%	-0.12%	-1.73%	0.17%	0.20%	-1.40%	11.81%
854	Mesquite	12.69%	3.82%	0.00%	0.28%	0.19%	-0.13%	0.01%	-0.24%	3.93%	16.62%
856	Mexia	12.29%	0.00%	0.00%	0.15%	0.04%	0.06%	0.08%	-0.51%	-0.18%	12.11%
858	Miami	13.85%	0.00%	0.00%	-0.21%	-1.83%	-0.28%	0.00%	-0.07%	-2.39%	11.46%
860	Midland	14.21%	0.00%	0.00%	0.28%	-0.01%	0.13%	0.02%	-0.22%	0.20%	14.41%
862	Midlothian	14.29%	0.00%	0.00%	0.06%	-0.08%	-0.23%	0.37%	0.35%	0.47%	14.76%
863	Milano	10.77%	0.00%	0.00%	-0.09%	0.67%	0.17%	-0.01%	-0.02%	0.72%	11.49%
864	Miles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
865	Milford	9.16%	0.00%	0.00%	0.24%	-0.06%	0.42%	0.02%	-1.35%	-0.73%	8.43%
868	Mineola	4.18%	0.00%	0.00%	0.15%	0.00%	-0.01%	0.00%	0.22%	0.36%	4.54%
870	Mineral Wells	8.83%	0.00%	0.00%	0.19%	0.01%	-0.01%	-0.17%	-0.03%	-0.01%	8.82%
874	Mission	8.42%	0.00%	0.00%	0.10%	0.01%	-0.01%	0.04%	-0.04%	0.10%	8.52%
875	Missouri City	8.16%	0.77%	0.00%	0.19%	-0.04%	0.01%	-0.09%	-0.14%	0.70%	8.86%
876	Monahans	7.66%	0.00%	0.00%	0.16%	-0.05%	-0.07%	-0.07%	-0.27%	-0.30%	7.36%
887	Mont Belvieu	15.84%	0.00%	0.00%	0.11%	-0.10%	-0.57%	-0.55%	-0.37%	-1.48%	14.36%
877	Montgomery	6.13%	0.00%	0.00%	0.02%	-0.03%	0.06%	0.19%	-0.32%	-0.08%	6.05%
878	Moody	3.42%	0.00%	0.00%	0.09%	-1.33%	0.03%	-0.09%	0.17%	-1.13%	2.29%
883	Morgan's Point	9.23%	0.00%	0.00%	0.32%	-0.10%	-0.04%	0.07%	0.54%	0.79%	10.02%
882	Morgan's Point Resort	12.17%	0.00%	0.00%	0.07%	-0.11%	-0.11%	-0.21%	0.01%	-0.35%	11.82%
884	Morton	4.31%	0.00%	0.00%	0.24%	-0.02%	-0.10%	0.17%	-0.57%	-0.28%	4.03%
886	Moulton	5.15%	0.00%	0.00%	0.33%	-0.08%	0.00%	0.24%	-0.91%	-0.42%	4.73%
890	Mount Enterprise	1.91%	0.00%	0.00%	0.30%	-0.15%	0.02%	0.39%	-0.01%	0.55%	2.46%
892	Mt. Pleasant	15.09%	0.00%	0.00%	0.13%	-0.05%	-0.18%	-0.25%	0.24%	-0.11%	14.98%
894	Mt. Vernon	11.21%	0.00%	0.00%	0.14%	-0.08%	-0.19%	0.09%	0.23%	0.19%	11.40%
896	Muenster	1.42%	0.00%	0.00%	0.18%	0.00%	0.03%	-0.05%	0.06%	0.22%	1.64%
898	Muleshoe	17.84%	0.00%	0.00%	0.25%	0.08%	0.35%	-0.22%	0.80%	1.26%	19.10%
901	Munday	3.57%	0.00%	0.00%	0.01%	-0.27%	-0.11%	0.11%	0.07%	-0.19%	3.38%
903	Murphy	14.11%	0.00%	0.00%	0.03%	-0.03%	-0.08%	-0.02%	-0.03%	-0.13%	13.98%
10904	Nacogdoches	14.99%	0.00%	0.00%	0.19%	-0.88%	-0.15%	-0.01%	0.01%	-0.84%	14.15%
906	Naples	1.93%	0.00%	0.00%	0.07%	-0.01%	-0.02%	0.13%	0.07%	0.24%	2.17%
907	Nash	17.63%	0.00%	0.00%	0.01%	-0.09%	-0.51%	0.20%	0.30%	-0.09%	17.54%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
905	Nassau Bay	15.66%	0.00%	0.00%	0.06%	-0.16%	0.35%	-0.14%	-0.03%	0.08%	15.74%
909	Natalia	3.13%	0.00%	0.00%	0.01%	0.00%	-0.04%	0.02%	0.05%	0.04%	3.17%
908	Navasota	8.01%	0.00%	0.00%	0.31%	-0.03%	0.04%	0.06%	-0.79%	-0.41%	7.60%
910	Nederland	6.35%	0.00%	0.00%	0.37%	0.00%	0.01%	-0.02%	-0.24%	0.12%	6.47%
912	Needville	4.19%	0.00%	0.00%	0.13%	-0.01%	-0.02%	-0.07%	-0.01%	0.02%	4.21%
914	New Boston	1.63%	0.00%	0.00%	0.14%	-0.04%	0.11%	0.09%	0.14%	0.44%	2.07%
10916	New Braunfels	16.96%	0.00%	0.00%	0.09%	-0.04%	-0.26%	0.01%	0.09%	-0.11%	16.85%
20916	New Braunfels Utilities	17.42%	0.00%	0.00%	0.15%	-0.12%	-0.68%	0.15%	0.30%	-0.20%	17.22%
915	New Deal	0.54%	0.00%	0.00%	0.05%	0.00%	0.06%	-0.08%	0.15%	0.18%	0.72%
923	New Fairview	10.42%	0.00%	0.00%	-0.03%	0.04%	-0.57%	0.00%	0.83%	0.27%	10.69%
918	New London	3.87%	0.00%	0.00%	0.09%	-0.05%	-0.05%	0.01%	-0.48%	-0.48%	3.39%
919	New Summerfield	9.54%	0.00%	0.00%	0.04%	0.11%	0.12%	-0.14%	-1.97%	-1.84%	7.70%
917	New Waverly	6.14%	0.24%	0.00%	0.24%	0.12%	0.18%	0.19%	0.52%	1.49%	7.63%
913	Newark	3.15%	0.00%	0.00%	-0.01%	0.08%	0.05%	-0.38%	0.06%	-0.20%	2.95%
920	Newton	20.51%	0.00%	0.00%	0.17%	0.07%	0.47%	0.06%	-0.14%	0.63%	21.14%
922	Nixon	0.70%	0.00%	0.00%	0.03%	-0.04%	-0.05%	-0.01%	0.01%	-0.06%	0.64%
924	Nocona	9.83%	0.00%	0.00%	0.11%	0.04%	0.28%	-0.06%	-0.09%	0.28%	10.11%
925	Nolanville	2.32%	0.00%	0.00%	-0.01%	-0.03%	-0.07%	-0.03%	-0.06%	-0.20%	2.12%
928	Normangee	2.29%	0.00%	0.00%	0.11%	0.02%	-0.99%	0.15%	-0.71%	-1.42%	0.87%
931	North Richland Hills	16.15%	0.00%	0.00%	0.28%	0.02%	0.02%	-0.02%	-0.11%	0.19%	16.34%
930	Northlake	10.50%	0.00%	0.00%	-0.02%	-0.09%	-0.19%	-0.22%	-0.01%	-0.53%	9.97%
935	O'Donnell	7.03%	0.00%	0.00%	0.18%	-0.04%	-0.08%	0.00%	0.38%	0.44%	7.47%
936	Oak Point	7.12%	0.00%	0.00%	0.00%	-0.05%	-0.04%	0.52%	-0.06%	0.37%	7.49%
937	Oak Ridge North	11.82%	0.00%	0.00%	0.11%	-0.01%	0.06%	-0.21%	-0.37%	-0.42%	11.40%
942	Odem	9.12%	0.00%	0.00%	0.12%	0.07%	-0.15%	0.12%	0.42%	0.58%	9.70%
944	Odessa	13.07%	0.00%	0.00%	0.25%	0.01%	0.21%	0.04%	-0.14%	0.37%	13.44%
945	Oglesby	0.53%	0.00%	0.00%	0.18%	0.00%	0.04%	0.00%	0.32%	0.54%	1.07%
949	Old River-Winfree	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
950	Olmos Park	2.60%	0.00%	0.00%	0.16%	-0.01%	-0.01%	-0.07%	-0.02%	0.05%	2.65%
951	Olney	6.35%	0.00%	0.00%	0.08%	-0.06%	0.03%	0.76%	-0.26%	0.55%	6.90%
953	Omaha	5.30%	0.00%	0.00%	0.02%	0.01%	0.00%	-0.15%	-0.04%	-0.16%	5.14%
954	Onalaska	2.63%	0.00%	0.00%	0.05%	0.01%	0.01%	0.02%	-0.63%	-0.54%	2.09%
958	Orange	15.80%	0.00%	0.00%	0.37%	-0.02%	0.14%	-0.64%	-0.49%	-0.64%	15.16%
960	Orange Grove	1.03%	6.08%	0.00%	0.16%	0.32%	0.02%	-0.18%	-0.23%	6.17%	7.20%
959	Ore City	1.45%	0.00%	0.00%	0.05%	0.01%	0.00%	-0.25%	-0.24%	-0.43%	1.02%
962	Overton	2.01%	1.22%	0.00%	0.08%	0.03%	-0.08%	0.13%	-0.23%	1.15%	3.16%
961	Ovilla	9.59%	0.00%	0.00%	0.05%	-0.10%	-0.04%	-0.15%	0.48%	0.24%	9.83%
963	Oyster Creek	11.02%	0.00%	0.00%	0.08%	-0.14%	-0.38%	-0.22%	0.40%	-0.26%	10.76%
964	Paducah	1.11%	0.00%	0.00%	0.24%	0.02%	-0.33%	-0.38%	-0.66%	-1.11%	0.00%
966	Palacios	17.45%	0.00%	0.00%	0.12%	0.09%	0.30%	-0.21%	-0.48%	-0.18%	17.27%
968	Palestine	13.42%	0.00%	0.00%	0.19%	0.03%	0.21%	-0.01%	-0.26%	0.16%	13.58%
970	Palmer	6.74%	4.73%	0.00%	0.06%	0.29%	-0.02%	0.25%	-1.01%	4.30%	11.04%
969	Palmhurst	5.94%	0.00%	0.00%	-0.02%	0.03%	0.00%	-0.03%	-0.19%	-0.21%	5.73%
971	Palmview	1.92%	0.00%	0.00%	0.01%	-0.01%	-0.05%	-0.03%	0.15%	0.07%	1.99%
972	Pampa	21.43%	0.00%	0.00%	0.24%	0.05%	0.26%	0.07%	-0.57%	0.05%	21.48%
974	Panhandle	12.34%	0.00%	0.00%	0.12%	-0.03%	0.05%	-0.10%	-1.13%	-1.09%	11.25%
973	Panorama Village	6.58%	0.00%	0.00%	0.16%	-0.10%	-0.01%	-0.30%	-0.05%	-0.30%	6.28%
975	Pantego	17.49%	0.00%	0.00%	0.29%	-0.13%	-0.22%	-0.34%	0.08%	-0.32%	17.17%
976	Paris	6.95%	0.00%	0.00%	0.24%	0.02%	0.11%	-0.05%	-0.09%	0.23%	7.18%
977	Parker	12.21%	0.00%	0.00%	0.05%	-0.03%	-0.19%	0.35%	0.03%	0.21%	12.42%
978	Pasadena	13.45%	0.00%	0.00%	0.30%	-0.04%	-0.10%	0.01%	-0.16%	0.01%	13.46%
983	Pearland	13.30%	0.00%	0.00%	0.08%	-0.05%	-0.13%	-0.11%	0.05%	-0.16%	13.14%
984	Pearsall	2.87%	1.48%	0.00%	0.09%	0.09%	0.13%	0.03%	0.00%	1.82%	4.69%
988	Pecos City	6.06%	0.00%	0.00%	0.10%	-0.04%	0.00%	-0.01%	0.03%	0.08%	6.14%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Fully Amortized Prior Bases					
989	Pelican Bay	5.01%	0.00%	0.00%	-0.06%	-0.09%	-0.47%	-0.13%	0.09%	-0.66%	4.35%
991	Penitas	4.33%	0.00%	0.00%	-0.03%	0.00%	0.09%	-0.05%	-0.23%	-0.22%	4.11%
994	Perryton	14.71%	0.00%	0.00%	0.20%	-0.01%	0.19%	0.03%	-0.16%	0.25%	14.96%
1000	Pflugerville	13.33%	0.00%	0.00%	0.05%	-0.04%	-0.13%	0.06%	0.19%	0.13%	13.46%
1002	Pharr	7.89%	0.00%	0.00%	0.10%	-0.02%	-0.12%	0.05%	-0.04%	-0.03%	7.86%
1004	Pilot Point	9.19%	2.90%	0.00%	0.05%	0.10%	-0.22%	-0.20%	-0.32%	2.31%	11.50%
1005	Pinehurst	19.38%	0.00%	0.00%	0.18%	-0.04%	-0.06%	0.01%	0.35%	0.44%	19.82%
1003	Pineland	7.91%	0.00%	0.00%	0.85%	0.00%	-0.02%	0.03%	-2.53%	-1.67%	6.24%
1001	Piney Point Village	6.95%	0.00%	0.00%	0.03%	-0.05%	0.00%	0.13%	-0.14%	-0.03%	6.92%
1006	Pittsburg	14.39%	0.00%	0.00%	0.34%	-0.34%	-0.08%	0.29%	-1.24%	-1.03%	13.36%
1007	Plains	6.57%	0.00%	0.00%	0.24%	-0.19%	-0.01%	-2.54%	0.15%	-2.35%	4.22%
1008	Plainview	13.07%	0.00%	0.00%	0.36%	-0.01%	0.03%	0.10%	-1.28%	-0.80%	12.27%
1010	Plano	16.67%	0.00%	0.00%	0.22%	-0.07%	-0.11%	-0.01%	0.01%	0.04%	16.71%
1012	Pleasanton	15.79%	0.00%	0.00%	0.08%	0.03%	0.17%	-0.18%	-0.67%	-0.57%	15.22%
1013	Point	13.67%	0.00%	0.00%	-0.06%	-0.39%	-0.34%	0.59%	-0.35%	-0.55%	13.12%
1017	Ponder	6.11%	0.00%	0.00%	0.01%	0.03%	0.04%	0.02%	0.01%	0.11%	6.22%
1014	Port Aransas	11.55%	0.00%	0.00%	0.05%	0.03%	0.27%	-0.20%	-0.03%	0.12%	11.67%
11016	Port Arthur	13.80%	0.00%	0.00%	0.23%	-0.04%	-0.29%	-0.02%	0.06%	-0.06%	13.74%
1018	Port Isabel	3.97%	0.00%	0.00%	0.09%	0.00%	0.00%	-0.05%	-0.33%	-0.29%	3.68%
1020	Port Lavaca	5.81%	0.00%	0.00%	0.15%	0.02%	0.04%	0.04%	-0.17%	0.08%	5.89%
1022	Port Neches	12.49%	0.18%	0.00%	0.35%	0.01%	-0.05%	0.12%	0.09%	0.70%	13.19%
1019	Portland	13.64%	0.00%	0.00%	0.11%	-0.01%	-0.03%	-0.11%	-0.42%	-0.46%	13.18%
1024	Post	10.79%	4.50%	0.00%	0.10%	0.12%	-1.53%	0.15%	0.13%	3.47%	14.26%
1026	Poteet	2.18%	0.00%	0.00%	0.10%	0.01%	-0.10%	0.06%	-0.11%	-0.04%	2.14%
1028	Poth	4.47%	0.00%	0.00%	0.10%	-0.01%	-0.08%	-0.02%	-0.19%	-0.20%	4.27%
1030	Pottsboro	6.72%	0.00%	0.00%	0.00%	-0.01%	0.00%	-0.05%	0.09%	0.03%	6.75%
1031	Prairie View	5.25%	0.00%	0.00%	-0.05%	-0.21%	-0.11%	-0.13%	-0.47%	-0.97%	4.28%
1032	Premont	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1029	Presidio	0.87%	0.00%	0.00%	0.03%	0.01%	-0.02%	0.03%	-0.17%	-0.12%	0.75%
1033	Primera	0.06%	0.00%	0.00%	0.00%	-0.03%	0.00%	-0.03%	0.00%	-0.06%	0.00%
1034	Princeton	10.75%	0.00%	0.00%	0.01%	-0.15%	-0.17%	0.02%	0.29%	0.00%	10.75%
1036	Prosper	13.55%	0.00%	0.00%	-0.03%	-0.14%	-0.21%	-0.08%	0.45%	-0.01%	13.54%
1037	Providence Village	7.50%	0.00%	0.00%	-0.07%	-0.12%	-0.35%	0.34%	0.29%	0.09%	7.59%
1042	Quanah	9.36%	0.00%	0.00%	0.59%	-0.55%	0.29%	0.05%	-0.66%	-0.28%	9.08%
1045	Queen City	1.77%	0.00%	0.00%	0.04%	-0.01%	-0.08%	-0.15%	0.14%	-0.06%	1.71%
1044	Quinlan	10.01%	0.00%	0.00%	-0.01%	0.01%	0.00%	0.16%	-0.21%	-0.05%	9.96%
1047	Quintana	2.55%	0.00%	0.00%	-0.04%	-0.18%	-0.41%	0.11%	0.84%	0.32%	2.87%
1046	Quitaque	4.92%	0.00%	0.00%	0.18%	-0.16%	-0.20%	-0.02%	-0.12%	-0.32%	4.60%
1048	Quitman	5.49%	0.00%	0.00%	0.15%	-0.13%	-0.02%	0.03%	0.05%	0.08%	5.57%
1050	Ralls	6.50%	0.00%	0.00%	0.28%	0.10%	0.38%	0.44%	0.05%	1.25%	7.75%
1051	Rancho Viejo	6.91%	0.00%	0.00%	0.30%	-0.09%	-0.04%	0.00%	-0.37%	-0.20%	6.71%
1052	Ranger	6.64%	0.00%	0.00%	0.14%	-0.67%	1.11%	-0.04%	0.71%	1.25%	7.89%
1054	Rankin	1.24%	0.00%	0.00%	0.20%	-0.06%	-0.08%	-0.62%	0.03%	-0.53%	0.71%
1055	Ransom Canyon	15.39%	0.00%	0.00%	0.04%	-0.02%	0.36%	-0.06%	0.03%	0.35%	15.74%
1058	Raymondville	1.47%	0.00%	0.00%	0.22%	-0.01%	-0.14%	0.08%	-0.64%	-0.49%	0.98%
1061	Red Oak	6.16%	1.02%	0.00%	0.01%	0.00%	-0.09%	-0.08%	0.08%	0.94%	7.10%
1062	Redwater	3.08%	0.00%	0.00%	0.00%	-0.02%	0.04%	-0.01%	0.10%	0.11%	3.19%
1064	Refugio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1065	Reklaw	16.53%	0.00%	0.00%	0.25%	0.31%	1.23%	-0.36%	-1.20%	0.23%	16.76%
1066	Reno (Lamar County)	4.17%	0.00%	0.00%	0.04%	0.01%	0.05%	-0.02%	0.15%	0.23%	4.40%
1069	Reno (Parker County)	2.72%	1.43%	0.00%	-0.01%	0.03%	0.07%	-0.15%	0.02%	1.39%	4.11%
1067	Rhome	7.60%	0.00%	0.00%	0.05%	-0.04%	-0.02%	-0.19%	-0.28%	-0.48%	7.12%
1068	Rice	1.07%	0.00%	0.00%	0.01%	-0.01%	0.01%	0.05%	0.07%	0.13%	1.20%
1070	Richardson	14.44%	0.00%	0.00%	0.29%	-0.01%	0.00%	0.01%	-0.01%	0.28%	14.72%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Return on AVA	Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes		Fully Amortized Prior Bases						
1073	Richland Hills	15.47%	0.00%	0.00%	0.34%	-0.09%	-0.17%	0.09%	-0.01%	0.16%	15.63%	
1074	Richland Springs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1076	Richmond	14.67%	0.00%	0.00%	0.16%	-0.02%	-0.20%	-0.02%	0.04%	-0.04%	14.63%	
1077	Richwood	11.05%	0.00%	0.00%	0.12%	0.00%	0.02%	-0.03%	-0.07%	0.04%	11.09%	
1072	Riesel	5.98%	0.00%	0.00%	0.00%	-0.03%	0.10%	-0.12%	-0.10%	-0.15%	5.83%	
1075	Rio Grande City	7.03%	0.00%	0.00%	0.04%	0.03%	0.03%	0.06%	-0.36%	-0.20%	6.83%	
1079	Rio Vista	3.77%	0.00%	0.00%	0.08%	0.10%	0.41%	-0.04%	0.01%	0.56%	4.33%	
1080	Rising Star	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.05%	0.06%	0.06%	
1082	River Oaks	13.76%	0.00%	0.00%	0.19%	-0.03%	-0.01%	0.35%	0.13%	0.63%	14.39%	
1084	Roanoke	17.45%	0.00%	0.00%	0.04%	-0.01%	-0.01%	0.05%	-0.18%	-0.11%	17.34%	
1088	Robert Lee	5.40%	0.00%	0.00%	0.19%	0.07%	0.45%	0.17%	-0.75%	0.13%	5.53%	
1089	Robinson	13.85%	0.00%	0.00%	0.08%	-0.08%	-0.23%	0.05%	-0.08%	-0.26%	13.59%	
21090	Robstown	6.13%	0.00%	0.00%	0.20%	-0.02%	0.02%	-0.01%	-0.53%	-0.34%	5.79%	
11090	Robstown Utility Systems	12.76%	0.00%	0.00%	0.36%	0.02%	0.09%	-0.02%	-0.49%	-0.04%	12.72%	
1092	Roby	1.81%	0.00%	0.00%	0.68%	-0.22%	0.13%	0.00%	0.86%	1.45%	3.26%	
1096	Rockdale	9.30%	0.00%	0.00%	0.07%	-0.05%	-0.06%	-0.04%	-0.23%	-0.31%	8.99%	
1098	Rockport	17.45%	0.00%	0.00%	0.14%	0.21%	0.58%	-0.55%	0.04%	0.42%	17.87%	
1100	Rocksprings	0.52%	0.00%	0.00%	0.09%	-0.05%	0.00%	0.58%	0.17%	0.79%	1.31%	
1102	Rockwall	15.76%	0.00%	0.00%	0.13%	-0.01%	0.03%	0.04%	-0.50%	-0.31%	15.45%	
1104	Rogers	8.52%	0.00%	0.00%	0.08%	0.04%	0.32%	0.09%	-0.37%	0.16%	8.68%	
1105	Rollingwood	8.17%	3.03%	0.00%	0.09%	0.06%	0.04%	0.07%	0.42%	3.71%	11.88%	
1106	Roma	10.66%	0.00%	0.00%	0.12%	0.05%	0.05%	0.03%	-0.72%	-0.47%	10.19%	
1109	Roscoe	2.14%	0.00%	0.00%	0.08%	-0.01%	-0.02%	0.06%	0.05%	0.16%	2.30%	
1112	Rosebud	1.90%	0.00%	0.00%	0.01%	0.00%	-0.01%	0.01%	0.04%	0.05%	1.95%	
1114	Rosenberg	12.87%	3.48%	0.00%	0.15%	0.12%	-0.08%	-0.11%	-0.24%	3.32%	16.19%	
1116	Rotan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1118	Round Rock	15.33%	0.00%	0.00%	0.10%	-0.06%	-0.16%	0.01%	0.13%	0.02%	15.35%	
1119	Rowlett	12.82%	0.00%	0.00%	0.16%	-0.03%	-0.09%	0.04%	0.15%	0.23%	13.05%	
1120	Royse City	15.98%	0.00%	0.00%	-0.01%	-0.15%	-0.45%	-0.33%	0.31%	-0.63%	15.35%	
1122	Rule	8.88%	0.00%	0.00%	0.32%	0.08%	0.11%	0.04%	-7.26%	-6.71%	2.17%	
1123	Runaway Bay	1.78%	0.00%	0.00%	0.06%	-0.06%	0.31%	-0.21%	-0.15%	-0.05%	1.73%	
1124	Runge	18.85%	0.00%	0.00%	0.23%	0.22%	0.32%	-0.19%	-0.77%	-0.19%	18.66%	
1126	Rusk	6.58%	0.00%	0.00%	0.08%	0.01%	-0.01%	0.03%	-0.68%	-0.57%	6.01%	
1128	Sabinal	3.12%	0.00%	0.00%	0.11%	-0.01%	0.00%	0.05%	-0.03%	0.12%	3.24%	
1129	Sachse	14.79%	0.00%	0.00%	0.07%	-0.04%	-0.16%	-0.22%	0.20%	-0.15%	14.64%	
1131	Saginaw	17.14%	4.19%	0.00%	0.10%	0.22%	-0.17%	0.19%	0.00%	4.53%	21.67%	
1130	Saint Jo	5.13%	0.00%	0.00%	0.18%	0.08%	-1.41%	-0.20%	-1.24%	-2.59%	2.54%	
1133	Salado	6.25%	0.00%	0.00%	0.01%	-0.07%	0.05%	-0.55%	0.01%	-0.55%	5.70%	
1132	San Angelo	17.46%	0.00%	0.00%	0.31%	0.00%	0.10%	-0.10%	-0.34%	-0.03%	17.43%	
21136	San Antonio	11.37%	0.29%	0.00%	0.17%	0.00%	-0.06%	-0.03%	-0.07%	0.30%	11.67%	
11136	San Antonio Water System	3.60%	0.00%	0.00%	0.07%	-0.01%	-0.02%	-0.02%	0.02%	0.04%	3.64%	
1138	San Augustine	8.34%	0.00%	0.00%	0.17%	-0.18%	0.00%	-0.05%	-0.09%	-0.15%	8.19%	
1140	San Benito	5.51%	0.00%	0.00%	0.10%	0.01%	0.04%	0.05%	-0.44%	-0.24%	5.27%	
1144	San Felipe	4.46%	0.00%	0.00%	0.11%	0.06%	-0.02%	0.00%	0.01%	0.16%	4.62%	
1148	San Juan	2.55%	0.00%	0.00%	0.06%	-0.01%	0.00%	-0.03%	-0.08%	-0.06%	2.49%	
1150	San Marcos	17.34%	0.00%	0.00%	0.14%	-0.06%	-0.33%	-0.07%	0.27%	-0.05%	17.29%	
1152	San Saba	8.31%	0.00%	0.00%	0.13%	0.03%	0.13%	-0.11%	-0.03%	0.15%	8.46%	
1146	Sanger	7.91%	0.00%	0.00%	0.06%	-0.01%	-0.03%	0.05%	0.18%	0.25%	8.16%	
1153	Sansom Park	6.15%	0.00%	0.00%	0.04%	0.01%	0.00%	0.12%	-0.29%	-0.12%	6.03%	
1155	Santa Fe	11.62%	0.00%	0.00%	0.15%	0.03%	0.34%	-0.10%	-0.21%	0.21%	11.83%	
1158	Savoy	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1159	Schertz	16.04%	0.00%	0.00%	0.06%	-0.05%	-0.20%	-0.12%	0.07%	-0.24%	15.80%	
1160	Schulenburg	21.43%	0.00%	0.00%	0.31%	-0.04%	-0.05%	0.09%	-0.24%	0.07%	21.50%	
1161	Seabrook	15.57%	0.00%	0.00%	0.20%	0.00%	0.01%	-0.01%	0.11%	0.31%	15.88%	

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Return on AVA	Contribution Lag/Phase In &		Payroll Growth	Normal Cost	Liability Growth	Total Change	2020 Rates
			Benefit Changes	Method Changes		Fully Amortized Prior Bases						
1162	Seadrift	4.09%	0.00%	0.00%	0.03%	-0.09%	-0.45%	0.04%	0.02%	-0.45%	3.64%	
1164	Seagoville	10.86%	0.00%	0.00%	0.12%	-0.01%	-0.03%	0.15%	-0.15%	0.08%	10.94%	
1166	Seagraves	10.02%	0.00%	0.00%	0.13%	0.04%	0.14%	-0.18%	0.07%	0.20%	10.22%	
1167	Sealy	14.57%	0.00%	0.00%	0.13%	0.04%	-0.06%	-0.32%	0.50%	0.29%	14.86%	
1168	Seguin	15.24%	6.99%	0.00%	0.12%	0.09%	-0.17%	-0.03%	-0.02%	6.98%	22.22%	
1169	Selma	14.66%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%	-0.08%	-0.02%	14.64%	
1170	Seminole	12.89%	0.00%	0.00%	0.28%	0.02%	0.13%	0.16%	-1.45%	-0.86%	12.03%	
1171	Seven Points	2.60%	0.00%	0.00%	0.08%	-0.10%	-0.67%	0.00%	-0.80%	-1.49%	1.11%	
1172	Seymour	7.03%	0.00%	0.00%	0.16%	-0.04%	0.15%	-0.07%	-0.03%	0.17%	7.20%	
1165	Shady Shores	9.26%	0.00%	0.00%	-0.10%	0.18%	0.05%	-0.03%	0.15%	0.25%	9.51%	
1177	Shallowater	2.42%	2.08%	0.00%	0.08%	0.06%	0.01%	0.08%	-0.17%	2.14%	4.56%	
1174	Shamrock	7.84%	0.00%	0.00%	0.16%	0.22%	1.47%	0.01%	-0.95%	0.91%	8.75%	
1173	Shavano Park	13.82%	0.00%	0.00%	0.04%	-0.09%	-0.18%	-0.73%	0.49%	-0.47%	13.35%	
1175	Shenandoah	16.93%	0.00%	0.00%	0.07%	0.06%	0.38%	-0.08%	0.88%	1.31%	18.24%	
1181	Shepherd	2.70%	0.00%	0.00%	0.08%	0.02%	0.13%	-0.01%	-0.33%	-0.11%	2.59%	
1176	Sherman	13.92%	0.00%	0.00%	0.24%	-0.03%	-0.10%	0.01%	0.30%	0.42%	14.34%	
1178	Shiner	7.71%	0.00%	0.00%	0.14%	0.02%	-0.08%	-0.03%	0.24%	0.29%	8.00%	
1179	Shoreacres	4.68%	0.00%	0.00%	0.13%	-0.03%	-0.19%	0.17%	-0.27%	-0.19%	4.49%	
1180	Silsbee	18.49%	0.00%	0.00%	0.22%	0.01%	-0.14%	0.13%	0.26%	0.48%	18.97%	
1182	Silverton	4.47%	0.00%	0.00%	0.45%	-0.04%	0.13%	-0.01%	0.39%	0.92%	5.39%	
1184	Sinton	12.87%	0.00%	0.00%	0.13%	0.08%	0.20%	-0.17%	-0.78%	-0.54%	12.33%	
1185	Skellytown	0.55%	0.00%	0.00%	0.09%	-0.06%	1.24%	-0.14%	0.23%	1.36%	1.91%	
1186	Slaton	6.52%	0.00%	0.00%	0.21%	0.00%	0.01%	0.08%	-0.03%	0.27%	6.79%	
1188	Smithville	6.86%	0.00%	0.00%	0.07%	-0.01%	-0.04%	0.07%	-0.01%	0.08%	6.94%	
1189	Smyer	10.39%	0.00%	0.00%	0.13%	0.36%	0.48%	-0.53%	-1.15%	-0.71%	9.68%	
1190	Snyder	13.67%	0.00%	0.00%	0.29%	-0.09%	0.12%	-0.04%	-0.32%	-0.04%	13.63%	
1191	Somerset	2.59%	0.00%	0.00%	0.02%	-0.04%	0.02%	0.06%	0.03%	0.09%	2.68%	
1192	Somerville	5.21%	0.00%	0.00%	0.08%	-0.03%	0.03%	-0.34%	-0.70%	-0.96%	4.25%	
1194	Sonora	8.29%	0.00%	0.00%	0.17%	0.04%	0.18%	-0.22%	-0.01%	0.16%	8.45%	
1196	Sour Lake	5.69%	0.00%	0.00%	0.04%	0.01%	-0.01%	-0.20%	-0.30%	-0.46%	5.23%	
1198	South Houston	10.00%	0.00%	0.00%	0.32%	0.00%	0.05%	-0.07%	-0.47%	-0.17%	9.83%	
1199	South Padre Island	12.81%	0.00%	0.00%	0.13%	-0.02%	-0.03%	0.04%	0.00%	0.12%	12.93%	
1197	Southlake	12.35%	0.00%	0.00%	0.12%	-0.06%	-0.16%	0.01%	0.19%	0.10%	12.45%	
1200	Southmayd	5.63%	0.00%	0.00%	-0.08%	-0.32%	-0.27%	0.03%	0.18%	-0.46%	5.17%	
1202	Southside Place	11.80%	0.00%	0.00%	0.10%	-0.03%	-0.07%	0.10%	-0.29%	-0.19%	11.61%	
1204	Spearman	11.38%	0.00%	0.00%	0.23%	-0.01%	-0.03%	0.02%	-0.21%	0.00%	11.38%	
1201	Splendora	5.19%	0.00%	0.00%	-0.04%	0.01%	0.31%	0.11%	0.01%	0.40%	5.59%	
1205	Spring Valley Village	6.89%	0.00%	0.00%	0.17%	-0.03%	-0.03%	0.08%	-0.17%	0.02%	6.91%	
1203	Springtown	9.14%	0.00%	0.00%	0.10%	-0.05%	0.02%	0.49%	-0.39%	0.17%	9.31%	
1206	Spur	4.66%	0.00%	0.00%	0.13%	0.00%	0.00%	-0.08%	0.46%	0.51%	5.17%	
1207	Stafford	14.44%	0.00%	0.00%	0.14%	-0.03%	-0.10%	-0.14%	-0.18%	-0.31%	14.13%	
1208	Stamford	5.26%	0.00%	0.00%	0.19%	-0.06%	0.04%	-0.19%	-0.28%	-0.30%	4.96%	
1210	Stanton	7.75%	0.00%	0.00%	0.08%	-0.06%	-0.15%	0.01%	0.03%	-0.09%	7.66%	
1211	Star Harbor	10.48%	0.00%	0.00%	0.48%	-0.03%	-0.04%	-0.20%	0.01%	0.22%	10.70%	
1212	Stephenville	6.36%	0.00%	0.00%	0.21%	-0.03%	0.03%	0.00%	0.10%	0.31%	6.67%	
1213	Sterling City	1.20%	0.00%	0.00%	0.08%	-0.01%	0.00%	-0.08%	-0.08%	-0.09%	1.11%	
1214	Stinnett	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1216	Stockdale	4.48%	0.98%	0.00%	-0.03%	0.07%	0.03%	0.02%	-0.02%	1.05%	5.53%	
1218	Stratford	6.31%	0.00%	0.00%	0.05%	-0.14%	-0.02%	0.06%	-1.09%	-1.14%	5.17%	
1224	Sudan	0.95%	0.31%	0.00%	0.08%	-0.06%	0.01%	0.12%	0.10%	0.56%	1.51%	
1225	Sugar Land	14.78%	0.00%	0.00%	0.13%	-0.02%	-0.05%	-0.05%	-0.19%	-0.18%	14.60%	
1226	Sulphur Springs	7.31%	0.19%	0.00%	0.22%	0.01%	0.02%	-0.03%	0.05%	0.46%	7.77%	
1228	Sundown	11.23%	0.00%	0.00%	0.28%	0.00%	0.05%	0.09%	0.10%	0.52%	11.75%	
1229	Sunnyvale	11.63%	0.00%	0.00%	0.05%	-0.07%	-0.18%	0.25%	-0.12%	-0.07%	11.56%	

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
1230	Sunray	18.51%	0.00%	0.00%	0.17%	0.16%	0.70%	-3.52%	-1.58%	-4.07%	14.44%
1227	Sunrise Beach Village	1.28%	0.00%	0.00%	0.01%	-0.01%	-0.01%	-0.01%	0.08%	0.06%	1.34%
1231	Sunset Valley	12.19%	1.11%	0.00%	0.08%	-0.01%	-0.19%	0.11%	-0.11%	0.99%	13.18%
1233	Surfside Beach	1.36%	0.00%	0.00%	0.02%	-0.01%	0.10%	-0.06%	-0.07%	-0.02%	1.34%
1232	Sweeny	17.20%	0.00%	0.00%	0.25%	0.08%	0.17%	-0.03%	-0.56%	-0.09%	17.11%
1234	Sweetwater	17.65%	0.00%	0.00%	0.20%	-0.03%	0.13%	-0.08%	-0.14%	0.08%	17.73%
1264	TMRS	15.95%	0.00%	0.00%	0.09%	-0.14%	-0.37%	-0.01%	0.22%	-0.21%	15.74%
1236	Taft	16.91%	0.00%	0.00%	0.13%	0.16%	0.53%	0.69%	-0.54%	0.97%	17.88%
1238	Tahoka	1.41%	0.04%	0.00%	0.00%	0.01%	0.00%	-0.18%	-1.28%	-1.41%	0.00%
1240	Talty	8.14%	0.00%	0.00%	-0.05%	0.23%	2.92%	-0.07%	-0.28%	2.75%	10.89%
1241	Tatum	1.79%	0.00%	0.00%	0.05%	-0.05%	-0.02%	0.04%	0.00%	0.02%	1.81%
1246	Taylor	11.88%	0.00%	0.00%	0.13%	-0.06%	-0.28%	-0.13%	0.02%	-0.32%	11.56%
1248	Teague	9.23%	0.00%	0.00%	0.14%	-0.12%	-0.01%	0.36%	-0.56%	-0.19%	9.04%
1252	Temple	16.43%	0.00%	0.00%	0.22%	0.00%	0.04%	0.02%	0.20%	0.48%	16.91%
1254	Tenaha	0.10%	0.00%	0.00%	0.08%	-0.03%	-0.07%	0.37%	-0.15%	0.20%	0.30%
1256	Terrell	15.68%	0.00%	0.00%	0.18%	0.01%	0.16%	-0.07%	-0.07%	0.21%	15.89%
1258	Terrell Hills	12.10%	3.22%	0.00%	0.16%	0.19%	-0.05%	-0.21%	-0.03%	3.28%	15.38%
31263	Tex Municipal League IEBP	5.91%	0.31%	0.00%	0.11%	0.01%	-0.03%	-0.12%	-0.27%	0.01%	5.92%
21263	Tex Municipal League IRP	10.39%	0.00%	0.00%	0.21%	-0.02%	0.00%	0.00%	-0.07%	0.12%	10.51%
21260	Texarkana	16.03%	0.00%	0.00%	0.31%	-0.01%	0.02%	-0.17%	-0.62%	-0.47%	15.56%
11260	Texarkana Police Dept	15.01%	0.00%	0.00%	0.32%	-0.05%	-0.03%	-0.12%	-0.71%	-0.59%	14.42%
31260	Texarkana Water Utilities	16.07%	0.00%	0.00%	0.23%	-0.01%	-0.12%	-0.08%	0.03%	0.05%	16.12%
1262	Texas City	16.18%	0.00%	0.00%	0.28%	-0.04%	-0.05%	-0.01%	-0.12%	0.06%	16.24%
11263	Texas Municipal League	16.04%	0.00%	0.00%	0.34%	-0.03%	-0.18%	0.19%	-1.51%	-1.19%	14.85%
1267	The Colony	13.01%	0.00%	0.00%	0.12%	-0.05%	-0.15%	0.01%	-0.02%	-0.09%	12.92%
1269	Thompsons	4.20%	0.00%	0.00%	0.07%	0.04%	0.06%	0.00%	-0.06%	0.11%	4.31%
1268	Thorndale	7.58%	0.00%	0.00%	0.18%	0.16%	0.34%	-0.13%	-0.04%	0.51%	8.09%
1272	Thrall	8.36%	0.00%	0.00%	-0.10%	0.02%	0.00%	-0.02%	-0.85%	-0.95%	7.41%
1274	Three Rivers	23.36%	0.00%	0.00%	0.04%	0.13%	-0.11%	-0.05%	-0.73%	-0.72%	22.64%
1276	Throckmorton	4.56%	0.00%	0.00%	0.26%	-0.04%	0.00%	-0.15%	0.28%	0.35%	4.91%
1277	Tiki Island	3.58%	0.00%	0.00%	0.03%	-0.01%	-0.04%	0.13%	0.07%	0.18%	3.76%
1278	Timpson	2.16%	0.00%	0.00%	0.07%	-0.01%	0.00%	0.01%	-0.22%	-0.15%	2.01%
1280	Tioga	1.46%	0.00%	0.00%	0.01%	-0.02%	0.03%	-0.04%	0.02%	0.00%	1.46%
1283	Tolar	8.96%	0.00%	0.00%	0.22%	-0.08%	-0.05%	-0.06%	-1.25%	-1.22%	7.74%
1286	Tom Bean	2.42%	0.00%	0.00%	0.01%	-0.04%	-0.02%	0.27%	0.04%	0.26%	2.68%
1284	Tomball	13.49%	0.00%	0.00%	0.12%	0.02%	0.00%	-0.01%	-0.13%	0.00%	13.49%
1290	Trent	8.18%	0.00%	0.00%	0.17%	-0.42%	0.00%	-0.01%	-0.04%	-0.30%	7.88%
1292	Trenton	2.84%	0.00%	0.00%	0.11%	-0.04%	0.13%	0.02%	0.36%	0.58%	3.42%
1293	Trinidad	3.24%	0.00%	0.00%	0.12%	-0.01%	0.10%	0.08%	-0.46%	-0.17%	3.07%
1294	Trinity	6.92%	0.00%	0.00%	0.04%	0.04%	0.08%	-0.12%	-0.10%	-0.06%	6.86%
1295	Trophy Club	12.95%	0.00%	0.00%	0.11%	-0.01%	-0.09%	0.42%	-0.29%	0.14%	13.09%
1296	Troup	5.33%	0.00%	0.00%	0.05%	-0.03%	-0.04%	-0.04%	0.09%	0.03%	5.36%
1297	Troy	11.83%	0.00%	0.00%	-0.02%	-0.23%	-0.04%	0.11%	-0.54%	-0.72%	11.11%
1298	Tulia	10.50%	0.00%	0.00%	0.28%	-0.07%	0.02%	0.06%	-0.10%	0.19%	10.69%
1299	Turkey	5.19%	0.00%	0.00%	0.26%	0.03%	-0.23%	-0.08%	0.01%	-0.01%	5.18%
1301	Tye	7.25%	0.00%	0.00%	0.02%	-0.04%	-0.02%	-0.22%	-0.09%	-0.35%	6.90%
1304	Tyler	20.89%	0.00%	0.00%	0.28%	0.08%	0.14%	0.00%	-0.40%	0.10%	20.99%
1305	Universal City	18.46%	0.00%	0.00%	0.10%	-0.04%	-0.11%	0.01%	0.15%	0.11%	18.57%
1306	University Park	7.26%	2.92%	0.00%	0.26%	-0.21%	-0.04%	-0.04%	-0.70%	2.19%	9.45%
1308	Uvalde	5.93%	0.00%	0.00%	0.09%	0.00%	0.03%	-0.04%	-0.05%	0.03%	5.96%
1312	Valley Mills	1.89%	0.00%	0.00%	-0.02%	-0.01%	0.00%	0.44%	0.02%	0.43%	2.32%
1313	Valley View	2.17%	0.00%	0.00%	-0.01%	0.00%	0.07%	0.54%	-0.94%	-0.34%	1.83%
1314	Van	7.32%	0.00%	0.00%	0.08%	0.02%	-0.01%	0.07%	-0.30%	-0.14%	7.18%
1316	Van Alstyne	9.66%	0.00%	0.00%	0.06%	-0.06%	-0.02%	0.16%	-0.05%	0.09%	9.75%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption &		Contribution					Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Lag/Phase In & Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
1318	Van Horn	7.85%	0.00%	0.00%	0.14%	-0.06%	0.12%	0.03%	0.12%	0.35%	8.20%
1320	Vega	24.79%	0.00%	0.00%	0.51%	0.29%	0.27%	-0.84%	-1.73%	-1.50%	23.29%
1324	Venus	10.53%	0.00%	0.00%	0.01%	-0.11%	-0.04%	-0.15%	0.30%	0.01%	10.54%
1326	Vernon	11.98%	0.00%	0.00%	0.30%	0.03%	0.09%	0.34%	-0.45%	0.31%	12.29%
1328	Victoria	16.59%	0.00%	0.00%	0.27%	0.04%	0.08%	-0.09%	-0.59%	-0.29%	16.30%
1329	Vidor	14.24%	0.00%	0.00%	0.27%	0.01%	0.10%	0.36%	-0.76%	-0.02%	14.22%
1500	Village Fire Department	6.09%	0.00%	0.00%	0.25%	-0.02%	-0.01%	0.01%	-0.03%	0.20%	6.29%
1327	Village of the Hills	6.18%	0.00%	0.00%	-0.14%	-0.06%	-0.05%	0.01%	0.22%	-0.02%	6.16%
1330	Waco	14.02%	0.00%	0.00%	0.25%	-0.07%	0.01%	-0.04%	0.16%	0.31%	14.33%
1332	Waelder	2.72%	0.00%	0.00%	0.05%	-0.02%	-0.05%	0.06%	-0.01%	0.03%	2.75%
1334	Wake Village	13.11%	0.00%	0.00%	0.13%	-0.06%	-0.14%	-0.44%	0.24%	-0.27%	12.84%
1336	Waller	3.90%	0.00%	0.00%	0.10%	-0.02%	0.01%	0.04%	-0.07%	0.06%	3.96%
1337	Wallis	2.64%	0.00%	0.00%	0.06%	-0.20%	0.02%	-0.11%	-0.01%	-0.24%	2.40%
1338	Walnut Springs	3.53%	0.00%	0.00%	0.17%	0.03%	0.00%	0.02%	0.18%	0.40%	3.93%
1340	Waskom	6.73%	0.00%	0.00%	0.10%	0.01%	0.11%	0.00%	-0.12%	0.10%	6.83%
1341	Watauga	13.50%	0.00%	0.00%	0.17%	-0.03%	-0.01%	0.53%	0.04%	0.70%	14.20%
1342	Waxahachie	14.96%	0.00%	0.00%	0.13%	-0.12%	-0.46%	0.21%	0.64%	0.40%	15.36%
1344	Weatherford	13.25%	0.00%	0.00%	0.18%	0.00%	0.03%	0.04%	-0.13%	0.12%	13.37%
1345	Webster	17.41%	0.00%	0.00%	0.17%	-0.05%	-0.11%	0.11%	0.17%	0.29%	17.70%
1346	Weimar	17.22%	0.00%	0.00%	0.24%	-0.09%	-0.28%	-0.16%	-0.04%	-0.33%	16.89%
1350	Wellington	4.04%	0.00%	0.00%	0.38%	-0.02%	-0.01%	-0.05%	-0.07%	0.23%	4.27%
1352	Wells	1.45%	0.00%	0.00%	0.20%	-0.62%	0.76%	0.19%	0.98%	1.51%	2.96%
1354	Weslaco	7.76%	0.24%	0.00%	0.19%	-0.01%	-0.05%	0.02%	0.12%	0.51%	8.27%
1356	West	1.56%	0.00%	0.00%	0.13%	-0.31%	-0.07%	0.03%	0.06%	-0.16%	1.40%
1358	West Columbia	3.26%	0.00%	0.00%	0.14%	0.01%	0.00%	0.02%	-0.24%	-0.07%	3.19%
1359	West Lake Hills	15.99%	0.00%	0.00%	0.17%	-0.01%	0.24%	-0.26%	0.27%	0.41%	16.40%
1361	West Orange	20.03%	0.00%	0.00%	0.30%	0.13%	0.68%	0.15%	-1.27%	-0.01%	20.02%
1365	West Tawakoni	9.56%	0.00%	0.00%	0.11%	-0.06%	-0.01%	-0.07%	-0.47%	-0.50%	9.06%
1364	West Univ. Place	12.84%	0.00%	0.00%	0.21%	-0.04%	-0.12%	0.00%	0.00%	0.05%	12.89%
1363	Westlake	11.80%	0.00%	0.00%	-0.01%	-0.11%	-0.17%	-0.03%	0.29%	-0.03%	11.77%
1362	Westover Hills	1.57%	0.72%	0.00%	0.08%	0.02%	-0.02%	-0.09%	0.07%	0.78%	2.35%
1366	Westworth Village	11.75%	0.00%	0.00%	0.04%	0.02%	0.10%	-0.16%	-0.01%	-0.01%	11.74%
1368	Wharton	5.88%	0.00%	0.00%	0.12%	0.00%	0.01%	0.00%	-0.31%	-0.18%	5.70%
1370	Wheeler	7.69%	0.00%	0.00%	0.34%	0.14%	0.08%	0.15%	-0.44%	0.27%	7.96%
1372	White Deer	8.08%	0.00%	0.00%	0.19%	0.09%	0.75%	0.28%	0.17%	1.48%	9.56%
1377	White Oak	14.10%	0.00%	0.00%	0.21%	-0.02%	0.04%	0.42%	-0.35%	0.30%	14.40%
1378	White Settlement	16.93%	0.00%	0.00%	0.14%	-0.08%	-0.14%	0.24%	-0.02%	0.14%	17.07%
1374	Whiteface	1.56%	0.00%	0.00%	0.20%	0.01%	-0.36%	0.21%	0.01%	0.07%	1.63%
1375	Whitehouse	8.99%	0.00%	0.00%	0.10%	-0.01%	-0.33%	-0.10%	0.01%	-0.33%	8.66%
1376	Whitesboro	7.22%	0.00%	0.00%	0.20%	0.02%	0.04%	0.00%	-1.10%	-0.84%	6.38%
1380	Whitewright	2.87%	0.00%	0.00%	0.06%	-0.05%	0.01%	0.09%	0.15%	0.26%	3.13%
1382	Whitney	4.22%	0.00%	0.00%	0.04%	-0.02%	0.00%	-0.05%	-0.12%	-0.15%	4.07%
1384	Wichita Falls	12.77%	0.00%	0.00%	0.23%	0.02%	0.19%	0.04%	0.03%	0.51%	13.28%
1386	Willis	9.95%	0.00%	0.00%	0.07%	0.02%	0.02%	-0.10%	-0.50%	-0.49%	9.46%
1387	Willow Park	7.23%	0.00%	0.00%	-0.01%	-0.08%	-0.08%	0.21%	0.14%	0.18%	7.41%
1388	Wills Point	12.40%	0.00%	0.00%	0.21%	-0.05%	-0.09%	0.03%	-0.49%	-0.39%	12.01%
1390	Wilmer	4.70%	0.00%	0.00%	0.05%	-0.08%	0.01%	-0.24%	0.04%	-0.22%	4.48%
1392	Wimberley	7.87%	0.00%	0.00%	-0.05%	-0.31%	-0.46%	-0.39%	-0.10%	-1.31%	6.56%
1393	Windcrest	7.40%	0.00%	0.00%	0.09%	-0.09%	-0.03%	-0.14%	0.04%	-0.13%	7.27%
1395	Winfield	3.50%	0.00%	0.00%	0.04%	0.13%	0.31%	0.20%	-0.37%	0.31%	3.81%
1396	Wink	7.44%	0.00%	0.00%	0.09%	-0.06%	-0.01%	0.60%	-0.21%	0.41%	7.85%
1398	Winnsboro	8.94%	0.00%	0.00%	0.13%	-0.10%	-0.05%	0.02%	0.16%	0.16%	9.10%
1399	Winona	0.00%	0.00%	0.00%	0.00%	0.00%	1.71%	0.00%	0.23%	1.94%	1.94%
1400	Winters	9.85%	0.00%	0.00%	0.44%	0.01%	-0.03%	0.24%	-0.10%	0.56%	10.41%

Section 3
TEXAS MUNICIPAL RETIREMENT SYSTEM
Changes in Full Retirement Rate from Prior Valuation Report

CITY NUMBER	CITY NAME	2019 Rates	Assumption & Contribution Lag/Phase In &							Total Change	2020 Rates
			Benefit Changes	Method Changes	Return on AVA	Fully Amortized Prior Bases	Payroll Growth	Normal Cost	Liability Growth		
1403	Wolfforth	11.10%	0.00%	0.00%	0.05%	-0.01%	0.06%	-0.01%	0.30%	0.39%	11.49%
1409	Woodcreek	7.67%	0.00%	0.00%	0.06%	-0.23%	-0.03%	0.00%	0.56%	0.36%	8.03%
1404	Woodsboro	1.05%	0.00%	0.00%	0.07%	0.02%	-0.30%	-0.03%	-0.07%	-0.31%	0.74%
1406	Woodville	17.52%	0.00%	0.00%	0.21%	-0.07%	0.26%	-0.08%	-0.45%	-0.13%	17.39%
1407	Woodway	16.46%	0.00%	0.00%	0.19%	0.01%	0.08%	0.15%	-0.12%	0.31%	16.77%
1408	Wortham	5.89%	0.00%	0.00%	0.07%	0.01%	-0.03%	-0.40%	-0.18%	-0.53%	5.36%
1410	Wylie	14.84%	0.00%	0.00%	0.05%	-0.01%	-0.11%	-0.22%	0.20%	-0.09%	14.75%
1412	Yoakum	15.73%	0.00%	0.00%	0.24%	0.02%	0.26%	-0.14%	0.03%	0.41%	16.14%
1414	Yorktown	0.92%	0.00%	0.00%	0.15%	-0.01%	-0.11%	-0.22%	0.12%	-0.07%	0.85%
1415	Zavalla	0.02%	0.00%	0.00%	0.00%	-0.02%	0.02%	0.00%	0.07%	0.07%	0.09%

SECTION 4

COMPARISON OF EXPECTED CITY CONTRIBUTION DOLLAR AMOUNTS FOR 2019 AND 2020

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
4	Abernathy	\$671,308	4.01%	\$26,919	\$691,447	3.85%	\$26,621
6	Abilene	\$52,834,764	10.93%	\$5,774,840	\$54,419,807	11.05%	\$6,013,389
7	Addison	\$20,199,105	10.69%	\$2,159,284	\$20,805,078	11.06%	\$2,301,042
8	Agua Dulce	\$101,420	9.08%	\$9,209	\$104,463	7.77%	\$8,117
10	Alamo	\$5,194,337	6.87%	\$356,851	\$5,350,167	6.30%	\$337,061
12	Alamo Heights	\$5,567,671	16.84%	\$937,596	\$5,734,701	16.91%	\$969,738
14	Alba	\$227,850	2.44%	\$5,560	\$234,686	1.96%	\$4,600
16	Albany	\$629,134	5.24%	\$32,967	\$648,008	5.48%	\$35,511
17	Aledo	\$652,967	7.46%	\$48,711	\$672,556	7.50%	\$50,442
18	Alice	\$9,899,224	4.81%	\$476,153	\$10,196,201	4.80%	\$489,418
19	Allen	\$50,478,372	14.03%	\$7,082,116	\$51,992,723	14.00%	\$7,278,981
20	Alpine	\$3,233,807	1.06%	\$34,278	\$3,330,821	0.88%	\$29,311
22	Alto	\$456,993	10.30%	\$47,070	\$467,504	10.75%	\$50,257
23	Alton	\$3,157,917	12.14%	\$383,371	\$3,252,655	12.64%	\$411,136
24	Alvarado	\$2,960,650	5.19%	\$153,658	\$3,049,470	5.36%	\$163,452
26	Alvin	\$11,016,971	16.88%	\$1,859,665	\$11,347,480	17.00%	\$1,929,072
28	Alvord	\$310,031	5.44%	\$16,866	\$319,332	5.78%	\$18,457
30	Amarillo	\$90,633,812	12.18%	\$11,039,198	\$93,352,826	12.21%	\$11,398,380
32	Amherst	\$106,016	0.00%	\$0	\$108,136	0.00%	\$0
34	Anahuac	\$385,984	8.75%	\$33,774	\$393,704	8.66%	\$34,095
36	Andrews	\$4,641,610	15.97%	\$741,265	\$4,780,858	15.98%	\$763,981
38	Angleton	\$6,383,874	12.35%	\$788,408	\$6,575,390	12.21%	\$802,855
40	Anna	\$4,490,266	14.67%	\$658,722	\$4,624,974	14.09%	\$651,659
41	Annetta	\$108,419	9.99%	\$10,831	\$111,672	8.82%	\$9,849
44	Anson	\$819,734	0.54%	\$4,427	\$844,326	0.57%	\$4,813
45	Anthony	\$1,195,876	2.99%	\$35,757	\$1,231,752	3.19%	\$39,293
48	Aransas Pass	\$4,855,218	9.71%	\$471,442	\$5,000,875	9.79%	\$489,586
50	Archer City	\$829,020	4.18%	\$34,653	\$853,891	4.25%	\$36,290
49	Arcola	\$648,760	4.81%	\$31,205	\$668,223	4.05%	\$27,063
51	Argyle	\$1,840,746	13.68%	\$251,814	\$1,895,968	13.42%	\$254,439
52	Arlington	\$183,134,161	15.81%	\$28,953,511	\$188,628,186	16.13%	\$30,425,726
54	Arp	\$298,041	1.68%	\$5,007	\$306,982	1.14%	\$3,500
60	Aspermont	\$283,976	0.00%	\$0	\$292,495	0.00%	\$0
62	Athens	\$7,116,400	15.87%	\$1,129,373	\$7,329,892	15.46%	\$1,133,201
64	Atlanta	\$1,672,228	3.58%	\$59,866	\$1,714,034	3.39%	\$58,106
66	Aubrey	\$2,796,825	6.13%	\$171,445	\$2,880,730	5.91%	\$170,251
74	Avinger	\$62,915	2.07%	\$1,302	\$64,802	2.02%	\$1,309
75	Azle	\$6,885,251	12.23%	\$842,066	\$7,091,809	12.50%	\$886,476
77	Baird	\$481,048	0.87%	\$4,185	\$495,479	1.08%	\$5,351
78	Balch Springs	\$10,541,216	13.83%	\$1,457,850	\$10,857,452	13.60%	\$1,476,613
79	Balcones Heights	\$3,021,908	8.57%	\$258,978	\$3,112,565	7.92%	\$246,515
80	Ballinger	\$1,457,488	3.70%	\$53,927	\$1,501,213	3.56%	\$53,443
82	Balmorhea	\$32,609	0.00%	\$0	\$33,261	0.00%	\$0
83	Bandera	\$848,277	10.40%	\$88,221	\$866,939	10.82%	\$93,803
84	Bangs	\$508,608	12.80%	\$65,102	\$523,866	12.33%	\$64,593

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
90	Bartlett	\$555,636	7.87%	\$43,729	\$572,305	8.22%	\$47,043
91	Bartonville	\$444,082	14.23%	\$63,193	\$457,404	15.00%	\$68,611
92	Bastrop	\$7,234,119	11.37%	\$822,519	\$7,451,143	11.29%	\$841,234
94	Bay City	\$7,859,690	9.51%	\$747,457	\$8,079,761	9.62%	\$777,273
93	Bayou Vista	\$360,218	2.82%	\$10,158	\$367,422	2.66%	\$9,773
96	Baytown	\$60,282,263	17.63%	\$10,627,763	\$62,090,731	17.33%	\$10,760,324
98	Beaumont	\$61,804,612	19.22%	\$11,878,846	\$63,658,750	19.41%	\$12,356,163
100	Bedford	\$23,643,895	9.02%	\$2,132,679	\$24,353,212	8.92%	\$2,172,307
101	Bee Cave	\$2,883,203	9.08%	\$261,795	\$2,969,699	8.97%	\$266,382
102	Beeville	\$4,270,839	0.83%	\$35,448	\$4,398,964	0.43%	\$18,916
106	Bellaire	\$11,169,043	20.45%	\$2,284,069	\$11,504,114	20.20%	\$2,323,831
109	Bellmead	\$3,795,571	8.81%	\$334,390	\$3,909,438	8.63%	\$337,384
110	Bells	\$378,068	0.00%	\$0	\$389,410	0.00%	\$0
112	Bellville	\$2,505,901	15.38%	\$385,408	\$2,581,078	15.78%	\$407,294
114	Belton	\$8,876,416	7.90%	\$701,237	\$9,142,708	8.11%	\$741,474
118	Benbrook	\$9,841,964	16.18%	\$1,592,430	\$10,137,223	16.44%	\$1,666,559
121	Berryville	\$73,882	3.03%	\$2,239	\$76,098	3.39%	\$2,580
123	Bertram	\$493,289	1.98%	\$9,767	\$508,088	1.70%	\$8,637
124	Big Lake	\$1,253,468	17.67%	\$221,488	\$1,291,072	17.51%	\$226,067
126	Big Sandy	\$451,207	2.44%	\$11,009	\$464,743	2.49%	\$11,572
128	Big Spring	\$9,178,979	17.19%	\$1,577,866	\$9,426,811	17.44%	\$1,644,036
132	Bishop	\$775,825	3.51%	\$27,231	\$799,100	3.52%	\$28,128
134	Blanco	\$920,611	6.47%	\$59,564	\$948,229	6.55%	\$62,109
140	Blooming Grove	\$180,070	9.98%	\$17,971	\$185,472	10.78%	\$19,994
142	Blossom	\$187,810	3.72%	\$6,987	\$193,444	4.11%	\$7,951
143	Blue Mound	\$1,076,847	4.64%	\$49,966	\$1,109,152	4.68%	\$51,908
144	Blue Ridge	\$212,477	1.81%	\$3,846	\$218,851	1.79%	\$3,917
148	Boerne	\$15,514,876	18.34%	\$2,845,428	\$15,980,322	18.35%	\$2,932,389
150	Bogata	\$332,962	0.00%	\$0	\$342,951	0.14%	\$480
152	Bonham	\$5,209,080	5.31%	\$276,602	\$5,365,352	5.15%	\$276,316
154	Booker	\$468,555	5.85%	\$27,410	\$482,612	5.64%	\$27,219
156	Borger	\$9,093,738	14.57%	\$1,324,958	\$9,366,550	13.87%	\$1,299,140
158	Bovina	\$391,986	0.00%	\$0	\$403,746	0.23%	\$929
160	Bowie	\$3,595,326	10.62%	\$381,824	\$3,703,186	9.57%	\$354,395
162	Boyd	\$723,947	4.24%	\$30,695	\$745,665	4.10%	\$30,572
166	Brady	\$4,268,968	10.24%	\$437,142	\$4,397,037	9.83%	\$432,229
170	Brazoria	\$1,213,251	6.69%	\$81,166	\$1,244,796	5.64%	\$70,206
172	Breckenridge	\$2,281,471	7.42%	\$169,285	\$2,343,071	6.93%	\$162,375
174	Bremond	\$265,066	15.95%	\$42,278	\$271,163	15.97%	\$43,305
176	Brenham	\$11,592,361	10.01%	\$1,160,395	\$11,940,132	9.67%	\$1,154,611
177	Bridge City	\$3,498,380	15.07%	\$527,206	\$3,603,331	15.13%	\$545,184
178	Bridgeport	\$3,028,318	13.88%	\$420,331	\$3,107,054	13.67%	\$424,734
180	Bronte	\$130,566	12.36%	\$16,138	\$133,438	12.97%	\$17,307
182	Brookshire	\$1,798,275	8.57%	\$154,112	\$1,852,223	8.68%	\$160,773
184	Brownfield	\$4,047,128	5.11%	\$206,808	\$4,168,542	3.92%	\$163,407

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
186	Brownsboro	\$302,263	10.75%	\$32,493	\$311,331	10.41%	\$32,410
10188	Brownsville	\$62,462,808	17.07%	\$10,662,401	\$64,336,692	16.86%	\$10,847,166
20188	Brownsville PUB	\$31,209,832	17.45%	\$5,446,116	\$32,146,127	17.21%	\$5,532,348
10190	Brownwood	\$10,203,257	13.13%	\$1,339,688	\$10,509,355	13.37%	\$1,405,101
30190	Brownwood Health Dept.	\$461,672	9.95%	\$45,936	\$475,522	10.64%	\$50,596
20190	Brownwood Public Library	\$177,695	4.70%	\$8,352	\$183,026	4.44%	\$8,126
195	Bruceville-Eddy	\$655,643	5.24%	\$34,356	\$673,345	5.72%	\$38,515
192	Bryan	\$59,689,745	14.99%	\$8,947,493	\$61,480,437	15.19%	\$9,338,878
193	Bryson	\$108,468	0.00%	\$0	\$111,722	0.00%	\$0
194	Buda	\$5,735,864	13.94%	\$799,579	\$5,907,940	13.76%	\$812,933
196	Buffalo	\$586,802	4.82%	\$28,284	\$604,406	4.82%	\$29,132
198	Bullard	\$1,258,525	7.68%	\$96,655	\$1,296,281	7.48%	\$96,962
203	Bulverde	\$1,565,334	9.05%	\$141,663	\$1,612,294	10.00%	\$161,229
199	Bunker Hill Village	\$645,203	11.70%	\$75,489	\$663,914	10.18%	\$67,586
200	Burkburnett	\$3,180,226	10.14%	\$322,475	\$3,275,633	10.28%	\$336,735
202	Burleson	\$23,052,221	15.31%	\$3,529,295	\$23,743,788	15.47%	\$3,673,164
204	Burnet	\$6,210,360	13.06%	\$811,073	\$6,396,671	13.00%	\$831,567
206	Burton	\$36,748	10.09%	\$3,708	\$37,850	10.36%	\$3,921
207	Cactus	\$1,912,068	5.09%	\$97,324	\$1,969,430	5.18%	\$102,016
208	Caddo Mills	\$617,367	6.38%	\$39,388	\$635,888	5.79%	\$36,818
210	Caldwell	\$2,307,639	9.32%	\$215,072	\$2,376,868	8.13%	\$193,239
212	Calvert	\$447,901	1.04%	\$4,658	\$461,338	1.16%	\$5,352
214	Cameron	\$1,721,601	10.09%	\$173,710	\$1,762,919	10.29%	\$181,404
216	Campbell	\$61,872	41.81%	\$25,869	\$63,728	41.75%	\$26,606
220	Canadian	\$1,034,365	16.23%	\$167,877	\$1,065,396	17.10%	\$182,183
221	Caney City	\$142,655	1.91%	\$2,725	\$146,935	1.43%	\$2,101
222	Canton	\$2,980,620	12.08%	\$360,059	\$3,070,039	11.61%	\$356,432
224	Canyon	\$5,645,904	15.33%	\$865,517	\$5,815,281	14.12%	\$821,118
227	Carmine	\$62,502	2.67%	\$1,669	\$63,752	1.95%	\$1,243
228	Carrizo Springs	\$1,371,508	5.24%	\$71,867	\$1,412,653	5.33%	\$75,294
230	Carrollton	\$58,218,122	11.95%	\$6,957,066	\$59,906,448	12.12%	\$7,260,661
232	Carthage	\$4,229,420	18.76%	\$793,439	\$4,356,303	17.97%	\$782,828
231	Castle Hills	\$3,719,237	11.43%	\$425,109	\$3,830,814	12.38%	\$474,255
234	Castroville	\$1,886,375	9.06%	\$170,906	\$1,941,080	8.75%	\$169,845
238	Cedar Hill	\$22,905,362	13.71%	\$3,140,325	\$23,592,523	13.79%	\$3,253,409
239	Cedar Park	\$30,774,351	14.32%	\$4,406,887	\$31,697,582	14.36%	\$4,551,773
240	Celeste	\$94,333	7.60%	\$7,169	\$97,163	8.93%	\$8,677
242	Celina	\$7,919,110	6.34%	\$502,072	\$8,156,683	6.47%	\$527,737
244	Center	\$3,247,863	13.16%	\$427,419	\$3,345,299	12.40%	\$414,817
246	Centerville	\$222,965	20.95%	\$46,711	\$229,654	21.92%	\$50,340
247	Chandler	\$1,122,269	4.70%	\$52,747	\$1,155,937	4.46%	\$51,555
248	Charlotte	\$366,829	6.58%	\$24,137	\$377,834	3.79%	\$14,320
249	Chester	\$34,270	1.54%	\$528	\$34,955	0.62%	\$217
245	Chico	\$258,873	4.00%	\$10,355	\$266,639	4.26%	\$11,359
250	Childress	\$2,099,317	14.98%	\$314,478	\$2,162,297	15.51%	\$335,372

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
251	Chillicothe	\$251,306	9.78%	\$24,578	\$258,845	7.33%	\$18,973
253	Chireno	\$286,015	20.46%	\$58,519	\$294,595	21.08%	\$62,101
254	Christine	\$32,747	0.00%	\$0	\$33,729	0.00%	\$0
255	Cibolo	\$6,816,174	12.72%	\$867,017	\$7,020,659	12.49%	\$876,880
256	Cisco	\$1,338,329	6.56%	\$87,794	\$1,378,479	6.39%	\$88,085
258	Clarendon	\$513,235	1.47%	\$7,545	\$528,632	1.39%	\$7,348
259	Clarksville	\$865,346	2.19%	\$18,951	\$891,306	1.56%	\$13,904
260	Clarksville City	\$204,259	3.61%	\$7,374	\$210,387	4.40%	\$9,257
263	Clear Lake Shores	\$1,005,922	10.88%	\$109,444	\$1,035,094	10.65%	\$110,238
264	Cleburne	\$15,539,562	15.69%	\$2,438,157	\$16,005,749	16.06%	\$2,570,523
266	Cleveland	\$3,497,953	10.77%	\$376,730	\$3,585,402	10.53%	\$377,543
268	Clifton	\$1,117,168	1.76%	\$19,662	\$1,150,683	1.93%	\$22,208
271	Clute	\$4,786,594	10.25%	\$490,626	\$4,920,619	10.29%	\$506,332
272	Clyde	\$1,286,373	12.96%	\$166,714	\$1,324,964	12.98%	\$171,980
274	Coahoma	\$256,140	6.03%	\$15,445	\$263,824	6.27%	\$16,542
276	Cockrell Hill	\$1,418,954	8.18%	\$116,070	\$1,461,523	8.08%	\$118,091
278	Coleman	\$2,832,200	16.54%	\$468,446	\$2,900,173	16.89%	\$489,839
280	College Station	\$58,459,343	13.20%	\$7,716,633	\$60,213,123	13.19%	\$7,942,111
281	Colleyville	\$13,160,573	8.56%	\$1,126,545	\$13,555,390	8.94%	\$1,211,852
282	Collinsville	\$365,795	5.45%	\$19,936	\$376,769	5.43%	\$20,459
283	Colmesneil	\$157,713	8.41%	\$13,264	\$162,444	9.05%	\$14,701
284	Colorado City	\$1,593,083	8.39%	\$133,660	\$1,639,282	8.04%	\$131,798
286	Columbus	\$1,857,021	12.39%	\$230,085	\$1,907,161	12.46%	\$237,632
288	Comanche	\$1,039,381	4.72%	\$49,059	\$1,070,562	4.97%	\$53,207
289	Combes	\$587,935	6.75%	\$39,686	\$605,573	6.92%	\$41,906
290	Commerce	\$2,978,057	8.56%	\$254,922	\$3,067,399	8.50%	\$260,729
294	Conroe	\$28,398,811	16.17%	\$4,592,088	\$29,250,775	16.24%	\$4,750,326
295	Converse	\$8,007,831	13.75%	\$1,101,077	\$8,248,066	13.72%	\$1,131,635
298	Cooper	\$427,561	4.93%	\$21,079	\$440,388	5.02%	\$22,107
299	Coppell	\$29,578,265	15.53%	\$4,593,505	\$30,465,613	15.57%	\$4,743,496
297	Copper Canyon	\$211,877	10.94%	\$23,179	\$218,233	11.69%	\$25,511
300	Copperas Cove	\$12,012,115	11.96%	\$1,436,649	\$12,372,478	12.06%	\$1,492,121
301	Corinth	\$9,898,654	15.30%	\$1,514,494	\$10,195,614	15.34%	\$1,564,007
302	Corpus Christi	\$132,940,160	24.61%	\$32,716,573	\$135,997,784	24.61%	\$33,469,055
304	Corrigan	\$1,046,110	3.83%	\$40,066	\$1,077,493	3.97%	\$42,776
306	Corsicana	\$9,854,121	15.51%	\$1,528,374	\$10,051,203	15.37%	\$1,544,870
308	Cotulla	\$1,434,694	6.67%	\$95,694	\$1,477,735	6.61%	\$97,678
310	Crandall	\$1,476,991	10.68%	\$157,743	\$1,521,301	10.68%	\$162,475
312	Crane	\$1,385,352	8.86%	\$122,742	\$1,426,913	8.01%	\$114,296
314	Crawford	\$177,905	0.98%	\$1,743	\$183,242	0.79%	\$1,448
316	Crockett	\$2,259,217	8.10%	\$182,997	\$2,326,994	8.09%	\$188,254
318	Crosbyton	\$335,237	4.87%	\$16,326	\$345,294	5.02%	\$17,334
320	Cross Plains	\$364,297	8.39%	\$30,565	\$375,226	8.16%	\$30,618
321	Cross Roads	\$743,468	7.37%	\$54,794	\$765,772	7.55%	\$57,816
322	Crowell	\$208,957	5.07%	\$10,594	\$215,226	5.53%	\$11,902

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
323	Crowley	\$6,232,186	10.77%	\$671,206	\$6,419,152	10.95%	\$702,897
324	Crystal City	\$1,383,249	0.85%	\$11,758	\$1,420,597	0.61%	\$8,666
326	Cuero	\$4,859,022	10.34%	\$502,423	\$5,004,793	10.48%	\$524,502
328	Cumby	\$430,805	2.18%	\$9,392	\$443,729	1.91%	\$8,475
332	Daingerfield	\$765,825	6.14%	\$47,022	\$788,800	5.60%	\$44,173
334	Daisetta	\$210,170	1.26%	\$2,648	\$214,373	0.92%	\$1,972
336	Dalhart	\$2,915,094	4.68%	\$136,426	\$3,002,547	4.78%	\$143,522
339	Dalworthington Gardens	\$1,679,493	21.36%	\$358,740	\$1,729,878	20.99%	\$363,101
340	Danbury	\$409,787	6.15%	\$25,202	\$422,081	5.74%	\$24,227
341	Darrouzett	\$97,176	1.97%	\$1,914	\$100,091	4.13%	\$4,134
344	Dayton	\$4,530,404	7.28%	\$329,813	\$4,666,316	6.99%	\$326,175
352	De Leon	\$505,118	1.52%	\$7,678	\$515,220	1.76%	\$9,068
10366	DeSoto	\$23,676,134	10.93%	\$2,587,801	\$24,386,418	10.94%	\$2,667,874
346	Decatur	\$6,208,642	14.65%	\$909,566	\$6,394,901	14.30%	\$914,471
348	Deer Park	\$20,438,749	14.10%	\$2,881,864	\$21,051,911	13.78%	\$2,900,953
350	Dekalb	\$554,449	3.03%	\$16,800	\$569,419	2.43%	\$13,837
354	Del Rio	\$19,582,271	7.44%	\$1,456,921	\$20,169,739	7.45%	\$1,502,646
353	Dell City	\$108,987	10.35%	\$11,280	\$111,167	9.17%	\$10,194
356	Denison	\$11,644,178	12.17%	\$1,417,096	\$11,993,503	12.16%	\$1,458,410
358	Denton	\$90,674,346	17.00%	\$15,414,639	\$93,394,576	17.29%	\$16,147,922
360	Denver City	\$1,312,335	11.30%	\$148,294	\$1,346,456	11.17%	\$150,399
362	Deport	\$166,195	3.18%	\$5,285	\$171,181	1.88%	\$3,218
370	Devine	\$1,885,528	16.41%	\$309,415	\$1,942,094	16.62%	\$322,776
371	Diboll	\$1,729,705	14.04%	\$242,851	\$1,774,677	14.67%	\$260,345
372	Dickens	\$73,063	2.51%	\$1,834	\$75,255	1.97%	\$1,483
373	Dickinson	\$5,599,479	9.46%	\$529,711	\$5,767,463	9.49%	\$547,332
374	Dilley	\$1,406,393	10.25%	\$144,155	\$1,448,585	10.14%	\$146,887
376	Dimmitt	\$1,038,859	3.72%	\$38,646	\$1,070,025	4.02%	\$43,015
382	Donna	\$5,567,496	11.21%	\$624,116	\$5,734,521	11.06%	\$634,238
379	Double Oak	\$740,987	6.65%	\$49,276	\$763,217	7.05%	\$53,807
383	Dripping Springs	\$1,231,217	6.36%	\$78,305	\$1,268,154	5.97%	\$75,709
385	Driscoll	\$276,080	1.93%	\$5,328	\$284,362	1.95%	\$5,545
384	Dublin	\$1,600,062	12.43%	\$198,888	\$1,648,064	12.43%	\$204,854
386	Dumas	\$5,805,938	5.53%	\$321,068	\$5,980,116	5.56%	\$332,494
388	Duncanville	\$17,827,081	7.65%	\$1,363,772	\$18,361,893	7.67%	\$1,408,357
394	Eagle Lake	\$1,140,478	9.31%	\$106,179	\$1,172,411	8.90%	\$104,345
396	Eagle Pass	\$17,342,800	8.40%	\$1,456,795	\$17,863,084	8.54%	\$1,525,507
397	Early	\$1,169,777	3.48%	\$40,708	\$1,204,870	3.22%	\$38,797
399	Earth	\$175,869	5.06%	\$8,899	\$181,145	5.09%	\$9,220
393	East Bernard	\$157,598	5.37%	\$8,463	\$162,326	5.02%	\$8,149
401	East Mountain	\$40,152	11.70%	\$4,698	\$41,357	13.08%	\$5,409
395	East Tawakoni	\$303,058	5.89%	\$17,850	\$312,150	5.27%	\$16,450
398	Eastland	\$1,798,579	9.12%	\$164,030	\$1,852,536	8.98%	\$166,358
402	Ector	\$177,313	2.00%	\$3,546	\$182,632	1.94%	\$3,543
406	Eden	\$280,663	2.86%	\$8,027	\$286,276	2.94%	\$8,417

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
408	Edgewood	\$396,951	3.03%	\$12,028	\$404,890	2.69%	\$10,892
410	Edinburg	\$37,103,808	14.24%	\$5,283,582	\$38,216,922	14.32%	\$5,472,663
412	Edna	\$1,633,586	10.81%	\$176,591	\$1,682,594	10.67%	\$179,533
414	El Campo	\$6,059,624	10.60%	\$642,320	\$6,241,413	10.54%	\$657,845
416	Eldorado	\$777,586	7.21%	\$56,064	\$800,914	7.21%	\$57,746
418	Electra	\$985,851	2.24%	\$22,083	\$1,009,511	2.35%	\$23,724
420	Elgin	\$4,247,437	13.96%	\$592,942	\$4,374,860	13.76%	\$601,981
422	Elkhart	\$252,967	5.04%	\$12,750	\$260,556	5.23%	\$13,627
427	Elmendorf	\$738,932	1.45%	\$10,715	\$761,100	1.58%	\$12,025
432	Emory	\$1,014,944	6.52%	\$66,174	\$1,045,392	6.74%	\$70,459
436	Ennis	\$11,857,968	16.90%	\$2,003,997	\$12,213,707	16.71%	\$2,040,910
439	Eules	\$30,116,674	17.51%	\$5,273,430	\$31,020,174	17.70%	\$5,490,571
440	Eustace	\$281,344	8.88%	\$24,983	\$289,784	10.63%	\$30,804
441	Everman	\$2,135,245	9.56%	\$204,129	\$2,199,302	9.39%	\$206,514
443	Fair Oaks Ranch	\$3,428,233	11.72%	\$401,789	\$3,531,080	11.71%	\$413,489
442	Fairfield	\$1,547,131	8.09%	\$125,163	\$1,593,545	7.17%	\$114,257
445	Fairview	\$5,171,264	10.66%	\$551,257	\$5,326,402	10.77%	\$573,653
20444	Falfurrias	\$1,820,028	3.31%	\$60,243	\$1,874,629	3.33%	\$62,425
446	Falls City	\$143,829	7.63%	\$10,974	\$148,144	7.85%	\$11,629
448	Farmers Branch	\$30,269,925	18.49%	\$5,596,909	\$31,087,213	19.00%	\$5,906,570
450	Farmersville	\$2,071,506	8.57%	\$177,528	\$2,133,651	8.74%	\$186,481
451	Farwell	\$295,613	14.32%	\$42,332	\$304,481	15.24%	\$46,403
452	Fate	\$2,980,288	9.90%	\$295,049	\$3,069,697	10.74%	\$329,685
454	Fayetteville	\$114,325	2.97%	\$3,395	\$117,755	3.22%	\$3,792
456	Ferris	\$1,765,573	5.31%	\$93,752	\$1,818,540	5.45%	\$99,110
458	Flatonia	\$944,678	15.66%	\$147,937	\$973,018	15.94%	\$155,099
460	Florence	\$423,847	4.25%	\$18,013	\$436,562	4.34%	\$18,947
20462	Floresville	\$3,327,029	10.55%	\$351,002	\$3,413,532	10.26%	\$350,228
463	Flower Mound	\$39,499,696	10.67%	\$4,214,618	\$40,684,687	10.77%	\$4,381,741
464	Floydata	\$1,000,499	10.09%	\$100,950	\$1,024,511	10.00%	\$102,451
468	Forest Hill	\$5,361,714	13.35%	\$715,789	\$5,522,565	12.82%	\$707,993
470	Forney	\$9,978,657	13.47%	\$1,344,125	\$10,278,017	13.80%	\$1,418,366
472	Fort Stockton	\$5,671,990	9.97%	\$565,497	\$5,842,150	9.64%	\$563,183
476	Franklin	\$545,136	3.24%	\$17,662	\$561,490	3.11%	\$17,462
478	Frankston	\$525,375	1.46%	\$7,670	\$541,136	1.45%	\$7,846
480	Fredericksburg	\$9,996,677	11.68%	\$1,167,612	\$10,296,577	12.06%	\$1,241,767
482	Freeport	\$6,572,270	13.65%	\$897,115	\$6,769,438	14.30%	\$968,030
481	Freer	\$623,864	7.05%	\$43,982	\$642,580	7.00%	\$44,981
483	Friendswood	\$14,961,477	15.69%	\$2,347,456	\$15,410,321	15.84%	\$2,440,995
484	Friona	\$931,057	9.13%	\$85,006	\$952,471	9.06%	\$86,294
486	Frisco	\$91,693,221	14.21%	\$13,029,607	\$94,444,018	14.07%	\$13,288,273
487	Fritch	\$768,734	2.88%	\$22,140	\$791,796	1.78%	\$14,094
488	Frost	\$96,986	5.58%	\$5,412	\$99,896	6.98%	\$6,973
491	Fulshear	\$2,927,361	7.93%	\$232,140	\$3,015,182	7.69%	\$231,867
493	Fulton	\$219,787	19.15%	\$42,089	\$226,381	22.59%	\$51,139

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
492	Gainesville	\$11,559,785	12.08%	\$1,396,422	\$11,837,220	12.17%	\$1,440,590
494	Galena Park	\$3,781,476	12.32%	\$465,878	\$3,857,106	12.14%	\$468,253
498	Ganado	\$500,799	13.59%	\$68,059	\$513,319	13.16%	\$67,553
499	Garden Ridge	\$1,668,834	7.76%	\$129,502	\$1,718,899	7.39%	\$127,027
500	Garland	\$155,261,797	10.79%	\$16,752,748	\$159,919,651	11.03%	\$17,639,138
502	Garrison	\$376,574	18.74%	\$70,570	\$384,105	16.50%	\$63,377
503	Gary	\$222,300	7.10%	\$15,783	\$226,746	7.22%	\$16,371
504	Gatesville	\$3,798,807	15.05%	\$571,720	\$3,912,771	14.88%	\$582,220
505	George West	\$1,231,204	6.16%	\$75,842	\$1,268,140	5.79%	\$73,425
506	Georgetown	\$47,729,588	12.23%	\$5,837,329	\$49,161,476	12.13%	\$5,963,287
510	Giddings	\$3,038,285	18.83%	\$572,109	\$3,129,434	18.19%	\$569,244
512	Gilmer	\$2,283,741	13.66%	\$311,959	\$2,352,253	13.34%	\$313,791
514	Gladewater	\$2,712,308	8.20%	\$222,409	\$2,793,677	8.62%	\$240,815
516	Glen Rose	\$1,285,595	14.57%	\$187,311	\$1,324,163	14.60%	\$193,328
517	Glenn Heights	\$4,256,793	2.94%	\$125,150	\$4,384,497	2.87%	\$125,835
518	Godley	\$547,837	2.53%	\$13,860	\$564,272	2.63%	\$14,840
519	Goldsmith	\$239,829	3.62%	\$8,682	\$247,024	3.20%	\$7,905
520	Goldthwaite	\$675,368	22.25%	\$150,269	\$695,629	23.50%	\$163,473
522	Goliad	\$653,041	4.33%	\$28,277	\$668,714	4.99%	\$33,369
524	Gonzales	\$4,713,962	10.68%	\$503,451	\$4,855,381	10.45%	\$507,387
527	Gordon	\$125,423	2.53%	\$3,173	\$129,186	2.73%	\$3,527
530	Gorman	\$236,248	8.55%	\$20,199	\$243,335	9.17%	\$22,314
532	Graford	\$132,021	2.88%	\$3,802	\$135,982	2.87%	\$3,903
10534	Graham	\$4,074,239	10.44%	\$425,351	\$4,159,798	10.35%	\$430,539
536	Granbury	\$8,853,111	15.97%	\$1,413,842	\$9,118,704	15.67%	\$1,428,901
540	Grand Prairie	\$96,547,690	16.87%	\$16,287,595	\$99,444,121	16.83%	\$16,736,446
542	Grand Saline	\$938,515	8.42%	\$79,023	\$957,285	7.33%	\$70,169
544	Grandview	\$839,535	6.19%	\$51,967	\$864,721	6.50%	\$56,207
546	Granger	\$401,836	0.65%	\$2,612	\$409,873	0.82%	\$3,361
547	Granite Shoals	\$1,753,881	5.01%	\$87,869	\$1,806,497	4.80%	\$86,712
548	Grapeland	\$263,869	3.72%	\$9,816	\$271,785	4.10%	\$11,143
550	Grapevine	\$45,651,559	18.58%	\$8,482,060	\$47,021,106	18.53%	\$8,713,011
552	Greenville	\$19,277,191	10.80%	\$2,081,937	\$19,855,507	11.00%	\$2,184,106
551	Gregory	\$442,987	4.09%	\$18,118	\$456,277	3.96%	\$18,069
553	Grey Forest	\$2,832,574	15.38%	\$435,650	\$2,917,551	15.76%	\$459,806
556	Groesbeck	\$1,283,879	2.50%	\$32,097	\$1,322,395	2.50%	\$33,060
558	Groom	\$225,136	2.90%	\$6,529	\$231,890	2.71%	\$6,284
559	Groves	\$6,540,194	9.32%	\$609,546	\$6,736,400	9.13%	\$615,033
560	Groveton	\$227,107	1.99%	\$4,519	\$233,920	2.03%	\$4,749
562	Gruver	\$246,413	11.96%	\$29,471	\$251,341	14.01%	\$35,213
563	Gun Barrel City	\$1,692,114	5.10%	\$86,298	\$1,742,877	4.70%	\$81,915
564	Gunter	\$399,735	3.96%	\$15,830	\$411,727	4.14%	\$17,045
568	Hale Center	\$467,119	1.96%	\$9,156	\$481,133	1.98%	\$9,526
570	Hallettsville	\$1,542,541	11.77%	\$181,557	\$1,588,817	11.84%	\$188,116
572	Hallsville	\$864,902	3.02%	\$26,120	\$890,849	2.93%	\$26,102

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
574	Haltom City	\$17,399,981	18.84%	\$3,278,156	\$17,921,980	19.05%	\$3,414,137
576	Hamilton	\$1,072,627	17.88%	\$191,786	\$1,104,806	15.10%	\$166,826
578	Hamlin	\$544,806	13.93%	\$75,891	\$555,702	11.69%	\$64,962
580	Happy	\$95,825	8.33%	\$7,982	\$98,412	8.15%	\$8,021
581	Harker Heights	\$12,632,619	14.89%	\$1,880,997	\$13,011,598	14.77%	\$1,921,813
10582	Harlingen	\$9,512,592	10.49%	\$997,871	\$9,512,592	11.66%	\$1,109,168
20582	Harlingen Waterworks Sys	\$6,339,446	1.87%	\$118,548	\$6,529,629	1.92%	\$125,369
583	Hart	\$153,643	3.93%	\$6,038	\$156,716	3.97%	\$6,222
586	Haskell	\$695,577	0.00%	\$0	\$716,444	0.00%	\$0
587	Haslet	\$1,399,608	8.79%	\$123,026	\$1,441,596	8.63%	\$124,410
588	Hawkins	\$405,079	14.79%	\$59,911	\$414,801	6.06%	\$25,137
585	Hays	\$31,368	3.20%	\$1,004	\$31,995	8.43%	\$2,697
590	Hearne	\$2,275,194	15.08%	\$343,099	\$2,343,450	14.98%	\$351,049
591	Heath	\$3,955,030	11.14%	\$440,590	\$4,073,681	11.55%	\$470,510
592	Hedley	\$28,067	4.12%	\$1,156	\$28,628	2.45%	\$701
595	Hedwig Village	\$2,093,914	7.22%	\$151,181	\$2,150,450	7.33%	\$157,628
593	Helotes	\$3,884,407	6.72%	\$261,032	\$4,000,939	6.57%	\$262,862
594	Hemphill	\$1,187,632	7.78%	\$92,398	\$1,223,261	7.33%	\$89,665
596	Hempstead	\$3,644,908	7.90%	\$287,948	\$3,754,255	7.78%	\$292,081
598	Henderson	\$6,486,152	16.40%	\$1,063,729	\$6,680,737	16.11%	\$1,076,267
600	Henrietta	\$703,694	14.80%	\$104,147	\$724,805	14.74%	\$106,836
602	Hereford	\$5,223,600	10.56%	\$551,612	\$5,380,308	10.34%	\$556,324
605	Hewitt	\$4,905,953	15.76%	\$773,178	\$5,053,132	15.48%	\$782,225
609	Hickory Creek	\$1,186,609	12.07%	\$143,224	\$1,215,088	11.95%	\$145,203
606	Hico	\$491,323	8.30%	\$40,780	\$502,623	8.30%	\$41,718
607	Hidalgo	\$6,237,912	12.73%	\$794,086	\$6,425,049	12.66%	\$813,411
608	Higgins	\$111,451	3.46%	\$3,856	\$114,795	4.07%	\$4,672
610	Highland Park	\$13,152,265	5.34%	\$702,331	\$13,546,833	5.64%	\$764,041
611	Highland Village	\$10,525,876	13.35%	\$1,405,204	\$10,841,652	13.31%	\$1,443,024
613	Hill Country Village	\$866,174	3.71%	\$32,135	\$890,427	3.79%	\$33,747
612	Hillsboro	\$4,804,209	11.05%	\$530,865	\$4,948,335	11.28%	\$558,172
619	Hilshire Village	\$113,080	12.99%	\$14,689	\$116,472	10.98%	\$12,789
614	Hitchcock	\$2,213,939	4.23%	\$93,650	\$2,280,357	4.18%	\$95,319
615	Holland	\$279,120	8.00%	\$22,330	\$286,935	7.08%	\$20,315
616	Holliday	\$397,698	2.72%	\$10,817	\$409,629	2.64%	\$10,814
617	Hollywood Park	\$2,153,985	8.80%	\$189,551	\$2,218,605	8.81%	\$195,459
618	Hondo	\$4,598,579	8.38%	\$385,361	\$4,736,536	8.22%	\$389,343
620	Honey Grove	\$415,648	7.75%	\$32,213	\$428,117	7.29%	\$31,210
622	Hooks	\$567,643	13.49%	\$76,575	\$584,672	13.46%	\$78,697
623	Horizon City	\$3,069,050	5.86%	\$179,846	\$3,161,122	5.89%	\$186,190
626	Howe	\$744,165	5.42%	\$40,334	\$759,048	5.25%	\$39,850
627	Hubbard	\$406,283	0.79%	\$3,210	\$416,846	0.77%	\$3,210
628	Hudson	\$733,664	4.36%	\$31,988	\$755,674	4.17%	\$31,512
629	Hudson Oaks	\$1,478,013	11.96%	\$176,770	\$1,522,353	12.20%	\$185,727
630	Hughes Springs	\$618,234	9.08%	\$56,136	\$632,453	8.63%	\$54,581

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
632	Humble	\$15,284,193	13.43%	\$2,052,667	\$15,742,719	13.61%	\$2,142,584
633	Hunters Creek Village	\$519,240	15.44%	\$80,171	\$534,817	16.86%	\$90,170
634	Huntington	\$788,087	14.12%	\$111,278	\$810,153	14.27%	\$115,609
636	Huntsville	\$13,932,380	18.37%	\$2,559,378	\$14,322,487	18.58%	\$2,661,118
637	Hurst	\$27,330,250	10.96%	\$2,995,395	\$28,150,158	11.11%	\$3,127,483
638	Hutchins	\$3,710,675	8.70%	\$322,829	\$3,821,995	9.07%	\$346,655
640	Hutto	\$8,571,106	12.09%	\$1,036,247	\$8,828,239	12.04%	\$1,062,920
641	Huxley	\$357,529	1.26%	\$4,505	\$365,395	0.90%	\$3,289
642	Idalou	\$574,649	4.35%	\$24,997	\$591,888	4.05%	\$23,971
643	Ingleside	\$3,484,642	9.87%	\$343,934	\$3,589,181	8.87%	\$318,360
646	Ingram	\$519,520	5.74%	\$29,820	\$535,106	5.73%	\$30,662
647	Iowa Colony	\$395,336	19.31%	\$76,339	\$407,196	14.15%	\$57,618
644	Iowa Park	\$1,851,971	14.69%	\$272,055	\$1,907,530	14.76%	\$281,551
645	Iraan	\$275,872	16.81%	\$46,374	\$284,148	17.58%	\$49,953
648	Irving	\$109,317,946	14.34%	\$15,676,193	\$112,269,531	14.46%	\$16,234,174
650	Italy	\$743,382	3.09%	\$22,971	\$765,683	2.99%	\$22,894
652	Itasca	\$732,653	10.37%	\$75,976	\$754,633	10.70%	\$80,746
654	Jacinto City	\$2,799,875	7.78%	\$217,830	\$2,883,871	7.97%	\$229,845
656	Jacksboro	\$1,836,434	14.25%	\$261,692	\$1,891,527	14.92%	\$282,216
658	Jacksonville	\$6,367,955	10.76%	\$685,192	\$6,546,258	10.61%	\$694,558
660	Jasper	\$5,888,109	8.94%	\$526,397	\$6,064,752	9.09%	\$551,286
664	Jefferson	\$779,221	1.22%	\$9,506	\$794,805	0.89%	\$7,074
665	Jersey Village	\$5,541,680	14.73%	\$816,289	\$5,707,930	14.05%	\$801,964
666	Jewett	\$281,777	9.32%	\$26,262	\$290,230	10.60%	\$30,764
668	Joaquin	\$260,199	4.67%	\$12,151	\$268,005	4.56%	\$12,221
670	Johnson City	\$862,391	10.09%	\$87,015	\$885,676	9.78%	\$86,619
673	Jones Creek	\$283,338	6.44%	\$18,247	\$291,838	6.02%	\$17,569
675	Jonestown	\$1,302,631	7.00%	\$91,184	\$1,341,710	7.32%	\$98,213
677	Josephine	\$455,208	6.35%	\$28,906	\$468,864	5.95%	\$27,897
671	Joshua	\$1,780,309	5.97%	\$106,284	\$1,833,718	5.70%	\$104,522
672	Jourdanton	\$1,541,373	6.04%	\$93,099	\$1,587,614	6.08%	\$96,527
674	Junction	\$873,955	14.71%	\$128,559	\$900,174	14.53%	\$130,795
676	Justin	\$1,764,292	7.66%	\$135,145	\$1,817,221	7.43%	\$135,020
678	Karnes City	\$1,374,047	8.79%	\$120,779	\$1,415,268	8.74%	\$123,694
680	Katy	\$14,673,279	14.05%	\$2,061,596	\$15,113,477	13.62%	\$2,058,456
682	Kaufman	\$3,023,062	13.92%	\$420,810	\$3,113,754	14.78%	\$460,213
683	Keene	\$2,338,757	12.02%	\$281,119	\$2,408,920	12.17%	\$293,166
681	Keller	\$19,332,431	15.45%	\$2,986,861	\$19,912,404	15.83%	\$3,152,134
685	Kemah	\$2,224,492	7.04%	\$156,604	\$2,275,655	6.93%	\$157,703
684	Kemp	\$695,451	5.04%	\$35,051	\$709,360	5.79%	\$41,072
686	Kenedy	\$2,116,685	4.23%	\$89,536	\$2,180,186	3.93%	\$85,681
688	Kennedale	\$4,085,036	13.85%	\$565,777	\$4,187,162	13.57%	\$568,198
690	Kerens	\$420,160	8.32%	\$34,957	\$432,765	8.15%	\$35,270
692	Kermit	\$2,400,675	16.16%	\$387,949	\$2,472,695	15.71%	\$388,460
10694	Kerrville	\$17,654,078	10.05%	\$1,774,235	\$18,183,700	10.13%	\$1,842,009

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
20694	Kerrville PUB	\$4,041,538	12.04%	\$486,601	\$4,162,784	12.06%	\$502,032
10696	Kilgore	\$7,979,504	14.21%	\$1,133,888	\$8,218,889	13.78%	\$1,132,563
698	Killeen	\$46,699,039	10.98%	\$5,127,554	\$48,100,010	11.27%	\$5,420,871
700	Kingsville	\$11,987,332	8.68%	\$1,040,500	\$12,346,952	8.80%	\$1,086,532
701	Kirby	\$2,252,573	14.65%	\$330,002	\$2,320,150	14.77%	\$342,686
702	Kirbyville	\$872,501	5.46%	\$47,639	\$890,824	5.82%	\$51,846
704	Knox City	\$352,847	2.58%	\$9,103	\$363,432	2.37%	\$8,613
706	Kosse	\$134,976	5.18%	\$6,992	\$139,025	5.36%	\$7,452
708	Kountze	\$1,008,646	1.33%	\$13,415	\$1,038,905	1.38%	\$14,337
709	Kress	\$29,721	0.00%	\$0	\$30,315	0.00%	\$0
699	Krugerville	\$622,937	8.62%	\$53,697	\$641,625	8.17%	\$52,421
707	Krum	\$1,975,150	6.81%	\$134,508	\$2,034,405	6.57%	\$133,660
710	Kyle	\$11,708,038	12.49%	\$1,462,334	\$12,059,279	12.52%	\$1,509,822
725	La Coste	\$324,189	1.48%	\$4,798	\$333,915	1.30%	\$4,341
714	La Feria	\$2,083,458	11.05%	\$230,222	\$2,145,962	11.23%	\$240,992
716	La Grange	\$2,997,702	14.83%	\$444,559	\$3,087,633	14.06%	\$434,121
723	La Grulla	\$612,867	5.64%	\$34,566	\$628,802	5.13%	\$32,258
732	La Joya	\$1,137,048	6.21%	\$70,611	\$1,171,159	6.83%	\$79,990
721	La Marque	\$6,352,537	14.79%	\$939,540	\$6,517,703	13.92%	\$907,264
728	La Porte	\$23,726,658	15.53%	\$3,684,750	\$24,438,458	15.38%	\$3,758,635
731	La Vernia	\$780,013	3.28%	\$25,584	\$803,413	3.12%	\$25,066
711	Lacy-Lakeview	\$2,140,170	14.36%	\$307,328	\$2,204,375	14.40%	\$317,430
712	Ladonia	\$50,228	4.54%	\$2,280	\$51,735	3.26%	\$1,687
713	Lago Vista	\$4,323,863	7.77%	\$335,964	\$4,453,579	8.12%	\$361,631
705	Laguna Vista	\$776,551	4.55%	\$35,333	\$799,848	4.32%	\$34,553
717	Lake Dallas	\$1,945,087	12.54%	\$243,914	\$2,003,440	13.06%	\$261,649
718	Lake Jackson	\$11,917,278	11.98%	\$1,427,690	\$12,274,796	12.04%	\$1,477,885
719	Lake Worth	\$5,475,364	16.91%	\$925,884	\$5,639,625	16.05%	\$905,160
727	Lakeport	\$214,065	0.00%	\$0	\$220,487	0.00%	\$0
715	Lakeside	\$791,096	8.13%	\$64,316	\$814,829	8.55%	\$69,668
729	Lakeside City	\$193,863	2.47%	\$4,788	\$199,679	2.08%	\$4,153
720	Lakeway	\$7,172,807	13.92%	\$998,455	\$7,387,991	13.90%	\$1,026,931
722	Lamesa	\$3,561,259	4.45%	\$158,476	\$3,646,729	4.76%	\$173,584
724	Lampasas	\$5,501,859	15.24%	\$838,483	\$5,666,915	15.55%	\$881,205
726	Lancaster	\$17,701,686	13.39%	\$2,370,256	\$18,232,737	13.45%	\$2,452,303
730	Laredo	\$115,662,307	20.78%	\$24,034,627	\$119,132,176	20.77%	\$24,743,753
733	Lavon	\$911,616	6.39%	\$58,252	\$938,964	6.51%	\$61,127
736	League City	\$34,033,940	15.05%	\$5,122,108	\$35,054,958	14.72%	\$5,160,090
737	Leander	\$18,406,975	12.23%	\$2,251,173	\$18,959,184	12.04%	\$2,282,686
735	Lefors	\$117,291	3.94%	\$4,621	\$120,810	4.05%	\$4,893
739	Leon Valley	\$6,227,367	16.89%	\$1,051,802	\$6,414,188	17.12%	\$1,098,109
738	Leonard	\$668,974	1.93%	\$12,911	\$689,043	1.15%	\$7,924
740	Levelland	\$5,281,370	11.69%	\$617,392	\$5,439,811	11.44%	\$622,314
742	Lewisville	\$54,923,274	16.28%	\$8,941,509	\$56,570,972	16.57%	\$9,373,810
744	Lexington	\$520,410	8.55%	\$44,495	\$536,022	8.82%	\$47,277

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
746	Liberty	\$4,554,465	17.83%	\$812,061	\$4,663,772	17.48%	\$815,227
745	Liberty Hill	\$1,674,376	6.87%	\$115,030	\$1,724,607	7.08%	\$122,102
748	Lindale	\$2,623,673	14.61%	\$383,319	\$2,702,383	14.79%	\$399,682
750	Linden	\$538,669	1.23%	\$6,626	\$554,829	1.28%	\$7,102
755	Lipan	\$152,393	2.46%	\$3,749	\$156,965	2.46%	\$3,861
751	Little Elm	\$16,512,038	13.18%	\$2,176,287	\$17,007,399	13.47%	\$2,290,897
752	Littlefield	\$2,370,980	9.25%	\$219,316	\$2,432,625	8.93%	\$217,233
753	Live Oak	\$6,762,897	17.95%	\$1,213,940	\$6,965,784	18.26%	\$1,271,952
757	Liverpool	\$193,445	2.68%	\$5,184	\$199,248	1.94%	\$3,865
754	Livingston	\$4,309,274	14.81%	\$638,203	\$4,438,552	15.56%	\$690,639
756	Llano	\$2,330,044	14.67%	\$341,817	\$2,383,635	14.59%	\$347,772
758	Lockhart	\$6,556,913	13.00%	\$852,399	\$6,714,279	12.81%	\$860,099
760	Lockney	\$221,610	0.00%	\$0	\$226,042	0.00%	\$0
765	Lone Star	\$469,589	2.13%	\$10,002	\$478,981	2.54%	\$12,166
766	Longview	\$34,793,140	10.75%	\$3,740,263	\$35,836,934	10.86%	\$3,891,891
768	Loraine	\$88,761	2.63%	\$2,334	\$91,424	3.39%	\$3,099
769	Lorena	\$713,003	10.68%	\$76,149	\$734,393	10.78%	\$79,168
770	Lorenzo	\$295,841	2.04%	\$6,035	\$304,716	2.25%	\$6,856
771	Los Fresnos	\$2,059,967	7.01%	\$144,404	\$2,121,766	7.34%	\$155,738
773	Lott	\$371,550	1.20%	\$4,459	\$382,697	1.24%	\$4,745
774	Lovelady	\$119,826	8.95%	\$10,724	\$123,421	7.65%	\$9,442
778	Lubbock	\$104,677,150	17.71%	\$18,538,323	\$107,817,465	17.57%	\$18,943,529
779	Lucas	\$2,432,175	12.83%	\$312,048	\$2,505,140	12.50%	\$313,143
782	Lufkin	\$17,582,427	16.34%	\$2,872,969	\$18,109,900	16.17%	\$2,928,371
784	Luling	\$3,620,101	9.30%	\$336,669	\$3,728,704	8.60%	\$320,669
785	Lumberton	\$2,316,800	16.59%	\$384,357	\$2,386,304	15.98%	\$381,331
786	Lyford	\$440,982	4.21%	\$18,565	\$454,211	4.07%	\$18,486
787	Lytle	\$1,115,579	9.74%	\$108,657	\$1,149,046	10.23%	\$117,547
790	Madisonville	\$1,590,900	9.17%	\$145,886	\$1,638,627	9.49%	\$155,506
791	Magnolia	\$1,582,682	1.67%	\$26,431	\$1,630,162	1.62%	\$26,409
792	Malakoff	\$1,377,427	7.69%	\$105,924	\$1,418,750	7.64%	\$108,393
796	Manor	\$3,800,271	8.87%	\$337,084	\$3,914,279	9.11%	\$356,591
798	Mansfield	\$37,642,317	14.95%	\$5,627,526	\$38,771,587	15.39%	\$5,966,947
799	Manvel	\$2,646,205	11.60%	\$306,960	\$2,725,591	10.70%	\$291,638
800	Marble Falls	\$6,933,027	9.37%	\$649,625	\$7,141,018	9.76%	\$696,963
802	Marfa	\$1,700,222	2.69%	\$45,736	\$1,751,229	3.21%	\$56,214
804	Marion	\$467,050	5.20%	\$24,287	\$481,062	3.42%	\$16,452
806	Marlin	\$2,068,499	8.91%	\$184,303	\$2,109,869	8.71%	\$183,770
808	Marquez	\$93,490	15.97%	\$14,930	\$96,295	18.81%	\$18,113
810	Marshall	\$8,619,257	16.17%	\$1,393,734	\$8,834,738	16.12%	\$1,424,160
812	Mart	\$548,176	1.63%	\$8,935	\$564,621	2.03%	\$11,462
813	Martindale	\$123,883	13.33%	\$16,514	\$127,599	12.02%	\$15,337
814	Mason	\$1,204,163	6.90%	\$83,087	\$1,240,288	6.57%	\$81,487
816	Matador	\$128,213	6.38%	\$8,180	\$132,059	7.96%	\$10,512
818	Mathis	\$2,106,281	4.31%	\$90,781	\$2,169,469	3.64%	\$78,969

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
820	Maud	\$263,208	3.62%	\$9,528	\$271,104	3.47%	\$9,407
822	Maypearl	\$197,364	2.70%	\$5,329	\$203,285	2.69%	\$5,468
824	McAllen	\$74,374,962	7.76%	\$5,771,497	\$76,606,211	7.81%	\$5,982,945
826	McCamey	\$593,839	1.64%	\$9,739	\$611,654	1.67%	\$10,215
828	McGregor	\$2,743,849	9.87%	\$270,818	\$2,826,164	9.65%	\$272,725
830	McKinney	\$80,275,295	15.07%	\$12,097,487	\$82,683,554	14.90%	\$12,319,850
832	McLean	\$233,833	2.18%	\$5,098	\$240,848	2.58%	\$6,214
833	McLendon-Chisholm	\$248,964	8.53%	\$21,237	\$256,433	1.52%	\$3,898
834	Meadow	\$167,650	4.56%	\$7,645	\$172,680	4.24%	\$7,322
831	Meadowlakes	\$812,195	2.41%	\$19,574	\$836,561	2.38%	\$19,910
835	Meadows Place	\$1,701,874	9.66%	\$164,401	\$1,742,719	9.54%	\$166,255
837	Melissa	\$2,929,851	13.10%	\$383,810	\$3,017,747	12.84%	\$387,479
1501	Memorial Villages PD	\$3,261,163	11.03%	\$359,706	\$3,358,998	11.61%	\$389,980
840	Memphis	\$625,157	3.52%	\$22,006	\$639,536	3.59%	\$22,959
842	Menard	\$269,820	0.00%	\$0	\$276,296	0.00%	\$0
844	Mercedes	\$4,458,909	18.12%	\$807,954	\$4,592,676	18.09%	\$830,815
846	Meridian	\$443,234	3.16%	\$14,006	\$456,531	2.96%	\$13,513
848	Merkel	\$538,235	11.69%	\$62,920	\$554,382	11.50%	\$63,754
852	Mertzson	\$201,913	13.21%	\$26,673	\$207,970	11.81%	\$24,561
854	Mesquite	\$78,628,941	16.51%	\$12,981,638	\$80,987,809	16.62%	\$13,460,174
856	Mexia	\$4,195,095	12.29%	\$515,577	\$4,320,948	12.11%	\$523,267
858	Miami	\$97,280	13.85%	\$13,473	\$100,198	11.46%	\$11,483
860	Midland	\$48,803,414	14.21%	\$6,934,965	\$50,267,516	14.41%	\$7,243,549
862	Midlothian	\$15,120,566	14.29%	\$2,160,729	\$15,574,183	14.76%	\$2,298,749
863	Milano	\$33,629	10.77%	\$3,622	\$34,638	11.49%	\$3,980
864	Miles	\$136,812	0.00%	\$0	\$140,916	0.00%	\$0
865	Milford	\$267,875	9.16%	\$24,537	\$273,233	8.43%	\$23,034
868	Mineola	\$2,241,840	4.18%	\$93,709	\$2,309,095	4.54%	\$104,833
870	Mineral Wells	\$8,382,831	8.83%	\$740,204	\$8,634,316	8.82%	\$761,547
874	Mission	\$31,215,757	8.42%	\$2,628,367	\$32,152,230	8.52%	\$2,739,370
875	Missouri City	\$24,293,554	8.93%	\$2,169,414	\$25,022,361	8.86%	\$2,216,981
876	Monahans	\$3,823,863	7.66%	\$292,908	\$3,938,579	7.36%	\$289,879
887	Mont Belvieu	\$6,062,336	15.84%	\$960,274	\$6,244,206	14.36%	\$896,668
877	Montgomery	\$1,306,117	6.13%	\$80,065	\$1,345,301	6.05%	\$81,391
878	Moody	\$508,450	3.42%	\$17,389	\$523,704	2.29%	\$11,993
883	Morgan's Point	\$857,624	9.23%	\$79,159	\$883,353	10.02%	\$88,512
882	Morgan's Point Resort	\$1,186,266	12.17%	\$144,369	\$1,213,550	11.82%	\$143,442
884	Morton	\$379,267	4.31%	\$16,346	\$389,886	4.03%	\$15,712
886	Moulton	\$460,509	5.15%	\$23,716	\$474,324	4.73%	\$22,436
890	Mount Enterprise	\$98,947	1.91%	\$1,890	\$101,718	2.46%	\$2,502
892	Mt. Pleasant	\$8,419,701	15.09%	\$1,270,533	\$8,672,292	14.98%	\$1,299,109
894	Mt. Vernon	\$952,398	11.21%	\$106,764	\$979,065	11.40%	\$111,613
896	Muenster	\$538,756	1.42%	\$7,650	\$554,919	1.64%	\$9,101
898	Muleshoe	\$1,421,311	17.84%	\$253,562	\$1,463,950	19.10%	\$279,614
901	Munday	\$303,012	3.57%	\$10,818	\$312,102	3.38%	\$10,549

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
903	Murphy	\$7,926,243	14.11%	\$1,118,393	\$8,164,030	13.98%	\$1,141,331
10904	Nacogdoches	\$17,289,876	14.99%	\$2,591,752	\$17,808,572	14.15%	\$2,519,913
906	Naples	\$366,808	1.93%	\$7,079	\$377,812	2.17%	\$8,199
907	Nash	\$1,067,582	17.63%	\$188,215	\$1,097,474	17.54%	\$192,497
905	Nassau Bay	\$2,748,323	15.66%	\$430,387	\$2,830,773	15.74%	\$445,564
909	Natalia	\$431,607	3.13%	\$13,509	\$444,555	3.17%	\$14,092
908	Navasota	\$3,344,260	8.01%	\$267,875	\$3,444,588	7.60%	\$261,789
910	Nederland	\$8,558,760	6.35%	\$543,481	\$8,815,523	6.47%	\$570,364
912	Needville	\$894,044	4.19%	\$37,460	\$917,289	4.21%	\$38,618
914	New Boston	\$1,405,834	1.63%	\$22,915	\$1,448,009	2.07%	\$29,974
10916	New Braunfels	\$39,701,875	16.96%	\$6,733,438	\$40,892,931	16.85%	\$6,890,459
20916	New Braunfels Utilities	\$18,475,786	17.42%	\$3,218,482	\$19,030,060	17.22%	\$3,276,976
915	New Deal	\$232,898	0.54%	\$1,258	\$237,789	0.72%	\$1,712
923	New Fairview	\$74,975	9.63%	\$7,220	\$77,224	10.40%	\$8,031
918	New London	\$346,919	3.87%	\$13,426	\$357,327	3.39%	\$12,113
919	New Summerfield	\$359,724	9.54%	\$34,318	\$370,516	7.70%	\$28,530
917	New Waverly	\$222,953	6.38%	\$14,224	\$229,642	7.63%	\$17,522
913	Newark	\$250,183	3.15%	\$7,881	\$257,688	2.95%	\$7,602
920	Newton	\$1,036,855	20.51%	\$212,659	\$1,067,961	21.14%	\$225,767
922	Nixon	\$686,659	0.70%	\$4,807	\$707,259	0.64%	\$4,526
924	Nocona	\$777,512	9.83%	\$76,429	\$800,837	10.11%	\$80,965
925	Nolanville	\$605,773	2.32%	\$14,054	\$623,946	2.12%	\$13,228
928	Normangee	\$142,716	2.29%	\$3,268	\$146,997	0.87%	\$1,279
931	North Richland Hills	\$37,029,808	16.15%	\$5,980,314	\$38,140,702	16.34%	\$6,232,191
930	Northlake	\$2,248,455	10.50%	\$236,088	\$2,315,909	9.97%	\$230,896
935	O'Donnell	\$113,559	7.03%	\$7,983	\$115,830	7.47%	\$8,653
936	Oak Point	\$1,718,689	7.12%	\$122,371	\$1,770,250	7.49%	\$132,592
937	Oak Ridge North	\$2,710,944	11.82%	\$320,434	\$2,792,272	11.40%	\$318,319
942	Odem	\$498,739	9.12%	\$45,485	\$513,701	9.70%	\$49,829
944	Odessa	\$42,440,344	13.07%	\$5,546,953	\$43,713,554	13.44%	\$5,875,102
945	Oglesby	\$48,003	0.53%	\$254	\$49,107	1.07%	\$525
949	Old River-Winfree	\$35,751	0.00%	\$0	\$36,824	0.00%	\$0
950	Olmos Park	\$1,886,835	2.60%	\$49,058	\$1,943,440	2.65%	\$51,501
951	Olney	\$727,724	6.35%	\$46,210	\$742,278	6.90%	\$51,217
953	Omaha	\$219,989	5.30%	\$11,659	\$226,589	5.14%	\$11,647
954	Onalaska	\$492,623	2.63%	\$12,956	\$507,402	2.09%	\$10,605
958	Orange	\$9,195,194	15.80%	\$1,452,841	\$9,471,050	15.16%	\$1,435,811
960	Orange Grove	\$380,048	7.11%	\$27,021	\$391,449	7.20%	\$28,184
959	Ore City	\$377,248	1.45%	\$5,470	\$388,565	1.02%	\$3,963
962	Overton	\$749,099	3.23%	\$24,196	\$771,572	3.16%	\$24,382
961	Ovilla	\$1,279,678	9.45%	\$120,930	\$1,318,068	9.83%	\$129,566
963	Oyster Creek	\$1,127,018	11.02%	\$124,197	\$1,160,829	10.76%	\$124,905
964	Paducah	\$165,145	1.11%	\$1,833	\$169,439	0.00%	\$0
966	Palacios	\$1,494,018	17.45%	\$260,706	\$1,535,851	17.27%	\$265,241
968	Palestine	\$8,995,409	13.42%	\$1,207,184	\$9,265,271	13.58%	\$1,258,224

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
970	Palmer	\$1,213,127	11.47%	\$139,146	\$1,249,521	11.04%	\$137,947
969	Palmhurst	\$1,155,291	5.94%	\$68,624	\$1,189,950	5.73%	\$68,184
971	Palmview	\$2,773,699	1.92%	\$53,255	\$2,856,910	1.99%	\$56,853
972	Pampa	\$7,661,461	21.43%	\$1,641,851	\$7,891,305	21.48%	\$1,695,052
974	Panhandle	\$864,736	12.34%	\$106,708	\$890,678	11.25%	\$100,201
973	Panorama Village	\$648,737	6.58%	\$42,687	\$668,199	6.28%	\$41,963
975	Pantego	\$2,618,276	17.49%	\$457,936	\$2,681,115	17.17%	\$460,347
976	Paris	\$12,123,962	6.95%	\$842,615	\$12,487,681	7.18%	\$896,615
977	Parker	\$1,517,626	12.21%	\$185,302	\$1,563,155	12.42%	\$194,144
978	Pasadena	\$66,325,479	13.45%	\$8,920,777	\$68,116,267	13.46%	\$9,168,450
983	Pearland	\$46,985,502	13.30%	\$6,249,072	\$48,395,067	13.14%	\$6,359,112
984	Pearsall	\$2,638,680	4.35%	\$114,783	\$2,717,840	4.69%	\$127,467
988	Pecos City	\$6,168,297	6.06%	\$373,799	\$6,353,346	6.14%	\$390,095
989	Pelican Bay	\$483,200	5.01%	\$24,208	\$497,696	4.35%	\$21,650
991	Penitas	\$1,347,235	4.33%	\$58,335	\$1,387,652	4.11%	\$57,032
994	Perryton	\$3,982,196	14.71%	\$585,781	\$4,101,662	14.96%	\$613,609
1000	Pflugerville	\$20,958,252	13.33%	\$2,793,735	\$21,587,000	13.46%	\$2,905,610
1002	Pharr	\$29,862,376	7.89%	\$2,356,141	\$30,758,247	7.86%	\$2,417,598
1004	Pilot Point	\$2,467,396	12.09%	\$298,308	\$2,541,418	11.50%	\$292,263
1005	Pinehurst	\$1,154,520	19.38%	\$223,746	\$1,179,919	19.82%	\$233,860
1003	Pineland	\$510,822	7.91%	\$40,406	\$526,147	6.24%	\$32,832
1001	Piney Point Village	\$501,102	6.95%	\$34,827	\$516,135	6.92%	\$35,717
1006	Pittsburg	\$1,554,569	14.39%	\$223,702	\$1,588,770	13.36%	\$212,260
1007	Plains	\$382,610	6.57%	\$25,137	\$394,088	4.22%	\$16,631
1008	Plainview	\$6,437,980	13.07%	\$841,444	\$6,592,492	12.27%	\$808,899
1010	Plano	\$171,076,692	16.67%	\$28,518,485	\$176,208,993	16.71%	\$29,444,523
1012	Pleasanton	\$5,146,278	15.79%	\$812,597	\$5,300,666	15.22%	\$806,761
1013	Point	\$377,881	13.67%	\$51,656	\$386,950	13.12%	\$50,768
1017	Ponder	\$743,470	6.11%	\$45,426	\$765,774	6.22%	\$47,631
1014	Port Aransas	\$5,837,617	11.55%	\$674,245	\$6,012,746	11.67%	\$701,687
11016	Port Arthur	\$36,631,421	13.80%	\$5,055,136	\$37,730,364	13.74%	\$5,184,152
1018	Port Isabel	\$2,505,921	3.97%	\$99,485	\$2,581,099	3.68%	\$94,984
1020	Port Lavaca	\$3,842,506	5.81%	\$223,250	\$3,957,781	5.89%	\$233,113
1022	Port Neches	\$7,091,163	12.67%	\$898,450	\$7,289,716	13.19%	\$961,514
1019	Portland	\$7,230,625	13.64%	\$986,257	\$7,447,544	13.18%	\$981,586
1024	Post	\$780,966	15.29%	\$119,410	\$802,052	14.26%	\$114,373
1026	Poteet	\$962,786	2.18%	\$20,989	\$991,670	2.14%	\$21,222
1028	Poth	\$430,898	4.47%	\$19,261	\$443,825	4.27%	\$18,951
1030	Pottsboro	\$938,105	6.72%	\$63,041	\$966,248	6.75%	\$65,222
1031	Prairie View	\$782,836	5.25%	\$41,099	\$806,321	4.28%	\$34,511
1032	Premont	\$563,522	0.00%	\$0	\$580,428	0.00%	\$0
1029	Presidio	\$1,602,522	0.87%	\$13,942	\$1,650,598	0.75%	\$12,379
1033	Primera	\$568,335	0.06%	\$341	\$585,385	0.00%	\$0
1034	Princeton	\$4,449,262	10.75%	\$478,296	\$4,582,740	10.75%	\$492,645
1036	Prosper	\$13,457,675	13.55%	\$1,823,515	\$13,861,405	13.54%	\$1,876,834

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1037	Providence Village	\$495,303	7.50%	\$37,148	\$510,162	7.59%	\$38,721
1042	Quanah	\$507,798	9.36%	\$47,530	\$517,954	9.08%	\$47,030
1045	Queen City	\$465,953	1.77%	\$8,247	\$479,932	1.71%	\$8,207
1044	Quinlan	\$700,294	10.01%	\$70,099	\$721,303	9.96%	\$71,842
1047	Quintana	\$177,280	2.55%	\$4,521	\$182,598	2.87%	\$5,241
1046	Quitaque	\$127,670	4.92%	\$6,281	\$131,500	4.60%	\$6,049
1048	Quitman	\$1,023,960	5.49%	\$56,215	\$1,054,679	5.57%	\$58,746
1050	Ralls	\$374,270	6.50%	\$24,328	\$381,755	7.75%	\$29,586
1051	Rancho Viejo	\$576,224	6.91%	\$39,817	\$593,511	6.71%	\$39,825
1052	Ranger	\$837,363	6.64%	\$55,601	\$862,484	7.89%	\$68,050
1054	Rankin	\$208,958	1.24%	\$2,591	\$215,227	0.71%	\$1,528
1055	Ransom Canyon	\$548,566	15.39%	\$84,424	\$565,023	15.74%	\$88,935
1058	Raymondville	\$2,233,473	1.47%	\$32,832	\$2,300,477	0.98%	\$22,545
1061	Red Oak	\$6,388,530	7.18%	\$458,696	\$6,580,186	7.10%	\$467,193
1062	Redwater	\$247,769	3.08%	\$7,631	\$255,202	3.19%	\$8,141
1064	Refugio	\$1,222,495	0.00%	\$0	\$1,254,280	0.00%	\$0
1065	Reklaw	\$234,644	16.53%	\$38,787	\$239,337	16.76%	\$40,113
1066	Reno (Lamar County)	\$590,833	4.17%	\$24,638	\$607,376	4.40%	\$26,725
1069	Reno (Parker County)	\$682,228	4.15%	\$28,312	\$702,695	4.11%	\$28,881
1067	Rhome	\$754,255	7.60%	\$57,323	\$776,883	7.12%	\$55,314
1068	Rice	\$359,125	1.07%	\$3,843	\$369,899	1.20%	\$4,439
1070	Richardson	\$76,121,946	14.44%	\$10,992,009	\$78,405,604	14.72%	\$11,541,305
1073	Richland Hills	\$4,933,927	15.47%	\$763,279	\$5,081,945	15.63%	\$794,308
1074	Richland Springs	\$23,245	0.00%	\$0	\$23,942	0.00%	\$0
1076	Richmond	\$9,183,565	14.67%	\$1,347,229	\$9,459,072	14.63%	\$1,383,862
1077	Richwood	\$1,289,755	11.05%	\$142,518	\$1,328,448	11.09%	\$147,325
1072	Riesel	\$342,091	5.98%	\$20,457	\$352,354	5.83%	\$20,542
1075	Rio Grande City	\$5,651,543	7.03%	\$397,303	\$5,821,089	6.83%	\$397,580
1079	Rio Vista	\$244,580	3.77%	\$9,221	\$251,917	4.33%	\$10,908
1080	Rising Star	\$267,083	0.00%	\$0	\$275,095	0.06%	\$165
1082	River Oaks	\$2,552,252	13.76%	\$351,190	\$2,628,820	14.39%	\$378,287
1084	Roanoke	\$10,452,932	17.45%	\$1,824,037	\$10,766,520	17.34%	\$1,866,915
1088	Robert Lee	\$127,868	5.40%	\$6,905	\$130,425	5.53%	\$7,213
1089	Robinson	\$3,592,423	13.85%	\$497,551	\$3,700,196	13.59%	\$502,857
21090	Robstown	\$5,792,093	6.13%	\$355,055	\$5,965,856	5.79%	\$345,423
11090	Robstown Utility Systems	\$2,351,207	12.76%	\$300,014	\$2,421,743	12.72%	\$308,046
1092	Roby	\$72,400	1.81%	\$1,310	\$73,920	3.26%	\$2,410
1096	Rockdale	\$2,016,401	9.30%	\$187,525	\$2,076,893	8.99%	\$186,713
1098	Rockport	\$6,521,559	17.45%	\$1,138,012	\$6,717,206	17.87%	\$1,200,365
1100	Rocksprings	\$237,772	0.52%	\$1,236	\$244,905	1.31%	\$3,208
1102	Rockwall	\$20,109,941	15.76%	\$3,169,327	\$20,713,239	15.45%	\$3,200,195
1104	Rogers	\$332,913	8.52%	\$28,364	\$342,900	8.68%	\$29,764
1105	Rollingwood	\$980,886	11.20%	\$109,859	\$1,010,313	11.88%	\$120,025
1106	Roma	\$4,220,698	10.66%	\$449,926	\$4,347,319	10.19%	\$442,992
1109	Roscoe	\$335,795	2.14%	\$7,186	\$342,511	2.30%	\$7,878

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1112	Rosebud	\$414,926	1.90%	\$7,884	\$426,544	1.95%	\$8,318
1114	Rosenberg	\$16,144,953	16.35%	\$2,639,700	\$16,629,302	16.19%	\$2,692,284
1116	Rotan	\$275,474	0.00%	\$0	\$280,983	0.00%	\$0
1118	Round Rock	\$63,993,175	15.33%	\$9,810,154	\$65,912,970	15.35%	\$10,117,641
1119	Rowlett	\$26,513,875	12.82%	\$3,399,079	\$27,309,291	13.05%	\$3,563,862
1120	Royse City	\$4,064,630	15.98%	\$649,528	\$4,186,569	15.35%	\$642,638
1122	Rule	\$76,164	8.88%	\$6,763	\$78,449	2.17%	\$1,702
1123	Runaway Bay	\$673,715	1.78%	\$11,992	\$687,863	1.73%	\$11,900
1124	Runge	\$124,124	18.85%	\$23,397	\$126,979	18.66%	\$23,694
1126	Rusk	\$1,785,661	6.58%	\$117,496	\$1,839,231	6.01%	\$110,538
1128	Sabinal	\$440,992	3.12%	\$13,759	\$454,222	3.24%	\$14,717
1129	Sachse	\$9,646,351	14.79%	\$1,426,695	\$9,935,742	14.64%	\$1,454,593
1131	Saginaw	\$8,829,626	21.33%	\$1,883,359	\$9,094,515	21.67%	\$1,970,781
1130	Saint Jo	\$174,059	5.13%	\$8,929	\$179,281	2.54%	\$4,554
1133	Salado	\$527,247	6.25%	\$32,953	\$543,064	5.70%	\$30,955
1132	San Angelo	\$36,344,302	17.46%	\$6,345,715	\$37,361,942	17.43%	\$6,512,186
21136	San Antonio	\$393,626,053	11.66%	\$45,896,798	\$405,434,835	11.67%	\$47,314,245
11136	San Antonio Water System	\$111,921,856	3.60%	\$4,029,187	\$115,279,512	3.64%	\$4,196,174
1138	San Augustine	\$1,177,051	8.34%	\$98,166	\$1,212,363	8.19%	\$99,293
1140	San Benito	\$5,878,434	5.51%	\$323,902	\$6,054,787	5.27%	\$319,087
1144	San Felipe	\$195,125	4.46%	\$8,703	\$200,979	4.62%	\$9,285
1148	San Juan	\$8,547,406	2.55%	\$217,959	\$8,803,828	2.49%	\$219,215
1150	San Marcos	\$44,185,517	17.34%	\$7,661,769	\$45,511,083	17.29%	\$7,868,866
1152	San Saba	\$1,827,383	8.31%	\$151,856	\$1,882,204	8.46%	\$159,234
1146	Sanger	\$3,868,300	7.91%	\$305,983	\$3,984,349	8.16%	\$325,123
1153	Sansom Park	\$1,315,658	6.15%	\$80,913	\$1,355,128	6.03%	\$81,714
1155	Santa Fe	\$3,223,913	11.62%	\$374,619	\$3,320,630	11.83%	\$392,831
1158	Savoy	\$108,388	0.00%	\$0	\$110,556	0.00%	\$0
1159	Schertz	\$19,180,232	16.04%	\$3,076,509	\$19,755,639	15.80%	\$3,121,391
1160	Schulenburg	\$1,846,985	21.43%	\$395,809	\$1,896,854	21.50%	\$407,824
1161	Seabrook	\$6,629,557	15.57%	\$1,032,222	\$6,828,444	15.88%	\$1,084,357
1162	Seadrift	\$623,863	4.09%	\$25,516	\$642,579	3.64%	\$23,390
1164	Seagoville	\$5,028,140	10.86%	\$546,056	\$5,178,984	10.94%	\$566,581
1166	Seagraves	\$688,875	10.02%	\$69,025	\$709,541	10.22%	\$72,515
1167	Sealy	\$3,318,565	14.57%	\$483,515	\$3,418,122	14.86%	\$507,933
1168	Seguin	\$21,853,013	22.23%	\$4,857,925	\$22,508,603	22.22%	\$5,001,412
1169	Selma	\$5,832,965	14.66%	\$855,113	\$6,007,954	14.64%	\$879,564
1170	Seminole	\$3,017,809	12.89%	\$388,996	\$3,108,343	12.03%	\$373,934
1171	Seven Points	\$601,605	2.60%	\$15,642	\$619,653	1.11%	\$6,878
1172	Seymour	\$1,216,004	7.03%	\$85,485	\$1,242,756	7.20%	\$89,478
1165	Shady Shores	\$111,946	9.26%	\$10,366	\$115,304	9.51%	\$10,965
1177	Shallowater	\$620,350	4.50%	\$27,916	\$638,961	4.56%	\$29,137
1174	Shamrock	\$687,509	7.84%	\$53,901	\$708,134	8.75%	\$61,962
1173	Shavano Park	\$2,969,852	13.49%	\$400,633	\$3,058,948	13.35%	\$408,370
1175	Shenandoah	\$3,547,932	16.93%	\$600,665	\$3,654,370	18.24%	\$666,557

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1181	Shepherd	\$365,029	2.70%	\$9,856	\$375,980	2.59%	\$9,738
1176	Sherman	\$25,352,078	13.92%	\$3,529,009	\$26,087,288	14.34%	\$3,740,917
1178	Shiner	\$1,315,888	7.71%	\$101,455	\$1,355,365	8.00%	\$108,429
1179	Shoreacres	\$660,430	4.68%	\$30,908	\$678,922	4.49%	\$30,484
1180	Silsbee	\$3,166,199	18.49%	\$585,430	\$3,261,185	18.97%	\$618,647
1182	Silverton	\$154,039	4.47%	\$6,886	\$157,120	5.39%	\$8,469
1183	Simonton	\$99,854	2.59%	\$2,586	\$102,850	2.40%	\$2,468
1184	Sinton	\$2,259,581	12.87%	\$290,808	\$2,327,368	12.33%	\$286,964
1185	Skellytown	\$151,951	0.55%	\$836	\$156,510	1.91%	\$2,989
1186	Slaton	\$2,026,981	6.52%	\$132,159	\$2,085,763	6.79%	\$141,623
1188	Smithville	\$2,558,383	6.86%	\$175,505	\$2,635,134	6.94%	\$182,878
1189	Smyer	\$101,112	10.34%	\$10,455	\$104,145	9.68%	\$10,081
1190	Snyder	\$5,149,679	13.67%	\$703,961	\$5,304,169	13.63%	\$722,958
1191	Somerset	\$417,121	2.59%	\$10,803	\$429,635	2.68%	\$11,514
1192	Somerville	\$589,045	5.21%	\$30,689	\$606,716	4.25%	\$25,785
1194	Sonora	\$1,165,575	8.29%	\$96,626	\$1,200,542	8.45%	\$101,446
1196	Sour Lake	\$643,913	5.69%	\$36,639	\$663,230	5.23%	\$34,687
1198	South Houston	\$5,621,154	10.00%	\$562,115	\$5,789,789	9.83%	\$569,136
1199	South Padre Island	\$8,938,902	12.81%	\$1,145,073	\$9,207,069	12.93%	\$1,190,474
1197	Southlake	\$24,354,791	12.35%	\$3,007,817	\$25,085,435	12.45%	\$3,123,137
1200	Southmayd	\$288,420	5.63%	\$16,238	\$297,073	5.17%	\$15,359
1202	Southside Place	\$1,575,750	11.80%	\$185,939	\$1,623,023	11.61%	\$188,433
1204	Spearman	\$1,126,771	11.38%	\$128,227	\$1,160,574	11.38%	\$132,073
1201	Splendora	\$1,109,588	5.19%	\$57,588	\$1,142,876	5.59%	\$63,887
1205	Spring Valley Village	\$2,882,701	6.89%	\$198,618	\$2,969,182	6.91%	\$205,170
1203	Springtown	\$1,681,376	9.14%	\$153,678	\$1,731,817	9.31%	\$161,232
1206	Spur	\$329,502	4.66%	\$15,355	\$338,399	5.17%	\$17,495
1207	Stafford	\$10,591,247	14.44%	\$1,529,376	\$10,908,984	14.13%	\$1,541,439
1208	Stamford	\$958,804	5.26%	\$50,433	\$987,568	4.96%	\$48,983
1210	Stanton	\$1,265,724	7.75%	\$98,094	\$1,303,696	7.66%	\$99,863
1211	Star Harbor	\$163,382	10.48%	\$17,122	\$168,283	10.70%	\$18,006
1212	Stephenville	\$9,090,042	6.36%	\$578,127	\$9,362,743	6.67%	\$624,495
1213	Sterling City	\$268,742	1.20%	\$3,225	\$275,998	1.11%	\$3,064
1214	Stinnett	\$714,969	0.00%	\$0	\$736,418	0.00%	\$0
1216	Stockdale	\$371,401	5.46%	\$20,278	\$382,543	5.53%	\$21,155
1218	Stratford	\$672,439	6.31%	\$42,431	\$692,612	5.17%	\$35,808
1224	Sudan	\$377,936	1.26%	\$4,762	\$386,629	1.51%	\$5,838
1225	Sugar Land	\$54,729,351	14.78%	\$8,088,998	\$56,371,232	14.60%	\$8,230,200
1226	Sulphur Springs	\$8,480,956	7.50%	\$636,072	\$8,735,385	7.77%	\$678,739
1228	Sundown	\$566,291	11.23%	\$63,594	\$583,280	11.75%	\$68,535
1229	Sunnyvale	\$2,435,831	11.63%	\$283,287	\$2,508,906	11.56%	\$290,030
1230	Sunray	\$548,482	18.51%	\$101,524	\$564,936	14.44%	\$81,577
1227	Sunrise Beach Village	\$499,022	1.28%	\$6,387	\$513,993	1.34%	\$6,888
1231	Sunset Valley	\$2,056,982	13.30%	\$273,579	\$2,118,691	13.18%	\$279,243
1233	Surfside Beach	\$836,509	1.36%	\$11,377	\$861,604	1.34%	\$11,545

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1232	Sweeny	\$1,049,690	17.20%	\$180,547	\$1,081,181	17.11%	\$184,990
1234	Sweetwater	\$5,627,794	17.65%	\$993,306	\$5,796,628	17.73%	\$1,027,742
1264	TMRS	\$12,000,142	15.95%	\$1,914,023	\$12,360,146	15.74%	\$1,945,487
1236	Taft	\$902,778	16.89%	\$152,479	\$929,861	17.88%	\$166,259
1238	Tahoka	\$734,199	1.45%	\$10,646	\$756,225	0.00%	\$0
1240	Talty	\$119,682	8.14%	\$9,742	\$123,272	10.89%	\$13,424
1241	Tatum	\$386,418	1.79%	\$6,917	\$398,011	1.81%	\$7,204
1246	Taylor	\$8,144,815	11.88%	\$967,604	\$8,389,159	11.56%	\$969,787
1248	Teague	\$852,253	9.23%	\$78,663	\$877,821	9.04%	\$79,355
1252	Temple	\$33,685,233	16.43%	\$5,534,484	\$34,695,790	16.91%	\$5,867,058
1254	Tenaha	\$318,968	0.10%	\$319	\$328,537	0.30%	\$986
1256	Terrell	\$10,357,559	15.68%	\$1,624,065	\$10,668,286	15.89%	\$1,695,191
1258	Terrell Hills	\$2,785,506	15.32%	\$426,740	\$2,869,071	15.38%	\$441,263
31263	Tex Municipal League IEBP	\$11,245,339	6.22%	\$699,460	\$11,470,246	5.92%	\$679,039
21263	Tex Municipal League IRP	\$25,893,213	10.39%	\$2,690,305	\$26,670,009	10.51%	\$2,803,018
21260	Texarkana	\$8,886,314	16.03%	\$1,424,476	\$9,108,472	15.56%	\$1,417,278
11260	Texarkana Police Dept	\$6,313,716	15.01%	\$947,689	\$6,496,814	14.42%	\$936,841
31260	Texarkana Water Utilities	\$7,266,602	16.07%	\$1,167,743	\$7,484,600	16.12%	\$1,206,518
1262	Texas City	\$23,040,245	16.18%	\$3,727,912	\$23,731,452	16.24%	\$3,853,988
11263	Texas Municipal League	\$3,212,410	16.04%	\$515,271	\$3,283,083	14.85%	\$487,538
1267	The Colony	\$23,831,125	13.01%	\$3,100,429	\$24,546,059	12.92%	\$3,171,351
1269	Thompsons	\$128,643	4.20%	\$5,403	\$132,502	4.31%	\$5,711
1268	Thorndale	\$244,597	7.58%	\$18,540	\$251,690	8.09%	\$20,362
1272	Thrall	\$182,936	8.36%	\$15,293	\$188,424	7.41%	\$13,962
1274	Three Rivers	\$2,119,120	23.36%	\$495,026	\$2,182,694	22.64%	\$494,162
1276	Throckmorton	\$140,311	4.56%	\$6,398	\$144,520	4.91%	\$7,096
1277	Tiki Island	\$491,165	3.58%	\$17,584	\$505,900	3.76%	\$19,022
1278	Timpson	\$428,082	2.16%	\$9,247	\$440,924	2.01%	\$8,863
1280	Tioga	\$394,106	1.46%	\$5,754	\$405,929	1.46%	\$5,927
1283	Tolar	\$252,261	8.96%	\$22,603	\$259,829	7.74%	\$20,111
1286	Tom Bean	\$285,540	2.42%	\$6,910	\$294,106	2.68%	\$7,882
1284	Tomball	\$11,180,729	13.49%	\$1,508,280	\$11,516,151	13.49%	\$1,553,529
1290	Trent	\$90,095	8.18%	\$7,370	\$92,618	7.88%	\$7,298
1292	Trenton	\$165,114	2.84%	\$4,689	\$170,067	3.42%	\$5,816
1293	Trinidad	\$221,908	3.24%	\$7,190	\$226,568	3.07%	\$6,956
1294	Trinity	\$836,185	6.92%	\$57,864	\$861,271	6.86%	\$59,083
1295	Trophy Club	\$5,197,784	12.95%	\$673,113	\$5,353,718	13.09%	\$700,802
1296	Troup	\$901,896	5.33%	\$48,071	\$928,953	5.36%	\$49,792
1297	Troy	\$682,510	11.83%	\$80,741	\$702,985	11.11%	\$78,102
1298	Tulia	\$1,570,166	10.50%	\$164,867	\$1,617,271	10.69%	\$172,886
1299	Turkey	\$134,016	5.19%	\$6,955	\$138,036	5.18%	\$7,150
1301	Tye	\$620,862	7.25%	\$45,012	\$637,004	6.90%	\$43,953
1304	Tyler	\$36,941,294	20.89%	\$7,717,036	\$38,049,533	20.99%	\$7,986,597
1305	Universal City	\$7,888,037	18.46%	\$1,456,132	\$8,124,678	18.57%	\$1,508,753
1306	University Park	\$16,955,259	10.18%	\$1,726,045	\$17,463,917	9.45%	\$1,650,340

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1308	Uvalde	\$6,834,529	5.93%	\$405,288	\$7,039,565	5.96%	\$419,558
1312	Valley Mills	\$324,165	1.89%	\$6,127	\$333,890	2.32%	\$7,746
1313	Valley View	\$242,927	2.17%	\$5,272	\$250,215	1.83%	\$4,579
1314	Van	\$922,834	7.32%	\$67,551	\$950,519	7.18%	\$68,247
1316	Van Alstyne	\$1,702,132	9.66%	\$164,426	\$1,746,387	9.75%	\$170,273
1318	Van Horn	\$1,134,681	7.85%	\$89,072	\$1,158,509	8.20%	\$94,998
1320	Vega	\$262,122	24.79%	\$64,980	\$269,986	23.29%	\$62,880
1324	Venus	\$1,160,465	10.53%	\$122,197	\$1,195,279	10.54%	\$125,982
1326	Vernon	\$3,945,028	11.98%	\$472,614	\$4,063,379	12.29%	\$499,389
1328	Victoria	\$32,021,745	16.59%	\$5,312,407	\$32,982,397	16.30%	\$5,376,131
1329	Vidor	\$3,503,805	14.24%	\$498,942	\$3,608,919	14.22%	\$513,188
1500	Village Fire Department	\$3,710,413	6.09%	\$225,964	\$3,814,305	6.29%	\$239,920
1327	Village of the Hills	\$92,371	6.18%	\$5,709	\$95,142	6.16%	\$5,861
1330	Waco	\$83,965,529	14.02%	\$11,771,967	\$86,484,495	14.33%	\$12,393,228
1332	Waelder	\$717,585	2.72%	\$19,518	\$739,113	2.75%	\$20,326
1334	Wake Village	\$1,108,020	13.11%	\$145,261	\$1,141,261	12.84%	\$146,538
1336	Waller	\$1,729,108	3.90%	\$67,435	\$1,780,981	3.96%	\$70,527
1337	Wallis	\$631,710	2.64%	\$16,677	\$650,661	2.40%	\$15,616
1338	Walnut Springs	\$91,219	3.53%	\$3,220	\$93,956	3.93%	\$3,692
1340	Waskom	\$775,259	6.73%	\$52,175	\$794,640	6.83%	\$54,274
1341	Watauga	\$9,520,427	13.50%	\$1,285,258	\$9,806,040	14.20%	\$1,392,458
1342	Waxahachie	\$16,116,678	14.96%	\$2,411,055	\$16,600,178	15.36%	\$2,549,787
1344	Weatherford	\$22,511,783	13.25%	\$2,982,811	\$23,187,136	13.37%	\$3,100,120
1345	Webster	\$11,629,335	17.41%	\$2,024,667	\$11,978,215	17.70%	\$2,120,144
1346	Weimar	\$1,314,907	17.22%	\$226,427	\$1,347,780	16.89%	\$227,640
1350	Wellington	\$460,619	4.04%	\$18,609	\$474,438	4.27%	\$20,259
1352	Wells	\$150,750	1.45%	\$2,186	\$153,765	2.96%	\$4,551
1354	Weslaco	\$10,598,318	8.00%	\$847,865	\$10,810,284	8.27%	\$894,010
1356	West	\$828,382	1.56%	\$12,923	\$853,233	1.40%	\$11,945
1358	West Columbia	\$1,667,209	3.26%	\$54,351	\$1,717,225	3.19%	\$54,779
1359	West Lake Hills	\$1,754,054	15.99%	\$280,473	\$1,806,676	16.40%	\$296,295
1361	West Orange	\$1,328,205	20.03%	\$266,039	\$1,368,051	20.02%	\$273,884
1365	West Tawakoni	\$581,447	9.56%	\$55,586	\$593,076	9.06%	\$53,733
1364	West Univ. Place	\$10,027,431	12.84%	\$1,287,522	\$10,328,254	12.89%	\$1,331,312
1363	Westlake	\$3,842,199	11.80%	\$453,379	\$3,957,465	11.77%	\$465,794
1362	Westover Hills	\$1,300,567	2.29%	\$29,783	\$1,339,584	2.35%	\$31,480
1366	Westworth Village	\$2,473,031	11.75%	\$290,581	\$2,547,222	11.74%	\$299,044
1368	Wharton	\$5,675,798	5.88%	\$333,737	\$5,846,072	5.70%	\$333,226
1370	Wheeler	\$288,405	7.69%	\$22,178	\$297,057	7.96%	\$23,646
1372	White Deer	\$218,129	8.08%	\$17,625	\$224,673	9.56%	\$21,479
1377	White Oak	\$2,163,667	14.10%	\$305,077	\$2,228,577	14.40%	\$320,915
1378	White Settlement	\$6,708,853	16.93%	\$1,135,809	\$6,910,119	17.07%	\$1,179,557
1374	Whiteface	\$126,166	1.56%	\$1,968	\$129,951	1.63%	\$2,118
1375	Whitehouse	\$2,048,059	8.99%	\$184,121	\$2,099,260	8.66%	\$181,796
1376	Whitesboro	\$2,020,072	7.22%	\$145,849	\$2,080,674	6.38%	\$132,747

SECTION 4
TEXAS MUNICIPAL RETIREMENT SYSTEM
COMPARISON OF EXPECTED CITY CONTRIBUTION AMOUNTS
FOR THE RETIREMENT PLAN

CITY #	CITY NAME	2019 EXPECTED CONTRIBUTIONS			2020 EXPECTED CONTRIBUTIONS		
		EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS	EXPECTED COMPENSATION	TOTAL RATE*	EXPECTED CONTRIBUTIONS
1380	Whitewright	\$840,026	2.87%	\$24,109	\$865,227	3.13%	\$27,082
1382	Whitney	\$755,612	4.22%	\$31,887	\$770,724	4.07%	\$31,368
1384	Wichita Falls	\$46,722,157	12.77%	\$5,966,419	\$48,123,822	13.28%	\$6,390,844
1386	Willis	\$2,177,869	9.95%	\$216,698	\$2,243,205	9.46%	\$212,207
1387	Willow Park	\$2,031,170	7.23%	\$146,854	\$2,092,105	7.41%	\$155,025
1388	Wills Point	\$1,149,853	12.40%	\$142,582	\$1,174,000	12.01%	\$140,997
1390	Wilmer	\$2,228,763	4.70%	\$104,752	\$2,286,711	4.48%	\$102,445
1392	Wimberley	\$432,960	7.87%	\$34,074	\$445,949	6.56%	\$29,254
1393	Windcrest	\$3,481,083	7.40%	\$257,600	\$3,585,515	7.27%	\$260,667
1395	Winfield	\$85,036	3.50%	\$2,976	\$87,587	3.81%	\$3,337
1396	Wink	\$406,159	7.44%	\$30,218	\$417,531	7.85%	\$32,776
1398	Winnsboro	\$1,643,863	8.94%	\$146,961	\$1,693,179	9.10%	\$154,079
1399	Winona	\$195,264	0.00%	\$0	\$201,122	1.94%	\$3,902
1400	Winters	\$549,016	9.85%	\$54,078	\$563,290	10.41%	\$58,638
1403	Wolfforth	\$1,399,230	11.10%	\$155,315	\$1,441,207	11.49%	\$165,595
1409	Woodcreek	\$136,713	7.67%	\$10,486	\$140,814	8.03%	\$11,307
1404	Woodsboro	\$491,179	1.05%	\$5,157	\$505,914	0.74%	\$3,744
1406	Woodville	\$1,545,745	17.52%	\$270,815	\$1,592,117	17.39%	\$276,869
1407	Woodway	\$5,174,091	16.46%	\$851,655	\$5,329,314	16.77%	\$893,726
1408	Wortham	\$330,382	5.89%	\$19,459	\$338,972	5.36%	\$18,169
1410	Wylie	\$22,097,588	14.84%	\$3,279,282	\$22,760,516	14.75%	\$3,357,176
1412	Yoakum	\$4,049,505	15.73%	\$636,987	\$4,170,990	16.14%	\$673,198
1414	Yorktown	\$406,855	0.92%	\$3,743	\$419,061	0.85%	\$3,562
1415	Zavalla	\$269,590	0.02%	\$54	\$274,982	0.09%	\$247

SECTION 5

SUPPLEMENTAL DEATH RATES

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
4 Abernathy	0.14 %	0.27 %	3	106 Bellaire	0.16 %	0.21 %	3
6 Abilene	0.15 %	0.25 %	3	109 Bellmead	0.15 %	0.19 %	3
7 Addison	0.13 %	0.16 %	3	110 Bells	0.07 %	0.11 %	3
8 Agua Dulce	0.16 %	0.16 %	3	112 Bellville	0.18 %	0.27 %	3
10 Alamo	0.15 %	0.19 %	3	114 Belton	0.13 %	0.17 %	3
12 Alamo Heights	0.16 %	0.22 %	3	118 Benbrook	0.12 %	0.15 %	3
14 Alba	0.21 %	0.21 %	3	121 Berryville	0.26 %	0.44 %	3
16 Albany	0.36 %	0.44 %	3	123 Bertram	0.08 %	0.18 %	1
17 Aledo	0.11 %	0.17 %	3	124 Big Lake	0.21 %	0.25 %	3
18 Alice	0.17 %	0.26 %	1	126 Big Sandy	0.13 %	0.22 %	3
19 Allen	0.14 %	0.15 %	3	128 Big Spring	0.19 %	0.30 %	3
20 Alpine	0.15 %	0.19 %	3	132 Bishop	0.17 %	0.25 %	3
22 Alto	0.10 %	0.22 %	3	134 Blanco	0.14 %	0.18 %	3
23 Alton	0.14 %	0.16 %	3	140 Blooming Grove	0.10 %	0.15 %	3
24 Alvarado	0.14 %	0.15 %	3	142 Blossom	0.34 %	0.58 %	3
26 Alvin	0.12 %	0.16 %	3	143 Blue Mound	0.08 %	0.10 %	3
28 Alvord	0.18 %	0.30 %	3	144 Blue Ridge	0.09 %	0.19 %	3
30 Amarillo	0.15 %	0.22 %	1	148 Boerne	0.15 %	0.17 %	3
32 Amherst	0.14 %	0.21 %	1	150 Bogata	0.13 %	0.16 %	3
34 Anahuac	0.10 %	0.15 %	3	152 Bonham	0.16 %	0.21 %	1
36 Andrews	0.13 %	0.18 %	1	154 Booker	0.31 %	0.34 %	3
38 Angleton	0.19 %	0.23 %	3	156 Borger	0.15 %	0.19 %	3
40 Anna	0.12 %	0.13 %	3	158 Bovina	0.09 %	0.19 %	3
41 Annetta	0.10 %	0.10 %	3	160 Bowie	0.18 %	0.25 %	3
44 Anson	0.17 %	0.22 %	3	162 Boyd	0.09 %	0.14 %	1
45 Anthony	0.14 %	0.15 %	3	166 Brady	0.20 %	0.26 %	3
48 Aransas Pass	0.17 %	0.21 %	3	170 Brazoria	0.14 %	0.21 %	3
50 Archer City	0.29 %	0.34 %	3	172 Breckenridge	0.20 %	0.28 %	3
49 Arcola	0.18 %	0.18 %	3	174 Bremond	0.16 %	0.31 %	3
51 Argyle	0.20 %	0.22 %	1	176 Brenham	0.13 %	0.19 %	1
52 Arlington	0.12 %	0.16 %	3	177 Bridge City	0.22 %	0.28 %	3
54 Arp	0.06 %	0.12 %	3	178 Bridgeport	0.15 %	0.20 %	3
60 Aspermont	0.14 %	0.20 %	3	180 Bronte	0.21 %	0.24 %	3
62 Athens	0.12 %	0.16 %	3	182 Brookshire	0.18 %	0.19 %	3
64 Atlanta	0.18 %	0.23 %	3	184 Brownfield	0.20 %	0.25 %	1
66 Aubrey	0.14 %	0.15 %	3	186 Brownsboro	0.41 %	0.41 %	3
74 Avinger	0.22 %	0.22 %	3	10188 Brownsville	0.13 %	0.18 %	3
75 Azle	0.14 %	0.17 %	3	20188 Brownsville PUB	0.16 %	0.21 %	3
77 Baird	0.12 %	0.17 %	3	10190 Brownwood	0.14 %	0.22 %	1
78 Balch Springs	0.13 %	0.16 %	3	30190 Brownwood Health Dept.	0.11 %	0.19 %	1
79 Balcones Heights	0.16 %	0.21 %	3	20190 Brownwood Public Library	0.54 %	0.72 %	1
80 Ballinger	0.22 %	0.29 %	3	195 Bruceville-Eddy	0.11 %	0.17 %	3
82 Balmorhea	0.08 %	0.08 %	3	192 Bryan	0.14 %	0.18 %	1
83 Bandera	0.14 %	0.26 %	3	193 Bryson	0.12 %	0.17 %	1
84 Bangs	0.17 %	0.33 %	3	194 Buda	0.16 %	0.17 %	3
90 Bartlett	0.25 %	0.33 %	3	196 Buffalo	0.35 %	0.42 %	3
91 Bartonville	0.09 %	0.11 %	3	198 Bullard	0.17 %	0.19 %	3
92 Bastrop	0.15 %	0.18 %	3	203 Bulverde	0.12 %	0.14 %	3
94 Bay City	0.14 %	0.22 %	3	199 Bunker Hill Village	0.16 %	0.20 %	3
93 Bayou Vista	0.09 %	0.13 %	3	200 Burkburnett	0.18 %	0.27 %	3
96 Baytown	0.12 %	0.15 %	3	202 Burleson	0.12 %	0.14 %	3
98 Beaumont	0.16 %	0.23 %	1	204 Burnet	0.12 %	0.16 %	3
100 Bedford	0.12 %	0.13 %	1	206 Burton	0.11 %	0.11 %	3
101 Bee Cave	0.14 %	0.15 %	3	207 Cactus	0.10 %	0.15 %	3
102 Beeville	0.19 %	0.31 %	1	208 Caddo Mills	0.12 %	0.15 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
210 Caldwell	0.31 %	0.39 %	3	297 Copper Canyon	0.52 %	0.55 %	3
212 Calvert	0.30 %	0.33 %	3	300 Copperas Cove	0.12 %	0.20 %	3
214 Cameron	0.18 %	0.26 %	3	301 Corinth	0.11 %	0.13 %	3
216 Campbell	0.22 %	0.22 %	3	302 Corpus Christi	0.17 %	0.27 %	1
220 Canadian	0.16 %	0.20 %	3	304 Corrigan	0.18 %	0.25 %	3
221 Caney City	0.08 %	0.08 %	3	306 Corsicana	0.15 %	0.23 %	3
222 Canton	0.20 %	0.23 %	3	308 Cotulla	0.27 %	0.32 %	3
224 Canyon	0.17 %	0.20 %	3	310 Crandall	0.14 %	0.17 %	3
227 Carmine	0.06 %	0.08 %	3	312 Crane	0.14 %	0.20 %	3
228 Carrizo Springs	0.20 %	0.30 %	3	314 Crawford	0.06 %	0.07 %	1
230 Carrollton	0.13 %	0.17 %	1	316 Crockett	0.20 %	0.33 %	3
232 Carthage	0.20 %	0.28 %	3	318 Crosbyton	0.30 %	0.77 %	3
231 Castle Hills	0.11 %	0.17 %	3	320 Cross Plains	0.14 %	0.18 %	3
234 Castroville	0.20 %	0.30 %	3	321 Cross Roads	0.07 %	0.08 %	3
238 Cedar Hill	0.13 %	0.15 %	3	322 Crowell	0.28 %	0.28 %	3
239 Cedar Park	0.11 %	0.12 %	3	323 Crowley	0.12 %	0.14 %	3
240 Celeste	0.38 %	0.46 %	3	324 Crystal City	0.19 %	0.30 %	1
242 Celina	0.14 %	0.15 %	3	326 Cuero	0.21 %	0.26 %	3
244 Center	0.13 %	0.18 %	3	328 Cumby	0.12 %	0.13 %	3
246 Centerville	0.27 %	0.29 %	1	332 Daingerfield	0.20 %	0.24 %	1
247 Chandler	0.20 %	0.23 %	3	334 Daisetta	0.37 %	0.42 %	3
248 Charlotte	0.16 %	0.18 %	3	336 Dalhart	0.15 %	0.20 %	3
249 Chester	0.95 %	0.95 %	3	339 Dalworthington Gardens	0.10 %	0.13 %	3
245 Chico	0.30 %	0.45 %	3	340 Danbury	0.17 %	0.19 %	3
250 Childress	0.21 %	0.31 %	3	341 Darrouzett	0.34 %	0.34 %	3
251 Chillicothe	0.20 %	0.20 %	3	344 Dayton	0.12 %	0.16 %	3
253 Chireno	0.12 %	0.26 %	3	352 De Leon	0.19 %	0.28 %	3
254 Christine	0.02 %	0.09 %	1	10366 DeSoto	0.15 %	0.19 %	3
255 Cibolo	0.15 %	0.16 %	3	346 Decatur	0.22 %	0.25 %	3
256 Cisco	0.21 %	0.28 %	2	348 Deer Park	0.16 %	0.20 %	3
258 Clarendon	0.52 %	0.57 %	3	350 Dekalb	0.16 %	0.20 %	3
259 Clarksville	0.17 %	0.23 %	3	354 Del Rio	0.19 %	0.22 %	3
260 Clarksville City	0.05 %	0.20 %	3	353 Dell City	0.08 %	0.20 %	3
263 Clear Lake Shores	0.13 %	0.14 %	3	356 Denison	0.17 %	0.23 %	1
264 Cleburne	0.15 %	0.22 %	3	358 Denton	0.14 %	0.17 %	3
266 Cleveland	0.14 %	0.23 %	3	360 Denver City	0.16 %	0.24 %	3
268 Clifton	0.25 %	0.38 %	3	362 Deport	0.06 %	0.14 %	3
271 Clute	0.12 %	0.16 %	3	370 Devine	0.12 %	0.16 %	3
272 Clyde	0.14 %	0.22 %	3	371 Diboll	0.11 %	0.19 %	3
274 Coahoma	0.17 %	0.25 %	3	372 Dickens	0.07 %	0.07 %	3
276 Cockrell Hill	0.16 %	0.20 %	3	373 Dickinson	0.17 %	0.19 %	3
278 Coleman	0.15 %	0.25 %	1	374 Dilley	0.13 %	0.18 %	3
280 College Station	0.11 %	0.14 %	1	376 Dimmitt	0.22 %	0.28 %	1
281 Colleyville	0.13 %	0.16 %	3	382 Donna	0.16 %	0.18 %	1
282 Collinsville	0.20 %	0.25 %	3	379 Double Oak	0.28 %	0.33 %	3
283 Colmesneil	0.08 %	0.09 %	3	383 Dripping Springs	0.10 %	0.11 %	3
284 Colorado City	0.28 %	0.43 %	3	385 Driscoll	0.27 %	0.29 %	3
286 Columbus	0.17 %	0.25 %	3	384 Dublin	0.17 %	0.21 %	3
288 Comanche	0.22 %	0.34 %	3	386 Dumas	0.14 %	0.20 %	3
289 Combes	0.24 %	0.24 %	3	388 Duncanville	0.14 %	0.18 %	1
290 Commerce	0.12 %	0.23 %	3	394 Eagle Lake	0.23 %	0.31 %	3
294 Conroe	0.12 %	0.14 %	1	396 Eagle Pass	0.15 %	0.21 %	3
295 Converse	0.11 %	0.13 %	3	397 Early	0.10 %	0.14 %	3
298 Cooper	0.21 %	0.27 %	3	399 Earth	0.18 %	0.38 %	3
299 Coppell	0.13 %	0.15 %	3	393 East Bernard	0.17 %	0.19 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
401 East Mountain	0.11 %	0.28 %	3	502 Garrison	0.12 %	0.14 %	3
395 East Tawakoni	0.16 %	0.23 %	3	503 Gary	0.20 %	0.24 %	1
398 Eastland	0.23 %	0.31 %	3	504 Gatesville	0.17 %	0.23 %	3
402 Ector	0.40 %	0.40 %	3	505 George West	0.17 %	0.19 %	3
406 Eden	0.19 %	0.34 %	3	506 Georgetown	0.12 %	0.13 %	3
408 Edgewood	0.24 %	0.32 %	3	510 Giddings	0.21 %	0.28 %	3
410 Edinburg	0.12 %	0.15 %	3	512 Gilmer	0.17 %	0.22 %	3
412 Edna	0.21 %	0.29 %	3	514 Gladewater	0.15 %	0.20 %	3
414 El Campo	0.14 %	0.20 %	3	516 Glen Rose	0.16 %	0.27 %	3
416 Eldorado	0.20 %	0.36 %	3	517 Glenn Heights	0.11 %	0.14 %	3
418 Electra	0.17 %	0.29 %	3	518 Godley	0.10 %	0.19 %	3
420 Elgin	0.24 %	0.27 %	3	519 Goldsmith	0.43 %	0.43 %	3
422 Elkhart	0.34 %	0.38 %	1	520 Goldthwaite	0.22 %	0.26 %	3
427 Elmendorf	0.09 %	0.11 %	3	522 Goliad	0.22 %	0.26 %	3
432 Emory	0.16 %	0.20 %	3	524 Gonzales	0.17 %	0.26 %	3
436 Ennis	0.13 %	0.18 %	3	527 Gordon	0.11 %	0.11 %	3
439 Euless	0.14 %	0.17 %	1	530 Gorman	0.44 %	0.44 %	3
440 Eustace	0.14 %	0.24 %	3	532 Graford	0.27 %	0.27 %	3
441 Everman	0.28 %	0.31 %	3	10534 Graham	0.21 %	0.31 %	3
443 Fair Oaks Ranch	0.13 %	0.14 %	3	536 Granbury	0.16 %	0.21 %	3
442 Fairfield	0.19 %	0.27 %	3	540 Grand Prairie	0.13 %	0.17 %	3
445 Fairview	0.16 %	0.17 %	3	542 Grand Saline	0.15 %	0.24 %	3
20444 Falfurrias	0.17 %	0.22 %	3	544 Grandview	0.14 %	0.26 %	1
446 Falls City	0.21 %	0.21 %	3	546 Granger	0.24 %	0.32 %	1
448 Farmers Branch	0.14 %	0.19 %	2	547 Granite Shoals	0.19 %	0.24 %	3
450 Farmersville	0.19 %	0.23 %	3	548 Grapeland	0.11 %	0.35 %	1
451 Farwell	0.14 %	0.16 %	3	550 Grapevine	0.16 %	0.19 %	1
452 Fate	0.10 %	0.11 %	3	552 Greenville	0.19 %	0.25 %	3
454 Fayetteville	0.17 %	0.24 %	1	551 Gregory	0.23 %	0.27 %	3
456 Ferris	0.13 %	0.20 %	3	553 Grey Forest	0.18 %	0.20 %	3
458 Flatonia	0.14 %	0.19 %	3	556 Groesbeck	0.18 %	0.23 %	3
460 Florence	0.17 %	0.18 %	3	558 Groom	0.18 %	0.23 %	1
20462 Floresville	0.13 %	0.18 %	1	559 Groves	0.16 %	0.23 %	1
463 Flower Mound	0.12 %	0.14 %	3	560 Groveton	0.27 %	0.39 %	3
464 Floydada	0.12 %	0.26 %	3	562 Gruver	0.21 %	0.31 %	1
468 Forest Hill	0.11 %	0.14 %	3	563 Gun Barrel City	0.16 %	0.20 %	3
470 Forney	0.12 %	0.13 %	3	564 Gunter	0.14 %	0.17 %	3
472 Fort Stockton	0.17 %	0.27 %	3	568 Hale Center	0.24 %	0.25 %	3
476 Franklin	0.10 %	0.15 %	1	570 Hallettsville	0.19 %	0.28 %	3
478 Frankston	0.14 %	0.18 %	3	572 Hallsville	0.21 %	0.23 %	3
480 Fredericksburg	0.19 %	0.23 %	3	574 Haltom City	0.14 %	0.19 %	3
482 Freeport	0.13 %	0.17 %	3	576 Hamilton	0.16 %	0.27 %	3
481 Freer	0.29 %	0.37 %	3	578 Hamlin	0.14 %	0.30 %	3
483 Friendswood	0.16 %	0.19 %	3	580 Happy	0.15 %	0.40 %	3
484 Friona	0.11 %	0.18 %	3	581 Harker Heights	0.13 %	0.15 %	3
486 Frisco	0.12 %	0.13 %	3	10582 Harlingen	0.18 %	0.37 %	3
487 Fritch	0.10 %	0.15 %	3	20582 Harlingen Waterworks Sys	0.16 %	0.26 %	3
488 Frost	0.53 %	0.65 %	1	583 Hart	0.06 %	0.10 %	1
491 Fulshear	0.13 %	0.14 %	3	586 Haskell	0.13 %	0.19 %	3
493 Fulton	0.19 %	0.27 %	3	587 Haslet	0.19 %	0.20 %	3
492 Gainesville	0.12 %	0.19 %	3	588 Hawkins	0.17 %	0.21 %	3
494 Galena Park	0.13 %	0.21 %	3	585 Hays	0.14 %	0.34 %	3
498 Ganado	0.27 %	0.44 %	3	590 Hearne	0.19 %	0.27 %	3
499 Garden Ridge	0.19 %	0.23 %	3	591 Heath	0.18 %	0.20 %	3
500 Garland	0.17 %	0.21 %	3	592 Hedley	0.09 %	0.74 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
595 Hedwig Village	0.22 %	0.25 %	3	670 Johnson City	0.16 %	0.18 %	3
593 Helotes	0.11 %	0.13 %	3	673 Jones Creek	0.13 %	0.21 %	3
594 Hemphill	0.29 %	0.35 %	3	675 Jonestown	0.17 %	0.22 %	3
596 Hempstead	0.23 %	0.25 %	3	677 Josephine	0.09 %	0.09 %	3
598 Henderson	0.11 %	0.16 %	3	671 Joshua	0.09 %	0.10 %	3
600 Henrietta	0.18 %	0.24 %	3	672 Jourdanton	0.24 %	0.33 %	3
602 Hereford	0.18 %	0.24 %	3	674 Junction	0.17 %	0.24 %	3
605 Hewitt	0.10 %	0.12 %	3	676 Justin	0.14 %	0.17 %	1
609 Hickory Creek	0.10 %	0.11 %	3	678 Karnes City	0.14 %	0.16 %	3
606 Hico	0.08 %	0.19 %	3	680 Katy	0.13 %	0.15 %	3
607 Hidalgo	0.17 %	0.19 %	1	682 Kaufman	0.17 %	0.22 %	3
608 Higgins	0.32 %	0.39 %	3	683 Keene	0.11 %	0.17 %	3
610 Highland Park	0.14 %	0.17 %	1	681 Keller	0.11 %	0.13 %	3
611 Highland Village	0.13 %	0.15 %	3	685 Kemah	0.15 %	0.18 %	3
613 Hill Country Village	0.13 %	0.14 %	3	684 Kemp	0.08 %	0.14 %	1
612 Hillsboro	0.17 %	0.21 %	1	686 Kenedy	0.16 %	0.17 %	3
619 Hilshire Village	0.20 %	0.24 %	3	688 Kennedale	0.20 %	0.23 %	3
614 Hitchcock	0.21 %	0.23 %	3	690 Kerens	0.17 %	0.18 %	3
615 Holland	0.46 %	0.54 %	3	692 Kermit	0.19 %	0.26 %	3
616 Holliday	0.17 %	0.17 %	1	10694 Kerrville	0.13 %	0.19 %	3
617 Hollywood Park	0.17 %	0.20 %	3	20694 Kerrville PUB	0.13 %	0.17 %	3
618 Hondo	0.13 %	0.18 %	3	10696 Kilgore	0.18 %	0.25 %	3
620 Honey Grove	0.23 %	0.34 %	3	698 Killeen	0.14 %	0.18 %	3
622 Hooks	0.13 %	0.18 %	3	700 Kingsville	0.14 %	0.20 %	1
623 Horizon City	0.12 %	0.12 %	3	701 Kirby	0.10 %	0.12 %	3
626 Howe	0.24 %	0.34 %	3	702 Kirbyville	0.24 %	0.38 %	3
627 Hubbard	0.25 %	0.26 %	3	704 Knox City	0.40 %	0.45 %	3
628 Hudson	0.17 %	0.19 %	3	706 Kosse	0.20 %	0.20 %	3
629 Hudson Oaks	0.11 %	0.13 %	3	708 Kountze	0.11 %	0.15 %	3
630 Hughes Springs	0.32 %	0.33 %	3	709 Kress	0.04 %	0.77 %	1
632 Humble	0.14 %	0.17 %	3	699 Krugerville	0.11 %	0.12 %	3
633 Hunters Creek Village	0.10 %	0.36 %	3	707 Krum	0.13 %	0.14 %	3
634 Huntington	0.17 %	0.21 %	3	710 Kyle	0.11 %	0.12 %	3
636 Huntsville	0.17 %	0.22 %	3	725 La Coste	0.31 %	0.31 %	1
637 Hurst	0.14 %	0.19 %	1	714 La Feria	0.15 %	0.24 %	3
638 Hutchins	0.12 %	0.13 %	3	716 La Grange	0.23 %	0.28 %	3
640 Hutto	0.10 %	0.11 %	3	723 La Grulla	0.11 %	0.19 %	3
641 Huxley	0.19 %	0.26 %	3	732 La Joya	0.21 %	0.25 %	3
642 Idalou	0.06 %	0.06 %	3	721 La Marque	0.11 %	0.16 %	3
643 Ingleside	0.25 %	0.31 %	3	728 La Porte	0.14 %	0.17 %	3
646 Ingram	0.12 %	0.19 %	1	731 La Vernia	0.13 %	0.15 %	3
647 Iowa Colony	0.49 %	0.49 %	3	711 Lacy-Lakeview	0.17 %	0.21 %	3
644 Iowa Park	0.15 %	0.23 %	3	712 Ladonia	0.23 %	0.37 %	3
645 Iraan	0.35 %	0.51 %	3	713 Lago Vista	0.21 %	0.24 %	3
648 Irving	0.14 %	0.18 %	3	705 Laguna Vista	0.17 %	0.17 %	3
650 Italy	0.23 %	0.26 %	3	717 Lake Dallas	0.13 %	0.18 %	3
652 Itasca	0.19 %	0.26 %	3	718 Lake Jackson	0.16 %	0.21 %	3
654 Jacinto City	0.29 %	0.34 %	3	719 Lake Worth	0.12 %	0.15 %	3
656 Jacksboro	0.15 %	0.21 %	3	727 Lakeport	0.08 %	0.10 %	3
658 Jacksonville	0.12 %	0.19 %	3	715 Lakeside	0.31 %	0.34 %	3
660 Jasper	0.21 %	0.27 %	3	729 Lakeside City	0.19 %	0.27 %	3
664 Jefferson	0.27 %	0.34 %	3	720 Lakeway	0.14 %	0.17 %	3
665 Jersey Village	0.15 %	0.19 %	3	722 Lamesa	0.20 %	0.30 %	1
666 Jewett	0.12 %	0.15 %	3	724 Lampasas	0.14 %	0.20 %	3
668 Joaquin	0.29 %	0.40 %	3	726 Lancaster	0.11 %	0.14 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
730 Laredo	0.16 %	0.21 %	3	820 Maud	0.15 %	0.18 %	3
733 Lavon	0.16 %	0.17 %	3	822 Maypearl	0.24 %	0.28 %	3
736 League City	0.14 %	0.17 %	3	824 McAllen	0.12 %	0.16 %	1
737 Leander	0.13 %	0.14 %	3	826 McCamey	0.15 %	0.15 %	3
735 Lefors	0.09 %	0.09 %	3	828 McGregor	0.22 %	0.28 %	3
739 Leon Valley	0.14 %	0.20 %	3	830 McKinney	0.12 %	0.13 %	3
738 Leonard	0.12 %	0.17 %	3	832 McLean	0.30 %	0.34 %	3
740 Levelland	0.16 %	0.19 %	3	833 McLendon-Chisholm	0.06 %	0.08 %	3
742 Lewisville	0.12 %	0.15 %	1	834 Meadow	0.15 %	0.15 %	3
744 Lexington	0.08 %	0.17 %	1	831 Meadowlakes	0.20 %	0.21 %	3
746 Liberty	0.17 %	0.20 %	1	835 Meadows Place	0.11 %	0.14 %	3
745 Liberty Hill	0.19 %	0.20 %	3	837 Melissa	0.14 %	0.16 %	3
748 Lindale	0.17 %	0.19 %	1	1501 Memorial Villages PD	0.12 %	0.18 %	3
750 Linden	0.23 %	0.30 %	3	840 Memphis	0.18 %	0.25 %	3
755 Lipan	0.27 %	0.27 %	3	842 Menard	0.12 %	0.17 %	1
751 Little Elm	0.11 %	0.12 %	3	844 Mercedes	0.14 %	0.19 %	3
752 Littlefield	0.15 %	0.26 %	3	846 Meridian	0.12 %	0.13 %	3
753 Live Oak	0.16 %	0.19 %	3	848 Merkel	0.10 %	0.15 %	3
757 Liverpool	0.20 %	0.20 %	3	852 Mertzon	0.12 %	0.17 %	3
754 Livingston	0.18 %	0.23 %	3	854 Mesquite	0.13 %	0.18 %	1
756 Llano	0.18 %	0.29 %	3	856 Mexia	0.15 %	0.21 %	3
758 Lockhart	0.18 %	0.24 %	3	858 Miami	0.45 %	0.45 %	3
760 Lockney	0.32 %	0.32 %	3	860 Midland	0.15 %	0.22 %	3
765 Lone Star	0.11 %	0.18 %	3	862 Midlothian	0.12 %	0.14 %	3
766 Longview	0.15 %	0.22 %	3	863 Milano	0.64 %	0.64 %	3
768 Loraine	0.13 %	0.14 %	3	864 Miles	0.33 %	0.33 %	3
769 Lorena	0.18 %	0.20 %	3	865 Milford	0.06 %	0.15 %	3
770 Lorenzo	0.11 %	0.12 %	1	868 Mineola	0.12 %	0.17 %	3
771 Los Fresnos	0.16 %	0.19 %	3	870 Mineral Wells	0.17 %	0.24 %	3
773 Lott	0.08 %	0.10 %	3	874 Mission	0.13 %	0.15 %	3
774 Lovelady	0.08 %	0.13 %	3	875 Missouri City	0.11 %	0.14 %	3
778 Lubbock	0.14 %	0.21 %	1	876 Monahans	0.20 %	0.25 %	3
779 Lucas	0.12 %	0.13 %	3	887 Mont Belvieu	0.11 %	0.13 %	3
782 Lufkin	0.16 %	0.22 %	3	877 Montgomery	0.21 %	0.23 %	1
784 Luling	0.20 %	0.30 %	3	878 Moody	0.15 %	0.19 %	3
785 Lumberton	0.17 %	0.23 %	3	883 Morgan's Point	0.12 %	0.23 %	2
786 Lyford	0.18 %	0.20 %	1	882 Morgan's Point Resort	0.11 %	0.17 %	3
787 Lytle	0.19 %	0.20 %	3	884 Morton	0.19 %	0.22 %	3
790 Madisonville	0.21 %	0.31 %	3	886 Moulton	0.15 %	0.21 %	3
791 Magnolia	0.31 %	0.34 %	3	890 Mount Enterprise	0.13 %	0.19 %	3
792 Malakoff	0.21 %	0.25 %	3	892 Mt. Pleasant	0.13 %	0.17 %	3
796 Manor	0.11 %	0.12 %	3	894 Mt. Vernon	0.16 %	0.26 %	3
798 Mansfield	0.14 %	0.16 %	3	896 Muenster	0.30 %	0.40 %	1
799 Manvel	0.10 %	0.11 %	3	898 Muleshoe	0.15 %	0.22 %	3
800 Marble Falls	0.15 %	0.19 %	3	901 Munday	0.12 %	0.18 %	3
802 Marfa	0.26 %	0.35 %	3	903 Murphy	0.14 %	0.16 %	3
804 Marion	0.33 %	0.43 %	3	10904 Nacogdoches	0.14 %	0.20 %	3
806 Marlin	0.12 %	0.27 %	3	906 Naples	0.24 %	0.31 %	3
808 Marquez	0.25 %	0.25 %	3	907 Nash	0.14 %	0.19 %	3
810 Marshall	0.14 %	0.24 %	3	905 Nassau Bay	0.14 %	0.18 %	3
812 Mart	0.17 %	0.25 %	3	909 Natalia	0.23 %	0.26 %	3
813 Martindale	0.18 %	0.19 %	3	908 Navasota	0.15 %	0.22 %	3
814 Mason	0.26 %	0.34 %	3	910 Nederland	0.15 %	0.20 %	1
816 Matador	0.31 %	0.36 %	3	912 Needville	0.42 %	0.48 %	3
818 Mathis	0.16 %	0.25 %	3	914 New Boston	0.17 %	0.23 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
10916 New Braunfels	0.12 %	0.15 %	3	1003 Pineland	0.18 %	0.25 %	3
20916 New Braunfels Utilities	0.13 %	0.15 %	3	1001 Piney Point Village	0.19 %	0.23 %	3
915 New Deal	0.22 %	0.24 %	1	1006 Pittsburg	0.13 %	0.21 %	3
923 New Fairview	0.03 %	0.13 %	3	1007 Plains	0.19 %	0.22 %	3
918 New London	0.20 %	0.23 %	1	1008 Plainview	0.16 %	0.24 %	1
919 New Summerfield	0.27 %	0.27 %	1	1010 Plano	0.14 %	0.17 %	1
917 New Waverly	0.32 %	0.37 %	3	1012 Pleasanton	0.14 %	0.16 %	3
913 Newark	0.10 %	0.11 %	3	1013 Point	0.05 %	0.07 %	1
920 Newton	0.16 %	0.28 %	3	1017 Ponder	0.37 %	0.42 %	3
922 Nixon	0.13 %	0.19 %	3	1014 Port Aransas	0.20 %	0.24 %	3
924 Nocona	0.22 %	0.31 %	3	11016 Port Arthur	0.18 %	0.25 %	3
925 Nolanville	0.12 %	0.13 %	3	1018 Port Isabel	0.12 %	0.17 %	3
928 Normangee	0.11 %	0.20 %	3	1020 Port Lavaca	0.15 %	0.25 %	3
931 North Richland Hills	0.12 %	0.15 %	1	1022 Port Neches	0.13 %	0.17 %	1
930 Northlake	0.09 %	0.10 %	3	1019 Portland	0.19 %	0.23 %	3
935 O'Donnell	0.14 %	0.20 %	3	1024 Post	0.19 %	0.43 %	3
936 Oak Point	0.11 %	0.12 %	3	1026 Poteet	0.14 %	0.18 %	3
937 Oak Ridge North	0.17 %	0.20 %	3	1028 Poth	0.23 %	0.34 %	3
942 Odem	0.24 %	0.36 %	3	1030 Pottsboro	0.14 %	0.18 %	3
944 Odessa	0.14 %	0.20 %	3	1031 Prairie View	0.20 %	0.20 %	3
945 Oglesby	0.04 %	0.18 %	3	1032 Premont	0.21 %	0.30 %	3
949 Old River-Winfree	0.14 %	0.14 %	1	1029 Presidio	0.20 %	0.22 %	3
950 Olmos Park	0.10 %	0.14 %	1	1033 Primera	0.12 %	0.13 %	3
951 Olney	0.21 %	0.24 %	3	1034 Princeton	0.11 %	0.12 %	3
953 Omaha	0.23 %	0.23 %	3	1036 Prosper	0.12 %	0.13 %	1
954 Onalaska	0.10 %	0.15 %	3	1037 Providence Village	0.20 %	0.20 %	3
958 Orange	0.17 %	0.23 %	1	1042 Quanah	0.15 %	0.31 %	3
960 Orange Grove	0.11 %	0.17 %	3	1045 Queen City	0.34 %	0.34 %	3
959 Ore City	0.09 %	0.11 %	3	1044 Quinlan	0.10 %	0.11 %	3
962 Overton	0.15 %	0.19 %	3	1047 Quintana	0.17 %	0.17 %	3
961 Ovilla	0.13 %	0.16 %	3	1046 Quitaque	0.17 %	0.25 %	3
963 Oyster Creek	0.18 %	0.22 %	3	1048 Quitman	0.15 %	0.23 %	3
964 Paducah	0.09 %	0.29 %	3	1050 Ralls	0.33 %	0.57 %	3
966 Palacios	0.20 %	0.27 %	3	1051 Rancho Viejo	0.10 %	0.11 %	3
968 Palestine	0.13 %	0.21 %	3	1052 Ranger	0.12 %	0.20 %	1
970 Palmer	0.10 %	0.11 %	3	1054 Rankin	0.06 %	0.22 %	3
969 Palmhurst	0.10 %	0.11 %	3	1055 Ransom Canyon	0.24 %	0.25 %	3
971 Palmview	0.08 %	0.09 %	3	1058 Raymondville	0.12 %	0.26 %	3
972 Pampa	0.14 %	0.25 %	3	1061 Red Oak	0.12 %	0.13 %	3
974 Panhandle	0.24 %	0.27 %	1	1062 Redwater	0.16 %	0.16 %	3
973 Panorama Village	0.34 %	0.41 %	3	1064 Refugio	0.15 %	0.25 %	1
975 Pantego	0.12 %	0.16 %	3	1065 Reklaw	0.16 %	0.30 %	3
976 Paris	0.16 %	0.25 %	3	1066 Reno (Lamar County)	0.09 %	0.10 %	3
977 Parker	0.15 %	0.17 %	3	1069 Reno (Parker County)	0.19 %	0.20 %	3
978 Pasadena	0.18 %	0.24 %	3	1067 Rhome	0.11 %	0.14 %	3
983 Pearland	0.11 %	0.12 %	3	1068 Rice	0.11 %	0.13 %	3
984 Pearsall	0.14 %	0.18 %	3	1070 Richardson	0.15 %	0.19 %	1
988 Pecos City	0.17 %	0.21 %	3	1073 Richland Hills	0.14 %	0.21 %	3
989 Pelican Bay	0.09 %	0.09 %	3	1074 Richland Springs	0.08 %	0.25 %	3
991 Penitas	0.08 %	0.09 %	3	1076 Richmond	0.14 %	0.17 %	3
994 Perryton	0.21 %	0.27 %	3	1077 Richwood	0.11 %	0.14 %	3
1000 Pflugerville	0.12 %	0.14 %	3	1072 Riesel	0.14 %	0.18 %	3
1002 Pharr	0.11 %	0.14 %	3	1075 Rio Grande City	0.13 %	0.14 %	3
1004 Pilot Point	0.12 %	0.15 %	3	1079 Rio Vista	0.08 %	0.11 %	3
1005 Pinehurst	0.16 %	0.25 %	3	1080 Rising Star	0.19 %	0.28 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
1082 River Oaks	0.16 %	0.28 %	3	1165 Shady Shores	0.07 %	0.07 %	3
1084 Roanoke	0.12 %	0.13 %	1	1177 Shallowater	0.13 %	0.16 %	3
1088 Robert Lee	0.04 %	0.13 %	3	1174 Shamrock	0.26 %	0.73 %	3
1089 Robinson	0.18 %	0.21 %	3	1173 Shavano Park	0.11 %	0.14 %	3
21090 Robstown	0.10 %	0.13 %	3	1175 Shenandoah	0.12 %	0.14 %	3
11090 Robstown Utility Systems	0.22 %	0.30 %	3	1181 Shepherd	0.20 %	0.21 %	3
1092 Roby	0.09 %	0.59 %	3	1176 Sherman	0.14 %	0.20 %	3
1096 Rockdale	0.31 %	0.37 %	3	1178 Shiner	0.23 %	0.36 %	3
1098 Rockport	0.20 %	0.26 %	3	1179 Shoreacres	0.24 %	0.28 %	3
1100 Rocksprings	0.14 %	0.15 %	1	1180 Silsbee	0.14 %	0.23 %	1
1102 Rockwall	0.13 %	0.15 %	3	1182 Silverton	0.13 %	0.21 %	3
1104 Rogers	0.11 %	0.22 %	1	1183 Simonton	0.04 %	0.04 %	3
1105 Rollingwood	0.25 %	0.28 %	3	1184 Sinton	0.14 %	0.21 %	3
1106 Roma	0.20 %	0.27 %	3	1185 Skellytown	0.18 %	0.24 %	3
1109 Roscoe	0.39 %	0.42 %	3	1186 Slaton	0.15 %	0.26 %	3
1112 Rosebud	0.22 %	0.31 %	3	1188 Smithville	0.20 %	0.27 %	3
1114 Rosenberg	0.09 %	0.12 %	3	1189 Smyer	0.18 %	0.18 %	3
1116 Rotan	0.18 %	0.28 %	3	1190 Snyder	0.17 %	0.24 %	3
1118 Round Rock	0.12 %	0.14 %	3	1191 Somerset	0.32 %	0.45 %	3
1119 Rowlett	0.14 %	0.16 %	1	1192 Somerville	0.24 %	0.37 %	3
1120 Royse City	0.15 %	0.17 %	3	1194 Sonora	0.17 %	0.28 %	3
1122 Rule	0.11 %	0.15 %	3	1196 Sour Lake	0.21 %	0.24 %	3
1123 Runaway Bay	0.16 %	0.21 %	3	1198 South Houston	0.21 %	0.28 %	3
1124 Runge	0.43 %	0.54 %	3	1199 South Padre Island	0.12 %	0.16 %	3
1126 Rusk	0.18 %	0.21 %	3	1197 Southlake	0.12 %	0.13 %	3
1128 Sabinal	0.32 %	0.42 %	3	1200 Southmayd	0.10 %	0.12 %	3
1129 Sachse	0.11 %	0.13 %	3	1202 Southside Place	0.14 %	0.22 %	3
1131 Saginaw	0.16 %	0.19 %	3	1204 Spearman	0.21 %	0.28 %	3
1130 Saint Jo	0.06 %	0.33 %	3	1201 Splendora	0.17 %	0.18 %	3
1133 Salado	0.18 %	0.22 %	3	1205 Spring Valley Village	0.12 %	0.16 %	3
1132 San Angelo	0.15 %	0.24 %	1	1203 Springtown	0.13 %	0.17 %	3
21136 San Antonio	0.15 %	0.21 %	1	1206 Spur	0.19 %	0.21 %	3
11136 San Antonio Water System	0.17 %	0.22 %	1	1207 Stafford	0.14 %	0.18 %	3
1138 San Augustine	0.16 %	0.26 %	3	1208 Stamford	0.28 %	0.39 %	3
1140 San Benito	0.14 %	0.21 %	3	1210 Stanton	0.18 %	0.20 %	3
1144 San Felipe	0.17 %	0.20 %	3	1211 Star Harbor	0.20 %	0.42 %	3
1148 San Juan	0.13 %	0.17 %	3	1212 Stephenville	0.15 %	0.20 %	3
1150 San Marcos	0.13 %	0.16 %	3	1213 Sterling City	0.14 %	0.19 %	1
1152 San Saba	0.22 %	0.29 %	3	1214 Stinnett	0.13 %	0.21 %	3
1146 Sanger	0.13 %	0.15 %	3	1216 Stockdale	0.36 %	0.38 %	3
1153 Sansom Park	0.10 %	0.13 %	3	1218 Stratford	0.26 %	0.31 %	3
1155 Santa Fe	0.16 %	0.21 %	1	1224 Sudan	0.12 %	0.20 %	1
1158 Savoy	0.13 %	0.25 %	3	1225 Sugar Land	0.15 %	0.16 %	3
1159 Schertz	0.10 %	0.12 %	3	1226 Sulphur Springs	0.18 %	0.24 %	3
1160 Schulenburg	0.18 %	0.25 %	3	1228 Sundown	0.13 %	0.21 %	3
1161 Seabrook	0.13 %	0.16 %	3	1229 Sunnyvale	0.17 %	0.21 %	3
1162 Seadrift	0.18 %	0.19 %	3	1230 Sunray	0.12 %	0.33 %	3
1164 Seagoville	0.18 %	0.22 %	3	1227 Sunrise Beach Village	0.09 %	0.14 %	3
1166 Seagraves	0.29 %	0.46 %	3	1231 Sunset Valley	0.11 %	0.12 %	3
1167 Sealy	0.16 %	0.18 %	3	1233 Surfside Beach	0.24 %	0.26 %	3
1168 Seguin	0.13 %	0.19 %	3	1232 Sweeny	0.16 %	0.32 %	3
1169 Selma	0.10 %	0.11 %	3	1234 Sweetwater	0.18 %	0.24 %	3
1170 Seminole	0.19 %	0.25 %	3	1264 TMRS	0.17 %	0.19 %	3
1171 Seven Points	0.13 %	0.20 %	3	1236 Taft	0.17 %	0.31 %	3
1172 Seymour	0.26 %	0.39 %	3	1238 Tahoka	0.22 %	0.29 %	3

Section 5
TEXAS MUNICIPAL RETIREMENT SYSTEM
CITY CONTRIBUTION RATES FOR 2020
SUPPLEMENTAL DEATH BENEFITS

CITY	ACTIVES	ACTIVES &		CITY	ACTIVES	ACTIVES &	
<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>	<u>NO.</u> <u>CITY NAME</u>	<u>ONLY</u>	<u>RETIREEES</u>	<u>CODE*</u>
1240 Talty	0.56 %	0.59 %	3	1334 Wake Village	0.11 %	0.23 %	3
1241 Tatum	0.13 %	0.17 %	3	1336 Waller	0.28 %	0.34 %	3
1246 Taylor	0.15 %	0.22 %	3	1337 Wallis	0.17 %	0.19 %	3
1248 Teague	0.11 %	0.24 %	3	1338 Walnut Springs	0.11 %	0.16 %	3
1252 Temple	0.13 %	0.20 %	3	1340 Waskom	0.20 %	0.24 %	3
1254 Tenaha	0.08 %	0.16 %	3	1341 Watauga	0.14 %	0.17 %	3
1256 Terrell	0.15 %	0.21 %	3	1342 Waxahachie	0.16 %	0.19 %	3
1258 Terrell Hills	0.14 %	0.18 %	3	1344 Weatherford	0.13 %	0.17 %	3
31263 Tex Municipal League IEBP	0.20 %	0.21 %	3	1345 Webster	0.18 %	0.21 %	3
21263 Tex Municipal League IRP	0.20 %	0.21 %	3	1346 Weimar	0.15 %	0.25 %	3
21260 Texarkana	0.17 %	0.29 %	1	1350 Wellington	0.28 %	0.51 %	3
11260 Texarkana Police Dept	0.09 %	0.13 %	1	1352 Wells	0.09 %	0.10 %	1
31260 Texarkana Water Utilities	0.16 %	0.24 %	1	1354 Weslaco	0.12 %	0.18 %	3
1262 Texas City	0.15 %	0.23 %	1	1356 West	0.14 %	0.21 %	3
11263 Texas Municipal League	0.14 %	0.19 %	3	1358 West Columbia	0.17 %	0.26 %	1
1267 The Colony	0.12 %	0.14 %	3	1359 West Lake Hills	0.12 %	0.27 %	3
1269 Thompsons	0.23 %	0.23 %	3	1361 West Orange	0.16 %	0.22 %	1
1268 Thorndale	0.26 %	0.34 %	3	1365 West Tawakoni	0.14 %	0.22 %	3
1272 Thrall	0.45 %	0.45 %	3	1364 West Univ. Place	0.14 %	0.18 %	3
1274 Three Rivers	0.30 %	0.34 %	3	1363 Westlake	0.18 %	0.19 %	3
1276 Throckmorton	0.10 %	0.22 %	3	1362 Westover Hills	0.18 %	0.30 %	3
1277 Tiki Island	0.22 %	0.23 %	3	1366 Westworth Village	0.17 %	0.20 %	3
1278 Timpson	0.44 %	0.46 %	3	1368 Wharton	0.20 %	0.23 %	3
1280 Tioga	0.13 %	0.13 %	3	1370 Wheeler	0.09 %	0.14 %	3
1283 Tolar	0.11 %	0.15 %	3	1372 White Deer	0.53 %	0.79 %	3
1286 Tom Bean	0.13 %	0.15 %	3	1377 White Oak	0.18 %	0.24 %	3
1284 Tomball	0.16 %	0.20 %	3	1378 White Settlement	0.12 %	0.16 %	3
1290 Trent	0.42 %	0.53 %	3	1374 Whiteface	0.11 %	0.47 %	3
1292 Trenton	0.26 %	0.34 %	3	1375 Whitehouse	0.12 %	0.17 %	3
1293 Trinidad	0.34 %	0.42 %	3	1376 Whitesboro	0.20 %	0.25 %	3
1294 Trinity	0.26 %	0.30 %	3	1380 Whitewright	0.08 %	0.14 %	3
1295 Trophy Club	0.15 %	0.17 %	3	1382 Whitney	0.16 %	0.19 %	3
1296 Troup	0.22 %	0.31 %	3	1384 Wichita Falls	0.17 %	0.26 %	1
1297 Troy	0.35 %	0.40 %	3	1386 Willis	0.13 %	0.18 %	3
1298 Tulia	0.16 %	0.24 %	3	1387 Willow Park	0.12 %	0.13 %	3
1299 Turkey	0.12 %	0.41 %	3	1388 Wills Point	0.11 %	0.21 %	3
1301 Tye	0.14 %	0.17 %	3	1390 Wilmer	0.10 %	0.11 %	3
1304 Tyler	0.15 %	0.24 %	3	1392 Wimberley	0.14 %	0.17 %	3
1305 Universal City	0.15 %	0.18 %	3	1393 Windcrest	0.18 %	0.21 %	3
1306 University Park	0.18 %	0.22 %	1	1395 Winfield	0.36 %	0.36 %	3
1308 Uvalde	0.13 %	0.18 %	3	1396 Wink	0.26 %	0.28 %	3
1312 Valley Mills	0.19 %	0.19 %	3	1398 Winnsboro	0.19 %	0.25 %	3
1313 Valley View	0.13 %	0.14 %	3	1399 Winona	0.12 %	0.21 %	3
1314 Van	0.18 %	0.25 %	3	1400 Winters	0.14 %	0.34 %	3
1316 Van Alstyne	0.13 %	0.17 %	3	1403 Wolfforth	0.18 %	0.21 %	3
1318 Van Horn	0.16 %	0.20 %	3	1409 Woodcreek	0.66 %	0.71 %	3
1320 Vega	0.12 %	0.18 %	3	1404 Woodsboro	0.16 %	0.17 %	3
1324 Venus	0.10 %	0.13 %	1	1406 Woodville	0.19 %	0.26 %	3
1326 Vernon	0.17 %	0.32 %	3	1407 Woodway	0.13 %	0.16 %	3
1328 Victoria	0.12 %	0.19 %	3	1408 Wortham	0.06 %	0.07 %	3
1329 Vidor	0.17 %	0.24 %	3	1410 Wylie	0.10 %	0.11 %	3
1500 Village Fire Department	0.11 %	0.14 %	3	1412 Yoakum	0.21 %	0.28 %	3
1327 Village of the Hills	0.06 %	0.06 %	3	1414 Yorktown	0.20 %	0.60 %	3
1330 Waco	0.15 %	0.22 %	1	1415 Zavalla	0.12 %	0.13 %	1
1332 Waelder	0.16 %	0.25 %	3				

SECTION 6

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Section 6

Texas Municipal Retirement System (“TMRS”) Summary of Actuarial Assumptions

These actuarial assumptions were developed primarily from the actuarial investigation of the experience of TMRS over the four year period from December 31, 2010 to December 31, 2014. They were adopted in 2015 and first used in the December 31, 2015 actuarial valuation. The post-retirement mortality assumption for healthy annuitants and Annuity Purchase Rate (APRs) are based on the Mortality Experience Investigation Study covering 2009 through 2011 and dated December 31, 2013. In conjunction with these changes first used in the December 31, 2013 valuation, the System adopted the Entry Age Normal actuarial cost method and a one-time change to the amortization policy. These assumptions apply to both the Pension Trust and the Supplemental Death Benefits Fund as applicable.

I. Economic Assumptions

A. General Inflation – General Inflation is assumed to be 2.50% per year.

B. Discount/Crediting Rates

1. System-wide Investment Return Assumption: 6.75% per year, compounded annually, composed of an assumed 2.50% inflation rate and a 4.25% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses. This is the discount rate used to value the liabilities of the individual employers.
2. For the Supplemental Death Benefits Fund, the rate is 4.25% per year, compounded annually, and derived as a blend of 5.00% for the portion of the benefits financed by advance funding contributions and a short-term interest rate for the portion of the benefits financed by current contributions.
3. Assumed discount/crediting rate for Supplemental Disability Benefits Fund and individual employee accounts: an annual rate of 5.00% for (1) accumulating prior service credit and updated service credit after the valuation date, (2) accumulating the employee current service balances, (3) calculating the Annuity Purchase Rates (APRs) used in determining the amount of the monthly benefit at future dates of retirement or disability, and (4) calculating the actuarial liability of the system-wide Supplemental Disability Benefits Fund.

C. Overall Payroll Growth – 3.00% per year, which is used to calculate the contribution rates for the retirement plan of each participating city as a level percentage of payroll. This represents the expected increase in total payroll. This increase rate is solely due to the effect of wage inflation on salaries, with no allowance for future membership growth. However, for cities with a decrease in the number of contributing members from 2005 to 2014, the payroll growth is decreased by half the annual percentage decrease in the count capped at a 1.0% decrease per year and rounded down to the nearest 0.1%.

D. Individual Salary Increases –

Salary increases are assumed to occur once a year, on January 1. Therefore, the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. Salaries are assumed to increase by the following graduated service-based scale.

<u>Years of Service</u>	<u>Rate (%)</u>
1	10.50%
2	7.50%
3	7.00%
4	6.50%
5	6.00%
6	5.50%
7	5.25%
8-10	4.75%
11	4.50%
12-13	4.25%
14-16	4.00%
17-24	3.75%
25 +	3.50%

E. Annuity Increase – The Consumer Price Index (CPI) is assumed to be 2.50% per year prospectively. Annuity Increases, when applicable, are 30%, 50%, or 70% of CPI, according to the provisions adopted by each city. The actual future COLA assumptions are as follows: 0.87% per year for the 30% CPI provision, 1.38% per year for the 50% CPI provision, and 1.86% per year for the 70% CPI provision.

II. Demographic Assumptions

A. Termination Rates

1. For the first 10 years of service, the base table rates vary by gender, entry age, and length of service. For each city the base table is then multiplied by 75% to 125%. A further multiplier is applied depending on an employee's classification: 1) Fire – 63%, 2) Police – 88%, or 3) Other – 108%. A sample of the base rates follows:

Males

Age	Service									
	0	1	2	3	4	5	6	7	8	9
20	0.2920	0.2623	0.2186	0.1932	0.1850	0.1673	0.1529	0.1243	0.1022	0.0816
25	0.2653	0.2269	0.1812	0.1554	0.1429	0.1267	0.1148	0.1006	0.0926	0.0757
30	0.2451	0.2052	0.1610	0.1322	0.1079	0.0998	0.0896	0.0774	0.0744	0.0621
35	0.2505	0.2070	0.1577	0.1265	0.1050	0.0994	0.0848	0.0719	0.0621	0.0567
40	0.2467	0.2060	0.1561	0.1213	0.1046	0.0943	0.0805	0.0710	0.0601	0.0577
45	0.2268	0.1934	0.1556	0.1220	0.1053	0.0926	0.0813	0.0711	0.0605	0.0575
50	0.2078	0.1731	0.1412	0.1149	0.1016	0.0887	0.0807	0.0716	0.0604	0.0578
55	0.2003	0.1668	0.1265	0.1074	0.0861	0.0864	0.0771	0.0682	0.0609	0.0560
60	0.1999	0.1542	0.1231	0.1060	0.0790	0.0868	0.0753	0.0683	0.0571	0.0549
65	0.2000	0.1463	0.1238	0.1063	0.0803	0.0867	0.0757	0.0700	0.0547	0.0551
70	0.2000	0.1477	0.1237	0.1063	0.0802	0.0867	0.0756	0.0697	0.0551	0.0551

Females

Age	Service									
	0	1	2	3	4	5	6	7	8	9
20	0.3030	0.2790	0.2221	0.2098	0.1997	0.2021	0.1536	0.1539	0.1564	0.1574
25	0.2782	0.2409	0.2067	0.1962	0.1710	0.1663	0.1369	0.1352	0.1186	0.1125
30	0.2574	0.2188	0.1949	0.1762	0.1347	0.1348	0.1276	0.1126	0.0973	0.0804
35	0.2424	0.2118	0.1805	0.1438	0.1273	0.1238	0.1112	0.1085	0.1000	0.0769
40	0.2244	0.1993	0.1614	0.1342	0.1295	0.1097	0.1023	0.0924	0.0834	0.0733
45	0.2191	0.1853	0.1427	0.1337	0.1054	0.1017	0.0894	0.0784	0.0705	0.0725
50	0.2201	0.1793	0.1347	0.1229	0.0886	0.0881	0.0823	0.0723	0.0675	0.0617
55	0.2200	0.1738	0.1350	0.1199	0.0834	0.0806	0.0713	0.0705	0.0685	0.0551
60	0.2200	0.1523	0.1350	0.1172	0.0798	0.0843	0.0645	0.0639	0.0429	0.0379
65	0.2200	0.1431	0.1350	0.1150	0.0800	0.0857	0.0667	0.0593	0.0276	0.0280
70	0.2200	0.1447	0.1350	0.1154	0.0800	0.0854	0.0664	0.0601	0.0303	0.0298

2. After 10 years of service, base termination rates vary by gender and by the number of years remaining until first retirement eligibility. For each city the base table is then multiplied by 75% to 125%. A further multiplier is applied depending on an employee's classification: 1) Fire – 52%, 2) Police – 79%, or 3) Other – 115%. A sample of the base rates follows:

Years from Retirement	Male	Female
1	1.72%	2.20%
2	2.29%	2.97%
3	2.71%	3.54%
4	3.06%	4.01%
5	3.35%	4.41%
6	3.61%	4.77%
7	3.85%	5.10%
8	4.07%	5.40%
9	4.28%	5.68%
10	4.47%	5.94%
11	4.65%	6.19%
12	4.82%	6.43%
13	4.98%	6.66%
14	5.14%	6.87%
15	5.29%	7.08%

Termination rates end at first eligibility for retirement

- B. Forfeiture Rates (Withdrawal of Member Deposits from TMRS) for vested members vary by age and employer match, and they are expressed as a percentage of the termination rates shown in (A). The withdrawal rates for cities with a 2-to-1 match are shown below. 4% is added to the rates for 1½-to-1 cities, and 8% is added for 1-to-1 cities.

Age	Percent of Terminating Employees Choosing to Take a Refund
25	41.2%
30	41.2%
35	41.2%
40	38.0%
45	32.6%
50	27.1%
55	21.7%

Forfeiture rates end at first eligibility for retirement.

C. Service Retirees and Beneficiary Mortality Rates

For calculating the actuarial liability and the retirement contribution rates, the Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 109% and female rates multiplied by 103%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.

D. Disabled Annuitant Mortality Rates

For calculating the actuarial liability and the retirement contribution rates, the Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 109% and female rates multiplied by 103% with a 3 year set-forward for both males and females. In addition, a 3% minimum mortality rate will be applied to reflect the impairment for younger members who become disabled. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements subject to the 3% floor.

E. Pre-Retirement Mortality

For calculating the actuarial liability and the retirement contribution rates, the Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 54.5% and female rates multiplied by 51.5%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.

F. Annuity Purchase Rates

For determining the amount of the monthly benefit at the time of retirement for both healthy and disabled annuitants, the annuity purchase rates (APRs) for 2014 are based on the UP-1984 Table with an age setback of two years for retirees and an age setback of eight years for beneficiaries. Beginning in 2027 the APRs will be based on a unisex blend of the RP-2000 Combined Healthy Mortality Tables with Blue Collar Adjustment for males and females with both male and female rates multiplied by 107.5% and projected on a fully generational basis with scale BB. For members, a unisex blend of 70% of the males table and 30% of the female table is used, while 30% of the male table and 70% of the female table is used for beneficiaries. From 2015 through 2026, the fully generational APRs will be phased into.

G. Disability Rates

Age	Males & Females
20	0.000004
25	0.000025
30	0.000099
35	0.000259
40	0.000494
45	0.000804
50	0.001188
55	0.001647
60	0.002180
65	0.002787

- H. Service Retirement Rates, applied to both Active and Inactive Members
The base table rates vary by gender, entry age group, and age. For members under age 62, these base rates are then multiplied by 2 factors based on 1) employee contribution rate and employer match and 2) if the city has a recurring COLA.

Age	Males Entry Age Groups			Females Entry Age Groups		
	Ages 32 & Under	Ages 33 - 47	Ages 48 & Over	Ages 32 & Under	Ages 33 - 47	Ages 48 & Over
40-44	0.06	-	-	0.06	-	-
45-49	0.06	-	-	0.06	-	-
50-52	0.08	-	-	0.08	-	-
53	0.08	0.10	-	0.08	0.10	-
54	0.08	0.10	-	0.11	0.10	-
55-59	0.14	0.10	-	0.11	0.10	-
60	0.20	0.15	0.10	0.14	0.15	0.10
61	0.25	0.30	0.20	0.28	0.26	0.20
62	0.32	0.25	0.12	0.28	0.17	0.12
63	0.32	0.23	0.12	0.28	0.17	0.12
64	0.32	0.35	0.20	0.28	0.22	0.20
65	0.32	0.32	0.20	0.28	0.27	0.20
66-69	0.22	0.22	0.17	0.22	0.22	0.17
70-74	0.20	0.22	0.25	0.22	0.22	0.25
75 and over	1.00	1.00	1.00	1.00	1.00	1.00

Note: For cities without a 20-year/any age retirement provision, the rates for entry ages 32 and under are loaded by 20% for ages below 60.

Plan Design Factors Applied to Base Retirement Rates

Employer Match	Employee Contribution Rate		
	5%	6%	7%
1 - 1	0.75	0.80	0.84
1½ - 1	0.81	0.86	0.92
2 - 1	0.86	0.93	1.00

Recurring COLA: 100%

No Recurring COLA: 90%

III. *Methods and Assumptions*

- A. Valuation of Assets – The actuarial value of assets is based on the market value of assets with a ten-year phase-in of actual investment return in excess of (less than) expected investment income. 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 timeframe. The actuarial value of assets is further adjusted by 33% of any difference between the initial value and a 15% corridor around the market value of assets, if necessary. For the purpose of determining the UAAL and annual required contribution associated with the Supplemental Death Trust, assets are valued at the Fund Value.
- B. Actuarial Cost Method: The actuarial cost method being used is known as the Entry Age Normal Actuarial Cost Method. The Entry Age Normal Actuarial Cost Method develops the annual cost of the Plan in two parts: that attributable to benefits accruing in the current year, known as the normal cost, and that due to service earned prior to the current year, known as the amortization of the unfunded actuarial accrued liability. The normal cost and the actuarial accrued liability are calculated individually for each member. 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 normal cost is calculated using an entry age based on benefit service with the current city. If a member has additional time-only vesting service through service with other TMRS cities or other public agencies, they retain this for determination of benefit eligibility and decrement rates. The salary-weighted average of these rates is the total normal cost rate. The unfunded actuarial accrued liability reflects the difference between the portion of projected benefits attributable to service credited prior to the valuation date and assets already accumulated. The unfunded actuarial accrued liability is paid off in accordance with a specified amortization procedure outlined in C below.

- C. Amortization Policy: For “underfunded” cities with twenty or more employees, the amortization as of the valuation date is a level percentage of payroll over a closed period using the process of “laddering”. Bases that existed prior to this valuation continue to be amortized on their original schedule. Beginning January 1, 2016, all new experience losses are amortized over individual periods of not more than 25 years. Previously, some cities amortized their losses over a 30 year period. New gains (including lump sum contributions) are offset against and amortized over the same period as the current largest outstanding loss base for the specific City which in turn decreases contribution rate volatility.

Once a City reaches an “overfunded” status, all prior non ad hoc bases are erased and the surplus for overfunded cities is amortized over a 25 year open period.

Ad hoc benefit enhancements are amortized over individual periods using a level dollar policy. The period will be based on the minimum of 15 years or the current life expectancy of the covered group.

For the December 31, 2013 actuarial valuation, there was a one-time change in the amortization policy for underfunded cities implemented in conjunction with the changes to the assumptions and cost method to minimize rate volatility associated with these changes. An initial ARC was developed using the methodology described above. For cities with a decrease in the rate compared to the rate calculated prior to changes, the amortization period for all non-ad hoc bases was shortened enough to keep the rates stable (if possible). Cities with an increase of more than 0.50% were allowed to extend the amortization periods for non-ad hoc bases up to 30 years to keep the full contribution rate from increasing. For cities with an increase of 0.50% or less, the amortization periods for all non-ad hoc bases could be extended to 25 years to keep the rate from increasing. The amortization period calculated in the prior steps was then rounded up to the nearest integer to calculate the final full contribution rate.

For the purpose of determining the annual required contribution associated with the Supplemental Death Trust, the amortization of the UAAL is done using a 25 year open period.

- D. Small City Methodology – For cities with fewer than twenty employees, more conservative methods and assumptions are used. First, lower termination rates are used for smaller cities, with maximum multipliers of 75% for employers with less than 6 members, 85% for employers with 6 to 10 members, 100% for employers with 11 to 15 members, and 115% for employers with less than 100 members.

There is also a load on the life expectancy for employers with less than 15 active members. The life expectancy will be loaded by decreasing the mortality rates by 1% for every active member less than 15. For example, an employer with 5 active members will have the baseline mortality tables multiplied by 90% (10 active members times 1%).

For underfunded plans, the maximum amortization period for amortizing gains and losses is decreased from current levels by 1 year for each active member less than the 20 member threshold. For example, an employer with 8 active members and a current maximum amortization period of 25 will use $(25 - (20 - 8)) = 13$ year amortization period for the gain or loss in that year's valuation. Under this policy, the lowest amortization period will be $25 - (20 - 1) = 6$ years. Once the plan is overfunded, the amortization period will revert back to the standard 25 years.

- E. Supplemental Death Benefit – The contribution rate for the Supplemental Death Benefit (SDB) is equal to the expected benefit payments during the upcoming year divided by the annualized pay of current active members and is calculated separately for actives and retirees. Due to the significant reserve in the Supplemental Death Trust, the SDB rate for retiree coverage is currently only one-third of the total term cost.

IV. Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): An exponential average of the actual salaries paid during the prior fiscal years, with 33% weight given to the most recent year and 67% weight given to the expected payroll for the previous fiscal year, moved forward with one year's payroll growth rate and adjusted for changes in population.
2. Individual salaries used to project benefits: For members with more than three years of service, actual salaries from the past three fiscal years are used to determine the USC final average salary as of the valuation date. For future salaries, this three-year average is projected forward with two years of salary scale to create the salary for the year following the valuation. This value is then projected with normal salary scales.
3. Timing of benefit payments: Benefit payments are assumed to be made in the middle of the month. Although TMRS benefits are paid at the end of the month, eligibility for that payment is determined at the beginning of the month. A middle of month payment approximates the impact of the combination of eligibility determination and actual payment timing.
4. Percent married: 100% of the employees are assumed to be married.
5. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

6. Optional Forms: Healthy members are assumed to choose a life only benefit when they retire. Disabled members are assumed to select a 50% Joint and Survivor option when they retire.
7. Percent electing annuity on death (when eligible): For vested members not eligible for retirement, 75% of the spouses of male members and 70% of the spouses of female members are assumed to commence an immediate benefit in lieu of a deferred annuity or a refund. Those not electing an immediate benefit are assumed to take a refund. All of the spouses of married participants who die after becoming eligible for a retirement benefit are assumed to elect an annuity that commences immediately.
8. Partial Lump Sum Utilization: It is assumed that each member at retirement will withdraw 40% of their eligible account balance.
9. Inactive Population: All non-vested members of a city are assumed to take an immediate refund if they are not contributing members in another city. Vested members not contributing in another city are assumed to take a deferred retirement benefit, except for those who have terminated in the past 12 months for whom one year of forfeiture probability is assumed. The forfeiture rates for inactive members of a city who are contributing members in another city are equal to the probability of termination multiplied by the forfeiture rates shown in II(A) and II(B) respectively. These rates are applied each year until retirement eligibility. Once a member is retirement eligible, they are assumed to commence benefits based on the service retirement rates shown in II(H).
10. There will be no recoveries once disabled.
11. No surviving spouse will remarry and there will be no children's benefit.
12. Decrement timing: Decrements of all types are assumed to occur mid-year.
13. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
14. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
15. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
16. Benefit Service: All members are assumed to accrue 1 year of eligibility service each year.
17. The decrement rates for service related decrements are based on total TMRS eligibility service.

V. Participant Data

Participant data was supplied in electronic text files. There were separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active members included birthdate, gender, service with the current city and total vesting service, salary, employee contribution account balances, as well as the data used in the next calculation of the Updated Service Credit (USC). For retired members and beneficiaries, the data included date of birth, gender, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, form of payment code, and aggregate increase in the CPI that will be used in the next calculation of the cost of living adjustment.

To the extent possible we have made use of all available data fields in the calculation of the liabilities stated in this report. Actual CPI is used to model the wear-away effect or “catch-up” when a city changes its COLA provisions. Adjustments are made for members who have service both in a city with “20 and out” retirement eligibility and one that hasn’t adopted it to calculate the earliest possible retirement date.

Salary supplied for the current year was based on the annualized earnings for the year preceding the valuation date.

Assumptions were made to correct for missing, bad, or inconsistent data. These had no material impact on the results presented.

SECTION 7

SUMMARY OF BENEFIT PROVISIONS

Section 7

Texas Municipal Retirement System Summary of Plan Benefit Provisions

The plan provisions are adopted by the governing body of each city, within the options available in the state statutes governing TMRS. Members in most cities can retire at age 60 and above with 5 or more years of service or with 20 years of service regardless of age. Some cities have elected retirement eligibility at age 60 with 10 years of service and/or with 25 years of service regardless of age. Most plans also provide death benefits and all provide disability benefits. Effective January 1, 2002, members are vested after 5 years, unless a city opted to maintain 10-year vesting. Members may work for more than one TMRS city during their career. If an individual has become vested in one TMRS city, he or she is immediately vested upon employment with another TMRS city. Similarly, once a member has met the eligibility requirements for retirement in a TMRS city, he or she is eligible in other TMRS cities as well.

Upon retirement, benefits depend on the sum of the employee's contributions, with interest, and the city-financed monetary credits, with interest. City-financed monetary credits are composed of three sources: prior service credits, current service credits, and updated service credits. The available member deposit rates are 5%, 6%, or 7% (some cities were grandfathered at a 3% rate), while the city's matching ratio will be 100%, 150%, or 200%. The balance at the beginning of each year is granted an interest credit as determined by the Board (employee account balances are guaranteed at least 5% interest).

- **Prior Service Credits:** At the inception of each city's plan, the city granted monetary credits for service rendered before the plan began of a percentage, adopted by the city, of a theoretical amount at least equal to two times what would have been contributed by the employee, with interest (3% annual), prior to establishment of the plan.
- **Current Service Credits:** Monetary credits for service since each plan began are a percent of the employee's accumulated contributions based on the city's matching rate in effect at the time the employee contributions are made.
- **Updated Service Credit (USC):** This monetary credit is determined by recalculating the member's account balance by assuming that the current member deposit rate of the currently employing city has always been in effect to create a hypothetical balance. The computation also assumes that the member's salary has always been the member's average salary during the 36-month period ending 13 months before the effective date of calculation. This hypothetical account balance is increased by 3% each year (not the actual interest credited to member accounts in previous years), and increased by the city match currently in effect. The resulting sum is then compared to the member's actual account

balance increased by the actual city match and actual interest credited. If the hypothetical balance exceeds the actual balance and the difference between them exceeds the current USC or Prior Service Credit, the member is granted a monetary credit (the new USC) equal to the difference between the hypothetical balance and the actual balance. The calculation may be done on a repeating or an ad hoc basis.

At retirement, the benefit is calculated as if the sum of the employee's contributions with interest and the city-financed monetary credits with interest were used to purchase an annuity. Members may choose to receive their retirement benefit in one of seven payment options: retiree life only; one of three lifetime survivor options; or one of three guaranteed term options. Members may also choose to receive a portion of their benefit as a Partial Lump Sum Distribution (PLSD) in an amount equal to 12, 24, or 36 monthly payments under the retiree life only option, which cannot exceed 75% of the total member deposits and interest. A member city may elect to increase the annuities of its retirees, either annually or on an annually repeating basis, effective January 1 of a calendar year. Cities may adopt annuity increases at a rate equal to either 30%, 50%, or 70% of the increase (if any) in the Consumer Price Index — all Urban Consumers (CPI-U) between the December preceding the member's retirement date and the December 13 months before the effective date of the increase, minus any previously granted increases.

Section 7

Texas Municipal Retirement System

Summary of Benefit Provision Changes Reflected in 12/31/2018 Valuation

CITY	Changes
Athens	Decreased repeating COLA from 70% to 30%.
Balcones Heights	Rescinded 70% repeating COLA.
Bartlett	Adopted restricted prior service credit. *
Belton	1) Decreased repeating USC from 100% to 50%. 2) Increased employee contribution rate from 5% to 6%. 3) Increased statutory max to 12.50% due to plan changes.
Blanco	1) Increased employee contribution rate from 5% to 7%. 2) Increased municipal matching ratio from 1 - 1 to 2 - 1. 3) Increased statutory max to 13.50% due to plan changes.
Brenham	Granted 70% ad hoc COLA.
Brookshire	1) Adopted 20 yr, any age retirement eligibility. 2) Increased employee contribution rate from 5% to 6%. 3) Increased statutory max to 12.50% due to plan changes.
Corpus Christi	1) Adopted 100% repeating USC. 2) Adopted 70% repeating COLA. 3) Increased employee contribution rate from 6% to 7%.
Dickinson	Adopted 5 year vesting.
Dilley	1) Increased employee contribution rate from 5% to 6%. 2) Increased statutory max to 12.50% due to plan changes.
Donna	1) Adopted 20 yr, any age retirement eligibility. 2) Increased employee contribution rate from 6% to 7%. 3) Increased statutory max to 13.50% due to plan changes.
Double Oak	Increased employee contribution rate from 5% to 6%.
Emory	1) Increased employee contribution rate from 5% to 7%. 2) Increased statutory max to 13.50% due to plan changes.
Fredericksburg	1) Increased repeating USC from 50% to 100%. 2) Removed statutory max.
Gainesville	Increased employee contribution rate from 5% to 6%.
Gladewater	1) Increased municipal matching ratio from 1 - 1 to 2 - 1. 2) Increased statutory max to 11.50% due to plan changes.
Glenn Heights	1) Adopted 20 yr, any age retirement eligibility. 2) Increased municipal matching ratio from 1 - 1 to 2 - 1. 3) Rescinded 100% repeating USC. 4) Rescinded 70% repeating COLA.
Goliad	Increased employee contribution rate from 5% to 7%.
Grand Prairie	Adopted 20 yr, any age retirement eligibility.
Grand Saline	1) Increased municipal matching ratio from 1 - 1 to 1.5 - 1. 2) Increased statutory max to 11.50% due to plan changes.
Grandview	Adopted restricted prior service credit. *
Harlingen Waterworks Sys	Discontinued Participation in TMRS for employees hired or rehired on or after October 1, 2018.
Helotes	Granted 100% ad hoc USC.
Henderson	Adopted 20 yr, any age retirement eligibility.
Hico	1) Increased employee contribution rate from 5% to 7%. 2) Increased statutory max to 13.50% due to plan changes.
Hurst	Granted 30% ad hoc COLA.
Karnes City	Increased municipal matching ratio from 1 - 1 to 1.5 - 1.
Kaufman	Adopted 50% repeating COLA.
Killeen	1) Granted 100% ad hoc USC with transfer. 2) Granted 70% ad hoc COLA.
Krum	1) Increased employee contribution rate from 6% to 7%. 2) Increased statutory max to 13.50% due to plan changes.
Lake Worth	Increased employee contribution rate from 6% to 7%.
Lavon	Increased employee contribution rate from 5% to 6%.
Leon Valley	Increased employee contribution rate from 6% to 7%.
Levelland	Adopted buy-back provision. *
Liberty	Adopted restricted prior service credit. *
Lorena	1) Increased municipal matching ratio from 1.5 - 1 to 2 - 1. 2) Increased statutory max to 12.50% due to plan changes.

* Reflects possible rate impact. No change to current rate.

Section 7

Texas Municipal Retirement System

Summary of Benefit Provision Changes Reflected in 12/31/2018 Valuation

CITY	Changes
Los Fresnos	1) Increased repeating USC from 10% to 50%. 2) Added transfer provision to repeating USC. 3) Adopted 30% repeating COLA.
Malakoff	Adopted 20 yr, any age retirement eligibility.
Manor	1) Granted 100% ad hoc USC. 2) Increased employee contribution rate from 5% to 7%.
Marble Falls	Adopted 75% repeating USC with transfer.
Meadows Place	1) Granted 100% ad hoc USC. 2) Granted 70% ad hoc COLA.
Mesquite	Adopted 100% repeating USC with transfer.
Missouri City	1) Granted 100% ad hoc USC with transfer. 2) Granted 70% ad hoc COLA.
Mount Enterprise	Adopted restricted prior service credit. *
Mt. Vernon	Adopted restricted prior service credit. *
New Waverly	Adopted 20 yr, any age retirement eligibility.
Orange Grove	1) Increased employee contribution rate from 5% to 6%. 2) Increased municipal matching ratio from 1.5 - 1 to 2 - 1. 3) Increased statutory max to 12.50% due to plan changes.
Overton	1) Adopted 20 yr, any age retirement eligibility. 2) Increased employee contribution rate from 5% to 6%. 3) Increased statutory max to 12.50% due to plan changes.
Palmer	1) Increased employee contribution rate from 5% to 7%. 2) Increased statutory max to 13.50% due to plan changes.
Palmview	1) Adopted buy-back provision. * 2) Adopted restricted prior service credit. *
Parker	Adopted restricted prior service credit. *
Pearsall	1) Increased employee contribution rate from 5% to 6%. 2) Increased statutory max to 8.50% due to plan changes.
Pilot Point	1) Increased employee contribution rate from 5% to 6%. 2) Increased statutory max to 12.50% due to plan changes.
Port Neches	Granted 30% ad hoc COLA.
Post	1) Adopted 5 year vesting. 2) Increased employee contribution rate from 5% to 7%.
Poteet	Adopted restricted prior service credit. *
Ransom Canyon	Adopted restricted prior service credit. *
Red Oak	1) Increased employee contribution rate from 6% to 7%. 2) Increased statutory max to 13.50% due to plan changes.
Reno (Parker County)	Increased employee contribution rate from 5% to 7%.
Richardson	Adopted buy-back provision. *
Rocksprings	Adopted restricted prior service credit. *
Rollingwood	1) Adopted 20 yr, any age retirement eligibility. 2) Increased employee contribution rate from 6% to 7%. 3) Increased statutory max to 13.50% due to plan changes.
Rosenberg	Increased employee contribution rate from 6% to 7%.
Saginaw	Increased employee contribution rate from 6% to 7%.
San Antonio	Granted 70% ad hoc COLA.
Seguin	Adopted 70% repeating COLA.
Shallowater	1) Adopted 20 yr, any age retirement eligibility. 2) Increased employee contribution rate from 5% to 6%. 3) Increased statutory max to 10.50% due to plan changes.
Stockdale	Increased employee contribution rate from 5% to 7%.
Sudan	1) Granted 100% ad hoc USC with transfer. 2) Granted 70% ad hoc COLA.
Sulphur Springs	Granted 100% ad hoc USC with transfer.
Sunset Valley	Adopted 20 yr, any age retirement eligibility.
Tahoka	Granted 100% ad hoc USC.
Terrell Hills	Increased employee contribution rate from 6% to 7%.
Tex Municipal League IEBP	Granted 100% ad hoc USC.

* Reflects possible rate impact. No change to current rate.

Section 7

Texas Municipal Retirement System

Summary of Benefit Provision Changes Reflected in 12/31/2018 Valuation

CITY	Changes
University Park	1) Granted 100% ad hoc USC with transfer.
Van Alstyne	2) Granted 70% ad hoc COLA.
Weslaco	Adopted restricted prior service credit. *
	1) Granted 50% ad hoc USC with transfer.
	2) Granted 30% ad hoc COLA.
Westover Hills	1) Increased employee contribution rate from 5% to 7%.
	2) Increased statutory max to 9.50% due to plan changes.
Willow Park	Adopted restricted prior service credit. *

* Reflects possible rate impact. No change to current rate.

SECTION 8

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

Section 8

Texas Municipal Retirement System

Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that results from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be

expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rates shown in this report may be considered as a minimum contribution rate that complies with the Board's funding policy and state statute. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

With each valuation there is a presentation of the summary of findings to the Board. Included are various discussions and scenarios of potential risks.

Investment Risk Scenario Testing - Benefit Accumulation Fund (Smoothed)

The funded status and Actuarially Determined Contributions (ADC) are based on numerous actuarial assumptions that have been selected based on the System's past experience and future expectations, including the expected annual investment return of 6.75%. The basis for the 6.75% investment return assumption has been detailed in Section 6 of this report.

The following table illustrates the projected Funded Ratio and ADC over the next five years assuming alternative investment returns on the market value of assets. The projections are based on actuarial assumptions (other than investment returns), methods and plan provisions used in this valuation.

Three scenarios of projected results are shown assuming annual net investment returns equal to:

1. The expected 25th percentile annual investment return over a 10-year period, based on the assumed investment return of 6.75% and an assumed standard deviation of 10.65% (approximately 4.50% per year)
2. The annual investment return assumed in this valuation of 6.75%
3. The expected 75th percentile annual investment return over a 10-year period, based on the assumed investment return of 6.75% and an assumed standard deviation of 10.65% (approximately 9.00% per year)

	Projected Investment Return					
	4.50%		6.75%		9.00%	
December 31,	Funded Ratio	ADC	Funded Ratio	ADC	Funded Ratio	ADC
2018	87.0%	13.58%	87.0%	13.58%	87.0%	13.58%
2019	87.1%	13.79%	87.3%	13.74%	87.5%	13.68%
2020	87.1%	14.05%	87.6%	13.89%	88.2%	13.72%
2021	87.1%	14.36%	88.0%	14.03%	89.0%	13.69%
2022	86.9%	14.70%	88.5%	14.15%	90.1%	13.58%
2023	86.7%	15.07%	88.9%	14.27%	91.3%	13.40%

In the middle scenario, which assumes the actual returns on a market basis meet the 6.75% assumed return, the increases over the period are due to recognizing the currently deferred investment losses from calendar year 2018. However, the funding policy (closed amortization strategy) continues to increase the Funded Ratio.

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

Aggregate Benefit Accumulation Fund Results		
	2018	2017
Ratio of the market value of assets to total payroll	4.2	4.6
Ratio of actuarial accrued liability to payroll	5.2	5.1
Ratio of actives to retirees and beneficiaries	1.7	1.8
Net cash flow as a percentage of market value of assets	-0.3%	-0.2%
Duration of the actuarial accrued liability	18.0	18.1
Average Change in Contribution Rate with 10% decline in assets (smoothed)	0.27%	0.27%
Average Change in Contribution Rate with 10% decline in assets (unsmoothed)	2.70%	2.66%

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL: The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL: The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.0 times the payroll, a change in liability 2% other than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

The relationship between the actuarial accrued liability and payroll is a useful indicator of the potential longer term asset-related volatility once the current UAAL is fully amortized. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES: A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

NET CASH FLOW AS A PERCENTAGE OF MARKET VALUE OF ASSETS: A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

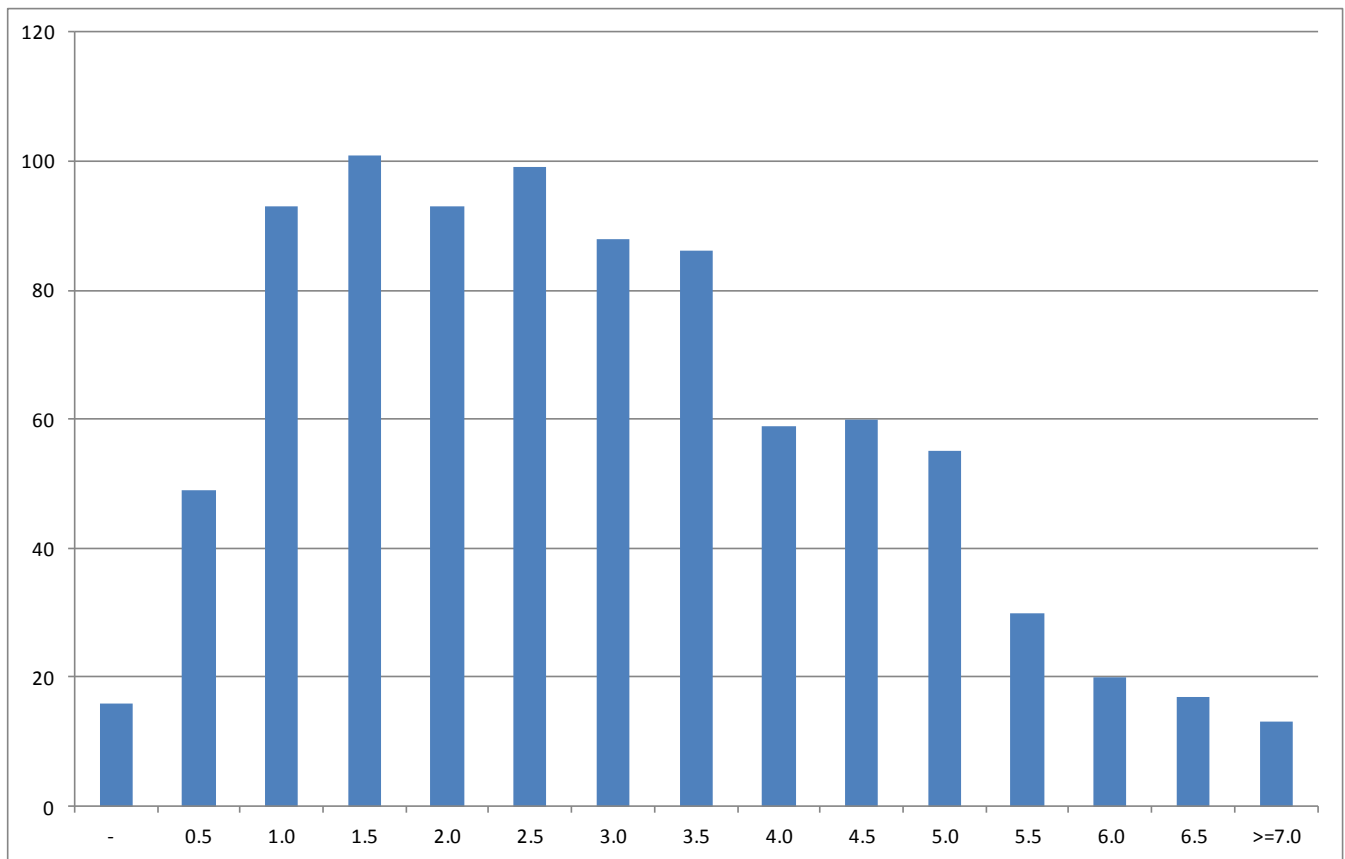
DURATION OF LIABILITIES: The duration of the present value of future benefits may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the present value of future benefits would increase approximately 10% if the assumed rate of return were lowered 1%. This also is an approximation of the discount-weighted average time horizon of the liability.

CHANGE IN CONTRIBUTION RATE WITH 10% DECLINE IN ASSETS (SMOOTHED): This shows the rate impact in one year if the actuarial value of assets (AVA) was 10% lower than in the current actuarial valuation with the asset loss smoothed over a 10 year period as is done in the system-wide calculation of the AVA.

CHANGE IN CONTRIBUTION RATE WITH 10% DECLINE IN ASSETS (UNSMOOTHED): This shows the rate impact if the actuarial value of assets was 10% lower than in the current actuarial valuation with the full asset loss recognized in the current valuation.

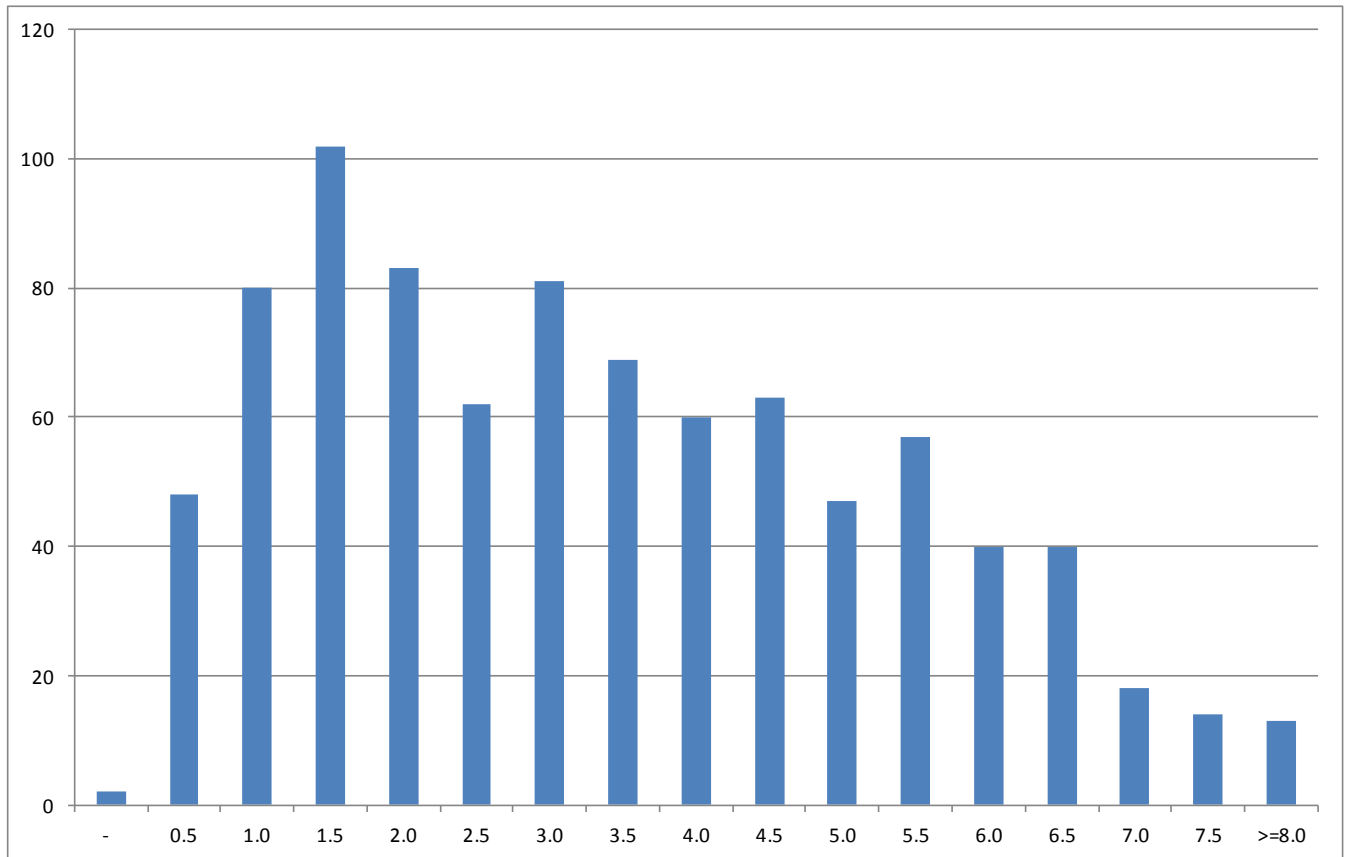
Distribution of Measures

Ratio of the Market Value of Assets to Total Payroll

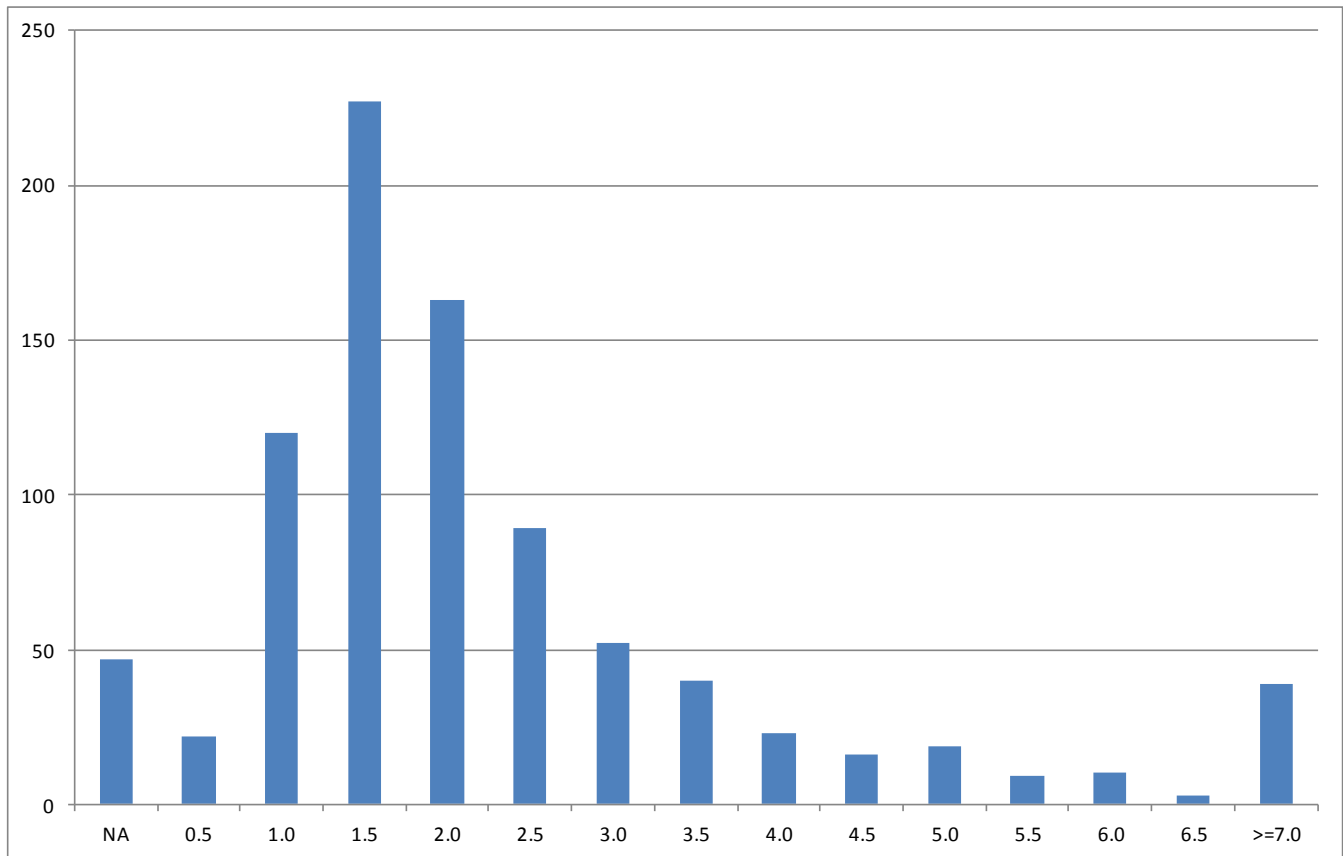


Distribution of Measures

Ratio of Actuarial Accrued Liability to Payroll

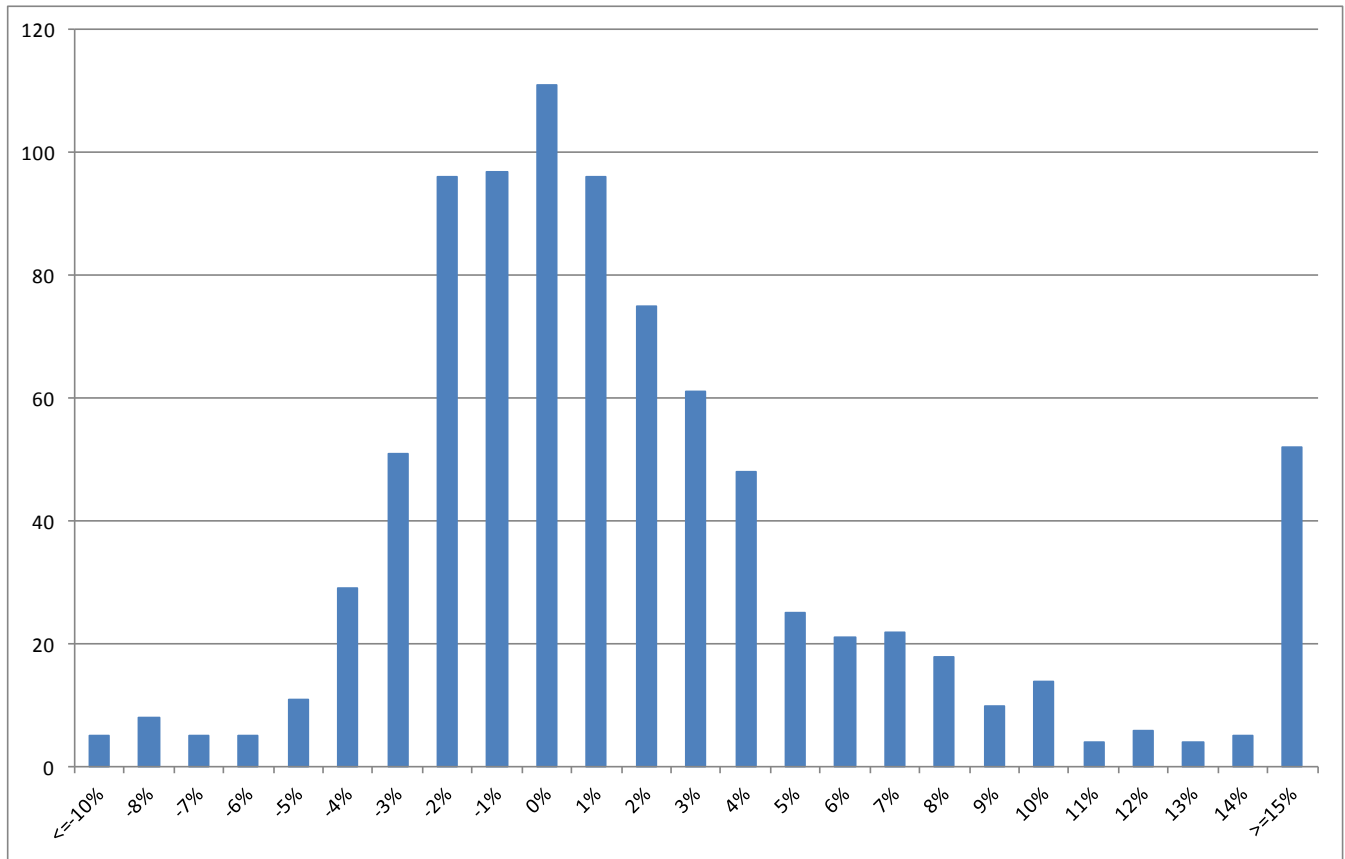


Distribution of Measures Active to Retiree Ratio



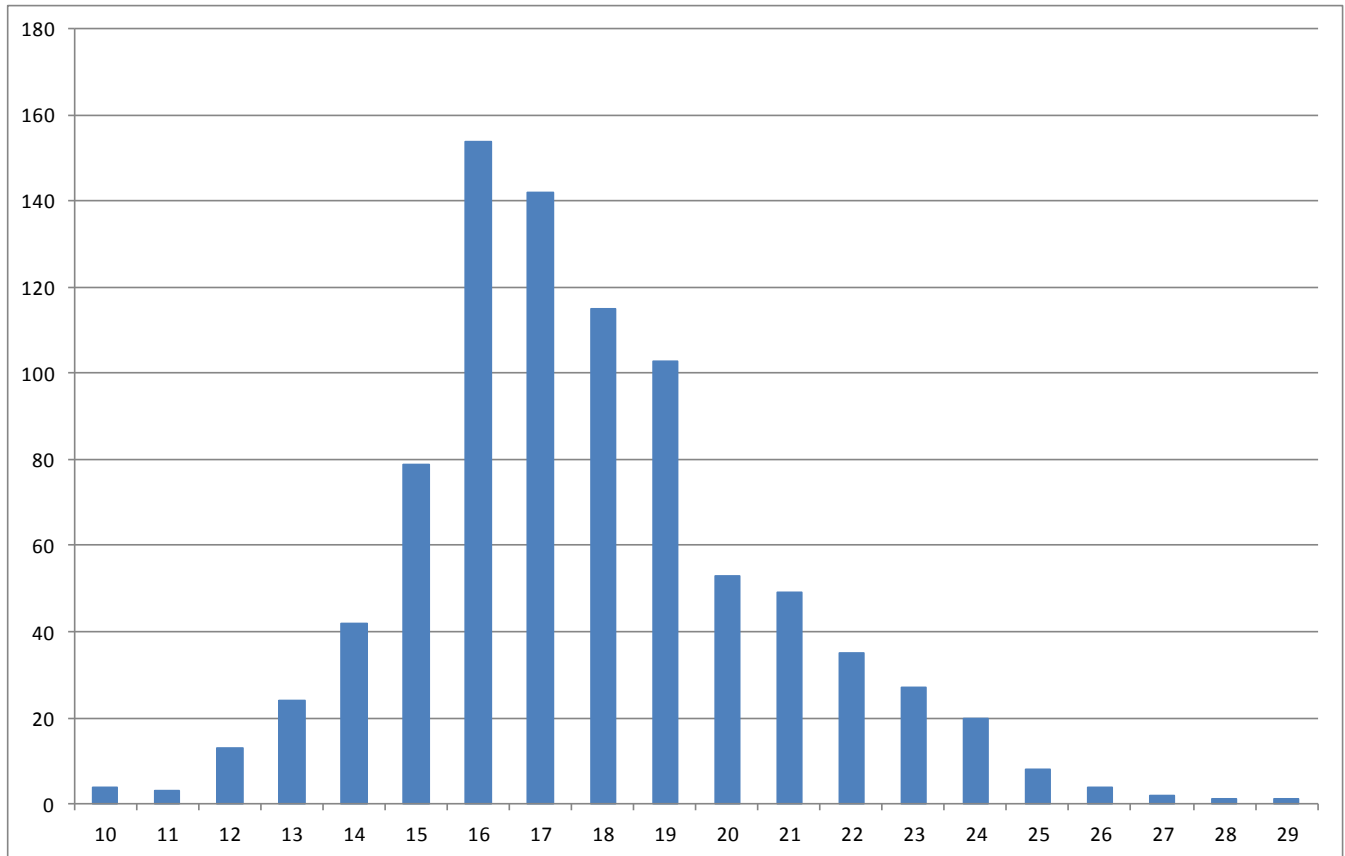
Distribution of Changes

Net Cash Flow as a Percentage of Market Value of Assets



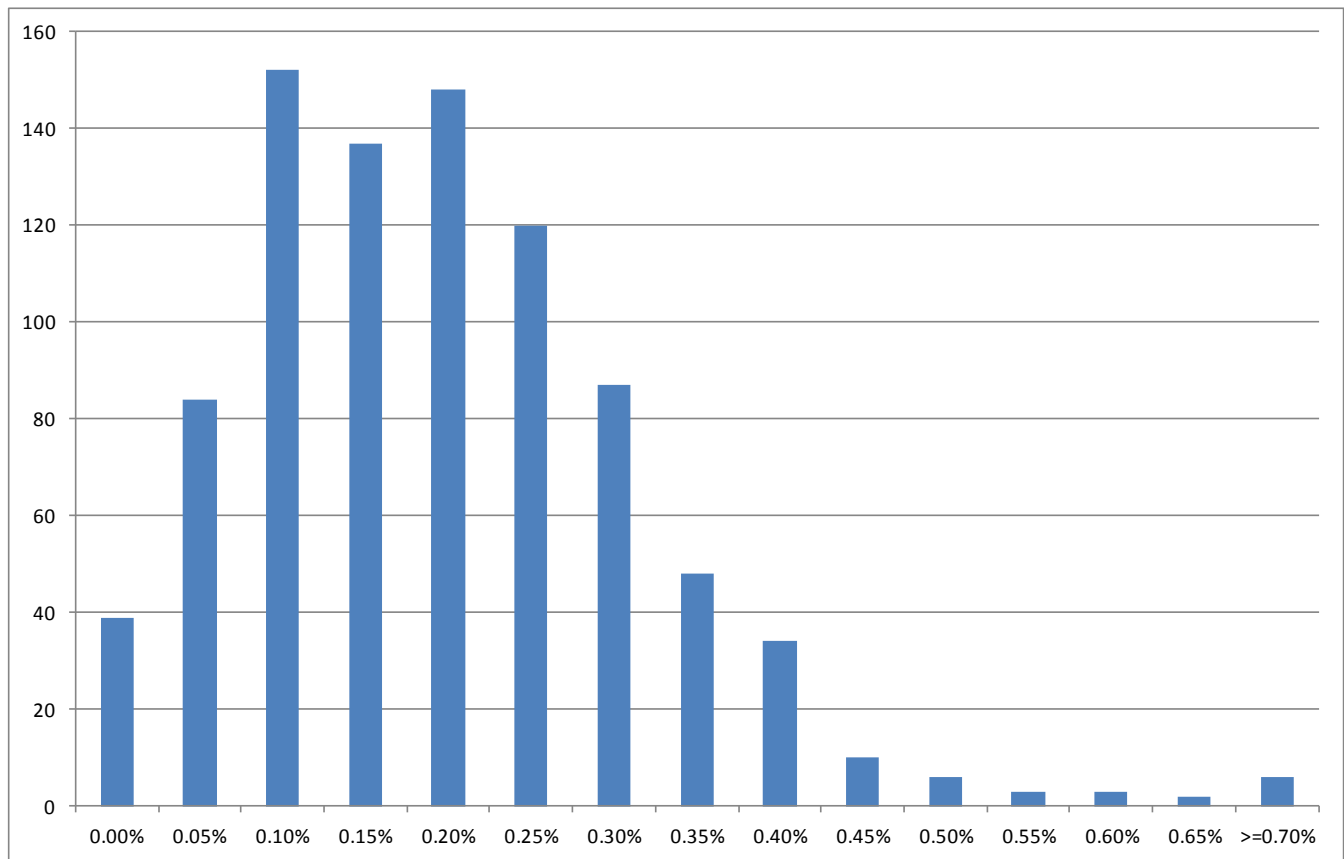
Distribution of Measures

Duration of Liabilities



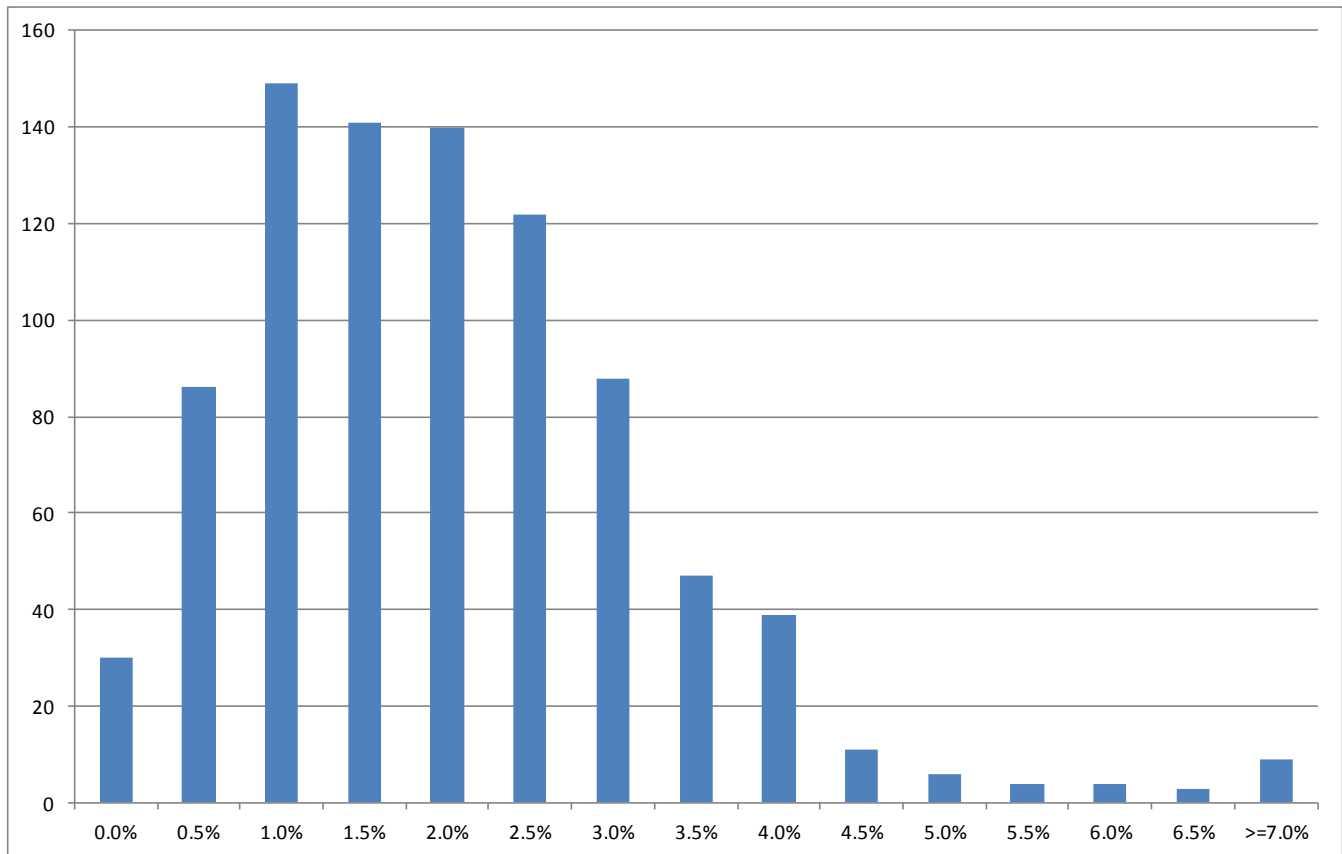
Distribution of Changes

Average Change in Contribution Rate with 10% Decline in Assets (Smoothed)



Distribution of Changes

Average Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)



Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
4	Abernathy	1.7	2.0	2.3	-4.1%	16.4	0.13%	1.29%
6	Abilene	5.1	5.9	1.2	-3.3%	15.1	0.32%	3.24%
7	Addison	5.9	6.6	1.3	-3.4%	16.3	0.38%	3.78%
8	Agua Dulce	0.2	0.6	NA	76.0%	18.1	0.02%	0.21%
10	Alamo	1.9	2.2	3.6	1.5%	20.5	0.12%	1.16%
12	Alamo Heights	3.6	5.0	1.2	0.7%	17.8	0.23%	2.30%
14	Alba	1.5	1.6	5.0	5.8%	15.5	0.18%	1.80%
16	Albany	1.4	1.7	2.3	2.0%	13.6	0.10%	0.97%
17	Aledo	1.4	1.5	1.6	3.4%	19.0	0.10%	1.04%
18	Alice	4.2	4.4	1.3	-2.9%	16.0	0.25%	2.54%
19	Allen	3.5	4.4	3.4	3.2%	20.0	0.22%	2.24%
20	Alpine	2.5	2.2	2.5	-2.1%	16.1	0.15%	1.48%
22	Alto	2.2	2.4	1.6	-0.3%	23.4	0.18%	1.77%
23	Alton	1.6	1.8	4.9	7.1%	22.8	0.10%	1.05%
24	Alvarado	1.1	1.3	5.3	4.8%	21.9	0.08%	0.76%
26	Alvin	4.9	6.1	1.6	0.5%	17.5	0.31%	3.10%
28	Alvord	1.5	1.7	2.3	3.5%	20.1	0.14%	1.41%
30	Amarillo	4.6	5.5	1.6	-2.8%	15.4	0.29%	2.87%
32	Amherst	2.9	1.4	1.5	-1.2%	17.6	0.00%	0.00%
34	Anahuac	2.1	2.4	2.2	0.6%	19.5	0.22%	2.18%
36	Andrews	4.8	6.0	1.9	-3.2%	17.0	0.31%	3.07%
38	Angleton	3.7	4.5	2.1	-0.2%	17.1	0.23%	2.27%
40	Anna	1.5	1.8	7.6	11.2%	24.0	0.09%	0.92%
41	Annetta	0.5	0.5	NA	32.0%	19.4	0.09%	0.88%
44	Anson	1.6	1.6	3.6	-0.6%	15.8	0.10%	1.00%
45	Anthony	1.0	1.3	4.4	1.4%	19.0	0.06%	0.62%
48	Aransas Pass	2.7	3.3	2.1	0.2%	19.0	0.17%	1.68%
50	Archer City	1.1	1.3	3.6	6.2%	15.7	0.07%	0.73%
49	Arcola	0.2	0.4	NA	32.7%	19.5	0.02%	0.16%
51	Argyle	2.6	3.1	1.6	3.1%	19.5	0.17%	1.71%
52	Arlington	5.8	7.0	1.4	-1.4%	17.1	0.36%	3.64%
54	Arp	2.4	2.3	1.8	-7.8%	16.3	0.14%	1.55%
60	Aspermont	1.9	1.6	3.0	-0.9%	15.5	0.00%	0.05%
62	Athens	4.1	5.3	1.5	0.6%	17.5	0.25%	2.45%
64	Atlanta	2.4	2.5	2.2	0.3%	15.9	0.15%	1.55%
66	Aubrey	1.2	1.3	5.7	8.8%	24.0	0.08%	0.79%
74	Avinger	1.8	1.8	NA	4.9%	15.8	0.12%	1.37%
75	Azle	3.0	3.8	1.7	2.5%	19.3	0.20%	1.95%
77	Baird	1.5	1.5	2.2	-2.4%	16.7	0.10%	1.08%
78	Balch Springs	2.9	3.9	2.0	4.6%	20.8	0.19%	1.85%
79	Balcones Heights	4.9	5.1	0.9	0.0%	15.9	0.31%	3.09%
80	Ballinger	2.5	2.7	2.2	-3.4%	14.9	0.15%	1.55%
82	Balmorhea	1.4	0.9	NA	3.7%	20.6	0.00%	0.00%
83	Bandera	2.7	2.8	1.8	2.0%	17.9	0.19%	1.96%
84	Bangs	4.0	4.5	1.2	-0.5%	15.4	0.31%	3.12%
90	Bartlett	2.5	2.4	1.3	1.6%	20.7	0.15%	1.60%
91	Bartonville	2.0	3.0	1.2	4.7%	18.5	0.20%	2.02%
92	Bastrop	2.2	2.8	2.4	4.2%	19.0	0.15%	1.46%
94	Bay City	4.0	4.7	1.4	-2.4%	16.0	0.26%	2.56%
93	Bayou Vista	1.2	1.2	1.6	1.6%	21.0	0.08%	0.88%
96	Baytown	4.5	5.8	1.7	0.4%	18.3	0.29%	2.89%
98	Beaumont	6.7	8.4	1.1	-1.6%	15.7	0.41%	4.14%
100	Bedford	1.1	1.6	5.0	12.2%	21.1	0.07%	0.69%
101	Bee Cave	1.9	2.1	4.9	8.1%	21.6	0.12%	1.19%
102	Beeville	3.0	2.6	1.3	-3.9%	16.2	0.19%	1.89%
106	Bellaire	6.1	7.7	1.2	-1.4%	16.1	0.39%	3.87%
109	Bellmead	3.6	3.8	2.2	0.0%	18.4	0.22%	2.23%
110	Bells	0.9	0.7	2.5	-4.3%	20.5	0.02%	0.56%
112	Bellville	3.8	5.2	1.3	-1.3%	16.1	0.23%	2.34%
114	Belton	2.4	2.8	2.0	0.0%	19.1	0.15%	1.51%
118	Benbrook	5.3	6.4	1.6	0.2%	18.2	0.33%	3.25%
121	Berryville	2.8	2.9	0.7	-3.6%	11.8	0.17%	3.85%
123	Bertram	1.2	1.3	2.2	1.6%	17.9	0.09%	0.93%
124	Big Lake	3.8	5.6	2.6	2.0%	17.8	0.24%	2.41%
126	Big Sandy	2.1	2.3	2.5	-5.8%	13.5	0.19%	1.86%
128	Big Spring	4.8	6.2	1.2	-1.4%	16.2	0.32%	3.17%
132	Bishop	3.3	3.6	1.5	-1.6%	15.6	0.20%	2.03%
134	Blanco	0.8	0.9	2.6	0.7%	21.1	0.05%	0.52%
140	Blooming Grove	2.3	2.9	2.5	2.1%	18.7	0.28%	2.81%
142	Blossom	4.1	4.1	1.0	-1.3%	15.7	0.26%	3.75%
143	Blue Mound	0.7	0.8	3.8	11.4%	22.5	0.04%	0.42%
144	Blue Ridge	0.8	0.6	5.0	9.5%	23.1	0.05%	0.51%
148	Boerne	3.2	4.6	3.0	4.8%	19.1	0.20%	2.04%
150	Bogata	1.0	0.8	3.3	2.0%	20.0	0.06%	0.65%
152	Bonham	3.2	3.4	2.0	-1.5%	16.8	0.19%	1.95%
154	Booker	1.9	2.0	5.0	3.3%	20.1	0.17%	1.74%
156	Borger	4.3	5.3	2.0	0.1%	17.6	0.27%	2.74%
158	Bovina	1.1	1.0	2.2	-3.8%	18.5	0.07%	0.68%
160	Bowie	4.1	4.7	1.2	-1.6%	17.4	0.26%	2.57%
162	Boyd	1.4	1.4	2.3	3.3%	20.5	0.09%	0.98%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
166	Brady	2.2	2.6	1.8	3.5%	18.1	0.14%	1.40%
170	Brazoria	3.8	4.0	1.8	0.8%	16.5	0.24%	2.41%
172	Breckenridge	3.1	3.7	1.4	-3.3%	15.4	0.21%	2.06%
174	Bremond	2.3	2.9	6.0	9.4%	18.2	0.27%	2.69%
176	Brenham	3.7	4.4	1.5	-1.7%	16.1	0.23%	2.29%
177	Bridge City	4.9	6.1	1.2	-0.9%	16.5	0.31%	3.09%
178	Bridgeport	3.6	4.6	1.3	0.0%	19.7	0.23%	2.32%
180	Bronte	2.6	3.5	3.0	3.5%	13.0	0.42%	4.24%
182	Brookshire	2.8	3.3	4.0	1.3%	17.6	0.18%	1.85%
184	Brownfield	4.9	4.9	2.0	-0.5%	15.4	0.29%	2.96%
186	Brownsboro	0.3	1.1	9.0	51.0%	15.7	0.03%	0.34%
10188	Brownsville	5.2	6.4	2.0	0.2%	18.4	0.32%	3.23%
20188	Brownsville PUB	4.9	6.2	2.2	2.0%	17.8	0.31%	3.05%
10190	Brownwood	4.4	5.4	1.6	-1.3%	16.7	0.27%	2.75%
30190	Brownwood Health Dept.	2.9	3.4	0.9	-1.4%	17.4	0.24%	2.42%
20190	Brownwood Public Library	2.0	2.0	3.3	0.1%	15.4	0.12%	1.34%
195	Bruceville-Eddy	1.8	1.9	2.4	1.7%	20.9	0.11%	1.24%
192	Bryan	4.7	5.9	1.4	-0.1%	17.8	0.30%	3.01%
193	Bryson	6.3	5.0	3.0	-4.1%	14.1	0.00%	0.00%
194	Buda	1.5	2.0	7.2	12.1%	22.5	0.10%	0.99%
196	Buffalo	2.4	2.6	3.4	1.0%	12.9	0.17%	1.71%
198	Bullard	1.3	1.7	9.0	7.8%	20.3	0.08%	0.85%
203	Bulverde	1.7	2.0	3.0	7.6%	21.4	0.10%	1.03%
199	Bunker Hill Village	4.7	5.1	1.6	-0.5%	14.2	0.49%	4.90%
200	Burkburnett	4.1	5.0	1.4	-2.6%	15.0	0.26%	2.56%
202	Burleson	3.5	4.6	2.5	2.6%	19.4	0.22%	2.23%
204	Burnet	3.4	4.2	1.8	0.8%	19.0	0.22%	2.18%
206	Burton	0.5	0.8	NA	27.9%	21.0	0.10%	0.99%
207	Cactus	0.8	0.9	4.3	9.5%	23.5	0.05%	0.53%
208	Caddo Mills	0.9	1.0	4.0	6.3%	20.2	0.07%	0.70%
210	Caldwell	4.4	4.9	1.9	-0.7%	14.3	0.29%	2.86%
212	Calvert	0.8	0.7	3.7	2.6%	17.0	0.05%	0.51%
214	Cameron	2.5	3.3	1.2	-1.6%	15.7	0.17%	1.71%
216	Campbell	0.8	2.7	NA	54.3%	15.1	0.14%	1.37%
220	Canadian	3.4	4.8	2.0	1.1%	18.4	0.22%	2.19%
221	Caney City	0.2	0.2	NA	34.4%	26.7	0.02%	0.14%
222	Canton	3.2	4.0	1.9	2.1%	17.1	0.20%	1.97%
224	Canyon	5.0	5.8	2.4	1.2%	17.2	0.31%	3.10%
227	Carmine	2.8	2.8	1.0	0.9%	19.5	0.18%	3.44%
228	Carrizo Springs	3.3	3.6	1.7	-4.6%	14.3	0.21%	2.09%
230	Carrollton	6.8	7.6	1.2	-2.0%	16.3	0.44%	4.36%
232	Carthage	6.4	8.0	1.3	-2.4%	15.3	0.40%	3.98%
231	Castle Hills	4.4	5.3	1.2	-2.0%	17.5	0.28%	2.75%
234	Castroville	2.7	3.2	1.2	-1.5%	16.4	0.17%	1.72%
238	Cedar Hill	4.0	4.9	1.9	1.4%	19.0	0.25%	2.53%
239	Cedar Park	2.4	3.3	3.6	6.2%	21.8	0.15%	1.53%
240	Celeste	0.7	1.4	1.0	8.4%	12.9	0.12%	1.19%
242	Celina	0.9	0.9	12.3	13.0%	24.3	0.05%	0.57%
244	Center	3.7	4.3	1.6	1.1%	19.1	0.23%	2.30%
246	Centerville	3.6	4.6	5.0	5.7%	13.4	0.44%	4.43%
247	Chandler	0.7	1.0	3.3	6.8%	16.3	0.04%	0.43%
248	Charlotte	1.6	1.6	8.0	-2.3%	18.4	0.11%	1.24%
249	Chester	15.3	15.3	NA	0.8%	9.6	1.10%	18.02%
245	Chico	1.6	1.9	1.8	1.0%	12.0	0.16%	1.60%
250	Childress	3.4	4.7	1.5	-1.4%	17.1	0.22%	2.16%
251	Chillicothe	0.4	0.9	NA	45.1%	17.5	0.04%	0.45%
253	Chireno	4.9	7.0	1.5	-1.3%	16.8	0.56%	5.64%
254	Christine	1.5	1.2	0.5	-0.4%	23.4	0.00%	0.00%
255	Cibolo	1.8	2.2	3.7	8.7%	22.4	0.11%	1.13%
256	Cisco	2.6	2.8	2.2	0.3%	17.2	0.17%	1.69%
258	Clarendon	1.8	1.6	2.3	1.5%	13.1	0.12%	1.13%
259	Clarksville	4.0	3.3	1.4	-2.0%	17.5	0.24%	2.43%
260	Clarksville City	6.4	6.4	0.6	-6.5%	14.1	0.41%	4.67%
263	Clear Lake Shores	1.7	2.1	4.5	8.0%	22.1	0.12%	1.21%
264	Cleburne	4.9	6.4	1.3	-2.0%	16.0	0.30%	2.98%
266	Cleveland	2.9	3.6	1.8	0.3%	17.8	0.19%	1.93%
268	Clifton	2.1	2.2	1.7	0.1%	15.1	0.13%	1.34%
271	Clute	4.3	4.7	1.6	-0.5%	17.7	0.28%	2.82%
272	Clyde	2.8	3.5	2.1	2.9%	19.3	0.18%	1.79%
274	Coahoma	3.1	3.3	1.3	-0.8%	15.1	0.20%	3.73%
276	Cockrell Hill	3.3	3.2	2.6	2.5%	20.2	0.22%	2.12%
278	Coleman	4.6	5.7	1.3	-1.3%	15.7	0.31%	3.09%
280	College Station	4.3	5.3	1.9	-0.3%	18.4	0.27%	2.74%
281	Colleyville	4.2	4.5	1.3	-0.8%	17.5	0.28%	2.76%
282	Collinsville	1.1	1.2	2.0	5.9%	18.4	0.12%	1.19%
283	Colmesneil	1.6	1.9	4.0	2.1%	19.7	0.21%	2.06%
284	Colorado City	3.7	3.9	1.6	-0.6%	15.6	0.23%	2.33%
286	Columbus	4.1	4.9	1.4	1.2%	16.6	0.26%	2.64%
288	Comanche	2.8	3.2	1.2	-2.6%	14.0	0.18%	1.81%
289	Combes	0.2	1.0	NA	67.3%	19.5	0.01%	0.12%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
290	Commerce	3.7	4.2	1.1	-1.2%	18.4	0.23%	2.27%
294	Conroe	4.1	5.3	2.3	0.3%	18.8	0.26%	2.56%
295	Converse	3.0	3.9	2.6	2.2%	20.3	0.19%	1.93%
298	Cooper	3.2	3.6	1.6	-2.0%	13.2	0.26%	2.55%
299	Coppell	4.8	5.8	1.6	0.9%	18.8	0.30%	3.00%
297	Copper Canyon	2.0	2.3	0.8	6.9%	12.3	0.30%	3.03%
300	Copperas Cove	4.5	5.5	1.1	-0.9%	17.6	0.28%	2.85%
301	Corinth	3.4	4.3	1.7	3.0%	20.8	0.22%	2.17%
302	Corpus Christi	5.3	7.6	1.1	-1.4%	15.6	0.36%	3.61%
304	Corrigan	1.4	1.5	1.9	0.2%	16.0	0.10%	0.94%
306	Corsicana	4.8	5.9	1.1	-1.0%	16.0	0.34%	3.43%
308	Cotulla	1.3	1.7	2.4	2.7%	16.7	0.09%	0.86%
310	Crandall	2.5	2.6	2.5	4.9%	21.1	0.15%	1.56%
312	Crane	4.5	4.5	1.5	-2.3%	16.2	0.30%	2.97%
314	Crawford	1.0	0.9	5.0	2.9%	23.5	0.05%	0.71%
316	Crockett	4.4	4.9	0.9	-3.8%	15.4	0.28%	2.78%
318	Crosbyton	4.4	4.6	0.8	-5.5%	12.4	0.28%	3.78%
320	Cross Plains	3.4	3.9	2.7	1.3%	16.1	0.32%	3.23%
321	Cross Roads	0.4	0.5	11.0	31.9%	27.1	0.03%	0.31%
322	Crowell	0.1	1.7	NA	100.0%	23.8	0.00%	0.03%
323	Crowley	2.7	3.3	2.2	2.6%	20.7	0.17%	1.74%
324	Crystal City	2.9	2.5	2.3	-3.4%	14.8	0.19%	1.86%
326	Cuero	2.5	3.2	1.6	0.9%	18.2	0.16%	1.58%
328	Cumby	0.6	0.7	3.3	6.0%	19.4	0.06%	0.59%
332	Daingerfield	3.4	3.6	1.2	-2.5%	15.2	0.21%	2.16%
334	Daisetta	1.4	1.3	7.0	3.1%	14.7	0.10%	0.96%
336	Dalhart	2.9	3.1	2.2	-1.4%	16.4	0.18%	1.80%
339	Dalworthington Gardens	3.9	5.5	2.2	0.6%	19.8	0.23%	2.33%
340	Danbury	1.1	1.3	9.0	2.5%	17.7	0.10%	1.02%
341	Darrouzett	2.7	2.9	3.0	-7.6%	14.3	0.36%	3.57%
344	Dayton	1.6	1.9	2.1	3.0%	18.4	0.11%	1.05%
352	De Leon	1.1	1.1	1.8	-0.4%	15.3	0.11%	1.06%
10366	DeSoto	4.8	5.4	1.4	-1.6%	17.1	0.30%	3.00%
346	Decatur	3.6	4.5	2.6	3.3%	17.9	0.22%	2.24%
348	Deer Park	6.0	6.9	1.5	-1.2%	17.1	0.37%	3.72%
350	Dekalb	1.6	1.5	1.3	2.7%	16.5	0.10%	1.05%
354	Del Rio	1.3	1.9	4.1	4.5%	18.2	0.08%	0.78%
353	Dell City	3.8	4.3	2.0	-3.5%	14.2	0.56%	5.62%
356	Denison	5.3	6.0	1.4	-2.2%	15.4	0.32%	3.24%
358	Denton	4.5	5.6	2.0	0.8%	17.9	0.28%	2.82%
360	Denver City	6.8	7.5	1.1	-3.1%	14.3	0.45%	4.48%
362	Deport	0.5	0.6	3.0	-1.2%	16.4	0.07%	0.67%
370	Devine	1.8	3.5	3.0	8.5%	18.9	0.12%	1.17%
371	Diboll	5.5	6.6	1.0	-2.2%	17.6	0.37%	3.67%
372	Dickens	0.9	0.8	NA	9.9%	23.2	0.06%	0.57%
373	Dickinson	3.0	3.5	2.6	2.2%	17.3	0.19%	1.93%
374	Dilley	1.4	2.0	1.7	0.6%	18.3	0.09%	0.88%
376	Dimmitt	4.7	4.4	1.3	-2.7%	15.6	0.30%	2.96%
382	Donna	1.3	1.9	4.6	6.6%	20.9	0.08%	0.81%
379	Double Oak	1.1	1.2	3.7	9.8%	20.1	0.09%	0.92%
383	Dripping Springs	0.6	0.7	24.0	19.1%	24.1	0.03%	0.34%
385	Driscoll	0.3	0.4	NA	19.1%	21.8	0.04%	0.36%
384	Dublin	2.3	3.0	2.3	4.3%	19.8	0.14%	1.45%
386	Dumas	3.0	3.3	1.7	-1.2%	17.4	0.19%	1.86%
388	Duncanville	6.0	6.6	1.1	-4.1%	14.6	0.37%	3.74%
394	Eagle Lake	3.7	4.2	1.4	-1.5%	15.9	0.24%	2.43%
396	Eagle Pass	3.8	4.3	2.3	-1.0%	18.0	0.24%	2.39%
397	Early	2.1	2.1	2.7	-0.5%	18.1	0.14%	1.36%
399	Earth	1.1	1.5	1.7	3.5%	13.2	0.13%	1.32%
393	East Bernard	0.4	0.5	5.0	23.4%	21.2	0.05%	0.49%
401	East Mountain	10.0	10.4	0.5	-3.9%	18.4	0.54%	15.02%
395	East Tawakoni	2.3	2.3	2.3	-4.3%	16.3	0.15%	1.89%
398	Eastland	2.4	2.8	1.9	0.9%	18.0	0.15%	1.49%
402	Ector	1.3	1.3	4.0	2.5%	14.2	0.08%	1.30%
406	Eden	4.6	4.8	0.7	-3.3%	14.6	0.31%	4.34%
408	Edgewood	0.9	1.1	1.8	5.1%	17.1	0.08%	0.82%
410	Edinburg	3.1	4.2	3.1	2.3%	19.8	0.19%	1.93%
412	Edna	4.6	5.5	1.4	-0.1%	16.5	0.28%	2.84%
414	El Campo	4.3	5.2	1.5	-0.9%	16.4	0.27%	2.66%
416	Eldorado	2.9	3.5	3.0	-2.3%	16.0	0.18%	1.81%
418	Electra	1.9	2.1	1.0	-3.0%	13.6	0.12%	1.23%
420	Elgin	2.6	3.4	2.5	3.9%	18.7	0.16%	1.63%
422	Elkhart	2.7	3.1	1.8	-0.6%	14.4	0.28%	2.77%
427	Elmendorf	0.3	0.4	16.0	16.8%	23.7	0.02%	0.25%
432	Emory	1.6	1.7	2.0	0.3%	17.6	0.10%	0.98%
436	Ennis	5.1	6.1	1.4	-0.7%	17.9	0.32%	3.22%
439	Eules	6.3	7.5	1.5	-0.3%	17.4	0.40%	3.97%
440	Eustace	2.1	2.6	0.9	0.3%	17.4	0.24%	2.41%
441	Everman	2.7	3.2	2.2	0.1%	17.0	0.18%	1.76%
443	Fair Oaks Ranch	2.0	2.4	5.2	7.9%	22.5	0.13%	1.28%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
442	Fairfield	3.8	3.9	1.2	-2.1%	15.4	0.23%	2.32%
445	Fairview	1.5	1.9	11.8	10.4%	22.5	0.10%	0.97%
20444	Falfurrias	1.4	1.6	1.9	-1.5%	15.8	0.09%	0.85%
446	Falls City	1.6	2.0	NA	10.0%	17.2	0.23%	2.28%
448	Farmers Branch	7.7	9.4	1.2	-1.9%	16.5	0.49%	4.91%
450	Farmersville	2.4	2.8	1.5	-1.8%	17.4	0.16%	1.58%
451	Farwell	3.3	4.1	2.3	-0.3%	17.2	0.36%	3.59%
452	Fate	1.0	1.1	4.6	14.6%	24.1	0.07%	0.66%
454	Fayetteville	0.9	1.0	4.0	3.7%	15.8	0.14%	1.45%
456	Ferris	2.1	2.3	1.4	-1.4%	18.6	0.13%	1.30%
458	Flatonia	4.6	5.4	1.4	0.9%	17.6	0.30%	2.96%
460	Florence	1.2	1.2	11.0	4.0%	21.6	0.07%	0.79%
20462	Floresville	1.8	2.4	2.1	3.6%	18.9	0.12%	1.23%
463	Flower Mound	3.1	3.7	2.7	2.6%	19.3	0.20%	1.97%
464	Floydada	4.7	5.5	1.1	-1.9%	15.9	0.30%	2.96%
468	Forest Hill	3.8	4.5	1.2	1.2%	19.7	0.24%	2.41%
470	Forney	2.0	2.5	6.1	7.4%	24.1	0.13%	1.32%
472	Fort Stockton	2.6	3.3	1.9	-1.4%	17.4	0.16%	1.59%
476	Franklin	1.1	1.1	2.4	0.2%	20.4	0.08%	0.76%
478	Frankston	0.8	0.9	3.3	4.6%	19.0	0.05%	0.63%
480	Fredericksburg	3.8	4.7	1.6	-0.4%	16.6	0.25%	2.50%
482	Freeport	3.5	4.6	1.6	0.1%	19.2	0.22%	2.15%
481	Freer	1.6	2.2	2.6	3.7%	16.5	0.10%	1.00%
483	Friendswood	4.4	5.4	1.7	-0.2%	17.7	0.28%	2.80%
484	Friona	5.2	5.8	1.6	-1.2%	16.2	0.35%	3.47%
486	Frisco	2.4	3.1	6.4	6.8%	23.0	0.15%	1.54%
487	Fritch	2.8	2.0	2.1	0.6%	21.1	0.17%	1.71%
488	Frost	2.5	3.0	1.0	-4.5%	10.1	0.37%	3.67%
491	Fulshear	0.5	0.6	23.0	24.9%	24.2	0.03%	0.31%
493	Fulton	1.7	2.5	1.3	5.5%	15.2	0.21%	2.12%
492	Gainesville	3.2	4.3	1.5	-1.7%	17.5	0.22%	2.18%
494	Galena Park	4.3	5.0	1.4	-2.0%	17.7	0.30%	2.98%
498	Ganado	6.6	7.2	1.0	0.9%	14.9	0.60%	6.04%
499	Garden Ridge	1.6	1.9	1.7	5.6%	18.6	0.10%	1.00%
500	Garland	5.9	6.6	1.4	-1.9%	15.4	0.37%	3.75%
502	Garrison	4.7	5.4	2.0	0.4%	16.4	0.52%	5.17%
503	Gary	1.7	2.3	2.0	2.4%	19.1	0.24%	2.41%
504	Gatesville	4.3	5.4	1.5	-0.3%	17.3	0.27%	2.67%
505	George West	1.1	1.4	4.6	0.6%	17.8	0.07%	0.69%
506	Georgetown	2.7	3.4	3.5	4.1%	20.6	0.17%	1.70%
510	Giddings	4.1	5.4	1.8	1.8%	16.0	0.26%	2.61%
512	Gilmer	3.8	4.7	1.3	0.8%	17.6	0.23%	2.32%
514	Gladewater	2.6	3.0	1.4	-1.7%	19.1	0.16%	1.59%
516	Glen Rose	2.7	3.4	1.3	2.0%	18.1	0.17%	1.66%
517	Glenn Heights	2.1	1.9	1.5	-0.4%	18.8	0.13%	1.32%
518	Godley	0.7	0.8	1.8	7.0%	21.2	0.06%	0.64%
519	Goldsmith	1.5	1.6	NA	6.3%	14.0	0.21%	2.11%
520	Goldthwaite	7.3	9.3	1.2	-3.4%	14.2	0.61%	6.11%
522	Goliad	2.9	2.8	1.4	-2.4%	16.4	0.20%	2.05%
524	Gonzales	3.2	4.0	1.7	-2.3%	17.1	0.19%	1.94%
527	Gordon	0.1	0.3	NA	100.0%	25.1	0.00%	0.04%
530	Gorman	0.3	1.0	NA	51.8%	19.2	0.03%	0.34%
532	Graford	0.8	0.9	NA	9.9%	16.9	0.12%	1.20%
10534	Graham	3.6	4.3	1.3	-1.1%	16.2	0.25%	2.54%
536	Granbury	3.9	5.0	1.5	0.2%	17.9	0.25%	2.47%
540	Grand Prairie	5.1	6.3	1.7	-0.7%	17.9	0.32%	3.25%
542	Grand Saline	3.1	3.3	1.5	-5.1%	16.7	0.21%	2.11%
544	Grandview	1.9	1.9	1.6	1.3%	18.4	0.12%	1.23%
546	Granger	1.2	1.0	1.1	-3.1%	14.9	0.09%	0.89%
547	Granite Shoals	0.9	1.0	3.2	5.1%	20.1	0.06%	0.59%
548	Grapeland	2.6	2.8	0.7	-2.8%	16.0	0.26%	2.64%
550	Grapevine	5.2	6.5	1.5	0.4%	17.4	0.33%	3.26%
552	Greenville	5.6	6.4	1.1	-2.5%	14.7	0.35%	3.51%
551	Gregory	1.3	1.0	6.0	3.0%	18.5	0.08%	0.79%
553	Grey Forest	4.3	5.4	1.7	0.2%	17.1	0.27%	2.70%
556	Groesbeck	1.2	1.4	2.0	-0.3%	16.6	0.07%	0.74%
558	Groom	1.4	1.4	1.3	-0.4%	14.9	0.09%	1.46%
559	Groves	6.1	6.7	1.1	-2.7%	14.9	0.37%	3.66%
560	Groveton	1.1	1.2	5.5	2.2%	15.5	0.06%	0.87%
562	Gruver	4.7	5.5	1.7	-1.2%	14.5	0.64%	6.42%
563	Gun Barrel City	2.0	2.0	1.8	1.7%	18.8	0.13%	1.28%
564	Gunter	0.8	0.6	2.3	7.6%	22.0	0.05%	0.50%
568	Hale Center	0.8	0.9	11.0	5.6%	18.3	0.07%	0.66%
570	Hallettsville	4.5	5.3	1.5	0.0%	16.5	0.28%	2.81%
572	Hallsville	0.6	0.8	5.0	3.0%	16.9	0.04%	0.38%
574	Haltom City	5.7	7.4	1.2	-0.7%	17.6	0.36%	3.59%
576	Hamilton	3.6	4.5	1.3	-1.0%	16.8	0.21%	2.11%
578	Hamlin	4.4	5.1	1.3	-4.0%	16.1	0.38%	3.79%
580	Happy	5.5	5.8	1.0	1.5%	15.2	0.68%	9.78%
581	Harker Heights	3.4	4.4	2.6	2.5%	19.5	0.21%	2.12%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
10582	Harlingen	8.8	9.8	0.5	-3.6%	13.4	1.03%	10.28%
20582	Harlingen Waterworks Sys	3.7	3.9	1.1	-4.1%	13.9	0.23%	2.31%
583	Hart	0.8	1.1	2.5	4.7%	22.5	0.11%	1.07%
586	Haskell	2.4	1.7	1.8	-3.2%	16.5	0.00%	0.00%
587	Haslet	1.9	2.0	4.2	7.2%	18.6	0.13%	1.29%
588	Hawkins	4.7	4.6	0.7	0.8%	14.6	0.34%	3.78%
585	Hays	2.9	2.9	0.3	-3.2%	13.0	0.33%	6.52%
590	Hearne	2.9	4.0	2.0	1.7%	17.8	0.19%	1.91%
591	Heath	2.6	3.0	2.3	4.1%	19.1	0.16%	1.63%
592	Hedley	6.5	6.4	1.0	-0.5%	11.3	0.44%	7.16%
595	Hedwig Village	2.4	2.8	1.8	-0.4%	15.0	0.16%	1.59%
593	Helotes	1.7	2.0	4.7	5.1%	20.6	0.10%	1.04%
594	Hemphill	2.5	3.1	2.0	2.4%	13.9	0.16%	1.61%
596	Hempstead	2.8	3.3	3.2	1.1%	15.5	0.18%	1.81%
598	Henderson	4.3	5.5	1.7	0.4%	19.5	0.27%	2.67%
600	Henrietta	3.4	4.4	1.3	0.8%	16.9	0.23%	2.29%
602	Hereford	3.6	4.4	2.0	-0.2%	17.2	0.23%	2.29%
605	Hewitt	3.3	4.4	2.8	2.3%	20.6	0.21%	2.06%
609	Hickory Creek	2.5	3.0	1.7	4.8%	23.6	0.17%	1.73%
606	Hico	2.4	2.6	1.6	-1.4%	18.3	0.19%	1.86%
607	Hidalgo	2.8	3.4	3.4	3.2%	19.7	0.18%	1.79%
608	Higgins	3.2	3.3	0.7	-14.6%	12.0	0.19%	4.01%
610	Highland Park	5.7	5.9	1.0	-3.3%	14.6	0.36%	3.61%
611	Highland Village	3.6	4.3	2.1	3.0%	19.3	0.23%	2.25%
613	Hill Country Village	2.3	2.4	3.8	2.3%	18.9	0.15%	1.68%
612	Hillsboro	3.6	4.5	1.6	0.9%	18.0	0.23%	2.27%
619	Hilshire Village	0.7	0.9	2.0	29.4%	17.1	0.13%	1.33%
614	Hitchcock	1.9	1.9	2.1	0.3%	15.7	0.12%	1.22%
615	Holland	2.2	2.4	2.7	-2.1%	15.5	0.21%	2.07%
616	Holliday	1.8	1.9	9.0	4.3%	18.1	0.12%	1.56%
617	Hollywood Park	2.5	3.1	2.0	2.7%	19.5	0.16%	1.58%
618	Hondo	3.1	3.5	1.6	-0.2%	17.9	0.19%	1.95%
620	Honey Grove	3.7	4.0	2.0	0.0%	16.2	0.33%	3.31%
622	Hooks	2.2	3.0	3.5	2.2%	18.5	0.16%	1.64%
623	Horizon City	0.1	0.6	NA	100.0%	25.8	0.01%	0.07%
626	Howe	3.0	3.2	1.8	1.7%	16.4	0.21%	2.30%
627	Hubbard	1.2	1.2	4.0	3.4%	18.1	0.08%	0.83%
628	Hudson	1.2	1.3	5.0	4.2%	18.7	0.08%	0.82%
629	Hudson Oaks	2.4	2.9	2.2	7.3%	24.1	0.16%	1.56%
630	Hughes Springs	7.4	7.6	2.0	0.9%	14.4	0.50%	5.88%
632	Humble	4.4	5.2	1.9	0.0%	18.9	0.28%	2.77%
633	Hunters Creek Village	1.8	2.9	0.9	3.4%	17.2	0.19%	1.92%
634	Huntington	3.9	4.8	1.7	0.2%	17.4	0.25%	2.48%
636	Huntsville	5.0	6.8	1.3	-1.1%	16.2	0.33%	3.26%
637	Hurst	5.6	6.3	1.5	-2.9%	16.0	0.34%	3.43%
638	Hutchins	1.9	2.2	2.6	4.0%	22.0	0.13%	1.28%
640	Hutto	1.7	1.8	6.0	9.9%	23.7	0.11%	1.07%
641	Huxley	2.6	2.4	2.5	-3.2%	14.7	0.18%	1.76%
642	Idalou	1.0	1.1	NA	1.3%	24.7	0.07%	0.70%
643	Ingleside	3.0	3.5	1.8	6.1%	15.9	0.19%	1.87%
646	Ingram	1.5	1.7	0.9	-0.4%	17.2	0.12%	1.20%
647	Iowa Colony	1.1	1.6	NA	25.9%	12.7	0.10%	0.99%
644	Iowa Park	4.1	5.0	1.5	0.1%	17.0	0.26%	2.60%
645	Iraan	4.1	5.6	1.2	-1.0%	13.4	0.48%	4.79%
648	Irving	6.2	7.3	1.4	-1.7%	16.0	0.40%	4.04%
650	Italy	0.6	0.9	2.0	0.4%	16.9	0.04%	0.40%
652	Itasca	2.8	2.8	3.2	2.5%	18.6	0.17%	1.78%
654	Jacinto City	3.0	3.6	1.9	0.2%	15.6	0.19%	1.91%
656	Jacksboro	3.1	4.1	1.9	0.3%	18.6	0.20%	2.01%
658	Jacksonville	4.1	4.8	1.2	-1.1%	17.6	0.27%	2.72%
660	Jasper	4.1	4.8	1.5	-1.6%	14.5	0.26%	2.56%
664	Jefferson	2.3	2.2	1.9	2.1%	14.2	0.17%	1.65%
665	Jersey Village	3.6	4.4	1.7	0.8%	18.2	0.23%	2.33%
666	Jewett	3.5	4.5	1.3	-10.7%	16.0	0.43%	4.33%
668	Joaquin	1.0	1.4	1.2	1.3%	14.7	0.10%	0.99%
670	Johnson City	2.1	2.7	1.9	2.5%	17.8	0.15%	1.53%
673	Jones Creek	1.5	1.9	1.6	1.0%	17.2	0.14%	1.40%
675	Jonestown	1.1	1.3	3.0	7.9%	19.4	0.07%	0.72%
677	Josephine	0.9	0.9	NA	11.9%	22.5	0.09%	0.86%
671	Joshua	2.0	2.0	5.1	2.5%	20.0	0.12%	1.22%
672	Jourdanton	1.8	2.1	2.1	-0.4%	17.1	0.11%	1.12%
674	Junction	3.7	4.6	1.4	-2.4%	15.6	0.25%	2.49%
676	Justin	1.1	1.3	3.2	8.9%	22.6	0.06%	0.64%
678	Karnes City	1.7	2.3	2.3	0.6%	19.4	0.11%	1.06%
680	Katy	3.1	3.6	3.5	3.5%	21.4	0.19%	1.92%
682	Kaufman	3.9	4.9	1.1	-2.5%	16.9	0.25%	2.52%
683	Keene	3.8	4.5	1.8	-0.1%	18.8	0.24%	2.41%
681	Keller	4.4	5.6	1.8	0.1%	19.0	0.28%	2.78%
685	Kemah	2.1	2.3	2.3	1.6%	18.5	0.15%	1.51%
684	Kemp	1.3	1.4	2.4	5.1%	19.3	0.09%	0.93%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
686	Kenedy	1.3	1.5	4.5	4.8%	18.6	0.08%	0.80%
688	Kennedale	3.5	4.2	1.8	2.7%	21.0	0.24%	2.37%
690	Kerens	0.4	1.1	11.0	23.4%	19.4	0.03%	0.32%
692	Kermit	4.0	5.3	1.9	0.9%	16.2	0.25%	2.53%
10694	Kerrville	4.1	4.8	1.2	-1.7%	17.2	0.26%	2.62%
20694	Kerrville PUB	6.3	7.2	1.4	-0.9%	16.7	0.40%	3.97%
10696	Kilgore	5.0	5.9	1.2	-1.4%	17.0	0.31%	3.12%
698	Killeen	3.7	4.5	1.8	-1.4%	16.2	0.22%	2.23%
700	Kingsville	4.9	5.5	1.5	-1.3%	17.0	0.31%	3.07%
701	Kirby	3.4	4.2	2.0	1.0%	20.1	0.21%	2.09%
702	Kirbyville	1.9	2.4	1.3	-1.0%	15.4	0.13%	1.30%
704	Knox City	1.9	1.8	1.6	-1.6%	14.7	0.12%	1.28%
706	Kosse	0.1	0.4	NA	79.3%	20.7	0.02%	0.17%
708	Kountze	0.8	0.9	6.3	3.0%	18.7	0.05%	0.55%
709	Kress	11.1	9.0	0.3	-5.7%	12.7	0.00%	0.00%
699	Krugerville	0.8	0.9	3.0	17.2%	21.0	0.08%	0.85%
707	Krum	1.0	1.1	5.3	9.4%	23.3	0.06%	0.64%
710	Kyle	1.8	2.2	8.0	8.9%	23.6	0.11%	1.11%
725	La Coste	1.2	1.2	2.7	3.9%	15.6	0.08%	0.81%
714	La Feria	2.8	3.8	1.8	-0.2%	16.8	0.17%	1.66%
716	La Grange	4.8	5.7	2.0	0.8%	15.6	0.30%	2.97%
723	La Grulla	1.4	1.2	3.0	-1.3%	22.5	0.09%	0.91%
732	La Joya	0.7	1.5	4.5	5.7%	17.3	0.04%	0.42%
721	La Marque	3.6	4.5	1.3	1.4%	19.6	0.24%	2.42%
728	La Porte	6.2	7.3	1.7	-0.7%	16.6	0.38%	3.83%
731	La Vernia	0.5	0.7	5.3	17.3%	20.5	0.04%	0.36%
711	Lacy-Lakeview	3.2	4.2	2.2	1.5%	20.7	0.20%	2.02%
712	Ladonia	2.5	1.8	0.7	-2.5%	14.2	0.15%	1.54%
713	Lago Vista	2.2	2.5	2.9	3.0%	17.4	0.15%	1.46%
705	Laguna Vista	1.1	1.0	NA	5.5%	19.0	0.06%	0.69%
717	Lake Dallas	4.3	5.0	0.8	-0.5%	17.3	0.27%	2.68%
718	Lake Jackson	5.1	5.8	1.7	-0.5%	16.7	0.32%	3.17%
719	Lake Worth	3.1	4.2	2.3	1.8%	20.3	0.20%	2.02%
727	Lakeport	1.9	1.4	6.0	0.7%	20.5	0.00%	0.26%
715	Lakeside	1.6	1.8	4.0	7.9%	18.4	0.11%	1.14%
729	Lakeside City	1.0	1.1	1.7	4.1%	16.2	0.12%	1.23%
720	Lakeway	2.5	3.2	1.9	5.8%	20.3	0.16%	1.58%
722	Lamesa	4.4	4.7	1.4	-4.4%	13.9	0.29%	2.93%
724	Lampasas	3.9	5.0	1.8	1.1%	19.2	0.25%	2.45%
726	Lancaster	4.0	5.1	1.3	-0.1%	18.6	0.25%	2.50%
730	Laredo	4.3	5.9	2.2	2.1%	18.2	0.27%	2.70%
733	Lavon	1.2	1.4	6.0	7.8%	19.3	0.08%	0.83%
736	League City	3.7	4.7	2.2	1.5%	18.9	0.23%	2.31%
737	Leander	1.7	2.1	5.4	9.9%	23.1	0.11%	1.06%
735	Lefors	0.5	0.6	NA	20.6%	22.1	0.06%	0.60%
739	Leon Valley	5.9	7.2	1.1	-2.0%	16.1	0.38%	3.85%
738	Leonard	1.3	1.2	2.3	1.1%	18.9	0.08%	0.81%
740	Levelland	5.0	5.6	1.7	-1.0%	17.2	0.31%	3.13%
742	Lewisville	4.8	6.0	1.8	0.1%	18.3	0.30%	3.04%
744	Lexington	3.2	3.8	1.2	-4.9%	16.9	0.27%	2.73%
746	Liberty	2.3	3.6	2.3	4.7%	16.6	0.16%	1.58%
745	Liberty Hill	0.5	0.6	31.0	27.5%	22.1	0.04%	0.36%
748	Lindale	2.3	3.4	4.5	4.6%	18.4	0.14%	1.43%
750	Linden	1.7	1.6	2.5	-2.9%	13.4	0.10%	1.07%
755	Lipan	1.1	1.2	NA	7.0%	17.6	0.15%	1.50%
751	Little Elm	1.8	2.3	5.2	9.5%	23.4	0.12%	1.21%
752	Littlefield	3.4	3.9	1.2	-2.1%	17.1	0.21%	2.14%
753	Live Oak	5.3	6.7	1.5	0.8%	17.1	0.33%	3.34%
757	Liverpool	0.4	0.4	NA	15.4%	22.5	0.05%	0.47%
754	Livingston	5.4	6.6	1.9	-0.3%	16.6	0.35%	3.53%
756	Llano	2.6	3.7	1.1	-0.2%	15.7	0.18%	1.84%
758	Lockhart	4.3	5.3	1.7	-0.4%	17.2	0.29%	2.90%
760	Lockney	3.7	2.1	2.3	-3.3%	15.9	0.00%	0.00%
765	Lone Star	3.3	3.4	1.8	-2.4%	16.5	0.22%	2.79%
766	Longview	4.8	5.6	1.3	-2.5%	15.8	0.29%	2.92%
768	Loraine	1.4	1.3	2.0	-2.8%	16.9	0.09%	1.08%
769	Lorena	2.1	2.5	2.4	3.4%	19.5	0.13%	1.33%
770	Lorenzo	2.0	1.6	1.5	-1.7%	21.2	0.12%	1.21%
771	Los Fresnos	1.9	2.4	3.4	0.8%	19.1	0.12%	1.20%
773	Lott	0.6	0.6	1.8	4.7%	21.2	0.04%	0.46%
774	Lovelady	0.6	0.7	3.0	1.8%	23.9	0.09%	0.93%
778	Lubbock	5.8	7.3	1.3	-1.9%	16.5	0.36%	3.63%
779	Lucas	1.5	1.8	2.3	10.7%	24.0	0.09%	0.92%
782	Lufkin	4.9	6.3	1.5	-0.4%	16.4	0.30%	3.04%
784	Luling	2.4	2.9	2.0	-0.3%	16.5	0.15%	1.52%
785	Lumberton	3.8	4.8	1.8	2.5%	18.2	0.24%	2.36%
786	Lyford	1.2	1.5	17.0	7.8%	15.9	0.08%	0.80%
787	Lytle	2.6	3.3	7.7	4.4%	19.3	0.18%	1.75%
790	Madisonville	2.4	3.0	1.6	0.5%	16.9	0.15%	1.53%
791	Magnolia	1.0	1.0	2.7	2.7%	18.6	0.06%	0.60%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
792	Malakoff	1.6	1.9	1.7	3.8%	16.9	0.11%	1.08%
796	Manor	0.8	1.2	10.1	9.7%	23.6	0.05%	0.51%
798	Mansfield	3.7	4.6	2.5	2.3%	19.9	0.25%	2.45%
799	Manvel	1.0	1.5	5.4	15.1%	20.8	0.07%	0.66%
800	Marble Falls	3.2	3.7	1.4	-0.7%	17.2	0.20%	1.98%
802	Marfa	1.8	1.7	1.9	-0.3%	15.2	0.12%	1.16%
804	Marion	2.2	2.0	1.4	-5.3%	15.9	0.14%	1.39%
806	Marlin	2.2	2.6	1.1	-0.8%	18.1	0.16%	1.58%
808	Marquez	0.2	7.1	NA	100.0%	16.0	0.01%	0.05%
810	Marshall	5.9	7.1	1.0	-2.6%	15.9	0.38%	3.83%
812	Mart	2.7	2.4	1.8	-1.1%	18.6	0.17%	1.73%
813	Martindale	1.2	1.6	3.0	14.2%	17.9	0.19%	1.89%
814	Mason	2.7	3.1	2.5	1.6%	15.1	0.17%	1.71%
816	Matador	1.6	2.1	1.5	0.1%	13.4	0.22%	2.22%
818	Mathis	1.6	1.4	1.7	-1.5%	18.3	0.11%	1.06%
820	Maud	0.5	0.7	NA	18.4%	18.9	0.04%	0.41%
822	Maypearl	1.4	1.5	2.0	3.1%	15.3	0.15%	1.54%
824	McAllen	3.5	4.0	2.8	-0.6%	16.9	0.21%	2.13%
826	McCamey	3.1	3.1	3.0	0.8%	16.0	0.20%	2.23%
828	McGregor	2.6	2.9	1.7	2.2%	18.1	0.16%	1.61%
830	McKinney	3.1	3.9	3.6	4.1%	21.0	0.20%	1.95%
832	McLean	1.9	2.1	2.0	-1.9%	14.0	0.23%	2.27%
833	McLendon-Chisholm	0.5	0.5	3.5	49.7%	25.7	0.03%	0.33%
834	Meadow	0.2	0.4	NA	38.8%	21.4	0.03%	0.28%
831	Meadowlakes	0.8	0.8	19.0	5.3%	17.5	0.05%	0.47%
835	Meadows Place	3.9	4.6	1.8	-0.4%	15.7	0.26%	2.60%
837	Melissa	1.3	1.9	4.2	14.2%	22.0	0.09%	0.86%
1501	Memorial Villages PD	3.8	4.9	1.0	-4.1%	14.6	0.23%	2.34%
840	Memphis	3.9	4.0	2.0	-1.3%	14.7	0.27%	2.77%
842	Menard	6.6	5.8	1.5	-4.1%	14.2	0.00%	0.00%
844	Mercedes	4.1	5.4	1.9	1.5%	17.9	0.25%	2.50%
846	Meridian	1.8	1.7	5.0	0.5%	18.6	0.11%	1.15%
848	Merkel	2.7	3.4	1.8	2.0%	18.0	0.19%	1.95%
852	Mertzon	1.3	2.5	2.5	3.2%	17.4	0.15%	1.51%
854	Mesquite	5.5	6.7	1.4	-2.9%	15.8	0.34%	3.39%
856	Mexia	3.9	4.5	1.6	-0.3%	18.8	0.24%	2.36%
858	Miami	1.1	1.7	NA	26.2%	12.4	0.17%	1.71%
860	Midland	5.6	6.7	1.2	-2.7%	15.9	0.36%	3.63%
862	Midlothian	2.7	3.4	2.6	4.5%	21.8	0.17%	1.70%
863	Milano	0.5	0.8	NA	26.0%	10.2	0.09%	0.90%
864	Miles	2.2	1.8	3.0	-0.3%	14.5	0.00%	0.52%
865	Milford	2.8	3.4	1.2	0.1%	16.2	0.30%	2.98%
868	Mineola	3.1	3.2	1.6	-1.6%	17.0	0.19%	1.96%
870	Mineral Wells	3.7	4.2	1.4	-2.7%	16.3	0.23%	2.33%
874	Mission	2.8	3.3	3.5	0.7%	19.3	0.17%	1.71%
875	Missouri City	4.2	4.8	1.8	-1.3%	17.2	0.26%	2.62%
876	Monahans	3.4	3.9	2.7	0.3%	16.4	0.21%	2.14%
887	Mont Belvieu	3.0	4.0	3.1	1.9%	19.4	0.19%	1.87%
877	Montgomery	1.1	1.0	2.6	3.8%	21.6	0.07%	0.71%
878	Moody	1.6	1.8	3.0	-1.8%	15.1	0.13%	1.26%
883	Morgan's Point	4.9	5.3	0.7	-1.6%	16.1	0.41%	4.15%
882	Morgan's Point Resort	2.7	3.1	1.2	4.2%	20.1	0.19%	1.89%
884	Morton	6.6	6.5	3.0	0.5%	15.7	0.41%	4.93%
886	Moulton	5.2	5.5	0.8	-1.8%	14.3	0.43%	4.29%
890	Mount Enterprise	2.1	2.2	1.0	-2.5%	11.6	0.40%	3.98%
892	Mt. Pleasant	3.9	4.9	1.6	2.0%	19.0	0.25%	2.48%
894	Mt. Vernon	3.6	4.2	1.4	1.0%	18.7	0.22%	2.24%
896	Muenster	3.3	2.9	1.2	-3.0%	13.5	0.21%	2.09%
898	Muleshoe	5.9	7.7	1.2	-0.9%	15.5	0.38%	3.78%
901	Munday	0.9	1.3	2.0	7.3%	18.7	0.10%	0.96%
903	Murphy	2.4	2.9	3.1	6.2%	22.0	0.15%	1.51%
10904	Nacogdoches	5.1	6.3	1.4	1.0%	16.6	0.32%	3.21%
906	Naples	1.7	1.5	1.3	-1.8%	14.5	0.10%	0.98%
907	Nash	2.0	3.4	2.5	8.2%	21.0	0.13%	1.32%
905	Nassau Bay	3.0	4.2	1.5	4.3%	18.3	0.18%	1.84%
909	Natalia	0.7	0.9	5.0	8.3%	16.3	0.07%	0.66%
908	Navasota	3.7	4.1	1.4	-1.8%	17.6	0.23%	2.34%
910	Nederland	6.7	6.8	1.2	-3.7%	15.0	0.42%	4.23%
912	Needville	3.0	3.3	2.0	0.6%	13.6	0.21%	2.10%
914	New Boston	2.7	2.7	2.3	-1.9%	15.3	0.17%	1.74%
10916	New Braunfels	3.2	4.4	2.4	3.5%	20.4	0.21%	2.07%
20916	New Braunfels Utilities	3.9	5.0	2.4	1.6%	18.3	0.25%	2.49%
915	New Deal	1.5	1.3	2.0	1.9%	13.0	0.11%	1.11%
923	New Fairview	1.2	2.1	1.0	11.4%	25.1	0.26%	2.62%
918	New London	3.1	3.2	2.0	1.1%	16.0	0.20%	2.85%
919	New Summerfield	1.4	1.5	1.8	2.6%	23.2	0.10%	1.27%
917	New Waverly	2.7	3.1	1.3	-0.7%	12.5	0.39%	3.92%
913	Newark	0.3	0.4	6.0	10.3%	23.8	0.03%	0.30%
920	Newton	4.9	6.7	1.4	0.6%	16.8	0.30%	3.03%
922	Nixon	1.2	1.2	3.2	2.5%	17.8	0.08%	0.79%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
924	Nocona	3.0	3.7	1.3	0.5%	16.9	0.20%	2.00%
925	Nolanville	0.3	0.4	8.0	19.2%	24.7	0.02%	0.22%
928	Normangee	2.0	1.4	1.3	-7.6%	18.6	0.12%	1.22%
931	North Richland Hills	6.1	7.2	1.4	-1.7%	17.5	0.38%	3.82%
930	Northlake	1.3	1.6	8.3	12.9%	23.3	0.08%	0.81%
935	O'Donnell	1.7	2.2	1.5	-0.3%	12.7	0.27%	2.74%
936	Oak Point	1.4	1.7	3.9	8.4%	22.2	0.09%	0.90%
937	Oak Ridge North	3.3	3.9	3.2	1.1%	18.6	0.21%	2.15%
942	Odem	1.9	2.8	1.5	-4.7%	13.6	0.13%	1.30%
944	Odessa	5.3	6.5	1.3	-2.1%	16.1	0.34%	3.38%
945	Oglesby	1.3	1.4	1.0	-5.3%	16.9	0.22%	2.70%
949	Old River-Winfree	2.0	1.3	NA	2.6%	16.4	0.00%	0.00%
950	Olmos Park	3.0	3.0	0.9	-3.4%	17.2	0.19%	1.93%
951	Olney	1.5	1.6	2.6	-1.3%	16.8	0.11%	1.08%
953	Omaha	1.1	1.5	6.0	6.6%	14.4	0.13%	1.28%
954	Onalaska	0.8	0.7	3.0	-7.9%	22.5	0.04%	0.47%
958	Orange	7.2	8.3	1.1	-1.6%	15.8	0.45%	4.46%
960	Orange Grove	3.3	3.3	1.8	-2.3%	16.9	0.21%	2.52%
959	Ore City	1.1	1.1	3.0	-2.0%	20.0	0.06%	0.82%
962	Overton	2.1	2.0	1.8	-0.1%	18.5	0.13%	1.29%
961	Ovilla	2.2	2.6	1.9	4.4%	19.9	0.14%	1.43%
963	Oyster Creek	2.5	3.0	1.4	2.3%	16.8	0.16%	1.63%
964	Paducah	7.6	6.7	0.3	-5.3%	12.5	0.00%	0.61%
966	Palacios	3.5	4.6	1.6	2.1%	16.4	0.21%	2.13%
968	Palestine	4.2	5.5	1.0	-2.1%	16.8	0.26%	2.62%
970	Palmer	1.5	2.0	3.3	1.3%	25.2	0.10%	0.97%
969	Palmhurst	0.7	0.8	6.3	16.6%	24.2	0.04%	0.43%
971	Palmview	0.6	0.7	16.8	6.0%	25.1	0.03%	0.33%
972	Pampa	4.4	6.4	1.0	-1.2%	16.1	0.27%	2.73%
974	Panhandle	3.2	4.1	1.6	0.1%	16.8	0.21%	2.09%
973	Panorama Village	3.0	3.1	0.9	0.2%	13.2	0.25%	2.49%
975	Pantego	4.8	6.1	0.8	-2.7%	16.8	0.34%	3.40%
976	Paris	4.9	5.4	1.1	-2.7%	14.5	0.31%	3.09%
977	Parker	1.9	2.7	2.8	4.4%	17.6	0.12%	1.21%
978	Pasadena	6.3	7.2	1.4	-1.5%	15.8	0.41%	4.08%
983	Pearland	2.8	3.4	3.0	3.5%	21.4	0.18%	1.76%
984	Pearsall	2.3	2.7	2.8	-1.3%	17.0	0.14%	1.42%
988	Pecos City	2.3	2.5	1.9	-0.2%	16.9	0.16%	1.55%
989	Pelican Bay	0.1	0.5	NA	82.8%	26.0	0.01%	0.09%
991	Penitas	0.3	0.4	36.0	35.4%	28.8	0.02%	0.19%
994	Perryton	5.1	6.1	2.2	0.3%	15.7	0.32%	3.24%
1000	Pflugerville	2.6	3.3	4.0	4.5%	21.3	0.16%	1.63%
1002	Pharr	2.5	3.0	2.8	0.8%	19.2	0.16%	1.58%
1004	Pilot Point	1.6	2.0	2.4	3.5%	21.6	0.10%	1.04%
1005	Pinehurst	3.9	5.4	0.7	-0.1%	17.1	0.28%	2.76%
1003	Pineland	4.9	5.3	2.3	-0.7%	14.8	0.33%	3.35%
1001	Piney Point Village	1.1	1.2	1.0	7.4%	14.8	0.15%	1.49%
1006	Pittsburg	4.7	5.5	1.7	-1.1%	17.1	0.33%	3.26%
1007	Plains	5.1	5.3	1.6	-2.6%	14.0	0.31%	4.42%
1008	Plainview	5.9	6.7	1.2	-2.0%	15.7	0.40%	3.99%
1010	Plano	5.5	6.5	1.9	0.1%	17.7	0.34%	3.44%
1012	Pleasanton	2.8	3.9	2.3	2.6%	19.3	0.18%	1.77%
1013	Point	1.2	1.5	3.7	13.9%	25.3	0.11%	1.11%
1017	Ponder	1.2	1.4	4.7	8.1%	15.8	0.09%	0.88%
1014	Port Aransas	2.2	2.8	2.1	2.8%	18.5	0.14%	1.40%
11016	Port Arthur	4.7	5.8	1.1	-1.8%	15.5	0.29%	2.92%
1018	Port Isabel	2.1	2.1	2.5	-0.8%	19.9	0.13%	1.34%
1020	Port Lavaca	2.8	3.2	1.2	-3.9%	17.5	0.17%	1.70%
1022	Port Neches	6.0	6.9	1.1	-4.2%	15.8	0.39%	3.90%
1019	Portland	3.1	4.1	2.0	2.1%	18.2	0.19%	1.92%
1024	Post	2.1	3.2	1.4	-0.3%	15.3	0.13%	1.32%
1026	Poteet	1.5	1.4	2.2	-6.8%	18.0	0.10%	1.00%
1028	Poth	1.3	1.6	2.5	-4.0%	14.6	0.12%	1.20%
1030	Pottsboro	1.4	1.5	1.8	8.6%	20.3	0.09%	0.90%
1031	Prairie View	0.1	0.5	NA	82.8%	19.7	0.01%	0.10%
1032	Premont	1.8	1.3	1.8	-8.1%	13.4	0.00%	0.00%
1029	Presidio	1.0	1.0	7.0	3.6%	17.6	0.07%	0.67%
1033	Primera	1.2	1.0	4.5	-1.3%	17.4	0.04%	0.68%
1034	Princeton	1.4	1.6	4.6	8.7%	23.2	0.09%	0.90%
1036	Prosper	1.3	1.6	9.9	13.8%	25.2	0.08%	0.84%
1037	Providence Village	0.3	0.5	NA	38.9%	21.8	0.03%	0.32%
1042	Quanah	5.6	6.3	0.7	-3.2%	14.6	0.52%	5.18%
1045	Queen City	1.7	1.6	4.0	3.7%	16.5	0.10%	1.11%
1044	Quinlan	1.0	1.1	9.0	12.2%	26.2	0.07%	0.68%
1047	Quintana	0.5	0.6	NA	13.2%	18.4	0.08%	0.85%
1046	Quitaque	1.7	2.0	4.0	0.9%	14.7	0.24%	2.36%
1048	Quitman	4.1	4.3	2.3	0.8%	16.9	0.26%	2.57%
1050	Ralls	4.2	4.7	1.1	-4.5%	14.0	0.38%	3.77%
1051	Rancho Viejo	4.6	5.0	5.0	-2.6%	17.6	0.40%	4.04%
1052	Ranger	2.3	2.3	3.0	3.5%	20.7	0.17%	1.63%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
1054	Rankin	3.4	3.5	0.8	-6.8%	13.1	0.20%	4.10%
1055	Ransom Canyon	2.4	3.7	4.0	6.7%	16.2	0.20%	2.04%
1058	Raymondville	4.1	3.8	1.4	-4.2%	16.4	0.26%	2.56%
1061	Red Oak	1.3	1.6	3.5	6.7%	22.0	0.08%	0.83%
1062	Redwater	1.0	1.1	NA	10.2%	18.5	0.11%	1.14%
1064	Refugio	2.1	1.6	1.6	-2.6%	15.5	0.00%	0.00%
1065	Reklaw	5.5	6.7	1.7	2.1%	15.0	0.69%	6.88%
1066	Reno (Lamar County)	1.9	1.8	14.0	4.3%	22.1	0.12%	1.20%
1069	Reno (Parker County)	0.5	0.5	3.4	13.9%	23.0	0.03%	0.36%
1067	Rhome	1.5	1.6	1.7	4.2%	21.1	0.10%	1.03%
1068	Rice	0.7	0.7	6.0	6.3%	22.2	0.04%	0.47%
1070	Richardson	6.3	7.4	1.4	-1.6%	15.9	0.40%	3.95%
1073	Richland Hills	5.6	6.6	0.8	-4.2%	16.8	0.36%	3.62%
1074	Richland Springs	6.3	3.5	0.5	-4.5%	12.2	0.00%	0.00%
1076	Richmond	4.2	5.1	2.1	0.8%	19.4	0.27%	2.68%
1077	Richwood	2.7	3.3	1.5	-0.8%	18.4	0.17%	1.70%
1072	Riesel	0.9	1.4	3.5	10.1%	19.8	0.10%	1.03%
1075	Rio Grande City	1.7	2.0	6.8	3.8%	22.0	0.10%	1.02%
1079	Rio Vista	2.0	2.3	3.5	1.8%	17.7	0.21%	2.09%
1080	Rising Star	1.0	0.7	7.0	3.6%	18.5	0.06%	0.59%
1082	River Oaks	4.8	5.7	1.1	-0.2%	17.5	0.30%	3.01%
1084	Roanoke	2.9	3.8	5.0	6.7%	21.8	0.19%	1.86%
1088	Robert Lee	0.9	1.4	2.0	-29.8%	18.8	0.10%	1.04%
1089	Robinson	2.8	3.9	3.4	3.2%	18.3	0.18%	1.82%
21090	Robstown	2.6	2.9	1.8	-3.5%	18.7	0.16%	1.63%
11090	Robstown Utility Systems	5.5	6.9	1.1	-2.2%	14.3	0.34%	3.43%
1092	Roby	9.1	9.2	0.5	-5.1%	13.5	0.68%	12.36%
1096	Rockdale	2.4	2.9	2.0	3.1%	16.8	0.15%	1.51%
1098	Rockport	4.4	5.7	1.6	0.3%	16.7	0.26%	2.58%
1100	Rocksprings	1.8	1.7	3.5	-1.6%	16.2	0.11%	1.17%
1102	Rockwall	4.0	4.8	2.5	1.6%	19.2	0.25%	2.49%
1104	Rogers	2.3	2.8	1.3	0.7%	17.4	0.24%	2.39%
1105	Rollingwood	2.2	2.7	1.8	1.8%	19.2	0.16%	1.61%
1106	Roma	2.9	3.5	2.8	2.6%	18.6	0.18%	1.77%
1109	Roscoe	1.6	1.7	2.7	3.1%	14.0	0.17%	1.73%
1112	Rosebud	0.6	0.7	2.0	6.8%	17.4	0.04%	0.50%
1114	Rosenberg	3.7	4.9	1.6	0.0%	20.2	0.24%	2.36%
1116	Rotan	2.2	1.7	6.0	2.1%	16.4	0.00%	0.00%
1118	Round Rock	3.6	4.5	2.9	3.1%	20.2	0.23%	2.31%
1119	Rowlett	4.3	5.2	1.7	0.8%	18.2	0.28%	2.76%
1120	Royse City	1.8	2.5	3.6	10.5%	22.2	0.12%	1.17%
1122	Rule	3.4	3.0	3.0	-22.1%	14.5	0.21%	2.11%
1123	Runaway Bay	1.1	1.0	1.8	-0.5%	16.4	0.08%	0.78%
1124	Runge	4.8	6.4	3.0	3.1%	13.3	0.71%	7.05%
1126	Rusk	2.4	2.5	2.4	1.9%	18.7	0.15%	1.49%
1128	Sabinal	2.4	2.5	1.7	-1.7%	13.1	0.18%	1.97%
1129	Sachse	2.7	3.5	1.8	4.0%	21.1	0.18%	1.77%
1131	Saginaw	3.4	5.1	2.7	3.3%	19.2	0.22%	2.15%
1130	Saint Jo	3.4	2.9	0.8	-11.4%	16.5	0.21%	2.09%
1133	Salado	1.2	1.1	2.0	7.5%	20.8	0.09%	0.82%
1132	San Angelo	5.3	6.8	1.1	-1.8%	15.8	0.34%	3.43%
21136	San Antonio	3.7	4.5	1.5	-1.4%	15.7	0.23%	2.33%
11136	San Antonio Water System	1.7	2.0	1.3	-0.9%	15.9	0.11%	1.07%
1138	San Augustine	4.3	4.7	1.3	0.4%	16.4	0.27%	2.69%
1140	San Benito	2.0	2.4	1.7	-1.8%	17.1	0.13%	1.25%
1144	San Felipe	1.4	1.8	1.3	1.8%	16.3	0.20%	2.03%
1148	San Juan	1.5	1.6	3.7	1.2%	19.4	0.10%	0.95%
1150	San Marcos	4.0	5.2	2.1	1.7%	18.5	0.25%	2.53%
1152	San Saba	3.1	3.7	1.9	-1.1%	17.2	0.19%	1.92%
1146	Sanger	2.3	2.8	3.7	3.1%	19.4	0.15%	1.47%
1153	Sansom Park	1.7	1.7	2.1	3.7%	22.2	0.12%	1.14%
1155	Santa Fe	3.4	4.4	2.0	-0.7%	17.3	0.21%	2.10%
1158	Savoy	2.9	2.3	1.0	-0.2%	16.5	0.00%	1.13%
1159	Schertz	2.7	3.8	3.0	4.7%	21.2	0.18%	1.76%
1160	Schulenburg	6.3	8.0	1.4	-1.8%	15.8	0.41%	4.11%
1161	Seabrook	4.9	6.0	1.3	-0.7%	16.7	0.30%	3.01%
1162	Seadrift	1.1	1.4	4.3	7.0%	17.3	0.08%	0.80%
1164	Seagoville	3.3	4.0	1.8	2.0%	17.4	0.21%	2.09%
1166	Seagraves	2.5	3.1	1.2	-3.3%	15.6	0.17%	1.73%
1167	Sealy	4.3	5.4	2.0	1.8%	18.8	0.26%	2.61%
1168	Seguin	3.6	5.4	1.5	1.3%	17.8	0.22%	2.24%
1169	Selma	2.9	3.7	3.9	4.8%	22.4	0.18%	1.83%
1170	Seminole	5.0	5.8	1.7	-1.9%	16.3	0.31%	3.11%
1171	Seven Points	2.6	1.4	2.7	0.9%	20.4	0.16%	1.60%
1172	Seymour	3.3	3.9	1.2	-1.8%	14.8	0.22%	2.25%
1165	Shady Shores	0.6	0.7	NA	28.1%	23.3	0.09%	0.90%
1177	Shallowater	2.3	2.4	2.3	0.8%	17.3	0.17%	1.74%
1174	Shamrock	2.8	3.7	0.6	-5.9%	12.8	0.22%	2.16%
1173	Shavano Park	2.4	2.9	1.7	6.7%	22.5	0.16%	1.58%
1175	Shenandoah	3.0	4.4	2.2	3.7%	20.9	0.18%	1.81%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
1181	Shepherd	1.9	1.6	5.5	0.4%	15.8	0.12%	1.19%
1176	Sherman	4.9	6.0	1.3	-1.8%	16.6	0.32%	3.16%
1178	Shiner	2.8	3.5	2.0	-2.0%	14.6	0.17%	1.74%
1179	Shoreacres	2.8	2.7	1.4	-2.7%	16.1	0.18%	1.85%
1180	Silsbee	4.6	6.3	1.2	-1.8%	16.5	0.29%	2.87%
1182	Silverton	5.2	5.5	1.3	-5.8%	14.0	0.37%	6.78%
1183	Simonton	0.1	0.3	NA	100.0%	27.8	0.00%	0.03%
1184	Sinton	3.4	4.4	2.0	0.1%	18.8	0.21%	2.12%
1185	Skellytown	1.8	1.5	3.0	0.8%	17.1	0.11%	1.03%
1186	Slaton	3.7	4.0	1.5	-4.8%	16.0	0.24%	2.37%
1188	Smithville	2.2	2.6	2.0	1.9%	17.2	0.14%	1.39%
1189	Smyer	2.8	3.1	NA	6.1%	14.7	0.46%	4.59%
1190	Snyder	5.5	6.4	1.4	-2.2%	16.3	0.35%	3.46%
1191	Somerset	0.8	0.8	3.0	4.2%	20.8	0.05%	0.50%
1192	Somerville	2.2	2.1	1.2	0.8%	15.8	0.13%	1.36%
1194	Sonora	3.6	4.1	1.0	-3.6%	16.3	0.22%	2.21%
1196	Sour Lake	1.8	1.7	3.3	3.5%	17.5	0.11%	1.14%
1198	South Houston	4.2	4.7	2.1	0.1%	16.2	0.26%	2.64%
1199	South Padre Island	3.7	4.2	2.5	1.6%	20.1	0.24%	2.35%
1197	Southlake	3.6	4.3	2.9	2.5%	19.8	0.23%	2.28%
1200	Southmayd	0.3	0.5	9.0	36.1%	23.2	0.03%	0.27%
1202	Southside Place	2.9	3.6	1.6	1.2%	17.5	0.19%	1.88%
1204	Spearman	4.8	5.5	1.1	-1.6%	16.0	0.31%	3.10%
1201	Splendora	0.1	0.6	24.0	77.0%	21.6	0.01%	0.09%
1205	Spring Valley Village	3.7	4.1	1.1	-1.8%	15.7	0.23%	2.34%
1203	Springtown	3.0	2.9	1.8	1.8%	20.4	0.18%	1.84%
1206	Spur	2.6	3.0	3.7	-0.1%	15.8	0.21%	2.15%
1207	Stafford	3.6	4.3	2.2	1.1%	19.8	0.22%	2.25%
1208	Stamford	3.3	3.4	1.1	-2.2%	15.0	0.22%	2.23%
1210	Stanton	2.6	3.1	2.6	1.9%	17.1	0.16%	1.57%
1211	Star Harbor	4.8	5.4	0.8	-2.3%	15.8	0.61%	6.11%
1212	Stephenville	4.4	4.6	1.7	-1.5%	16.6	0.27%	2.77%
1213	Sterling City	1.9	2.0	1.5	-0.1%	15.6	0.20%	2.30%
1214	Stinnett	3.1	2.7	1.8	-2.7%	15.0	0.00%	1.01%
1216	Stockdale	0.4	0.7	8.0	19.5%	16.9	0.04%	0.44%
1218	Stratford	1.7	1.7	1.2	3.0%	18.8	0.10%	1.25%
1224	Sudan	1.9	1.8	2.7	1.6%	16.2	0.13%	1.31%
1225	Sugar Land	4.1	4.9	3.3	2.7%	19.6	0.25%	2.51%
1226	Sulphur Springs	4.5	5.0	1.3	-2.4%	14.9	0.28%	2.82%
1228	Sundown	5.1	6.2	0.9	-1.1%	15.3	0.39%	3.95%
1229	Sunnyvale	2.2	2.6	2.6	3.9%	20.5	0.14%	1.36%
1230	Sunray	3.9	4.9	0.9	0.1%	16.5	0.40%	4.03%
1227	Sunrise Beach Village	0.6	0.7	3.3	6.6%	20.8	0.04%	0.58%
1231	Sunset Valley	2.8	3.5	4.4	3.4%	21.6	0.18%	1.78%
1233	Surfside Beach	0.9	0.8	10.0	3.6%	17.7	0.05%	0.53%
1232	Sweeny	4.4	5.8	1.3	-4.2%	15.4	0.26%	2.61%
1234	Sweetwater	4.7	6.1	1.3	-0.6%	16.1	0.30%	3.03%
1264	TMRS	3.3	4.2	3.3	3.7%	17.4	0.21%	2.11%
1236	Taft	2.9	3.9	1.4	-2.4%	16.9	0.19%	1.86%
1238	Tahoka	4.0	3.4	1.7	-2.5%	14.4	0.00%	1.69%
1240	Talty	0.3	0.9	4.0	41.1%	14.4	0.04%	0.45%
1241	Tatum	0.9	1.0	2.5	0.8%	18.4	0.08%	0.84%
1246	Taylor	3.1	4.0	1.5	0.5%	18.6	0.20%	2.00%
1248	Teague	3.5	3.6	0.9	-1.1%	17.4	0.21%	2.12%
1252	Temple	4.9	6.2	1.6	-0.9%	17.1	0.31%	3.12%
1254	Tenaha	1.2	1.0	1.7	-8.1%	18.1	0.07%	0.71%
1256	Terrell	4.9	6.0	1.4	0.0%	17.9	0.30%	3.02%
1258	Terrell Hills	4.2	5.4	1.7	0.1%	19.9	0.27%	2.66%
31263	Tex Municipal League IEBP	2.7	3.1	5.4	1.9%	15.6	0.19%	1.93%
21263	Tex Municipal League IRP	5.8	6.2	3.0	1.0%	16.4	0.36%	3.62%
21260	Texarkana	5.3	6.5	1.1	-2.4%	15.3	0.35%	3.53%
11260	Texarkana Police Dept	6.6	7.8	1.2	-1.8%	18.4	0.42%	4.18%
31260	Texarkana Water Utilities	5.0	6.3	1.4	-1.8%	16.5	0.30%	3.03%
1262	Texas City	5.5	6.8	1.3	-2.2%	16.2	0.35%	3.52%
11263	Texas Municipal League	5.9	7.2	1.3	-0.1%	15.5	0.41%	4.06%
1267	The Colony	3.4	4.1	1.8	1.4%	18.7	0.22%	2.18%
1269	Thompsons	1.6	1.9	3.0	4.5%	14.7	0.23%	2.29%
1268	Thorndale	3.2	3.6	0.9	-0.4%	14.3	0.35%	3.49%
1272	Thrall	0.6	0.8	NA	22.9%	16.5	0.08%	0.80%
1274	Three Rivers	2.7	4.8	2.1	5.8%	17.3	0.16%	1.62%
1276	Throckmorton	4.6	4.8	0.7	-3.6%	16.4	0.29%	5.28%
1277	Tiki Island	1.2	1.4	8.0	6.4%	17.4	0.12%	1.23%
1278	Timpson	2.4	2.4	3.0	2.0%	14.2	0.15%	1.93%
1280	Tioga	1.1	1.0	NA	7.3%	20.6	0.06%	0.75%
1283	Tolar	2.3	2.5	1.7	1.0%	16.8	0.26%	2.63%
1286	Tom Bean	1.0	0.9	4.0	7.2%	21.5	0.07%	0.64%
1284	Tomball	3.3	4.1	2.0	1.0%	19.2	0.21%	2.06%
1290	Trent	2.5	2.7	2.0	5.9%	10.8	0.42%	4.22%
1292	Trenton	1.9	1.8	1.3	-1.2%	14.7	0.14%	1.42%
1293	Trinidad	1.9	2.1	1.3	-0.9%	11.8	0.26%	2.63%

Section 8
TEXAS MUNICIPAL RETIREMENT SYSTEM
RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

City#	CityName	Ratio of MVA to Covered Pay	Ratio of AAL to Covered Pay	Ratio of Actives to Retirees (A/R)	Net Cash Flow as a Percentage of Market Value of Assets	Duration of Liabilities	Change in Contribution Rate with 10% Decline in Assets (Smoothed)	Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)
1294	Trinity	1.8	2.0	2.8	2.9%	20.3	0.11%	1.06%
1295	Trophy Club	3.4	4.0	2.1	2.3%	19.1	0.21%	2.12%
1296	Troup	1.5	1.7	1.9	1.9%	20.4	0.09%	0.90%
1297	Troy	1.3	1.5	1.4	12.0%	17.2	0.11%	1.11%
1298	Tulia	5.7	6.3	1.3	-2.7%	16.5	0.35%	3.54%
1299	Turkey	1.6	2.1	0.7	-8.4%	12.2	0.20%	2.04%
1301	Tye	1.3	1.6	2.5	5.3%	17.3	0.10%	0.98%
1304	Tyler	5.3	7.2	1.2	-0.8%	16.5	0.33%	3.26%
1305	Universal City	3.6	5.1	2.0	2.8%	18.4	0.23%	2.27%
1306	University Park	5.6	6.2	1.4	-1.7%	14.0	0.34%	3.43%
1308	Uvalde	2.3	2.6	2.3	-0.3%	18.6	0.14%	1.44%
1312	Valley Mills	0.2	0.3	NA	25.9%	21.1	0.02%	0.22%
1313	Valley View	0.3	0.3	5.0	12.2%	23.5	0.02%	0.28%
1314	Van	2.7	2.8	2.0	2.2%	16.6	0.17%	1.71%
1316	Van Alstyne	2.5	3.0	2.4	3.8%	23.7	0.16%	1.64%
1318	Van Horn	3.2	3.8	1.6	0.1%	17.3	0.23%	2.31%
1320	Vega	5.9	7.5	1.5	-2.6%	14.8	0.65%	6.50%
1324	Venus	1.6	1.7	2.3	8.0%	22.9	0.10%	0.98%
1326	Vernon	5.0	6.1	1.3	-3.0%	15.9	0.30%	3.00%
1328	Victoria	5.0	6.6	1.2	-2.1%	16.8	0.31%	3.10%
1329	Vidor	5.0	5.9	1.4	-0.8%	16.4	0.31%	3.10%
1500	Village Fire Department	4.8	5.4	1.7	-2.7%	16.2	0.31%	3.12%
1327	Village of the Hills	0.2	0.2	NA	60.5%	22.7	0.04%	0.39%
1330	Waco	5.0	6.1	1.4	-2.1%	15.2	0.32%	3.24%
1332	Waelder	1.4	1.5	3.8	1.5%	18.5	0.09%	0.90%
1334	Wake Village	3.3	4.1	1.2	0.0%	17.9	0.21%	2.08%
1336	Waller	2.0	2.1	1.6	-2.2%	14.1	0.12%	1.18%
1337	Wallis	1.9	1.9	3.2	1.4%	16.7	0.12%	1.25%
1338	Walnut Springs	1.6	1.8	1.0	0.3%	15.9	0.27%	2.69%
1340	Waskom	2.4	3.1	2.0	0.9%	15.7	0.18%	1.80%
1341	Watauga	4.5	5.4	1.6	0.9%	18.5	0.29%	2.95%
1342	Waxahachie	3.5	4.6	2.1	1.8%	18.5	0.23%	2.27%
1344	Weatherford	4.7	5.6	1.6	0.0%	17.8	0.30%	2.97%
1345	Webster	4.4	5.5	1.5	0.8%	18.5	0.29%	2.91%
1346	Weimar	5.4	6.5	1.0	-0.5%	14.7	0.36%	3.56%
1350	Wellington	7.1	7.5	1.0	-3.7%	11.4	0.45%	5.45%
1352	Wells	1.7	1.8	3.0	-0.6%	20.0	0.13%	1.86%
1354	Weslaco	3.5	4.1	1.4	-1.5%	16.8	0.25%	2.47%
1356	West	2.7	2.5	1.7	-1.5%	16.0	0.18%	1.75%
1358	West Columbia	3.0	2.8	1.5	-1.8%	14.8	0.19%	1.85%
1359	West Lake Hills	4.3	5.4	0.7	-0.2%	18.0	0.27%	2.71%
1361	West Orange	6.6	8.4	1.3	-0.8%	15.3	0.40%	4.04%
1365	West Tawakoni	2.0	2.6	1.6	0.8%	17.6	0.15%	1.47%
1364	West Univ. Place	4.5	5.5	1.2	-1.5%	16.5	0.28%	2.77%
1363	Westlake	1.7	2.2	3.9	10.1%	20.2	0.11%	1.08%
1362	Westover Hills	1.5	1.6	1.0	-2.6%	16.5	0.09%	0.93%
1366	Westworth Village	2.1	2.5	2.4	4.9%	20.6	0.14%	1.37%
1368	Wharton	2.8	3.1	2.5	0.4%	16.3	0.17%	1.75%
1370	Wheeler	4.4	4.8	2.3	-3.2%	17.4	0.45%	4.46%
1372	White Deer	2.0	2.9	0.8	-3.1%	12.5	0.26%	2.62%
1377	White Oak	5.3	6.0	1.4	-0.2%	16.7	0.33%	3.35%
1378	White Settlement	3.9	5.2	1.3	1.3%	17.8	0.25%	2.45%
1374	Whiteface	5.8	5.5	2.0	0.5%	15.1	0.36%	3.63%
1375	Whitehouse	2.5	3.0	2.2	1.1%	20.8	0.15%	1.53%
1376	Whitesboro	3.3	3.7	1.8	0.5%	16.2	0.21%	2.07%
1380	Whitewright	1.5	1.5	2.2	0.9%	20.5	0.09%	0.97%
1382	Whitney	1.3	1.5	1.7	3.1%	19.3	0.10%	0.96%
1384	Wichita Falls	4.8	6.0	1.5	-2.3%	15.2	0.30%	3.00%
1386	Willis	2.5	2.9	2.1	2.2%	19.4	0.15%	1.54%
1387	Willow Park	0.8	1.0	3.7	12.6%	23.2	0.06%	0.57%
1388	Wills Point	3.4	4.3	1.4	-1.0%	16.5	0.23%	2.30%
1390	Wilmer	1.5	1.6	2.1	4.0%	19.5	0.11%	1.07%
1392	Wimberley	0.8	1.1	2.0	15.5%	22.1	0.07%	0.68%
1393	Windcrest	2.6	2.9	1.4	1.4%	18.0	0.17%	1.68%
1395	Winfield	1.0	1.1	NA	-7.8%	15.5	0.14%	1.42%
1396	Wink	2.0	2.1	3.3	4.1%	16.4	0.19%	1.90%
1398	Winnsboro	2.9	3.4	1.6	-0.4%	16.2	0.18%	1.83%
1399	Winona	4.2	2.8	2.5	-3.6%	17.6	0.24%	2.38%
1400	Winters	5.6	6.3	0.9	-7.0%	15.4	0.41%	4.06%
1403	Wolfforth	2.2	3.1	4.7	4.4%	18.9	0.15%	1.46%
1409	Woodcreek	0.8	0.9	1.5	3.0%	10.3	0.14%	1.37%
1404	Woodsboro	1.5	1.2	4.0	-1.4%	20.0	0.10%	0.97%
1406	Woodville	4.6	5.8	2.5	2.3%	18.2	0.29%	2.86%
1407	Woodway	4.4	5.5	2.0	-1.2%	18.5	0.28%	2.77%
1408	Wortham	2.2	2.2	2.0	2.1%	23.4	0.14%	1.70%
1410	Wylie	2.8	3.7	3.1	5.0%	21.6	0.17%	1.72%
1412	Yoakum	5.3	6.7	1.4	-1.5%	15.3	0.34%	3.37%
1414	Yorktown	3.7	3.9	0.8	-6.6%	11.9	0.22%	3.17%
1415	Zavalla	2.3	1.8	9.0	2.7%	18.9	0.16%	1.56%

SECTION 9

INDIVIDUAL CITY REPORTS

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Abernathy	Abilene	Addison	Agua Dulce	Alamo	Alamo Heights	Alba
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$585,223	\$121,510,252	\$46,653,478	\$51,351	\$5,442,081	\$10,508,557	\$301,432
b. Noncontributing Members	331,724	25,827,657	15,540,610	0	1,586,560	3,705,799	4,423
c. Annuitants	<u>460,598</u>	<u>157,420,840</u>	<u>68,043,637</u>	<u>0</u>	<u>3,798,408</u>	<u>12,974,241</u>	<u>36,870</u>
2. Total Actuarial Accrued Liability	\$1,377,545	\$304,758,749	\$130,237,725	\$51,351	\$10,827,049	\$27,188,597	\$342,725
3. Actuarial value of assets	<u>1,258,369</u>	<u>278,782,304</u>	<u>124,221,190</u>	<u>16,396</u>	<u>9,824,966</u>	<u>20,833,283</u>	<u>340,234</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$119,176	\$25,976,445	\$6,016,535	\$34,955	\$1,002,083	\$6,355,314	\$2,491
5. Funded Ratio: (3) / (2)	91.3%	91.5%	95.4%	31.9%	90.7%	76.6%	99.3%
6. Annual Payroll	\$671,308	\$52,834,764	\$20,199,105	\$101,420	\$5,194,337	\$5,567,671	\$227,850
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.64%	7.63%	8.43%	2.13%	4.99%	9.88%	1.76%
Prior Service	<u>1.21%</u>	<u>3.42%</u>	<u>2.63%</u>	<u>5.64%</u>	<u>1.31%</u>	<u>7.03%</u>	<u>0.20%</u>
Total Retirement	3.85%	11.05%	11.06%	7.77%	6.30%	16.91%	1.96%
Supplemental Death	<u>0.27%</u>	<u>0.25%</u>	<u>0.16%</u>	<u>0.16%</u>	<u>0.19%</u>	<u>0.22%</u>	<u>0.21%</u>
Total Rate	4.12%	11.30%	11.22%	7.93%	6.49%	17.13%	2.17%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	N/A	15.50%	N/A	9.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.3 years	20.7 years	14.8 years	7.0 years	21.3 years	24.9 years	6.3 years
Number of annuitants	7	840	208	0	41	78	1
Number of active contributing members	16	1,026	263	4	147	97	5
Number of inactive members	36	574	227	0	104	88	1
Average age of contributing members	43.4 years	44.0 years	40.6 years	50.5 years	40.7 years	42.7 years	53.0 years
Average length of service of contributing members	7.3 years	10.4 years	11.2 years	4.9 years	8.7 years	12.1 years	13.4 years

	Albany	Aledo	Alice	Allen	Alpine	Alto	Alton
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$684,271	\$412,846	\$17,699,485	\$131,031,772	\$3,214,310	\$360,794	\$4,128,041
b. Noncontributing Members	22,021	197,683	2,825,295	27,756,863	622,047	328,611	753,843
c. Annuitants	<u>313,764</u>	<u>318,299</u>	<u>19,788,815</u>	<u>54,452,875</u>	<u>2,564,362</u>	<u>405,623</u>	<u>1,012,003</u>
2. Total Actuarial Accrued Liability	\$1,020,056	\$928,828	\$40,313,595	\$213,241,510	\$6,400,719	\$1,095,028	\$5,893,887
3. Actuarial value of assets	<u>891,943</u>	<u>891,134</u>	<u>40,993,138</u>	<u>183,986,885</u>	<u>7,787,008</u>	<u>1,043,151</u>	<u>5,384,325</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$128,113	\$37,694	(\$679,543)	\$29,254,625	(\$1,386,289)	\$51,877	\$509,562
5. Funded Ratio: (3) / (2)	87.4%	95.9%	101.7%	86.3%	121.7%	95.3%	91.4%
6. Annual Payroll	\$629,134	\$652,967	\$9,899,224	\$50,478,372	\$3,233,807	\$456,993	\$3,157,917
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.06%	7.04%	5.22%	10.43%	3.51%	9.85%	12.36%
Prior Service	<u>1.42%</u>	<u>0.46%</u>	<u>-0.42%</u>	<u>3.57%</u>	<u>-2.63%</u>	<u>0.90%</u>	<u>0.98%</u>
Total Retirement	5.48%	7.50%	4.80%	14.00%	0.88%	10.75%	13.34%
Supplemental Death	<u>0.44%</u>	<u>0.17%</u>	<u>0.00%</u>	<u>0.15%</u>	<u>0.19%</u>	<u>0.22%</u>	<u>0.16%</u>
Total Rate	5.92%	7.67%	4.80%	14.15%	1.07%	10.97%	13.50%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	12.80%
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	11.50%	N/A	11.50%	13.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.5 years	17.1 years	25.0 years	24.9 years	25.0 years	18.3 years	25.4 years
Number of annuitants	7	8	160	222	31	9	17
Number of active contributing members	16	13	206	751	79	14	83
Number of inactive members	9	12	95	467	75	20	86
Average age of contributing members	56.0 years	45.5 years	45.9 years	43.2 years	40.5 years	38.2 years	40.5 years
Average length of service of contributing members	9.7 years	7.5 years	10.8 years	10.6 years	6.1 years	3.7 years	7.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Alvarado	Alvin	Alvord	Amarillo	Amherst	Anahuac	Andrews
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,717,799	\$28,857,994	\$62,151	\$196,451,663	\$59,922	\$151,951	\$11,831,773
b. Noncontributing Members	744,294	8,193,988	305,985	27,226,570	13,758	410,960	1,578,539
c. Annuitants	<u>464,194</u>	<u>28,091,164</u>	<u>74,274</u>	<u>259,210,438</u>	<u>78,699</u>	<u>440,040</u>	<u>14,172,910</u>
2. Total Actuarial Accrued Liability	\$3,926,287	\$65,143,146	\$442,410	\$482,888,671	\$152,379	\$1,002,951	\$27,583,222
3. Actuarial value of assets	<u>3,645,114</u>	<u>55,659,554</u>	<u>420,196</u>	<u>423,364,057</u>	<u>347,285</u>	<u>944,977</u>	<u>23,186,531</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$281,173	\$9,483,592	\$22,214	\$59,524,614	(\$194,906)	\$57,974	\$4,396,691
5. Funded Ratio: (3) / (2)	92.8%	85.4%	95.0%	87.7%	227.9%	94.2%	84.1%
6. Annual Payroll	\$2,960,650	\$11,016,971	\$310,031	\$90,633,812	\$106,016	\$385,984	\$4,641,610
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.75%	9.86%	4.98%	7.12%	4.33%	7.04%	8.72%
Prior Service	<u>0.61%</u>	<u>7.14%</u>	<u>0.80%</u>	<u>5.09%</u>	<u>-4.33%</u>	<u>1.62%</u>	<u>7.26%</u>
Total Retirement	5.36%	17.00%	5.78%	12.21%	0.00%	8.66%	15.98%
Supplemental Death	<u>0.15%</u>	<u>0.16%</u>	<u>0.30%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.15%</u>	<u>0.00%</u>
Total Rate	5.51%	17.16%	6.08%	12.21%	0.00%	8.81%	15.98%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	23.5 years	16.1 years	11.0 years	17.6 years	25.0 years	12.2 years	17.9 years
Number of annuitants	12	130	3	1,160	2	5	36
Number of active contributing members	64	214	7	1,831	3	11	70
Number of inactive members	49	239	5	1,168	4	19	43
Average age of contributing members	41.8 years	40.3 years	39.0 years	43.3 years	50.3 years	39.0 years	40.7 years
Average length of service of contributing members	7.2 years	9.5 years	4.1 years	8.6 years	6.4 years	3.8 years	9.2 years

	Angleton	Anna	Annetta	Anson	Anthony	Aransas Pass	Archer City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$13,254,531	\$4,643,845	\$34,414	\$888,865	\$632,867	\$5,027,666	\$548,840
b. Noncontributing Members	3,048,516	1,437,306	24,660	128,209	298,598	1,843,642	299,522
c. Annuitants	<u>10,713,258</u>	<u>1,609,052</u>	<u>0</u>	<u>236,971</u>	<u>587,880</u>	<u>8,453,017</u>	<u>153,232</u>
2. Total Actuarial Accrued Liability	\$27,016,305	\$7,690,203	\$59,074	\$1,254,045	\$1,519,345	\$15,324,325	\$1,001,594
3. Actuarial value of assets	<u>23,574,109</u>	<u>6,733,647</u>	<u>57,927</u>	<u>1,329,871</u>	<u>1,212,975</u>	<u>13,288,028</u>	<u>928,830</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$3,442,196	\$956,556	\$1,147	(\$75,826)	\$306,370	\$2,036,297	\$72,764
5. Funded Ratio: (3) / (2)	87.3%	87.6%	98.1%	106.0%	79.8%	86.7%	92.7%
6. Annual Payroll	\$6,383,874	\$4,490,266	\$108,419	\$819,734	\$1,195,876	\$4,855,218	\$829,020
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.53%	12.78%	8.60%	1.14%	1.44%	7.21%	3.63%
Prior Service	<u>3.68%</u>	<u>1.31%</u>	<u>0.22%</u>	<u>-0.57%</u>	<u>1.75%</u>	<u>2.58%</u>	<u>0.62%</u>
Total Retirement	12.21%	14.09%	8.82%	0.57%	3.19%	9.79%	4.25%
Supplemental Death	<u>0.23%</u>	<u>0.13%</u>	<u>0.10%</u>	<u>0.22%</u>	<u>0.15%</u>	<u>0.21%</u>	<u>0.34%</u>
Total Rate	12.44%	14.22%	8.92%	0.79%	3.34%	10.00%	4.59%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	7.50%	N/A	N/A	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.2 years	25.1 years	5.5 years	25.0 years	21.2 years	24.9 years	20.3 years
Number of annuitants	58	10	0	7	7	52	5
Number of active contributing members	124	76	2	25	31	108	18
Number of inactive members	57	40	2	31	23	128	14
Average age of contributing members	43.9 years	39.3 years	52.2 years	43.1 years	42.5 years	39.4 years	50.4 years
Average length of service of contributing members	9.2 years	8.1 years	2.6 years	9.2 years	7.2 years	5.8 years	10.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Arcola	Argyle	Arlington	Arp	Aspermont	Athens	Atlanta
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$240,203	\$3,457,936	\$518,412,591	\$112,944	\$298,772	\$13,894,250	\$2,125,056
b. Noncontributing Members	31,003	1,065,885	93,833,494	118,914	27,147	2,516,957	500,673
c. Annuitants	<u>0</u>	<u>1,137,839</u>	<u>637,350,017</u>	<u>406,121</u>	<u>156,120</u>	<u>18,259,951</u>	<u>1,390,049</u>
2. Total Actuarial Accrued Liability	\$271,206	\$5,661,660	\$1,249,596,102	\$637,979	\$482,039	\$34,671,158	\$4,015,778
3. Actuarial value of assets	<u>140,376</u>	<u>5,133,084</u>	<u>1,084,555,626</u>	<u>699,835</u>	<u>605,619</u>	<u>28,444,177</u>	<u>4,032,140</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$130,830	\$528,576	\$165,040,476	(\$61,856)	(\$123,580)	\$6,226,981	(\$16,362)
5. Funded Ratio: (3) / (2)	51.8%	90.7%	86.8%	109.7%	125.6%	82.0%	100.4%
6. Annual Payroll	\$648,760	\$1,840,746	\$183,134,161	\$298,041	\$283,976	\$7,116,400	\$1,672,228
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.09%	11.56%	9.26%	2.41%	1.41%	9.05%	3.45%
Prior Service	<u>1.96%</u>	<u>1.86%</u>	<u>6.87%</u>	<u>-1.27%</u>	<u>-1.41%</u>	<u>6.41%</u>	<u>-0.06%</u>
Total Retirement	4.05%	13.42%	16.13%	1.14%	0.00%	15.46%	3.39%
Supplemental Death	<u>0.18%</u>	<u>0.00%</u>	<u>0.16%</u>	<u>0.12%</u>	<u>0.20%</u>	<u>0.16%</u>	<u>0.23%</u>
Total Rate	4.23%	13.42%	16.29%	1.26%	0.20%	15.62%	3.62%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	7.50%	7.50%	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.1 years	22.9 years	18.1 years	25.0 years	25.0 years	19.1 years	25.0 years
Number of annuitants	0	16	1,793	4	2	81	19
Number of active contributing members	14	26	2,551	7	6	121	41
Number of inactive members	7	23	1,192	12	2	70	14
Average age of contributing members	47.8 years	46.1 years	41.8 years	40.1 years	51.0 years	41.6 years	48.3 years
Average length of service of contributing members	4.1 years	12.3 years	11.1 years	4.3 years	12.8 years	9.7 years	10.6 years

	Aubrey	Avinger	Azle	Baird	Balch Springs	Balcones Heights	Ballinger
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,426,222	\$105,554	\$13,471,210	\$207,269	\$25,633,072	\$6,004,215	\$1,588,293
b. Noncontributing Members	1,025,041	0	4,145,018	217,347	4,205,275	1,529,613	275,732
c. Annuitants	<u>286,509</u>	<u>0</u>	<u>8,148,062</u>	<u>276,734</u>	<u>9,373,662</u>	<u>7,377,160</u>	<u>1,870,843</u>
2. Total Actuarial Accrued Liability	\$3,737,772	\$105,554	\$25,764,290	\$701,350	\$39,212,009	\$14,910,988	\$3,734,868
3. Actuarial value of assets	<u>3,609,373</u>	<u>115,674</u>	<u>21,882,401</u>	<u>750,554</u>	<u>31,804,963</u>	<u>15,252,649</u>	<u>3,668,710</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$128,399	(\$10,120)	\$3,881,889	(\$49,204)	\$7,407,046	(\$341,661)	\$66,158
5. Funded Ratio: (3) / (2)	96.6%	109.6%	84.9%	107.0%	81.1%	102.3%	98.2%
6. Annual Payroll	\$2,796,825	\$62,915	\$6,885,251	\$481,048	\$10,541,216	\$3,021,908	\$1,457,488
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.62%	3.01%	8.68%	1.71%	9.30%	8.61%	3.21%
Prior Service	<u>0.29%</u>	<u>-0.99%</u>	<u>3.82%</u>	<u>-0.63%</u>	<u>4.30%</u>	<u>-0.69%</u>	<u>0.35%</u>
Total Retirement	5.91%	2.02%	12.50%	1.08%	13.60%	7.92%	3.56%
Supplemental Death	<u>0.15%</u>	<u>0.22%</u>	<u>0.17%</u>	<u>0.17%</u>	<u>0.16%</u>	<u>0.21%</u>	<u>0.29%</u>
Total Rate	6.06%	2.24%	12.67%	1.25%	13.76%	8.13%	3.85%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	9.50%	12.50%	N/A	N/A	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	23.3 years	25.0 years	21.5 years	25.0 years	25.1 years	25.0 years	17.6 years
Number of annuitants	11	0	73	5	87	56	18
Number of active contributing members	63	2	126	11	176	53	40
Number of inactive members	84	0	126	9	114	43	12
Average age of contributing members	38.7 years	51.3 years	42.3 years	45.8 years	42.2 years	44.3 years	45.4 years
Average length of service of contributing members	7.1 years	15.5 years	9.4 years	6.5 years	8.6 years	12.3 years	6.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Balmorhea	Bandera	Bangs	Bartlett	Bartonville	Bastrop	Bay City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$27,430	\$1,011,368	\$774,643	\$496,247	\$278,717	\$12,029,693	\$14,051,227
b. Noncontributing Members	1,929	397,353	358,812	325,044	355,517	2,047,397	2,831,071
c. Annuitants	<u>0</u>	<u>1,061,143</u>	<u>968,153</u>	<u>415,224</u>	<u>596,301</u>	<u>6,480,512</u>	<u>19,110,526</u>
2. Total Actuarial Accrued Liability	\$29,359	\$2,469,864	\$2,101,608	\$1,236,515	\$1,230,535	\$20,557,602	\$35,992,824
3. Actuarial value of assets	<u>46,885</u>	<u>2,513,548</u>	<u>1,988,907</u>	<u>1,329,789</u>	<u>863,275</u>	<u>17,216,461</u>	<u>32,072,355</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$17,526)	(\$43,684)	\$112,701	(\$93,274)	\$367,260	\$3,341,141	\$3,920,469
5. Funded Ratio: (3) / (2)	159.7%	101.8%	94.6%	107.5%	70.2%	83.7%	89.1%
6. Annual Payroll	\$32,609	\$848,277	\$508,608	\$555,636	\$444,082	\$7,234,119	\$7,859,690
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.66%	11.16%	10.71%	9.25%	7.16%	8.46%	5.68%
Prior Service	<u>-1.66%</u>	<u>-0.34%</u>	<u>1.62%</u>	<u>-1.03%</u>	<u>8.39%</u>	<u>2.83%</u>	<u>3.94%</u>
Total Retirement	0.00%	10.82%	12.33%	8.22%	15.55%	11.29%	9.62%
Supplemental Death	<u>0.08%</u>	<u>0.26%</u>	<u>0.33%</u>	<u>0.33%</u>	<u>0.11%</u>	<u>0.18%</u>	<u>0.22%</u>
Total Rate	0.08%	11.08%	12.66%	8.55%	15.66%	11.47%	9.84%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	15.11%	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	11.50%	N/A	12.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	19.2 years	25.0 years	12.4 years	25.1 years	17.5 years
Number of annuitants	0	12	10	9	6	55	115
Number of active contributing members	1	21	12	12	7	131	159
Number of inactive members	1	32	21	25	10	58	100
Average age of contributing members	49.2 years	45.3 years	48.9 years	49.6 years	44.9 years	45.3 years	43.3 years
Average length of service of contributing members	10.3 years	6.2 years	6.3 years	9.8 years	6.5 years	10.3 years	9.8 years

	Bayou Vista	Baytown	Beaumont	Bedford	Bee Cave	Beeville	Bellaire
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$86,754	\$177,270,448	\$214,946,254	\$27,809,715	\$3,159,267	\$3,855,880	\$35,678,284
b. Noncontributing Members	115,326	22,223,472	25,017,340	4,185,559	1,991,426	1,358,145	6,228,418
c. Annuitants	<u>194,361</u>	<u>146,514,576</u>	<u>248,671,430</u>	<u>7,128,979</u>	<u>790,097</u>	<u>5,697,297</u>	<u>41,801,204</u>
2. Total Actuarial Accrued Liability	\$396,441	\$346,008,496	\$488,635,024	\$39,124,253	\$5,940,790	\$10,911,322	\$83,707,906
3. Actuarial value of assets	<u>433,273</u>	<u>283,516,517</u>	<u>416,353,551</u>	<u>26,587,047</u>	<u>5,600,544</u>	<u>13,133,716</u>	<u>70,416,834</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$36,832)	\$62,491,979	\$72,281,473	\$12,537,206	\$340,246	(\$2,222,394)	\$13,291,072
5. Funded Ratio: (3) / (2)	109.3%	81.9%	85.2%	68.0%	94.3%	120.4%	84.1%
6. Annual Payroll	\$360,218	\$60,282,263	\$61,804,612	\$23,643,895	\$2,883,203	\$4,270,839	\$11,169,043
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.35%	9.86%	9.70%	5.59%	8.21%	3.63%	11.23%
Prior Service	<u>-0.69%</u>	<u>7.47%</u>	<u>9.71%</u>	<u>3.33%</u>	<u>0.76%</u>	<u>-3.20%</u>	<u>8.97%</u>
Total Retirement	2.66%	17.33%	19.41%	8.92%	8.97%	0.43%	20.20%
Supplemental Death	<u>0.13%</u>	<u>0.15%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.15%</u>	<u>0.00%</u>	<u>0.21%</u>
Total Rate	2.79%	17.48%	19.41%	8.92%	9.12%	0.43%	20.41%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	13.50%	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	19.6 years	16.1 years	24.1 years	23.1 years	25.0 years	18.3 years
Number of annuitants	5	484	884	69	9	75	133
Number of active contributing members	8	834	1,000	343	44	97	153
Number of inactive members	10	340	413	150	40	94	115
Average age of contributing members	41.2 years	41.3 years	45.0 years	41.8 years	42.1 years	43.6 years	44.2 years
Average length of service of contributing members	3.4 years	10.7 years	12.0 years	11.9 years	7.1 years	9.1 years	12.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Bellmead	Bells	Bellville	Belton	Benbrook	Berryville	Bertram
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$5,244,194	\$54,715	\$5,709,161	\$11,127,596	\$30,156,661	\$43,500	\$165,678
b. Noncontributing Members	1,603,229	107,850	819,054	2,607,668	3,970,446	25,822	204,891
c. Annuitants	<u>6,972,004</u>	<u>102,618</u>	<u>5,891,810</u>	<u>10,298,429</u>	<u>24,719,369</u>	<u>129,752</u>	<u>235,425</u>
2. Total Actuarial Accrued Liability	\$13,819,427	\$265,183	\$12,420,025	\$24,033,693	\$58,846,476	\$199,074	\$605,994
3. Actuarial value of assets	<u>13,798,804</u>	<u>370,603</u>	<u>9,533,933</u>	<u>21,781,581</u>	<u>52,133,354</u>	<u>203,891</u>	<u>600,970</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$20,623	(\$105,420)	\$2,886,092	\$2,252,112	\$6,713,122	(\$4,817)	\$5,024
5. Funded Ratio: (3) / (2)	99.9%	139.8%	76.8%	90.6%	88.6%	102.4%	99.2%
6. Annual Payroll	\$3,795,571	\$378,068	\$2,505,901	\$8,876,416	\$9,841,964	\$73,882	\$493,289
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.60%	1.67%	6.35%	6.56%	11.60%	3.79%	1.62%
Prior Service	<u>0.03%</u>	<u>-1.67%</u>	<u>9.43%</u>	<u>1.55%</u>	<u>4.84%</u>	<u>-0.40%</u>	<u>0.08%</u>
Total Retirement	8.63%	0.00%	15.78%	8.11%	16.44%	3.39%	1.70%
Supplemental Death	<u>0.19%</u>	<u>0.11%</u>	<u>0.27%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.44%</u>	<u>0.00%</u>
Total Rate	8.82%	0.11%	16.05%	8.28%	16.59%	3.83%	1.70%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	12.50%	N/A	N/A	12.50%	N/A	9.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	27.0 years	25.0 years	16.4 years	25.2 years	20.0 years	25.0 years	18.0 years
Number of annuitants	33	4	38	86	76	3	6
Number of active contributing members	74	10	50	170	121	2	13
Number of inactive members	65	21	27	151	62	1	15
Average age of contributing members	43.6 years	38.9 years	46.1 years	41.0 years	41.4 years	59.6 years	39.7 years
Average length of service of contributing members	8.4 years	5.9 years	11.9 years	10.5 years	12.9 years	5.0 years	6.0 years

	Big Lake	Big Sandy	Big Spring	Bishop	Blanco	Blooming Grove	Blossom
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$4,240,234	\$226,417	\$20,075,027	\$1,216,570	\$274,158	\$234,928	\$354,015
b. Noncontributing Members	644,207	139,492	4,994,702	288,770	149,456	83,109	59,578
c. Annuitants	<u>1,847,793</u>	<u>624,787</u>	<u>31,316,455</u>	<u>1,102,231</u>	<u>429,338</u>	<u>165,186</u>	<u>347,530</u>
2. Total Actuarial Accrued Liability	\$6,732,234	\$990,696	\$56,386,184	\$2,607,571	\$852,952	\$483,223	\$761,123
3. Actuarial value of assets	<u>4,925,582</u>	<u>958,582</u>	<u>46,081,542</u>	<u>2,568,498</u>	<u>783,416</u>	<u>418,643</u>	<u>813,183</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,806,652	\$32,114	\$10,304,642	\$39,073	\$69,536	\$64,580	(\$52,060)
5. Funded Ratio: (3) / (2)	73.2%	96.8%	81.7%	98.5%	91.8%	86.6%	106.8%
6. Annual Payroll	\$1,253,468	\$451,207	\$9,178,979	\$775,825	\$920,611	\$180,070	\$187,810
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.98%	1.36%	8.86%	2.98%	6.07%	6.65%	5.81%
Prior Service	<u>10.53%</u>	<u>1.13%</u>	<u>8.58%</u>	<u>0.54%</u>	<u>0.48%</u>	<u>4.13%</u>	<u>-1.70%</u>
Total Retirement	17.51%	2.49%	17.44%	3.52%	6.55%	10.78%	4.11%
Supplemental Death	<u>0.25%</u>	<u>0.22%</u>	<u>0.30%</u>	<u>0.25%</u>	<u>0.18%</u>	<u>0.15%</u>	<u>0.58%</u>
Total Rate	17.76%	2.71%	17.74%	3.77%	6.73%	10.93%	4.69%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	7.50%	N/A	11.50%	13.50%	11.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.2 years	7.3 years	18.6 years	11.4 years	24.0 years	10.6 years	25.0 years
Number of annuitants	10	4	152	15	8	2	4
Number of active contributing members	26	10	175	23	21	5	4
Number of inactive members	6	10	106	12	31	2	1
Average age of contributing members	45.1 years	42.7 years	42.0 years	47.0 years	41.0 years	43.8 years	53.3 years
Average length of service of contributing members	9.1 years	7.0 years	7.3 years	8.8 years	3.3 years	10.8 years	12.0 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Blue Mound	Blue Ridge	Boerne	Bogata	Bonham	Booker	Borger
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$447,325	\$56,215	\$46,069,229	\$148,109	\$7,471,658	\$584,962	\$25,505,713
b. Noncontributing Members	172,580	66,461	3,516,310	33,170	2,430,483	192,621	2,590,832
c. Annuitants	<u>159,365</u>	<u>12,841</u>	<u>19,346,157</u>	<u>99,605</u>	<u>6,918,962</u>	<u>153,942</u>	<u>18,697,008</u>
2. Total Actuarial Accrued Liability	\$779,270	\$135,517	\$68,931,696	\$280,884	\$16,821,103	\$931,525	\$46,793,553
3. Actuarial value of assets	<u>745,222</u>	<u>177,133</u>	<u>51,639,844</u>	<u>353,776</u>	<u>16,537,811</u>	<u>931,436</u>	<u>40,581,406</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$34,048	(\$41,616)	\$17,291,852	(\$72,892)	\$283,292	\$89	\$6,212,147
5. Funded Ratio: (3) / (2)	95.6%	130.7%	74.9%	126.0%	98.3%	100.0%	86.7%
6. Annual Payroll	\$1,076,847	\$212,477	\$15,514,876	\$332,962	\$5,209,080	\$468,555	\$9,093,738
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.49%	2.99%	11.49%	1.48%	4.45%	5.64%	9.18%
Prior Service	<u>0.19%</u>	<u>-1.20%</u>	<u>6.86%</u>	<u>-1.34%</u>	<u>0.70%</u>	<u>0.00%</u>	<u>4.69%</u>
Total Retirement	4.68%	1.79%	18.35%	0.14%	5.15%	5.64%	13.87%
Supplemental Death	<u>0.10%</u>	<u>0.19%</u>	<u>0.17%</u>	<u>0.16%</u>	<u>0.00%</u>	<u>0.34%</u>	<u>0.19%</u>
Total Rate	4.78%	1.98%	18.52%	0.30%	5.15%	5.98%	14.06%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	7.50%	10.50%	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.8 years	25.0 years	24.9 years	25.0 years	9.3 years	12.1 years	21.1 years
Number of annuitants	6	1	87	3	55	2	86
Number of active contributing members	23	5	259	10	111	10	170
Number of inactive members	28	5	84	4	127	16	68
Average age of contributing members	39.5 years	46.8 years	43.4 years	41.0 years	42.1 years	50.0 years	41.9 years
Average length of service of contributing members	6.8 years	2.6 years	9.7 years	5.2 years	8.7 years	7.9 years	9.6 years

	Bovina	Bowie	Boyd	Brady	Brazoria	Breckenridge	Bremond
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$136,732	\$6,888,490	\$327,798	\$5,368,369	\$3,010,115	\$2,407,270	\$555,072
b. Noncontributing Members	54,294	2,053,194	289,523	2,126,476	644,226	500,515	172,488
c. Annuitants	<u>184,882</u>	<u>7,403,573</u>	<u>413,684</u>	<u>3,141,772</u>	<u>901,349</u>	<u>5,330,590</u>	<u>24,057</u>
2. Total Actuarial Accrued Liability	\$375,908	\$16,345,257	\$1,031,005	\$10,636,617	\$4,555,690	\$8,238,375	\$751,617
3. Actuarial value of assets	<u>437,306</u>	<u>15,033,630</u>	<u>1,053,143</u>	<u>9,705,650</u>	<u>4,581,992</u>	<u>7,429,943</u>	<u>619,943</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$61,398)	\$1,311,627	(\$22,138)	\$930,967	(\$26,302)	\$808,432	\$131,674
5. Funded Ratio: (3) / (2)	116.3%	92.0%	102.1%	91.2%	100.6%	90.2%	82.5%
6. Annual Payroll	\$391,986	\$3,595,326	\$723,947	\$4,268,968	\$1,213,251	\$2,281,471	\$265,066
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.19%	7.04%	4.29%	8.41%	5.78%	4.69%	5.67%
Prior Service	<u>-0.96%</u>	<u>2.53%</u>	<u>-0.19%</u>	<u>1.42%</u>	<u>-0.14%</u>	<u>2.24%</u>	<u>10.30%</u>
Total Retirement	0.23%	9.57%	4.10%	9.83%	5.64%	6.93%	15.97%
Supplemental Death	<u>0.19%</u>	<u>0.25%</u>	<u>0.00%</u>	<u>0.26%</u>	<u>0.21%</u>	<u>0.28%</u>	<u>0.31%</u>
Total Rate	0.42%	9.82%	4.10%	10.09%	5.85%	7.21%	16.28%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	11.50%	11.50%	12.50%	11.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	20.7 years	25.0 years	22.7 years	25.0 years	25.0 years	5.5 years
Number of annuitants	5	67	7	54	16	48	1
Number of active contributing members	11	80	16	98	28	66	6
Number of inactive members	16	73	22	112	19	50	11
Average age of contributing members	40.4 years	44.5 years	40.5 years	44.8 years	43.7 years	42.6 years	45.0 years
Average length of service of contributing members	4.5 years	9.1 years	8.2 years	7.8 years	9.4 years	7.7 years	9.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Brenham	Bridge City	Bridgeport	Bronte	Brookshire	Brownfield	Brownsboro
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$20,048,515	\$10,247,414	\$4,821,643	\$301,899	\$3,333,177	\$8,977,750	\$129,984
b. Noncontributing Members	4,531,987	1,311,567	2,707,589	19,641	1,622,183	663,448	21,012
c. Annuitants	<u>23,620,971</u>	<u>9,329,645</u>	<u>5,576,700</u>	<u>145,684</u>	<u>978,220</u>	<u>8,960,799</u>	<u>242,289</u>
2. Total Actuarial Accrued Liability	\$48,201,473	\$20,888,626	\$13,105,932	\$467,224	\$5,933,580	\$18,601,997	\$393,285
3. Actuarial value of assets	<u>43,242,221</u>	<u>17,588,513</u>	<u>10,988,451</u>	<u>369,918</u>	<u>5,415,735</u>	<u>19,567,186</u>	<u>111,632</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$4,959,252	\$3,300,113	\$2,117,481	\$97,306	\$517,845	(\$965,189)	\$281,653
5. Funded Ratio: (3) / (2)	89.7%	84.2%	83.8%	79.2%	91.3%	105.2%	28.4%
6. Annual Payroll	\$11,592,361	\$3,498,380	\$3,028,318	\$130,566	\$1,798,275	\$4,047,128	\$302,263
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.02%	9.34%	9.20%	2.58%	6.87%	5.38%	1.82%
Prior Service	<u>4.65%</u>	<u>5.79%</u>	<u>4.47%</u>	<u>10.51%</u>	<u>1.81%</u>	<u>-1.46%</u>	<u>8.59%</u>
Total Retirement	9.67%	15.13%	13.67%	13.09%	8.68%	3.92%	10.41%
Supplemental Death	<u>0.00%</u>	<u>0.28%</u>	<u>0.20%</u>	<u>0.24%</u>	<u>0.19%</u>	<u>0.00%</u>	<u>0.41%</u>
Total Rate	9.67%	15.41%	13.87%	13.33%	8.87%	3.92%	10.82%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	13.21%	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	N/A	N/A	12.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	11.4 years	25.0 years	25.0 years	8.6 years	24.1 years	25.0 years	14.0 years
Number of annuitants	137	50	45	1	10	45	1
Number of active contributing members	206	58	57	3	40	91	9
Number of inactive members	136	27	82	2	43	35	2
Average age of contributing members	41.3 years	46.0 years	40.2 years	57.2 years	43.6 years	44.8 years	46.6 years
Average length of service of contributing members	10.6 years	11.4 years	8.8 years	18.7 years	8.1 years	9.9 years	5.0 years

	Brownsville	Brownsville PUB	Brownwood	Brownwood Health Dept.	Brownwood Public Library	Bruceville-Eddy	Bryan
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$217,458,488	\$114,294,429	\$22,860,930	\$586,210	\$154,592	\$502,930	\$171,519,918
b. Noncontributing Members	13,339,418	10,003,795	4,411,379	137,203	4,568	317,309	31,676,001
c. Annuitants	<u>145,028,808</u>	<u>61,831,279</u>	<u>25,343,900</u>	<u>775,472</u>	<u>168,162</u>	<u>367,275</u>	<u>143,344,912</u>
2. Total Actuarial Accrued Liability	\$375,826,714	\$186,129,503	\$52,616,209	\$1,498,885	\$327,322	\$1,187,514	\$346,540,831
3. Actuarial value of assets	<u>328,577,911</u>	<u>155,070,768</u>	<u>45,625,998</u>	<u>1,343,908</u>	<u>354,351</u>	<u>1,205,383</u>	<u>292,306,019</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$47,248,803	\$31,058,735	\$6,990,211	\$154,977	(\$27,029)	(\$17,869)	\$54,234,812
5. Funded Ratio: (3) / (2)	87.4%	83.3%	86.7%	89.7%	108.3%	101.5%	84.3%
6. Annual Payroll	\$62,462,808	\$31,209,832	\$10,203,257	\$461,672	\$177,695	\$655,643	\$59,689,745
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.56%	10.18%	8.54%	7.94%	5.37%	5.89%	8.86%
Prior Service	<u>6.30%</u>	<u>7.03%</u>	<u>4.83%</u>	<u>2.70%</u>	<u>-0.93%</u>	<u>-0.17%</u>	<u>6.33%</u>
Total Retirement	16.86%	17.21%	13.37%	10.64%	4.44%	5.72%	15.19%
Supplemental Death	<u>0.18%</u>	<u>0.21%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.17%</u>	<u>0.00%</u>
Total Rate	17.04%	17.42%	13.37%	10.64%	4.44%	5.89%	15.19%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	11.50%	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	16.0 years	20.2 years	20.2 years	16.7 years	25.0 years	25.0 years	20.6 years
Number of annuitants	576	261	140	12	3	7	611
Number of active contributing members	1,144	585	227	11	10	17	877
Number of inactive members	286	120	91	2	4	16	470
Average age of contributing members	43.6 years	43.3 years	42.7 years	46.5 years	57.8 years	41.0 years	41.8 years
Average length of service of contributing members	11.7 years	12.2 years	8.5 years	9.9 years	6.3 years	6.0 years	11.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Bryson	Buda	Buffalo	Bullard	Bulverde	Bunker Hill Village	Burkburnett
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$60,994	\$8,022,916	\$942,879	\$1,613,283	\$1,638,548	\$1,835,506	\$6,117,914
b. Noncontributing Members	42,218	1,298,414	275,964	329,745	824,479	259,997	2,103,342
c. Annuitants	<u>349,028</u>	<u>1,852,800</u>	<u>286,909</u>	<u>111,048</u>	<u>529,837</u>	<u>1,159,204</u>	<u>6,874,228</u>
2. Total Actuarial Accrued Liability	\$452,240	\$11,174,130	\$1,505,752	\$2,054,076	\$2,992,864	\$3,254,707	\$15,095,484
3. Actuarial value of assets	<u>607,271</u>	<u>9,274,847</u>	<u>1,502,144</u>	<u>1,739,243</u>	<u>2,630,785</u>	<u>3,219,353</u>	<u>13,253,295</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$155,031)	\$1,899,283	\$3,608	\$314,833	\$362,079	\$35,354	\$1,842,189
5. Funded Ratio: (3) / (2)	134.3%	83.0%	99.8%	84.7%	87.9%	98.9%	87.8%
6. Annual Payroll	\$108,468	\$5,735,864	\$586,802	\$1,258,525	\$1,565,334	\$645,203	\$3,180,226
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.95%	11.75%	4.77%	5.89%	8.52%	9.52%	6.47%
Prior Service	<u>-2.95%</u>	<u>2.01%</u>	<u>0.05%</u>	<u>1.59%</u>	<u>1.48%</u>	<u>0.66%</u>	<u>3.81%</u>
Total Retirement	0.00%	13.76%	4.82%	7.48%	10.00%	10.18%	10.28%
Supplemental Death	<u>0.00%</u>	<u>0.17%</u>	<u>0.42%</u>	<u>0.19%</u>	<u>0.14%</u>	<u>0.20%</u>	<u>0.27%</u>
Total Rate	0.00%	13.93%	5.24%	7.67%	10.14%	10.38%	10.55%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	11.50%	11.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.4 years	18.0 years	23.6 years	23.3 years	10.1 years	22.4 years
Number of annuitants	1	15	5	3	9	5	52
Number of active contributing members	3	108	17	27	27	8	72
Number of inactive members	3	48	12	18	25	4	37
Average age of contributing members	50.0 years	42.4 years	54.7 years	44.6 years	43.7 years	50.8 years	44.0 years
Average length of service of contributing members	5.5 years	6.5 years	10.1 years	10.4 years	8.8 years	16.5 years	8.7 years

	Burleson	Burnet	Burton	Cactus	Caddo Mills	Caldwell	Calvert
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$60,339,691	\$11,124,445	\$28,730	\$866,869	\$300,647	\$6,755,275	\$164,872
b. Noncontributing Members	10,394,604	3,103,936	0	255,197	100,691	597,580	81,700
c. Annuitants	<u>31,994,175</u>	<u>11,677,805</u>	<u>0</u>	<u>531,581</u>	<u>166,275</u>	<u>3,871,348</u>	<u>63,199</u>
2. Total Actuarial Accrued Liability	\$102,728,470	\$25,906,186	\$28,730	\$1,653,647	\$567,613	\$11,224,203	\$309,771
3. Actuarial value of assets	<u>83,892,847</u>	<u>22,088,188</u>	<u>19,426</u>	<u>1,645,460</u>	<u>542,571</u>	<u>10,735,111</u>	<u>374,770</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$18,835,623	\$3,817,998	\$9,304	\$8,187	\$25,042	\$489,092	(\$64,999)
5. Funded Ratio: (3) / (2)	81.7%	85.3%	67.6%	99.5%	95.6%	95.6%	121.0%
6. Annual Payroll	\$23,052,221	\$6,210,360	\$36,748	\$1,912,068	\$617,367	\$2,307,639	\$447,901
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.45%	9.23%	1.64%	5.15%	5.44%	5.84%	2.05%
Prior Service	<u>5.02%</u>	<u>3.77%</u>	<u>8.72%</u>	<u>0.03%</u>	<u>0.35%</u>	<u>2.29%</u>	<u>-0.89%</u>
Total Retirement	15.47%	13.00%	10.36%	5.18%	5.79%	8.13%	1.16%
Supplemental Death	<u>0.14%</u>	<u>0.16%</u>	<u>0.11%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.39%</u>	<u>0.33%</u>
Total Rate	15.61%	13.16%	10.47%	5.33%	5.94%	8.52%	1.49%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	13.50%	N/A	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.1 years	3.1 years	23.0 years	15.2 years	11.4 years	25.0 years
Number of annuitants	132	64	0	9	3	30	3
Number of active contributing members	335	116	1	39	12	58	11
Number of inactive members	178	64	0	56	12	32	19
Average age of contributing members	42.0 years	40.8 years	48.5 years	37.6 years	44.1 years	51.3 years	48.0 years
Average length of service of contributing members	11.2 years	8.9 years	15.8 years	4.0 years	4.2 years	12.8 years	4.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Cameron	Campbell	Canadian	Caney City	Canton	Canyon	Carmine
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,204,607	\$164,374	\$1,918,639	\$16,874	\$5,971,181	\$16,697,723	\$123,333
b. Noncontributing Members	1,110,524	0	758,875	5,332	1,493,532	3,392,922	0
c. Annuitants	<u>2,380,012</u>	<u>0</u>	<u>2,278,533</u>	<u>0</u>	<u>3,693,035</u>	<u>11,271,677</u>	<u>38,026</u>
2. Total Actuarial Accrued Liability	\$5,695,143	\$164,374	\$4,956,047	\$22,206	\$11,157,748	\$31,362,322	\$161,359
3. Actuarial value of assets	<u>4,521,210</u>	<u>51,794</u>	<u>3,683,725</u>	<u>30,926</u>	<u>9,573,854</u>	<u>28,542,780</u>	<u>168,104</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,173,933	\$112,580	\$1,272,322	(\$8,720)	\$1,583,894	\$2,819,542	(\$6,745)
5. Funded Ratio: (3) / (2)	79.4%	31.5%	74.3%	139.3%	85.8%	91.0%	104.2%
6. Annual Payroll	\$1,721,601	\$61,872	\$1,034,365	\$142,655	\$2,980,620	\$5,645,904	\$62,502
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.39%	1.70%	9.55%	1.81%	8.08%	10.35%	2.68%
Prior Service	<u>4.90%</u>	<u>40.05%</u>	<u>7.55%</u>	<u>-0.38%</u>	<u>3.53%</u>	<u>3.77%</u>	<u>-0.73%</u>
Total Retirement	10.29%	41.75%	17.10%	1.43%	11.61%	14.12%	1.95%
Supplemental Death	<u>0.26%</u>	<u>0.22%</u>	<u>0.20%</u>	<u>0.08%</u>	<u>0.23%</u>	<u>0.20%</u>	<u>0.08%</u>
Total Rate	10.55%	41.97%	17.30%	1.51%	11.84%	14.32%	2.03%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.2 years	5.0 years	25.0 years	25.0 years	22.1 years	18.3 years	25.0 years
Number of annuitants	33	0	10	0	34	42	2
Number of active contributing members	41	2	20	4	66	100	2
Number of inactive members	41	0	8	4	49	42	0
Average age of contributing members	46.9 years	58.5 years	43.0 years	39.8 years	45.8 years	42.8 years	40.9 years
Average length of service of contributing members	9.2 years	21.2 years	8.4 years	1.9 years	8.9 years	10.2 years	15.0 years

	Carrizo Springs	Carrollton	Carthage	Castle Hills	Castroville	Cedar Hill	Cedar Park
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,356,172	\$168,427,118	\$11,838,580	\$6,093,735	\$946,378	\$60,218,333	\$68,898,573
b. Noncontributing Members	219,239	60,959,023	1,701,442	1,439,357	1,371,505	9,745,075	10,935,155
c. Annuitants	<u>3,204,052</u>	<u>202,220,249</u>	<u>18,680,785</u>	<u>11,270,037</u>	<u>3,380,617</u>	<u>38,912,907</u>	<u>19,598,843</u>
2. Total Actuarial Accrued Liability	\$4,779,463	\$431,606,390	\$32,220,807	\$18,803,129	\$5,698,500	\$108,876,315	\$99,432,571
3. Actuarial value of assets	<u>4,661,969</u>	<u>409,035,774</u>	<u>27,414,348</u>	<u>16,659,407</u>	<u>5,240,079</u>	<u>94,510,876</u>	<u>76,908,214</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$117,494	\$22,570,616	\$4,806,459	\$2,143,722	\$458,421	\$14,365,439	\$22,524,357
5. Funded Ratio: (3) / (2)	97.5%	94.8%	85.1%	88.6%	92.0%	86.8%	77.3%
6. Annual Payroll	\$1,371,508	\$58,218,122	\$4,229,420	\$3,719,237	\$1,886,375	\$22,905,362	\$30,774,351
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.81%	8.33%	9.00%	8.46%	7.24%	9.68%	9.65%
Prior Service	<u>0.52%</u>	<u>3.79%</u>	<u>8.97%</u>	<u>3.92%</u>	<u>1.51%</u>	<u>4.11%</u>	<u>4.71%</u>
Total Retirement	5.33%	12.12%	17.97%	12.38%	8.75%	13.79%	14.36%
Supplemental Death	<u>0.30%</u>	<u>0.00%</u>	<u>0.28%</u>	<u>0.17%</u>	<u>0.30%</u>	<u>0.15%</u>	<u>0.12%</u>
Total Rate	5.63%	12.12%	18.25%	12.55%	9.05%	13.94%	14.48%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	N/A	N/A	11.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.3 years	13.1 years	17.2 years	21.3 years	25.0 years	22.6 years	23.2 years
Number of annuitants	24	652	58	52	36	176	133
Number of active contributing members	40	802	73	60	42	340	473
Number of inactive members	42	634	40	40	64	163	248
Average age of contributing members	48.0 years	42.3 years	44.8 years	41.1 years	45.5 years	42.1 years	41.2 years
Average length of service of contributing members	8.5 years	11.6 years	11.0 years	10.1 years	5.6 years	11.4 years	10.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Celeste	Celina	Center	Centerville	Chandler	Charlotte	Chester
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$27,199	\$4,716,183	\$7,101,796	\$806,636	\$364,482	\$435,397	\$309,984
b. Noncontributing Members	50,254	1,879,239	536,933	56,452	90,319	97,948	215,504
c. Annuitants	<u>48,573</u>	<u>738,523</u>	<u>5,734,469</u>	<u>127,351</u>	<u>609,456</u>	<u>71,714</u>	<u>0</u>
2. Total Actuarial Accrued Liability	\$126,026	\$7,333,945	\$13,373,198	\$990,439	\$1,064,257	\$605,059	\$525,488
3. Actuarial value of assets	<u>68,518</u>	<u>7,441,491</u>	<u>12,158,394</u>	<u>817,975</u>	<u>783,575</u>	<u>657,035</u>	<u>557,373</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$57,508	(\$107,546)	\$1,214,804	\$172,464	\$280,682	(\$51,976)	(\$31,885)
5. Funded Ratio: (3) / (2)	54.4%	101.5%	90.9%	82.6%	73.6%	108.6%	106.1%
6. Annual Payroll	\$94,333	\$7,919,110	\$3,247,863	\$222,965	\$1,122,269	\$366,829	\$34,270
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.04%	6.55%	9.83%	6.84%	2.05%	4.66%	6.91%
Prior Service	<u>5.89%</u>	<u>-0.08%</u>	<u>2.57%</u>	<u>15.29%</u>	<u>2.41%</u>	<u>-0.87%</u>	<u>-6.29%</u>
Total Retirement	8.93%	6.47%	12.40%	22.13%	4.46%	3.79%	0.62%
Supplemental Death	<u>0.46%</u>	<u>0.15%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.23%</u>	<u>0.18%</u>	<u>0.95%</u>
Total Rate	9.39%	6.62%	12.58%	22.13%	4.69%	3.97%	1.57%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	21.92%	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	N/A	N/A	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.2 years	25.0 years	21.0 years	5.7 years	13.2 years	25.0 years	25.0 years
Number of annuitants	2	12	44	1	8	1	0
Number of active contributing members	2	147	69	5	26	8	2
Number of inactive members	9	71	18	3	9	7	2
Average age of contributing members	59.9 years	39.5 years	42.6 years	57.6 years	50.8 years	50.5 years	71.8 years
Average length of service of contributing members	7.6 years	7.1 years	9.1 years	15.7 years	6.1 years	9.0 years	29.1 years

	Chico	Childress	Chillicothe	Chireno	Christine	Cibola	Cisco
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$219,918	\$3,628,950	\$89,585	\$901,419	\$22,334	\$9,803,115	\$2,028,018
b. Noncontributing Members	106,944	397,006	99,926	0	102	2,058,501	608,579
c. Annuitants	<u>116,213</u>	<u>5,523,982</u>	<u>0</u>	<u>1,012,337</u>	<u>16,111</u>	<u>2,582,057</u>	<u>1,071,884</u>
2. Total Actuarial Accrued Liability	\$443,075	\$9,549,938	\$189,511	\$1,913,756	\$38,547	\$14,443,673	\$3,708,481
3. Actuarial value of assets	<u>398,366</u>	<u>7,385,616</u>	<u>100,849</u>	<u>1,444,805</u>	<u>48,833</u>	<u>12,541,333</u>	<u>3,676,719</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$44,709	\$2,164,322	\$88,662	\$468,951	(\$10,286)	\$1,902,340	\$31,762
5. Funded Ratio: (3) / (2)	89.9%	77.3%	53.2%	75.5%	126.7%	86.8%	99.1%
6. Annual Payroll	\$258,873	\$2,099,317	\$251,306	\$286,015	\$32,747	\$6,816,174	\$1,338,329
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.23%	9.17%	2.18%	9.69%	0.71%	10.75%	6.24%
Prior Service	<u>2.03%</u>	<u>6.34%</u>	<u>5.15%</u>	<u>11.39%</u>	<u>-0.71%</u>	<u>1.74%</u>	<u>0.15%</u>
Total Retirement	4.26%	15.51%	7.33%	21.08%	0.00%	12.49%	6.39%
Supplemental Death	<u>0.45%</u>	<u>0.31%</u>	<u>0.20%</u>	<u>0.26%</u>	<u>0.00%</u>	<u>0.16%</u>	<u>0.21%</u>
Total Rate	4.71%	15.82%	7.53%	21.34%	0.00%	12.65%	6.60%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	13.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	10.4 years	24.9 years	8.0 years	20.7 years	25.0 years	24.5 years	24.0 years
Number of annuitants	4	41	0	4	2	34	17
Number of active contributing members	7	60	6	6	1	127	37
Number of inactive members	5	46	3	0	1	92	31
Average age of contributing members	55.4 years	45.0 years	50.0 years	45.7 years	35.9 years	41.2 years	40.2 years
Average length of service of contributing members	9.9 years	6.6 years	4.5 years	12.5 years	9.3 years	8.8 years	8.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Clarendon	Clarksville	Clarksville City	Clear Lake Shores	Cleburne	Cleveland	Clifton
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$570,115	\$479,697	\$109,316	\$1,320,722	\$31,999,893	\$5,876,688	\$1,422,462
b. Noncontributing Members	96,054	600,952	31,478	245,178	7,920,519	1,781,249	385,527
c. Annuitants	<u>162,426</u>	<u>1,615,506</u>	<u>1,134,499</u>	<u>545,244</u>	<u>52,885,861</u>	<u>4,766,133</u>	<u>618,635</u>
2. Total Actuarial Accrued Liability	\$828,595	\$2,696,155	\$1,275,293	\$2,111,144	\$92,806,273	\$12,424,070	\$2,426,624
3. Actuarial value of assets	<u>937,785</u>	<u>3,426,788</u>	<u>1,352,440</u>	<u>1,856,911</u>	<u>75,354,153</u>	<u>10,458,949</u>	<u>2,433,870</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$109,190)	(\$730,633)	(\$77,147)	\$254,233	\$17,452,120	\$1,965,121	(\$7,246)
5. Funded Ratio: (3) / (2)	113.2%	127.1%	106.0%	88.0%	81.2%	84.2%	100.3%
6. Annual Payroll	\$513,235	\$865,346	\$204,259	\$1,005,922	\$15,539,562	\$3,497,953	\$1,117,168
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.70%	6.74%	5.23%	9.01%	8.17%	6.54%	1.97%
Prior Service	<u>-1.31%</u>	<u>-5.18%</u>	<u>-0.83%</u>	<u>1.64%</u>	<u>7.89%</u>	<u>3.99%</u>	<u>-0.04%</u>
Total Retirement	1.39%	1.56%	4.40%	10.65%	16.06%	10.53%	1.93%
Supplemental Death	<u>0.57%</u>	<u>0.23%</u>	<u>0.20%</u>	<u>0.14%</u>	<u>0.22%</u>	<u>0.23%</u>	<u>0.38%</u>
Total Rate	1.96%	1.79%	4.60%	10.79%	16.28%	10.76%	2.31%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	11.50%	N/A	12.50%	N/A	11.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	25.0 years	23.2 years	20.3 years	21.3 years	25.0 years
Number of annuitants	7	19	7	4	213	46	16
Number of active contributing members	16	26	4	18	286	83	27
Number of inactive members	20	39	4	16	175	79	22
Average age of contributing members	52.8 years	43.4 years	37.1 years	42.0 years	44.2 years	41.4 years	50.0 years
Average length of service of contributing members	10.6 years	4.7 years	4.5 years	7.9 years	9.1 years	8.6 years	10.9 years

	Clute	Clyde	Coahoma	Cockrell Hill	Coleman	College Station	Colleyville
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$8,151,403	\$2,260,986	\$372,409	\$2,331,089	\$7,170,789	\$130,823,967	\$26,977,757
b. Noncontributing Members	3,692,016	340,407	142,611	1,254,995	1,853,293	33,802,093	8,329,682
c. Annuitants	<u>10,137,776</u>	<u>1,815,241</u>	<u>315,797</u>	<u>956,163</u>	<u>6,831,208</u>	<u>134,992,147</u>	<u>24,446,148</u>
2. Total Actuarial Accrued Liability	\$21,981,195	\$4,416,634	\$830,817	\$4,542,247	\$15,855,290	\$299,618,207	\$59,753,587
3. Actuarial value of assets	<u>21,551,000</u>	<u>3,751,016</u>	<u>840,595</u>	<u>4,892,628</u>	<u>13,461,996</u>	<u>261,205,344</u>	<u>59,197,796</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$430,195	\$665,618	(\$9,778)	(\$350,381)	\$2,393,294	\$38,412,863	\$555,791
5. Funded Ratio: (3) / (2)	98.0%	84.9%	101.2%	107.7%	84.9%	87.2%	99.1%
6. Annual Payroll	\$4,786,594	\$1,286,373	\$256,140	\$1,418,954	\$2,832,200	\$58,459,343	\$13,160,573
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.73%	9.80%	6.50%	9.60%	9.27%	8.53%	8.61%
Prior Service	<u>0.56%</u>	<u>3.18%</u>	<u>-0.23%</u>	<u>-1.52%</u>	<u>7.62%</u>	<u>4.66%</u>	<u>0.33%</u>
Total Retirement	10.29%	12.98%	6.27%	8.08%	16.89%	13.19%	8.94%
Supplemental Death	<u>0.16%</u>	<u>0.22%</u>	<u>0.25%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.16%</u>
Total Rate	10.45%	13.20%	6.52%	8.28%	16.89%	13.19%	9.10%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	13.50%	11.50%	13.50%	N/A	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	25.0 years	25.0 years	25.0 years	15.1 years	20.1 years	17.7 years
Number of annuitants	58	16	4	12	53	481	136
Number of active contributing members	94	33	5	31	67	908	177
Number of inactive members	87	24	3	45	33	562	149
Average age of contributing members	41.0 years	44.6 years	52.9 years	43.5 years	44.8 years	39.6 years	43.1 years
Average length of service of contributing members	7.4 years	8.7 years	9.9 years	10.0 years	10.6 years	9.5 years	12.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Collinsville	Colmesneil	Colorado City	Columbus	Comanche	Combes	Commerce
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$262,402	\$200,989	\$2,330,921	\$4,459,137	\$1,458,315	\$571,779	\$3,727,508
b. Noncontributing Members	2,035	592	1,183,779	1,442,064	338,578	5,822	2,261,848
c. Annuitants	<u>186,014</u>	<u>88,099</u>	<u>2,422,348</u>	<u>2,904,373</u>	<u>1,512,546</u>	<u>0</u>	<u>5,819,821</u>
2. Total Actuarial Accrued Liability	\$450,451	\$289,680	\$5,937,048	\$8,805,574	\$3,309,439	\$577,601	\$11,809,177
3. Actuarial value of assets	<u>445,735</u>	<u>246,133</u>	<u>5,998,912</u>	<u>7,748,786</u>	<u>3,059,170</u>	<u>105,572</u>	<u>11,031,454</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$4,716	\$43,547	(\$61,864)	\$1,056,788	\$250,269	\$472,029	\$777,723
5. Funded Ratio: (3) / (2)	99.0%	85.0%	101.0%	88.0%	92.4%	18.3%	93.4%
6. Annual Payroll	\$365,795	\$157,713	\$1,593,083	\$1,857,021	\$1,039,381	\$587,935	\$2,978,057
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.30%	3.70%	8.28%	7.81%	3.28%	1.57%	6.78%
Prior Service	<u>0.13%</u>	<u>5.35%</u>	<u>-0.24%</u>	<u>4.65%</u>	<u>1.69%</u>	<u>5.35%</u>	<u>1.72%</u>
Total Retirement	5.43%	9.05%	8.04%	12.46%	4.97%	6.92%	8.50%
Supplemental Death	<u>0.25%</u>	<u>0.09%</u>	<u>0.43%</u>	<u>0.25%</u>	<u>0.34%</u>	<u>0.24%</u>	<u>0.23%</u>
Total Rate	5.68%	9.14%	8.47%	12.71%	5.31%	7.16%	8.73%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	12.50%	N/A	12.50%	N/A	7.50%	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.0 years	5.8 years	25.0 years	16.9 years	20.4 years	22.0 years	22.3 years
Number of annuitants	4	1	29	28	21	0	67
Number of active contributing members	8	4	45	38	25	17	75
Number of inactive members	2	1	46	26	15	6	94
Average age of contributing members	47.6 years	38.1 years	47.3 years	44.6 years	46.9 years	46.2 years	40.0 years
Average length of service of contributing members	8.5 years	7.7 years	7.1 years	10.9 years	10.8 years	8.3 years	7.4 years

	Conroe	Converse	Cooper	Coppell	Copper Canyon	Copperas Cove	Corinth
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$75,787,367	\$14,233,938	\$532,281	\$88,080,900	\$304,398	\$24,586,650	\$22,388,083
b. Noncontributing Members	11,468,958	4,294,751	45,114	17,298,802	39,163	8,886,158	6,642,531
c. Annuitants	<u>56,055,661</u>	<u>12,135,355</u>	<u>939,567</u>	<u>59,726,582</u>	<u>134,373</u>	<u>29,832,580</u>	<u>12,391,164</u>
2. Total Actuarial Accrued Liability	\$143,311,986	\$30,664,044	\$1,516,962	\$165,106,284	\$477,934	\$63,305,388	\$41,421,778
3. Actuarial value of assets	<u>118,592,377</u>	<u>25,212,689</u>	<u>1,427,737</u>	<u>144,441,930</u>	<u>440,763</u>	<u>55,697,549</u>	<u>34,990,192</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$24,719,609	\$5,451,355	\$89,225	\$20,664,354	\$37,171	\$7,607,839	\$6,431,586
5. Funded Ratio: (3) / (2)	82.8%	82.2%	94.1%	87.5%	92.2%	88.0%	84.5%
6. Annual Payroll	\$28,398,811	\$8,007,831	\$427,561	\$29,578,265	\$211,877	\$12,012,115	\$9,898,654
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.68%	9.55%	3.20%	10.86%	10.70%	8.17%	11.33%
Prior Service	<u>6.56%</u>	<u>4.17%</u>	<u>1.82%</u>	<u>4.71%</u>	<u>2.59%</u>	<u>3.89%</u>	<u>4.01%</u>
Total Retirement	16.24%	13.72%	5.02%	15.57%	13.29%	12.06%	15.34%
Supplemental Death	<u>0.00%</u>	<u>0.13%</u>	<u>0.27%</u>	<u>0.15%</u>	<u>0.55%</u>	<u>0.20%</u>	<u>0.13%</u>
Total Rate	16.24%	13.85%	5.29%	15.72%	13.84%	12.26%	15.47%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	12.24%	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	8.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.4 years	25.0 years	15.1 years	21.6 years	7.9 years	25.0 years	24.8 years
Number of annuitants	186	63	8	231	4	224	84
Number of active contributing members	430	165	13	379	3	244	144
Number of inactive members	179	153	3	224	1	240	128
Average age of contributing members	41.5 years	39.5 years	49.1 years	42.8 years	65.7 years	41.8 years	42.8 years
Average length of service of contributing members	9.9 years	7.7 years	9.9 years	11.9 years	14.3 years	11.8 years	12.5 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Corpus Christi	Corrigan	Corsicana	Cotulla	Crandall	Crane	Crawford
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$437,958,466	\$489,302	\$27,070,817	\$1,722,480	\$2,152,570	\$2,444,033	\$91,150
b. Noncontributing Members	51,346,008	212,255	5,402,806	40,943	798,916	364,015	5,347
c. Annuitants	<u>496,580,899</u>	<u>869,861</u>	<u>26,030,678</u>	<u>664,171</u>	<u>722,315</u>	<u>3,512,012</u>	<u>59,117</u>
2. Total Actuarial Accrued Liability	\$985,885,373	\$1,571,418	\$58,504,301	\$2,427,594	\$3,673,801	\$6,320,060	\$155,614
3. Actuarial value of assets	<u>730,891,816</u>	<u>1,589,519</u>	<u>49,975,225</u>	<u>2,011,599</u>	<u>3,758,832</u>	<u>6,705,801</u>	<u>168,485</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$254,993,557	(\$18,101)	\$8,529,076	\$415,995	(\$85,031)	(\$385,741)	(\$12,871)
5. Funded Ratio: (3) / (2)	74.1%	101.2%	85.4%	82.9%	102.3%	106.1%	108.3%
6. Annual Payroll	\$132,940,160	\$1,046,110	\$9,854,121	\$1,434,694	\$1,476,991	\$1,385,352	\$177,905
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.67%	4.08%	7.96%	4.76%	11.03%	9.72%	1.23%
Prior Service	<u>14.94%</u>	<u>-0.11%</u>	<u>7.41%</u>	<u>1.85%</u>	<u>-0.35%</u>	<u>-1.71%</u>	<u>-0.44%</u>
Total Retirement	24.61%	3.97%	15.37%	6.61%	10.68%	8.01%	0.79%
Supplemental Death	<u>0.00%</u>	<u>0.25%</u>	<u>0.23%</u>	<u>0.32%</u>	<u>0.17%</u>	<u>0.20%</u>	<u>0.00%</u>
Total Rate	24.61%	4.22%	15.60%	6.93%	10.85%	8.21%	0.79%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	11.50%	N/A	11.50%	13.50%	15.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.9 years	25.0 years	16.9 years	23.5 years	25.0 years	25.0 years	25.0 years
Number of annuitants	2,207	14	156	16	12	17	1
Number of active contributing members	2,419	26	176	39	30	25	5
Number of inactive members	1,203	49	90	53	40	6	2
Average age of contributing members	45.0 years	43.9 years	44.4 years	48.2 years	42.9 years	46.1 years	38.0 years
Average length of service of contributing members	11.2 years	4.9 years	11.8 years	6.5 years	7.6 years	8.9 years	8.0 years

	Crockett	Crosbyton	Cross Plains	Cross Roads	Crowell	Crowley	Crystal City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,226,930	\$384,327	\$709,521	\$246,580	\$89,936	\$11,185,568	\$1,081,089
b. Noncontributing Members	665,126	242,387	248,480	31,006	0	2,565,953	785,860
c. Annuitants	<u>6,813,360</u>	<u>866,911</u>	<u>325,502</u>	<u>33,225</u>	<u>0</u>	<u>6,595,292</u>	<u>1,428,890</u>
2. Total Actuarial Accrued Liability	\$10,705,416	\$1,493,625	\$1,283,503	\$310,811	\$89,936	\$20,346,813	\$3,295,839
3. Actuarial value of assets	<u>10,215,445</u>	<u>1,515,964</u>	<u>1,203,937</u>	<u>275,014</u>	<u>5,511</u>	<u>17,611,416</u>	<u>4,054,447</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$489,971	(\$22,339)	\$79,566	\$35,797	\$84,425	\$2,735,397	(\$758,608)
5. Funded Ratio: (3) / (2)	95.4%	101.5%	93.8%	88.5%	6.1%	86.6%	123.0%
6. Annual Payroll	\$2,259,217	\$335,237	\$364,297	\$743,468	\$208,957	\$6,232,186	\$1,383,249
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.54%	5.43%	5.21%	7.10%	1.59%	8.27%	4.08%
Prior Service	<u>1.55%</u>	<u>-0.41%</u>	<u>2.95%</u>	<u>0.45%</u>	<u>3.94%</u>	<u>2.68%</u>	<u>-3.47%</u>
Total Retirement	8.09%	5.02%	8.16%	7.55%	5.53%	10.95%	0.61%
Supplemental Death	<u>0.33%</u>	<u>0.77%</u>	<u>0.18%</u>	<u>0.08%</u>	<u>0.28%</u>	<u>0.14%</u>	<u>0.00%</u>
Total Rate	8.42%	5.79%	8.34%	7.63%	5.81%	11.09%	0.61%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	10.50%	9.50%	N/A	N/A	12.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.9 years	25.0 years	8.7 years	13.7 years	13.0 years	25.2 years	25.0 years
Number of annuitants	61	12	3	1	0	53	22
Number of active contributing members	52	10	8	11	8	115	51
Number of inactive members	49	17	5	2	0	86	90
Average age of contributing members	43.3 years	47.2 years	49.5 years	39.8 years	42.2 years	42.4 years	41.3 years
Average length of service of contributing members	7.8 years	6.2 years	10.9 years	9.8 years	4.6 years	10.2 years	4.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Cuero	Cumby	Daingerfield	Daisetta	Dalhart	Dalworthington Gardens	Danbury
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$8,198,827	\$124,138	\$871,681	\$164,655	\$4,368,477	\$2,416,284	\$416,134
b. Noncontributing Members	1,316,041	106,498	498,048	84,335	665,209	1,532,953	82,082
c. Annuitants	<u>5,797,883</u>	<u>91,797</u>	<u>1,183,870</u>	<u>6,343</u>	<u>3,587,583</u>	<u>4,652,586</u>	<u>4,747</u>
2. Total Actuarial Accrued Liability	\$15,312,751	\$322,433	\$2,553,599	\$255,333	\$8,621,269	\$8,601,823	\$502,963
3. Actuarial value of assets	<u>12,542,055</u>	<u>288,364</u>	<u>2,559,936</u>	<u>297,803</u>	<u>8,540,346</u>	<u>6,363,904</u>	<u>454,999</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,770,696	\$34,069	(\$6,337)	(\$42,470)	\$80,923	\$2,237,919	\$47,964
5. Funded Ratio: (3) / (2)	81.9%	89.4%	100.2%	116.6%	99.1%	74.0%	90.5%
6. Annual Payroll	\$4,859,022	\$430,805	\$765,825	\$210,170	\$2,915,094	\$1,679,493	\$409,787
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.98%	1.33%	5.65%	2.29%	4.61%	11.57%	4.66%
Prior Service	<u>3.50%</u>	<u>0.58%</u>	<u>-0.05%</u>	<u>-1.37%</u>	<u>0.17%</u>	<u>9.42%</u>	<u>1.08%</u>
Total Retirement	10.48%	1.91%	5.60%	0.92%	4.78%	20.99%	5.74%
Supplemental Death	<u>0.26%</u>	<u>0.13%</u>	<u>0.00%</u>	<u>0.42%</u>	<u>0.20%</u>	<u>0.13%</u>	<u>0.19%</u>
Total Rate	10.74%	2.04%	5.60%	1.34%	4.98%	21.12%	5.93%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	9.50%	N/A	11.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	19.1 years	25.0 years	25.0 years	24.9 years	20.1 years	13.9 years
Number of annuitants	55	3	15	1	31	12	1
Number of active contributing members	90	10	18	7	67	26	9
Number of inactive members	41	17	12	10	76	26	10
Average age of contributing members	46.4 years	37.0 years	45.4 years	58.1 years	41.1 years	42.4 years	49.5 years
Average length of service of contributing members	11.4 years	3.6 years	8.1 years	7.9 years	8.7 years	10.4 years	7.9 years

	Darrouzett	Dayton	De Leon	DeSoto	Decatur	Deer Park	Dekalb
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$31,673	\$3,694,333	\$138,217	\$48,055,562	\$17,383,448	\$64,624,114	\$392,169
b. Noncontributing Members	54,381	1,363,593	194,949	17,976,743	3,643,007	6,702,384	120,669
c. Annuitants	<u>160,313</u>	<u>3,638,234</u>	<u>275,402</u>	<u>55,627,363</u>	<u>5,243,996</u>	<u>63,327,322</u>	<u>296,499</u>
2. Total Actuarial Accrued Liability	\$246,367	\$8,696,160	\$608,568	\$121,659,668	\$26,270,451	\$134,653,820	\$809,337
3. Actuarial value of assets	<u>237,992</u>	<u>7,766,812</u>	<u>603,537</u>	<u>115,780,122</u>	<u>22,655,965</u>	<u>123,840,917</u>	<u>918,221</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$8,375	\$929,348	\$5,031	\$5,879,546	\$3,614,486	\$10,812,903	(\$108,884)
5. Funded Ratio: (3) / (2)	96.6%	89.3%	99.2%	95.2%	86.2%	92.0%	113.5%
6. Annual Payroll	\$97,176	\$4,530,404	\$505,118	\$23,676,134	\$6,208,642	\$20,438,749	\$554,449
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.87%	5.74%	1.67%	9.35%	10.73%	10.30%	3.67%
Prior Service	<u>1.26%</u>	<u>1.25%</u>	<u>0.09%</u>	<u>1.59%</u>	<u>3.57%</u>	<u>3.48%</u>	<u>-1.24%</u>
Total Retirement	4.13%	6.99%	1.76%	10.94%	14.30%	13.78%	2.43%
Supplemental Death	<u>0.34%</u>	<u>0.16%</u>	<u>0.28%</u>	<u>0.19%</u>	<u>0.25%</u>	<u>0.20%</u>	<u>0.20%</u>
Total Rate	4.47%	7.15%	2.04%	11.13%	14.55%	13.98%	2.63%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	7.50%	N/A	N/A	N/A	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	8.0 years	25.2 years	16.0 years	23.4 years	25.1 years	22.5 years	25.0 years
Number of annuitants	1	47	6	237	44	202	11
Number of active contributing members	3	97	11	341	114	305	14
Number of inactive members	2	83	17	258	93	149	9
Average age of contributing members	53.4 years	42.4 years	41.9 years	43.1 years	45.6 years	41.6 years	51.1 years
Average length of service of contributing members	3.0 years	6.7 years	8.3 years	10.4 years	12.1 years	11.9 years	8.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Del Rio	Dell City	Denison	Denton	Denver City	Deport	Devine
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$22,627,085	\$189,972	\$25,551,112	\$248,482,914	\$2,775,215	\$5,139	\$4,706,988
b. Noncontributing Members	2,575,872	2,274	5,060,564	55,172,422	689,566	3,964	203,784
c. Annuitants	<u>9,282,414</u>	<u>201,529</u>	<u>35,887,994</u>	<u>193,643,439</u>	<u>6,142,964</u>	<u>69,413</u>	<u>1,563,588</u>
2. Total Actuarial Accrued Liability	\$34,485,371	\$393,775	\$66,499,670	\$497,298,775	\$9,607,745	\$78,516	\$6,474,360
3. Actuarial value of assets	<u>24,934,225</u>	<u>363,398</u>	<u>61,379,444</u>	<u>416,882,602</u>	<u>9,201,475</u>	<u>76,118</u>	<u>3,607,518</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$9,551,146	\$30,377	\$5,120,226	\$80,416,173	\$406,270	\$2,398	\$2,866,842
5. Funded Ratio: (3) / (2)	72.3%	92.3%	92.3%	83.8%	95.8%	96.9%	55.7%
6. Annual Payroll	\$19,582,271	\$108,987	\$11,644,178	\$90,674,346	\$1,312,335	\$166,195	\$1,885,528
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.69%	5.42%	8.36%	10.03%	6.59%	1.60%	5.99%
Prior Service	<u>3.76%</u>	<u>3.75%</u>	<u>3.80%</u>	<u>7.26%</u>	<u>4.58%</u>	<u>0.28%</u>	<u>10.63%</u>
Total Retirement	7.45%	9.17%	12.16%	17.29%	11.17%	1.88%	16.62%
Supplemental Death	<u>0.22%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.17%</u>	<u>0.24%</u>	<u>0.14%</u>	<u>0.16%</u>
Total Rate	7.67%	9.37%	12.16%	17.46%	11.41%	2.02%	16.78%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.8 years	9.2 years	15.2 years	16.4 years	8.0 years	5.8 years	20.5 years
Number of annuitants	115	1	159	644	22	1	15
Number of active contributing members	477	2	228	1,265	24	3	45
Number of inactive members	208	1	114	613	27	3	11
Average age of contributing members	43.8 years	47.0 years	43.7 years	43.0 years	44.9 years	41.2 years	44.2 years
Average length of service of contributing members	9.4 years	12.8 years	9.7 years	11.1 years	10.1 years	0.9 years	9.2 years

	Diboll	Dickens	Dickinson	Dilley	Dimmitt	Donna	Double Oak
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,588,016	\$25,899	\$11,857,465	\$1,528,459	\$1,281,618	\$6,486,938	\$698,562
b. Noncontributing Members	1,867,934	31,639	2,908,774	103,379	371,477	983,299	144,789
c. Annuitants	<u>5,753,746</u>	<u>0</u>	<u>4,471,623</u>	<u>1,101,512</u>	<u>2,777,011</u>	<u>2,812,889</u>	<u>23,017</u>
2. Total Actuarial Accrued Liability	\$11,209,696	\$57,538	\$19,237,862	\$2,733,350	\$4,430,106	\$10,283,126	\$866,368
3. Actuarial value of assets	<u>9,949,971</u>	<u>67,593</u>	<u>17,628,864</u>	<u>2,015,760</u>	<u>4,999,805</u>	<u>7,302,373</u>	<u>817,343</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,259,725	(\$10,055)	\$1,608,998	\$717,590	(\$569,699)	\$2,980,753	\$49,025
5. Funded Ratio: (3) / (2)	88.8%	117.5%	91.6%	73.7%	112.9%	71.0%	94.3%
6. Annual Payroll	\$1,729,705	\$73,063	\$5,599,479	\$1,406,393	\$1,038,859	\$5,567,496	\$740,987
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.01%	2.82%	7.67%	6.91%	7.39%	7.49%	6.49%
Prior Service	<u>4.66%</u>	<u>-0.85%</u>	<u>1.82%</u>	<u>3.23%</u>	<u>-3.37%</u>	<u>3.57%</u>	<u>0.56%</u>
Total Retirement	14.67%	1.97%	9.49%	10.14%	4.02%	11.06%	7.05%
Supplemental Death	<u>0.19%</u>	<u>0.07%</u>	<u>0.19%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.33%</u>
Total Rate	14.86%	2.04%	9.68%	10.32%	4.02%	11.06%	7.38%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	13.50%	12.50%	12.50%	13.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.9 years	25.0 years	23.9 years	23.9 years	25.0 years	22.0 years	15.8 years
Number of annuitants	40	0	36	22	21	30	3
Number of active contributing members	39	2	92	37	28	138	11
Number of inactive members	39	2	87	40	22	100	7
Average age of contributing members	43.3 years	47.0 years	44.4 years	45.7 years	45.5 years	42.6 years	50.0 years
Average length of service of contributing members	9.0 years	3.5 years	10.2 years	7.3 years	6.6 years	6.3 years	13.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Dripping Springs	Driscoll	Dublin	Dumas	Duncanville	Eagle Lake	Eagle Pass
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$590,012	\$29,618	\$2,102,676	\$9,047,647	\$34,480,323	\$1,442,403	\$34,146,719
b. Noncontributing Members	152,304	65,751	667,992	2,128,325	12,385,977	651,238	4,095,220
c. Annuitants	<u>58,306</u>	<u>0</u>	<u>1,801,291</u>	<u>7,081,372</u>	<u>64,870,971</u>	<u>2,588,844</u>	<u>32,133,031</u>
2. Total Actuarial Accrued Liability	\$800,622	\$95,369	\$4,571,959	\$18,257,344	\$111,737,271	\$4,682,485	\$70,374,970
3. Actuarial value of assets	<u>680,554</u>	<u>95,309</u>	<u>3,767,775</u>	<u>17,608,153</u>	<u>108,455,575</u>	<u>4,428,163</u>	<u>67,449,160</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$120,068	\$60	\$804,184	\$649,191	\$3,281,696	\$254,322	\$2,925,810
5. Funded Ratio: (3) / (2)	85.0%	99.9%	82.4%	96.4%	97.1%	94.6%	95.8%
6. Annual Payroll	\$1,231,217	\$276,080	\$1,600,062	\$5,805,938	\$17,827,081	\$1,140,478	\$17,342,800
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.22%	1.95%	9.35%	4.88%	5.66%	7.36%	6.84%
Prior Service	<u>0.75%</u>	<u>0.00%</u>	<u>3.08%</u>	<u>0.68%</u>	<u>2.01%</u>	<u>1.54%</u>	<u>1.70%</u>
Total Retirement	5.97%	1.95%	12.43%	5.56%	7.67%	8.90%	8.54%
Supplemental Death	<u>0.11%</u>	<u>0.29%</u>	<u>0.21%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.31%</u>	<u>0.21%</u>
Total Rate	6.08%	2.24%	12.64%	5.76%	7.67%	9.21%	8.75%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	9.50%	N/A	12.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.9 years	20.0 years	25.1 years	25.1 years	11.3 years	21.4 years	12.5 years
Number of annuitants	1	0	19	65	225	17	183
Number of active contributing members	24	7	43	111	257	24	412
Number of inactive members	18	14	54	87	191	30	165
Average age of contributing members	39.7 years	46.2 years	41.9 years	42.2 years	43.5 years	50.0 years	42.0 years
Average length of service of contributing members	4.0 years	1.8 years	6.3 years	10.2 years	10.7 years	8.1 years	9.5 years

	Early	Earth	East Bernard	East Mountain	East Tawakoni	Eastland	Ector
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,330,997	\$86,698	\$50,087	\$9,645	\$197,961	\$2,375,877	\$194,600
b. Noncontributing Members	198,703	82,624	0	213,286	98,182	379,722	0
c. Annuitants	<u>940,623</u>	<u>82,195</u>	<u>27,402</u>	<u>128,431</u>	<u>396,644</u>	<u>2,107,659</u>	<u>16,512</u>
2. Total Actuarial Accrued Liability	\$2,470,323	\$251,517	\$77,489	\$351,362	\$692,787	\$4,863,258	\$211,112
3. Actuarial value of assets	<u>2,576,123</u>	<u>192,372</u>	<u>63,948</u>	<u>356,678</u>	<u>723,723</u>	<u>4,358,346</u>	<u>219,515</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$105,800)	\$59,145	\$13,541	(\$5,316)	(\$30,936)	\$504,912	(\$8,403)
5. Funded Ratio: (3) / (2)	104.3%	76.5%	82.5%	101.5%	104.5%	89.6%	104.0%
6. Annual Payroll	\$1,169,777	\$175,869	\$157,598	\$40,152	\$303,058	\$1,798,579	\$177,313
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.78%	2.15%	3.46%	13.89%	5.90%	7.13%	2.23%
Prior Service	<u>-0.56%</u>	<u>2.94%</u>	<u>1.56%</u>	<u>-0.81%</u>	<u>-0.63%</u>	<u>1.85%</u>	<u>-0.29%</u>
Total Retirement	3.22%	5.09%	5.02%	13.08%	5.27%	8.98%	1.94%
Supplemental Death	<u>0.14%</u>	<u>0.38%</u>	<u>0.19%</u>	<u>0.28%</u>	<u>0.23%</u>	<u>0.31%</u>	<u>0.40%</u>
Total Rate	3.36%	5.47%	5.21%	13.36%	5.50%	9.29%	2.34%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	N/A	N/A	N/A	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	15.0 years	6.2 years	25.0 years	25.0 years	22.3 years	25.0 years
Number of annuitants	10	3	1	2	4	21	1
Number of active contributing members	27	5	5	1	9	40	4
Number of inactive members	15	6	0	7	4	39	0
Average age of contributing members	43.3 years	53.6 years	44.6 years	53.5 years	47.9 years	45.3 years	53.4 years
Average length of service of contributing members	7.5 years	8.2 years	2.9 years	5.3 years	3.9 years	8.9 years	10.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Eden	Edgewood	Edinburg	Edna	El Campo	Eldorado	Electra
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$312,857	\$174,489	\$88,944,683	\$4,691,090	\$13,921,950	\$1,060,232	\$685,222
b. Noncontributing Members	89,137	125,882	9,110,152	1,323,940	2,827,400	167,588	393,713
c. Annuitants	<u>883,881</u>	<u>103,302</u>	<u>50,328,368</u>	<u>2,524,789</u>	<u>13,196,418</u>	<u>1,334,104</u>	<u>875,978</u>
2. Total Actuarial Accrued Liability	\$1,285,875	\$403,673	\$148,383,203	\$8,539,819	\$29,945,768	\$2,561,924	\$1,954,913
3. Actuarial value of assets	<u>1,303,270</u>	<u>365,397</u>	<u>116,901,351</u>	<u>7,554,204</u>	<u>26,221,752</u>	<u>2,291,225</u>	<u>1,862,599</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$17,395)	\$38,276	\$31,481,852	\$985,615	\$3,724,016	\$270,699	\$92,314
5. Funded Ratio: (3) / (2)	101.4%	90.5%	78.8%	88.5%	87.6%	89.4%	95.3%
6. Annual Payroll	\$280,663	\$396,951	\$37,103,808	\$1,633,586	\$6,059,624	\$777,586	\$985,851
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.36%	1.84%	8.67%	5.86%	6.19%	5.05%	1.60%
Prior Service	<u>-0.42%</u>	<u>0.85%</u>	<u>5.65%</u>	<u>4.81%</u>	<u>4.35%</u>	<u>2.16%</u>	<u>0.75%</u>
Total Retirement	2.94%	2.69%	14.32%	10.67%	10.54%	7.21%	2.35%
Supplemental Death	<u>0.34%</u>	<u>0.32%</u>	<u>0.15%</u>	<u>0.29%</u>	<u>0.20%</u>	<u>0.36%</u>	<u>0.29%</u>
Total Rate	3.28%	3.01%	14.47%	10.96%	10.74%	7.57%	2.64%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	N/A	N/A	N/A	N/A	10.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	16.1 years	22.0 years	17.0 years	20.1 years	24.5 years	17.9 years
Number of annuitants	13	6	258	26	73	7	26
Number of active contributing members	9	11	792	36	109	21	26
Number of inactive members	5	9	354	36	69	22	32
Average age of contributing members	50.8 years	45.9 years	41.0 years	48.1 years	41.8 years	39.5 years	44.3 years
Average length of service of contributing members	8.1 years	5.6 years	8.6 years	13.2 years	10.9 years	6.0 years	8.6 years

	Elgin	Elkhart	Elmendorf	Emory	Ennis	Euless	Eustace
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$8,013,678	\$254,680	\$222,947	\$685,914	\$32,166,894	\$107,095,221	\$345,814
b. Noncontributing Members	2,661,950	121,104	38,911	169,273	2,709,473	16,256,488	82,494
c. Annuitants	<u>3,229,950</u>	<u>348,878</u>	<u>15,439</u>	<u>807,246</u>	<u>35,482,030</u>	<u>94,455,006</u>	<u>329,758</u>
2. Total Actuarial Accrued Liability	\$13,905,578	\$724,662	\$277,297	\$1,662,433	\$70,358,397	\$217,806,715	\$758,066
3. Actuarial value of assets	<u>11,264,924</u>	<u>672,631</u>	<u>268,594</u>	<u>1,626,673</u>	<u>62,106,683</u>	<u>194,891,646</u>	<u>653,023</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,640,654	\$52,031	\$8,703	\$35,760	\$8,251,714	\$22,915,069	\$105,043
5. Funded Ratio: (3) / (2)	81.0%	92.8%	96.9%	97.8%	88.3%	89.5%	86.1%
6. Annual Payroll	\$4,247,437	\$252,967	\$738,932	\$1,014,944	\$11,857,968	\$30,116,674	\$281,344
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.79%	3.40%	1.49%	6.52%	11.77%	11.15%	5.80%
Prior Service	<u>3.97%</u>	<u>1.83%</u>	<u>0.09%</u>	<u>0.22%</u>	<u>4.94%</u>	<u>6.55%</u>	<u>4.83%</u>
Total Retirement	13.76%	5.23%	1.58%	6.74%	16.71%	17.70%	10.63%
Supplemental Death	<u>0.27%</u>	<u>0.00%</u>	<u>0.11%</u>	<u>0.20%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.24%</u>
Total Rate	14.03%	5.23%	1.69%	6.94%	16.89%	17.70%	10.87%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	13.50%	N/A	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	23.5 years	14.7 years	18.1 years	24.6 years	20.0 years	15.3 years	9.2 years
Number of annuitants	33	4	1	12	135	247	8
Number of active contributing members	84	7	16	24	193	382	7
Number of inactive members	65	8	16	11	58	170	11
Average age of contributing members	45.0 years	45.1 years	40.7 years	43.7 years	42.1 years	42.7 years	46.7 years
Average length of service of contributing members	9.3 years	5.9 years	4.8 years	6.3 years	11.5 years	14.1 years	6.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Everman	Fair Oaks Ranch	Fairfield	Fairview	Falfurrias	Falls City	Farmers Branch
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,732,669	\$5,115,411	\$2,040,609	\$7,056,001	\$1,091,511	\$142,708	\$99,962,239
b. Noncontributing Members	715,997	1,324,366	949,452	1,817,649	300,609	149,930	34,209,668
c. Annuitants	<u>3,362,311</u>	<u>1,450,850</u>	<u>2,637,750</u>	<u>399,102</u>	<u>1,359,057</u>	<u>0</u>	<u>133,809,997</u>
2. Total Actuarial Accrued Liability	\$6,810,977	\$7,890,627	\$5,627,811	\$9,272,752	\$2,751,177	\$292,638	\$267,981,904
3. Actuarial value of assets	<u>6,111,444</u>	<u>7,147,224</u>	<u>5,844,564</u>	<u>8,157,230</u>	<u>2,529,048</u>	<u>248,536</u>	<u>235,040,764</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$699,533	\$743,403	(\$216,753)	\$1,115,522	\$222,129	\$44,102	\$32,941,140
5. Funded Ratio: (3) / (2)	89.7%	90.6%	103.9%	88.0%	91.9%	84.9%	87.7%
6. Annual Payroll	\$2,135,245	\$3,428,233	\$1,547,131	\$5,171,264	\$1,820,028	\$143,829	\$30,269,925
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.20%	10.38%	8.03%	9.42%	2.52%	5.18%	10.07%
Prior Service	<u>2.19%</u>	<u>1.33%</u>	<u>-0.86%</u>	<u>1.35%</u>	<u>0.81%</u>	<u>2.67%</u>	<u>8.93%</u>
Total Retirement	9.39%	11.71%	7.17%	10.77%	3.33%	7.85%	19.00%
Supplemental Death	<u>0.31%</u>	<u>0.14%</u>	<u>0.27%</u>	<u>0.17%</u>	<u>0.22%</u>	<u>0.21%</u>	<u>0.14%</u>
Total Rate	9.70%	11.85%	7.44%	10.94%	3.55%	8.06%	19.14%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	13.50%	13.50%	N/A	9.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.9 years	25.0 years	25.0 years	24.1 years	22.0 years	15.1 years	16.8 years
Number of annuitants	22	12	25	6	22	0	332
Number of active contributing members	48	62	31	71	42	4	398
Number of inactive members	48	37	33	44	39	11	353
Average age of contributing members	42.8 years	41.6 years	47.7 years	41.9 years	45.2 years	53.4 years	41.4 years
Average length of service of contributing members	8.4 years	6.2 years	7.4 years	9.3 years	6.8 years	5.4 years	11.6 years

	Farmersville	Farwell	Fate	Fayetteville	Ferris	Flatonja	Florence
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,113,379	\$306,527	\$1,794,409	\$104,457	\$920,368	\$2,065,035	\$249,742
b. Noncontributing Members	450,292	141,177	1,007,120	0	999,780	586,841	202,100
c. Annuitants	<u>2,391,278</u>	<u>729,704</u>	<u>528,221</u>	<u>30,782</u>	<u>1,929,729</u>	<u>2,439,077</u>	<u>3,148</u>
2. Total Actuarial Accrued Liability	\$5,954,949	\$1,177,408	\$3,329,750	\$135,239	\$3,849,877	\$5,090,953	\$454,990
3. Actuarial value of assets	<u>5,346,574</u>	<u>1,021,667</u>	<u>3,203,049</u>	<u>125,425</u>	<u>3,723,814</u>	<u>4,558,481</u>	<u>488,183</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$608,375	\$155,741	\$126,701	\$9,814	\$126,063	\$532,472	(\$33,193)
5. Funded Ratio: (3) / (2)	89.8%	86.8%	96.2%	92.7%	96.7%	89.5%	107.3%
6. Annual Payroll	\$2,071,506	\$295,613	\$2,980,288	\$114,325	\$1,765,573	\$944,678	\$423,847
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.94%	11.29%	10.46%	2.02%	5.02%	10.17%	4.82%
Prior Service	<u>1.80%</u>	<u>3.95%</u>	<u>0.28%</u>	<u>1.20%</u>	<u>0.43%</u>	<u>5.77%</u>	<u>-0.48%</u>
Total Retirement	8.74%	15.24%	10.74%	3.22%	5.45%	15.94%	4.34%
Supplemental Death	<u>0.23%</u>	<u>0.16%</u>	<u>0.11%</u>	<u>0.00%</u>	<u>0.20%</u>	<u>0.19%</u>	<u>0.18%</u>
Total Rate	8.97%	15.40%	10.85%	3.22%	5.65%	16.13%	4.52%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	9.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	18.5 years	22.3 years	8.4 years	25.4 years	12.2 years	25.0 years
Number of annuitants	22	3	10	1	29	14	1
Number of active contributing members	33	7	46	4	42	20	11
Number of inactive members	17	10	33	0	56	11	14
Average age of contributing members	46.3 years	47.0 years	41.0 years	54.4 years	38.9 years	44.6 years	44.9 years
Average length of service of contributing members	10.6 years	7.4 years	8.7 years	6.3 years	4.6 years	9.7 years	4.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Floresville	Flower Mound	Floydada	Forest Hill	Forney	Fort Stockton	Franklin
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,910,091	\$88,376,582	\$2,519,861	\$11,510,717	\$15,586,284	\$5,676,876	\$313,113
b. Noncontributing Members	792,241	20,955,472	286,702	4,034,774	2,818,300	2,455,270	59,094
c. Annuitants	<u>3,457,526</u>	<u>35,226,028</u>	<u>2,195,481</u>	<u>8,115,454</u>	<u>7,099,865</u>	<u>9,240,775</u>	<u>216,731</u>
2. Total Actuarial Accrued Liability	\$8,159,858	\$144,558,082	\$5,002,044	\$23,660,945	\$25,504,449	\$17,372,921	\$588,938
3. Actuarial value of assets	<u>6,395,110</u>	<u>126,603,761</u>	<u>4,546,173</u>	<u>21,044,641</u>	<u>21,385,695</u>	<u>14,643,134</u>	<u>644,535</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,764,748	\$17,954,321	\$455,871	\$2,616,304	\$4,118,754	\$2,729,787	(\$55,597)
5. Funded Ratio: (3) / (2)	78.4%	87.6%	90.9%	88.9%	83.9%	84.3%	109.4%
6. Annual Payroll	\$3,327,029	\$39,499,696	\$1,000,499	\$5,361,714	\$9,978,657	\$5,671,990	\$545,136
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.57%	7.90%	6.63%	9.83%	11.26%	6.36%	3.74%
Prior Service	<u>3.69%</u>	<u>2.87%</u>	<u>3.37%</u>	<u>2.99%</u>	<u>2.54%</u>	<u>3.28%</u>	<u>-0.63%</u>
Total Retirement	10.26%	10.77%	10.00%	12.82%	13.80%	9.64%	3.11%
Supplemental Death	<u>0.00%</u>	<u>0.14%</u>	<u>0.26%</u>	<u>0.13%</u>	<u>0.13%</u>	<u>0.27%</u>	<u>0.00%</u>
Total Rate	10.26%	10.91%	10.26%	12.96%	13.93%	9.91%	3.11%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	13.50%	N/A	13.50%	N/A	11.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.7 years	23.9 years	20.3 years	25.0 years	25.0 years	21.3 years	25.0 years
Number of annuitants	31	221	19	71	25	68	5
Number of active contributing members	64	586	21	85	153	126	12
Number of inactive members	34	452	20	90	51	92	8
Average age of contributing members	44.6 years	41.1 years	43.1 years	39.5 years	39.5 years	39.7 years	39.5 years
Average length of service of contributing members	6.5 years	9.9 years	9.4 years	8.7 years	8.2 years	5.6 years	5.6 years

	Frankston	Fredericksburg	Freeport	Freer	Friendswood	Friona	Frisco
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$239,589	\$25,536,298	\$11,684,765	\$608,956	\$39,437,078	\$1,537,154	\$209,342,883
b. Noncontributing Members	65,975	3,492,054	5,430,386	307,198	9,401,379	840,941	26,846,246
c. Annuitants	<u>143,701</u>	<u>17,803,518</u>	<u>11,539,958</u>	<u>363,714</u>	<u>30,584,422</u>	<u>2,785,238</u>	<u>37,777,648</u>
2. Total Actuarial Accrued Liability	\$449,265	\$46,831,870	\$28,655,109	\$1,279,868	\$79,422,879	\$5,163,333	\$273,966,777
3. Actuarial value of assets	<u>467,206</u>	<u>40,676,609</u>	<u>23,034,824</u>	<u>965,353</u>	<u>68,259,462</u>	<u>4,907,992</u>	<u>230,713,453</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$17,941)	\$6,155,261	\$5,620,285	\$314,515	\$11,163,417	\$255,341	\$43,253,324
5. Funded Ratio: (3) / (2)	104.0%	86.9%	80.4%	75.4%	85.9%	95.1%	84.2%
6. Annual Payroll	\$525,375	\$9,996,677	\$6,572,270	\$623,864	\$14,961,477	\$931,057	\$91,693,221
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.66%	6.91%	9.06%	3.53%	10.94%	6.20%	11.16%
Prior Service	<u>-0.21%</u>	<u>5.15%</u>	<u>5.24%</u>	<u>3.47%</u>	<u>4.90%</u>	<u>2.86%</u>	<u>2.91%</u>
Total Retirement	1.45%	12.06%	14.30%	7.00%	15.84%	9.06%	14.07%
Supplemental Death	<u>0.18%</u>	<u>0.23%</u>	<u>0.17%</u>	<u>0.37%</u>	<u>0.19%</u>	<u>0.18%</u>	<u>0.13%</u>
Total Rate	1.63%	12.29%	14.47%	7.37%	16.03%	9.24%	14.20%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	15.9 years	25.1 years	20.9 years	22.5 years	12.5 years	24.8 years
Number of annuitants	4	99	73	7	123	14	188
Number of active contributing members	13	160	120	18	208	23	1,205
Number of inactive members	5	66	120	16	118	25	478
Average age of contributing members	45.8 years	45.4 years	40.9 years	47.4 years	44.1 years	42.1 years	41.0 years
Average length of service of contributing members	6.6 years	13.7 years	6.9 years	7.6 years	12.0 years	9.3 years	9.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Fritch	Frost	Fulshear	Fulton	Gainesville	Galena Park	Ganado
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$430,795	\$47,999	\$1,317,743	\$209,448	\$23,911,503	\$8,188,159	\$1,241,499
b. Noncontributing Members	572,728	43,974	249,561	34,321	3,289,453	1,378,297	1,439,195
c. Annuitants	<u>437,085</u>	<u>185,906</u>	<u>135,849</u>	<u>290,739</u>	<u>21,406,914</u>	<u>8,830,773</u>	<u>739,402</u>
2. Total Actuarial Accrued Liability	\$1,440,608	\$277,879	\$1,703,153	\$534,508	\$48,607,870	\$18,397,229	\$3,420,096
3. Actuarial value of assets	<u>2,137,877</u>	<u>244,107</u>	<u>1,486,771</u>	<u>385,149</u>	<u>38,742,603</u>	<u>16,681,520</u>	<u>3,355,137</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$697,269)	\$33,772	\$216,382	\$149,359	\$9,865,267	\$1,715,709	\$64,959
5. Funded Ratio: (3) / (2)	148.4%	87.8%	87.3%	72.1%	79.7%	90.7%	98.1%
6. Annual Payroll	\$768,734	\$96,986	\$2,927,361	\$219,787	\$11,559,785	\$3,781,476	\$500,799
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.35%	3.37%	7.17%	6.82%	5.45%	9.07%	12.00%
Prior Service	<u>-5.57%</u>	<u>3.61%</u>	<u>0.52%</u>	<u>15.77%</u>	<u>6.72%</u>	<u>3.07%</u>	<u>1.16%</u>
Total Retirement	1.78%	6.98%	7.69%	22.59%	12.17%	12.14%	13.16%
Supplemental Death	<u>0.15%</u>	<u>0.00%</u>	<u>0.14%</u>	<u>0.27%</u>	<u>0.19%</u>	<u>0.21%</u>	<u>0.44%</u>
Total Rate	1.93%	6.98%	7.83%	22.86%	12.36%	12.35%	13.60%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	7.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	12.1 years	20.4 years	4.8 years	18.4 years	25.0 years	15.1 years
Number of annuitants	9	3	2	4	148	57	10
Number of active contributing members	19	3	46	5	219	82	10
Number of inactive members	41	2	21	2	122	49	7
Average age of contributing members	35.7 years	64.5 years	43.6 years	51.4 years	41.2 years	40.7 years	52.6 years
Average length of service of contributing members	4.2 years	6.4 years	8.5 years	10.8 years	9.6 years	7.9 years	10.9 years

	Garden Ridge	Garland	Garrison	Gary	Gatesville	George West	Georgetown
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,639,019	\$512,841,880	\$775,600	\$274,295	\$10,284,255	\$696,060	\$99,003,831
b. Noncontributing Members	566,966	55,897,580	492,506	3,311	753,237	409,334	14,356,433
c. Annuitants	<u>897,255</u>	<u>422,625,632</u>	<u>798,882</u>	<u>218,906</u>	<u>8,600,349</u>	<u>544,947</u>	<u>41,358,238</u>
2. Total Actuarial Accrued Liability	\$3,103,240	\$991,365,092	\$2,066,988	\$496,512	\$19,637,841	\$1,650,341	\$154,718,502
3. Actuarial value of assets	<u>2,718,843</u>	<u>947,851,465</u>	<u>1,890,062</u>	<u>392,180</u>	<u>16,521,597</u>	<u>1,381,176</u>	<u>132,424,767</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$384,397	\$43,513,627	\$176,926	\$104,332	\$3,116,244	\$269,165	\$22,293,735
5. Funded Ratio: (3) / (2)	87.6%	95.6%	91.4%	79.0%	84.1%	83.7%	85.6%
6. Annual Payroll	\$1,668,834	\$155,261,797	\$376,574	\$222,300	\$3,798,807	\$1,231,204	\$47,729,588
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.94%	8.51%	11.07%	3.78%	9.29%	4.42%	9.08%
Prior Service	<u>1.45%</u>	<u>2.52%</u>	<u>5.43%</u>	<u>3.44%</u>	<u>5.59%</u>	<u>1.37%</u>	<u>3.05%</u>
Total Retirement	7.39%	11.03%	16.50%	7.22%	14.88%	5.79%	12.13%
Supplemental Death	<u>0.23%</u>	<u>0.21%</u>	<u>0.14%</u>	<u>0.00%</u>	<u>0.23%</u>	<u>0.19%</u>	<u>0.13%</u>
Total Rate	7.62%	11.24%	16.64%	7.22%	15.11%	5.98%	12.26%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	N/A	7.50%	N/A	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.1 years	14.5 years	11.1 years	21.7 years	21.3 years	24.2 years	22.7 years
Number of annuitants	16	1,422	4	2	51	7	195
Number of active contributing members	27	2,037	8	4	77	32	685
Number of inactive members	23	656	3	2	21	39	242
Average age of contributing members	45.5 years	44.9 years	44.8 years	50.8 years	42.3 years	44.4 years	42.2 years
Average length of service of contributing members	11.4 years	13.8 years	6.1 years	10.5 years	11.7 years	6.1 years	9.9 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Giddings	Gilmer	Gladewater	Glen Rose	Glenn Heights	Godley	Goldsmith
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$8,523,067	\$4,709,706	\$1,843,876	\$1,760,779	\$2,939,494	\$249,461	\$224,723
b. Noncontributing Members	1,435,421	627,828	2,210,125	211,870	1,901,418	76,616	174,649
c. Annuitants	<u>6,132,596</u>	<u>4,844,093</u>	<u>3,558,890</u>	<u>2,132,479</u>	<u>2,956,417</u>	<u>161,854</u>	<u>0</u>
2. Total Actuarial Accrued Liability	\$16,091,084	\$10,181,627	\$7,612,891	\$4,105,128	\$7,797,329	\$487,931	\$399,372
3. Actuarial value of assets	<u>12,920,844</u>	<u>8,618,019</u>	<u>7,010,064</u>	<u>3,484,641</u>	<u>9,164,652</u>	<u>418,322</u>	<u>382,888</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$3,170,240	\$1,563,608	\$602,827	\$620,487	(\$1,367,323)	\$69,609	\$16,484
5. Funded Ratio: (3) / (2)	80.3%	84.6%	92.1%	84.9%	117.5%	85.7%	95.9%
6. Annual Payroll	\$3,038,285	\$2,283,741	\$2,712,308	\$1,285,595	\$4,256,793	\$547,837	\$239,829
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.18%	8.68%	7.23%	11.62%	4.84%	1.69%	1.63%
Prior Service	<u>9.01%</u>	<u>4.66%</u>	<u>1.39%</u>	<u>2.98%</u>	<u>-1.97%</u>	<u>0.94%</u>	<u>1.57%</u>
Total Retirement	18.19%	13.34%	8.62%	14.60%	2.87%	2.63%	3.20%
Supplemental Death	<u>0.28%</u>	<u>0.22%</u>	<u>0.20%</u>	<u>0.27%</u>	<u>0.14%</u>	<u>0.19%</u>	<u>0.43%</u>
Total Rate	18.47%	13.56%	8.82%	14.87%	3.01%	2.82%	3.63%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	11.50%	N/A	12.50%	8.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	15.2 years	21.3 years	24.2 years	24.8 years	25.0 years	18.8 years	4.8 years
Number of annuitants	37	38	42	19	53	6	0
Number of active contributing members	68	51	57	25	79	11	4
Number of inactive members	51	32	88	17	96	15	2
Average age of contributing members	45.0 years	42.7 years	40.6 years	46.9 years	40.0 years	39.1 years	50.8 years
Average length of service of contributing members	10.0 years	10.3 years	5.7 years	7.7 years	7.4 years	5.5 years	13.3 years

	Goldthwaite	Goliad	Gonzales	Gordon	Gorman	Graford	Graham
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,733,048	\$494,598	\$6,691,875	\$10,446	\$215,664	\$113,247	\$7,433,746
b. Noncontributing Members	206,328	290,241	2,029,540	308	12,187	0	1,105,404
c. Annuitants	<u>3,035,360</u>	<u>1,062,737</u>	<u>9,178,538</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,865,460</u>
2. Total Actuarial Accrued Liability	\$5,974,736	\$1,847,576	\$17,899,953	\$10,754	\$227,851	\$113,247	\$17,404,610
3. Actuarial value of assets	<u>4,956,627</u>	<u>2,049,172</u>	<u>14,930,049</u>	<u>3,016</u>	<u>77,331</u>	<u>108,198</u>	<u>15,470,700</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,018,109	(\$201,596)	\$2,969,904	\$7,738	\$150,520	\$5,049	\$1,933,910
5. Funded Ratio: (3) / (2)	83.0%	110.9%	83.4%	28.0%	33.9%	95.5%	88.9%
6. Annual Payroll	\$675,368	\$653,041	\$4,713,962	\$125,423	\$236,248	\$132,021	\$4,074,239
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.37%	7.00%	6.28%	1.83%	2.06%	2.07%	6.85%
Prior Service	<u>13.13%</u>	<u>-2.01%</u>	<u>4.17%</u>	<u>0.90%</u>	<u>7.11%</u>	<u>0.80%</u>	<u>3.50%</u>
Total Retirement	23.50%	4.99%	10.45%	2.73%	9.17%	2.87%	10.35%
Supplemental Death	<u>0.26%</u>	<u>0.26%</u>	<u>0.26%</u>	<u>0.11%</u>	<u>0.44%</u>	<u>0.27%</u>	<u>0.31%</u>
Total Rate	23.76%	5.25%	10.71%	2.84%	9.61%	3.14%	10.66%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	15.1 years	25.0 years	22.2 years	8.0 years	11.0 years	5.3 years	21.2 years
Number of annuitants	9	10	57	0	0	0	68
Number of active contributing members	11	14	99	3	7	3	88
Number of inactive members	2	19	115	1	4	0	39
Average age of contributing members	47.3 years	42.1 years	41.5 years	45.6 years	54.6 years	50.0 years	45.3 years
Average length of service of contributing members	13.4 years	8.1 years	8.4 years	1.6 years	11.5 years	8.6 years	9.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Granbury	Grand Prairie	Grand Saline	Grandview	Granger	Granite Shoals	Grapeland
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$19,520,797	\$288,361,642	\$918,203	\$530,106	\$92,851	\$1,230,352	\$91,887
b. Noncontributing Members	3,771,781	35,134,717	461,756	370,519	186,790	211,661	164,501
c. Annuitants	<u>19,407,153</u>	<u>263,898,182</u>	<u>1,581,264</u>	<u>609,297</u>	<u>158,883</u>	<u>281,693</u>	<u>424,803</u>
2. Total Actuarial Accrued Liability	\$42,699,731	\$587,394,541	\$2,961,223	\$1,509,922	\$438,524	\$1,723,706	\$681,191
3. Actuarial value of assets	<u>35,581,279</u>	<u>510,381,514</u>	<u>2,928,798</u>	<u>1,607,958</u>	<u>525,710</u>	<u>1,685,280</u>	<u>670,396</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$7,118,452	\$77,013,027	\$32,425	(\$98,036)	(\$87,186)	\$38,426	\$10,795
5. Funded Ratio: (3) / (2)	83.3%	86.9%	98.9%	106.5%	119.9%	97.8%	98.4%
6. Annual Payroll	\$8,853,111	\$96,547,690	\$938,515	\$839,535	\$401,836	\$1,753,881	\$263,869
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.99%	10.67%	7.09%	7.22%	2.29%	4.65%	3.77%
Prior Service	<u>5.68%</u>	<u>6.16%</u>	<u>0.24%</u>	<u>-0.72%</u>	<u>-1.47%</u>	<u>0.15%</u>	<u>0.33%</u>
Total Retirement	15.67%	16.83%	7.33%	6.50%	0.82%	4.80%	4.10%
Supplemental Death	<u>0.21%</u>	<u>0.17%</u>	<u>0.24%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.24%</u>	<u>0.00%</u>
Total Rate	15.88%	17.00%	7.57%	6.50%	0.82%	5.04%	4.10%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	11.50%	11.50%	7.50%	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.2 years	17.7 years	24.0 years	25.0 years	25.0 years	21.7 years	17.0 years
Number of annuitants	107	768	17	10	9	10	10
Number of active contributing members	165	1,337	25	16	10	32	7
Number of inactive members	92	588	15	19	14	26	20
Average age of contributing members	43.4 years	41.6 years	42.8 years	44.0 years	48.2 years	45.8 years	44.7 years
Average length of service of contributing members	9.4 years	11.3 years	6.4 years	7.1 years	4.4 years	9.3 years	4.9 years

	Grapevine	Greenville	Gregory	Grey Forest	Groesbeck	Groom	Groves
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$134,571,916	\$50,246,593	\$169,061	\$6,843,922	\$1,038,011	\$137,430	\$20,519,178
b. Noncontributing Members	20,830,949	10,065,471	117,739	901,425	166,365	4,734	1,358,359
c. Annuitants	<u>131,073,279</u>	<u>57,631,154</u>	<u>103,905</u>	<u>7,211,046</u>	<u>568,675</u>	<u>175,537</u>	<u>18,711,381</u>
2. Total Actuarial Accrued Liability	\$286,476,144	\$117,943,218	\$390,705	\$14,956,393	\$1,773,051	\$317,701	\$40,588,918
3. Actuarial value of assets	<u>242,725,058</u>	<u>110,205,799</u>	<u>564,339</u>	<u>12,471,804</u>	<u>1,552,337</u>	<u>329,167</u>	<u>39,031,532</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$43,751,086	\$7,737,419	(\$173,634)	\$2,484,589	\$220,714	(\$11,466)	\$1,557,386
5. Funded Ratio: (3) / (2)	84.7%	93.4%	144.4%	83.4%	87.6%	103.6%	96.2%
6. Annual Payroll	\$45,651,559	\$19,277,191	\$442,987	\$2,832,574	\$1,283,879	\$225,136	\$6,540,194
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	11.48%	7.27%	6.37%	9.43%	1.30%	3.02%	6.87%
Prior Service	<u>7.05%</u>	<u>3.73%</u>	<u>-2.41%</u>	<u>6.33%</u>	<u>1.20%</u>	<u>-0.31%</u>	<u>2.26%</u>
Total Retirement	18.53%	11.00%	3.96%	15.76%	2.50%	2.71%	9.13%
Supplemental Death	<u>0.00%</u>	<u>0.25%</u>	<u>0.27%</u>	<u>0.20%</u>	<u>0.23%</u>	<u>0.00%</u>	<u>0.00%</u>
Total Rate	18.53%	11.25%	4.23%	15.96%	2.73%	2.71%	9.13%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	9.50%	N/A	N/A	7.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.0 years	13.9 years	25.0 years	19.5 years	20.6 years	25.0 years	13.5 years
Number of annuitants	395	285	2	22	15	4	93
Number of active contributing members	586	321	12	38	30	5	101
Number of inactive members	279	161	15	16	13	2	38
Average age of contributing members	44.6 years	45.8 years	50.9 years	44.7 years	45.4 years	48.3 years	44.9 years
Average length of service of contributing members	12.1 years	11.6 years	7.4 years	8.4 years	11.3 years	6.1 years	14.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Groveton	Gruver	Gun Barrel City	Gunter	Hale Center	Hallettsville	Hallsville
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$204,016	\$479,730	\$1,505,035	\$111,535	\$260,881	\$4,489,728	\$412,253
b. Noncontributing Members	10,921	470,023	926,144	60,911	59,568	288,479	59,579
c. Annuitants	29,040	422,202	870,355	72,264	55,375	3,037,247	226,205
2. Total Actuarial Accrued Liability	\$243,977	\$1,371,955	\$3,301,534	\$244,710	\$375,824	\$7,815,454	\$698,037
3. Actuarial value of assets	247,385	1,257,785	3,529,605	324,841	372,428	7,058,850	537,919
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$3,408)	\$114,170	(\$228,071)	(\$80,131)	\$3,396	\$756,604	\$160,118
5. Funded Ratio: (3) / (2)	101.4%	91.7%	106.9%	132.7%	99.1%	90.3%	77.1%
6. Annual Payroll	\$227,107	\$246,413	\$1,692,114	\$399,735	\$467,119	\$1,542,541	\$864,902
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.12%	7.74%	5.53%	5.37%	1.91%	6.89%	1.79%
Prior Service	-0.09%	6.75%	-0.83%	-1.23%	0.07%	4.95%	1.14%
Total Retirement	2.03%	14.49%	4.70%	4.14%	1.98%	11.84%	2.93%
Supplemental Death	0.39%	0.00%	0.20%	0.17%	0.25%	0.28%	0.23%
Total Rate	2.42%	14.49%	4.90%	4.31%	2.23%	12.12%	3.16%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	14.01%	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	12.50%	11.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	8.3 years	25.0 years	25.0 years	14.1 years	12.5 years	24.8 years
Number of annuitants	2	3	22	4	1	23	4
Number of active contributing members	11	5	39	9	11	35	20
Number of inactive members	6	7	42	10	8	16	17
Average age of contributing members	57.5 years	48.9 years	42.6 years	46.6 years	46.8 years	47.6 years	46.5 years
Average length of service of contributing members	8.2 years	7.6 years	6.7 years	5.5 years	7.7 years	15.7 years	8.1 years

	Haltom City	Hamilton	Hamlin	Happy	Harker Heights	Harlingen	Harlingen Waterworks Sys
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$53,678,492	\$1,293,553	\$946,895	\$228,974	\$32,445,127	\$35,787,985	\$9,559,252
b. Noncontributing Members	15,653,262	261,960	177,901	131,549	6,479,237	9,767,407	1,372,203
c. Annuitants	53,836,056	2,842,371	1,842,607	222,880	14,629,826	48,629,810	12,849,064
2. Total Actuarial Accrued Liability	\$123,167,810	\$4,397,884	\$2,967,403	\$583,403	\$53,554,190	\$94,185,202	\$23,780,519
3. Actuarial value of assets	101,793,473	3,677,728	2,683,325	586,530	43,680,803	89,689,182	23,886,611
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$21,374,337	\$720,156	\$284,078	(\$3,127)	\$9,873,387	\$4,496,020	(\$106,092)
5. Funded Ratio: (3) / (2)	82.6%	83.6%	90.4%	100.5%	81.6%	95.2%	100.4%
6. Annual Payroll	\$17,399,981	\$1,072,627	\$544,806	\$95,825	\$12,632,619	\$9,512,592	\$6,339,446
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.62%	9.85%	7.80%	8.36%	9.97%	4.97%	2.02%
Prior Service	8.43%	5.25%	3.89%	-0.21%	4.80%	6.69%	-0.10%
Total Retirement	19.05%	15.10%	11.69%	8.15%	14.77%	11.66%	1.92%
Supplemental Death	0.19%	0.27%	0.30%	0.40%	0.15%	0.37%	0.26%
Total Rate	19.24%	15.37%	11.99%	8.55%	14.92%	12.03%	2.18%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	15.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.0 years	17.5 years	21.1 years	25.0 years	25.0 years	9.5 years	25.0 years
Number of annuitants	205	23	12	2	81	333	123
Number of active contributing members	254	30	15	2	213	167	135
Number of inactive members	174	22	8	2	147	75	47
Average age of contributing members	44.3 years	42.7 years	44.7 years	52.5 years	41.7 years	50.4 years	44.4 years
Average length of service of contributing members	12.8 years	4.8 years	7.5 years	11.8 years	13.5 years	19.6 years	11.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Hart	Haskell	Haslet	Hawkins	Hays	Hearne	Heath
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$121,255	\$338,891	\$2,104,712	\$1,182,284	\$19,078	\$4,686,598	\$5,929,343
b. Noncontributing Members	39,502	219,632	481,476	132,506	0	1,075,627	2,380,958
c. Annuitants	<u>17,848</u>	<u>691,537</u>	<u>303,441</u>	<u>628,327</u>	<u>129,337</u>	<u>3,319,770</u>	<u>3,390,796</u>
2. Total Actuarial Accrued Liability	\$178,605	\$1,250,060	\$2,889,629	\$1,943,117	\$148,415	\$9,081,995	\$11,701,097
3. Actuarial value of assets	<u>130,196</u>	<u>1,816,831</u>	<u>2,932,629</u>	<u>2,109,822</u>	<u>156,086</u>	<u>7,073,139</u>	<u>10,529,126</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$48,409	(\$566,771)	(\$43,000)	(\$166,705)	(\$7,671)	\$2,008,856	\$1,171,971
5. Funded Ratio: (3) / (2)	72.9%	145.3%	101.5%	108.6%	105.2%	77.9%	90.0%
6. Annual Payroll	\$153,643	\$695,577	\$1,399,608	\$405,079	\$31,368	\$2,275,194	\$3,955,030
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.12%	2.01%	8.82%	8.74%	10.08%	9.12%	9.69%
Prior Service	<u>2.85%</u>	<u>-2.01%</u>	<u>-0.19%</u>	<u>-2.68%</u>	<u>-1.65%</u>	<u>5.86%</u>	<u>1.86%</u>
Total Retirement	3.97%	0.00%	8.63%	6.06%	8.43%	14.98%	11.55%
Supplemental Death	<u>0.00%</u>	<u>0.19%</u>	<u>0.20%</u>	<u>0.21%</u>	<u>0.34%</u>	<u>0.27%</u>	<u>0.20%</u>
Total Rate	3.97%	0.19%	8.83%	6.27%	8.77%	15.25%	11.75%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	9.50%	15.50%	N/A	N/A	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	15.6 years	25.0 years	25.0 years	25.0 years	25.0 years	22.1 years	24.1 years
Number of annuitants	2	10	6	12	3	27	21
Number of active contributing members	5	18	25	8	1	53	49
Number of inactive members	1	16	24	3	0	37	33
Average age of contributing members	39.2 years	40.9 years	45.8 years	51.5 years	55.3 years	46.6 years	43.6 years
Average length of service of contributing members	8.4 years	5.0 years	8.7 years	13.4 years	1.8 years	8.7 years	11.9 years

	Hedley	Hedwig Village	Helotes	Hemphill	Hempstead	Henderson	Henrietta
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$434	\$2,660,993	\$4,880,014	\$2,166,910	\$7,205,667	\$15,700,400	\$954,055
b. Noncontributing Members	152,780	678,840	1,147,755	332,584	320,305	3,126,156	630,343
c. Annuitants	<u>19,304</u>	<u>2,485,932</u>	<u>1,213,980</u>	<u>1,093,404</u>	<u>4,127,178</u>	<u>15,502,948</u>	<u>1,375,710</u>
2. Total Actuarial Accrued Liability	\$172,518	\$5,825,765	\$7,241,749	\$3,592,898	\$11,653,150	\$34,329,504	\$2,960,108
3. Actuarial value of assets	<u>184,930</u>	<u>5,278,214</u>	<u>6,574,319</u>	<u>3,112,746</u>	<u>10,763,481</u>	<u>28,163,045</u>	<u>2,416,244</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$12,412)	\$547,551	\$667,430	\$480,152	\$889,669	\$6,166,459	\$543,864
5. Funded Ratio: (3) / (2)	107.2%	90.6%	90.8%	86.6%	92.4%	82.0%	81.6%
6. Annual Payroll	\$28,067	\$2,093,914	\$3,884,407	\$1,187,632	\$3,644,908	\$6,486,152	\$703,694
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.44%	4.99%	5.14%	4.60%	6.28%	9.49%	9.96%
Prior Service	<u>-2.99%</u>	<u>2.34%</u>	<u>1.43%</u>	<u>2.73%</u>	<u>1.50%</u>	<u>6.62%</u>	<u>4.78%</u>
Total Retirement	2.45%	7.33%	6.57%	7.33%	7.78%	16.11%	14.74%
Supplemental Death	<u>0.74%</u>	<u>0.25%</u>	<u>0.13%</u>	<u>0.35%</u>	<u>0.25%</u>	<u>0.16%</u>	<u>0.24%</u>
Total Rate	3.19%	7.58%	6.70%	7.68%	8.03%	16.27%	14.98%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	12.50%	11.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	14.9 years	16.1 years	21.6 years	25.0 years	20.6 years	24.7 years
Number of annuitants	1	16	15	12	22	70	13
Number of active contributing members	1	29	70	24	70	122	17
Number of inactive members	10	21	39	11	32	61	15
Average age of contributing members	51.5 years	49.1 years	40.8 years	45.2 years	48.8 years	38.8 years	44.9 years
Average length of service of contributing members	0.3 years	13.4 years	9.5 years	10.2 years	10.8 years	9.8 years	7.5 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Hereford	Hewitt	Hickory Creek	Hico	Hidalgo	Higgins	Highland Park
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$12,737,672	\$10,829,036	\$2,301,810	\$216,560	\$11,480,625	\$29,696	\$31,215,426
b. Noncontributing Members	1,327,168	2,207,050	585,318	455,008	4,180,778	1,883	4,972,725
c. Annuitants	<u>8,223,970</u>	<u>7,414,634</u>	<u>527,642</u>	<u>518,899</u>	<u>5,023,792</u>	<u>302,503</u>	<u>39,896,078</u>
2. Total Actuarial Accrued Liability	\$22,288,810	\$20,450,720	\$3,414,770	\$1,190,467	\$20,685,195	\$334,082	\$76,084,229
3. Actuarial value of assets	<u>19,486,484</u>	<u>16,484,629</u>	<u>3,072,631</u>	<u>1,179,588</u>	<u>18,147,511</u>	<u>345,760</u>	<u>77,459,481</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,802,326	\$3,966,091	\$342,139	\$10,879	\$2,537,684	(\$11,678)	(\$1,375,252)
5. Funded Ratio: (3) / (2)	87.4%	80.6%	90.0%	99.1%	87.7%	103.5%	101.8%
6. Annual Payroll	\$5,223,600	\$4,905,953	\$1,186,609	\$491,323	\$6,237,912	\$111,451	\$13,152,265
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.50%	10.51%	10.05%	7.89%	9.46%	4.71%	6.28%
Prior Service	<u>3.84%</u>	<u>4.97%</u>	<u>1.90%</u>	<u>0.41%</u>	<u>3.20%</u>	<u>-0.64%</u>	<u>-0.64%</u>
Total Retirement	10.34%	15.48%	11.95%	8.30%	12.66%	4.07%	5.64%
Supplemental Death	<u>0.24%</u>	<u>0.12%</u>	<u>0.11%</u>	<u>0.19%</u>	<u>0.00%</u>	<u>0.39%</u>	<u>0.00%</u>
Total Rate	10.58%	15.60%	12.06%	8.49%	12.66%	4.46%	5.64%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	13.50%	13.50%	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.8 years	25.0 years	24.5 years	6.2 years	17.3 years	25.0 years	25.0 years
Number of annuitants	47	33	11	9	43	3	116
Number of active contributing members	92	91	19	14	148	2	120
Number of inactive members	35	61	15	7	108	1	39
Average age of contributing members	42.5 years	39.0 years	40.3 years	40.1 years	43.9 years	58.9 years	45.0 years
Average length of service of contributing members	11.7 years	9.8 years	8.5 years	3.1 years	7.5 years	7.7 years	14.9 years

	Highland Village	Hill Country Village	Hillsboro	Hilshire Village	Hitchcock	Holland	Holliday
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$24,843,558	\$1,165,999	\$10,561,585	\$95,136	\$2,001,634	\$456,792	\$494,628
b. Noncontributing Members	7,788,565	537,217	2,824,277	3,603	836,537	0	212,282
c. Annuitants	<u>10,849,813</u>	<u>328,596</u>	<u>7,199,979</u>	<u>11,188</u>	<u>1,431,303</u>	<u>149,713</u>	<u>116</u>
2. Total Actuarial Accrued Liability	\$43,481,936	\$2,031,812	\$20,585,841	\$109,927	\$4,269,474	\$606,505	\$707,026
3. Actuarial value of assets	<u>38,594,309</u>	<u>2,089,374</u>	<u>17,735,799</u>	<u>91,600</u>	<u>4,404,417</u>	<u>584,969</u>	<u>721,687</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$4,887,627	(\$57,562)	\$2,850,042	\$18,327	(\$134,943)	\$21,536	(\$14,661)
5. Funded Ratio: (3) / (2)	88.8%	102.8%	86.2%	83.3%	103.2%	96.4%	102.1%
6. Annual Payroll	\$10,525,876	\$866,174	\$4,804,209	\$113,080	\$2,213,939	\$279,120	\$397,698
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.47%	4.21%	6.17%	5.62%	4.12%	6.06%	2.87%
Prior Service	<u>2.84%</u>	<u>-0.42%</u>	<u>5.11%</u>	<u>5.36%</u>	<u>0.06%</u>	<u>1.02%</u>	<u>-0.23%</u>
Total Retirement	13.31%	3.79%	11.28%	10.98%	4.18%	7.08%	2.64%
Supplemental Death	<u>0.15%</u>	<u>0.14%</u>	<u>0.00%</u>	<u>0.24%</u>	<u>0.23%</u>	<u>0.54%</u>	<u>0.00%</u>
Total Rate	13.46%	3.93%	11.28%	11.22%	4.41%	7.62%	2.64%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	11.50%	N/A	N/A	11.50%	10.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	25.0 years	15.3 years	3.2 years	0.0 years	9.1 years	25.0 years
Number of annuitants	71	4	64	1	20	3	1
Number of active contributing members	150	15	105	2	41	8	9
Number of inactive members	112	21	75	1	61	0	5
Average age of contributing members	42.5 years	44.2 years	43.5 years	46.8 years	46.8 years	56.2 years	47.6 years
Average length of service of contributing members	10.9 years	12.4 years	10.5 years	6.5 years	11.2 years	8.9 years	10.9 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Hollywood Park	Hondo	Honey Grove	Hooks	Horizon City	Howe	Hubbard
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,409,362	\$4,681,430	\$672,719	\$639,529	\$1,870,818	\$1,228,336	\$265,489
b. Noncontributing Members	828,064	2,105,603	344,679	496,543	1,053	578,311	152,478
c. Annuitants	<u>2,002,929</u>	<u>8,874,415</u>	<u>575,579</u>	<u>467,864</u>	<u>0</u>	<u>490,467</u>	<u>49,553</u>
2. Total Actuarial Accrued Liability	\$6,240,355	\$15,661,448	\$1,592,977	\$1,603,936	\$1,871,871	\$2,297,114	\$467,520
3. Actuarial value of assets	<u>5,525,619</u>	<u>14,591,527</u>	<u>1,572,991</u>	<u>1,267,420</u>	<u>334,124</u>	<u>2,334,849</u>	<u>510,948</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$714,736	\$1,069,921	\$19,986	\$336,516	\$1,537,747	(\$37,735)	(\$43,428)
5. Funded Ratio: (3) / (2)	88.5%	93.2%	98.7%	79.0%	17.8%	101.6%	109.3%
6. Annual Payroll	\$2,153,985	\$4,598,579	\$415,648	\$567,643	\$3,069,050	\$744,165	\$406,283
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.77%	6.80%	6.85%	7.94%	2.81%	5.59%	1.45%
Prior Service	<u>2.04%</u>	<u>1.42%</u>	<u>0.44%</u>	<u>5.52%</u>	<u>3.08%</u>	<u>-0.34%</u>	<u>-0.68%</u>
Total Retirement	8.81%	8.22%	7.29%	13.46%	5.89%	5.25%	0.77%
Supplemental Death	<u>0.20%</u>	<u>0.18%</u>	<u>0.34%</u>	<u>0.18%</u>	<u>0.12%</u>	<u>0.34%</u>	<u>0.26%</u>
Total Rate	9.01%	8.40%	7.63%	13.64%	6.01%	5.59%	1.03%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	10.50%	11.50%	9.50%	13.50%	N/A	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.1 years	14.1 years	13.8 years	25.0 years	25.0 years	25.0 years
Number of annuitants	19	67	5	4	0	9	3
Number of active contributing members	38	109	10	14	73	16	12
Number of inactive members	26	85	19	9	2	18	15
Average age of contributing members	45.0 years	41.5 years	51.4 years	46.2 years	40.7 years	46.0 years	42.4 years
Average length of service of contributing members	10.0 years	6.7 years	14.3 years	9.4 years	5.4 years	10.0 years	7.7 years

	Hudson	Hudson Oaks	Hughes Springs	Humble	Hunters Creek Village	Huntington	Huntsville
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$672,616	\$3,058,469	\$3,655,839	\$43,999,163	\$661,767	\$1,621,342	\$36,451,065
b. Noncontributing Members	39,643	730,562	38,471	2,693,854	142,756	225,600	7,370,426
c. Annuitants	<u>159,865</u>	<u>527,065</u>	<u>851,425</u>	<u>30,654,227</u>	<u>754,083</u>	<u>1,829,259</u>	<u>47,854,289</u>
2. Total Actuarial Accrued Liability	\$872,124	\$4,316,096	\$4,545,735	\$77,347,244	\$1,558,606	\$3,676,201	\$91,675,780
3. Actuarial value of assets	<u>851,140</u>	<u>3,754,286</u>	<u>4,717,116</u>	<u>69,062,993</u>	<u>1,020,776</u>	<u>3,122,124</u>	<u>72,430,087</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$20,984	\$561,810	(\$171,381)	\$8,284,251	\$537,830	\$554,077	\$19,245,693
5. Funded Ratio: (3) / (2)	97.6%	87.0%	103.8%	89.3%	65.5%	84.9%	79.0%
6. Annual Payroll	\$733,664	\$1,478,013	\$618,234	\$15,284,193	\$519,240	\$788,087	\$13,932,380
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.95%	9.84%	10.45%	9.56%	9.07%	9.86%	8.16%
Prior Service	<u>0.22%</u>	<u>2.36%</u>	<u>-1.82%</u>	<u>4.05%</u>	<u>8.08%</u>	<u>4.41%</u>	<u>10.42%</u>
Total Retirement	4.17%	12.20%	8.63%	13.61%	17.15%	14.27%	18.58%
Supplemental Death	<u>0.19%</u>	<u>0.13%</u>	<u>0.33%</u>	<u>0.17%</u>	<u>0.36%</u>	<u>0.21%</u>	<u>0.22%</u>
Total Rate	4.36%	12.33%	8.96%	13.78%	17.51%	14.48%	18.80%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	17.22%	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.4 years	24.6 years	25.0 years	18.6 years	17.5 years	24.9 years	18.7 years
Number of annuitants	3	10	6	107	9	12	201
Number of active contributing members	15	22	12	200	8	20	252
Number of inactive members	4	17	1	52	3	15	160
Average age of contributing members	44.5 years	40.3 years	55.5 years	42.9 years	44.7 years	42.9 years	43.7 years
Average length of service of contributing members	7.9 years	10.5 years	18.3 years	13.0 years	13.3 years	9.1 years	11.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Hurst	Hutchins	Hutto	Huxley	Idalou	Ingleside	Ingram
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$76,599,204	\$4,591,211	\$7,949,747	\$297,490	\$333,831	\$5,050,451	\$226,940
b. Noncontributing Members	11,215,611	1,770,507	4,648,145	140,386	234,816	1,436,433	67,983
c. Annuitants	<u>75,272,920</u>	<u>2,252,063</u>	<u>2,524,617</u>	<u>365,266</u>	<u>0</u>	<u>5,037,351</u>	<u>565,365</u>
2. Total Actuarial Accrued Liability	\$163,087,735	\$8,613,781	\$15,122,509	\$803,142	\$568,647	\$11,524,235	\$860,288
3. Actuarial value of assets	<u>152,517,498</u>	<u>7,747,128</u>	<u>14,904,163</u>	<u>945,082</u>	<u>546,900</u>	<u>10,595,877</u>	<u>784,299</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$10,570,237	\$866,653	\$218,346	(\$141,940)	\$21,747	\$928,358	\$75,989
5. Funded Ratio: (3) / (2)	93.5%	89.9%	98.6%	117.7%	96.2%	91.9%	91.2%
6. Annual Payroll	\$27,330,250	\$3,710,675	\$8,571,106	\$357,529	\$574,649	\$3,484,642	\$519,520
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.96%	7.63%	11.88%	3.09%	3.73%	7.23%	4.63%
Prior Service	<u>3.15%</u>	<u>1.44%</u>	<u>0.16%</u>	<u>-2.19%</u>	<u>0.32%</u>	<u>1.64%</u>	<u>1.10%</u>
Total Retirement	11.11%	9.07%	12.04%	0.90%	4.05%	8.87%	5.73%
Supplemental Death	<u>0.00%</u>	<u>0.13%</u>	<u>0.11%</u>	<u>0.26%</u>	<u>0.06%</u>	<u>0.31%</u>	<u>0.00%</u>
Total Rate	11.11%	9.20%	12.15%	1.16%	4.11%	9.18%	5.73%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	11.50%	N/A	9.50%	N/A	11.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	16.5 years	24.7 years	24.3 years	25.0 years	16.0 years	24.9 years	18.4 years
Number of annuitants	272	26	23	4	0	44	13
Number of active contributing members	398	67	137	10	14	78	12
Number of inactive members	193	61	97	6	14	72	10
Average age of contributing members	42.6 years	40.2 years	41.7 years	45.3 years	36.6 years	47.9 years	45.2 years
Average length of service of contributing members	12.5 years	9.1 years	7.3 years	11.0 years	7.4 years	10.6 years	6.8 years

	Iowa Colony	Iowa Park	Iraan	Irving	Italy	Itasca	Jacinto City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$545,988	\$4,407,317	\$732,252	\$354,795,631	\$144,080	\$1,022,684	\$6,224,449
b. Noncontributing Members	14,735	739,038	90,121	55,989,962	173,645	117,100	770,719
c. Annuitants	<u>0</u>	<u>4,015,879</u>	<u>704,522</u>	<u>355,803,082</u>	<u>279,934</u>	<u>813,429</u>	<u>2,702,341</u>
2. Total Actuarial Accrued Liability	\$560,723	\$9,162,234	\$1,526,895	\$766,588,675	\$597,659	\$1,953,213	\$9,697,509
3. Actuarial value of assets	<u>402,044</u>	<u>7,844,637</u>	<u>1,185,406</u>	<u>698,577,540</u>	<u>464,679</u>	<u>2,115,944</u>	<u>8,701,421</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$158,679	\$1,317,597	\$341,489	\$68,011,135	\$132,980	(\$162,731)	\$996,088
5. Funded Ratio: (3) / (2)	71.7%	85.6%	77.6%	91.1%	77.7%	108.3%	89.7%
6. Annual Payroll	\$395,336	\$1,851,971	\$275,872	\$109,317,946	\$743,382	\$732,653	\$2,799,875
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.43%	7.09%	6.61%	9.46%	1.85%	12.06%	4.58%
Prior Service	<u>8.72%</u>	<u>7.67%</u>	<u>10.97%</u>	<u>5.00%</u>	<u>1.14%</u>	<u>-1.36%</u>	<u>3.39%</u>
Total Retirement	14.15%	14.76%	17.58%	14.46%	2.99%	10.70%	7.97%
Supplemental Death	<u>0.49%</u>	<u>0.23%</u>	<u>0.51%</u>	<u>0.18%</u>	<u>0.26%</u>	<u>0.26%</u>	<u>0.34%</u>
Total Rate	14.64%	14.99%	18.09%	14.64%	3.25%	10.96%	8.31%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	13.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	5.1 years	11.5 years	14.7 years	17.3 years	23.6 years	25.0 years	13.4 years
Number of annuitants	0	29	5	1,031	9	6	30
Number of active contributing members	8	44	6	1,486	18	19	57
Number of inactive members	4	37	4	531	26	26	32
Average age of contributing members	48.8 years	44.1 years	49.2 years	43.6 years	48.4 years	42.6 years	44.9 years
Average length of service of contributing members	6.4 years	9.5 years	11.2 years	13.0 years	4.0 years	5.7 years	10.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Jacksboro	Jacksonville	Jasper	Jefferson	Jersey Village	Jewett	Joaquin
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,398,050	\$12,741,253	\$13,590,268	\$966,641	\$8,630,576	\$401,950	\$132,819
b. Noncontributing Members	1,301,659	2,111,180	1,313,875	220,267	5,089,710	37,177	445
c. Annuitants	<u>3,641,039</u>	<u>15,881,509</u>	<u>11,831,328</u>	<u>531,026</u>	<u>10,787,537</u>	<u>769,369</u>	<u>196,804</u>
2. Total Actuarial Accrued Liability	\$7,340,748	\$30,733,942	\$26,735,471	\$1,717,934	\$24,507,823	\$1,208,496	\$330,068
3. Actuarial value of assets	<u>6,019,164</u>	<u>27,645,490</u>	<u>24,582,242</u>	<u>1,890,557</u>	<u>21,024,016</u>	<u>1,011,197</u>	<u>248,931</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,321,584	\$3,088,452	\$2,153,229	(\$172,623)	\$3,483,807	\$197,299	\$81,137
5. Funded Ratio: (3) / (2)	82.0%	90.0%	91.9%	110.0%	85.8%	83.7%	75.4%
6. Annual Payroll	\$1,836,434	\$6,367,955	\$5,888,109	\$779,221	\$5,541,680	\$281,777	\$260,199
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.49%	7.35%	5.29%	2.39%	10.20%	4.80%	1.89%
Prior Service	<u>4.43%</u>	<u>3.26%</u>	<u>3.80%</u>	<u>-1.50%</u>	<u>3.85%</u>	<u>5.80%</u>	<u>2.67%</u>
Total Retirement	14.92%	10.61%	9.09%	0.89%	14.05%	10.60%	4.56%
Supplemental Death	<u>0.21%</u>	<u>0.19%</u>	<u>0.27%</u>	<u>0.34%</u>	<u>0.19%</u>	<u>0.15%</u>	<u>0.40%</u>
Total Rate	15.13%	10.80%	9.36%	1.23%	14.24%	10.75%	4.96%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	15.50%	N/A	N/A	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.9 years	22.3 years	12.0 years	25.0 years	25.1 years	16.1 years	15.4 years
Number of annuitants	21	104	76	10	54	4	6
Number of active contributing members	40	127	117	19	92	5	7
Number of inactive members	46	84	54	29	96	2	1
Average age of contributing members	42.2 years	41.5 years	45.1 years	50.2 years	43.6 years	48.2 years	49.0 years
Average length of service of contributing members	7.8 years	9.5 years	11.3 years	10.0 years	8.7 years	12.3 years	4.6 years

	Johnson City	Jones Creek	Jonestown	Josephine	Joshua	Jourdanton	Junction
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$987,177	\$225,987	\$1,012,548	\$316,259	\$1,689,492	\$1,537,138	\$1,230,369
b. Noncontributing Members	414,057	1,803	209,289	87,708	1,204,215	237,438	184,220
c. Annuitants	<u>787,170</u>	<u>255,325</u>	<u>447,407</u>	<u>0</u>	<u>564,980</u>	<u>1,199,155</u>	<u>2,732,770</u>
2. Total Actuarial Accrued Liability	\$2,188,404	\$483,115	\$1,669,244	\$403,967	\$3,458,687	\$2,973,731	\$4,147,359
3. Actuarial value of assets	<u>1,808,191</u>	<u>406,385</u>	<u>1,518,069</u>	<u>403,127</u>	<u>3,538,003</u>	<u>2,805,232</u>	<u>3,548,466</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$380,213	\$76,730	\$151,175	\$840	(\$79,316)	\$168,499	\$598,893
5. Funded Ratio: (3) / (2)	82.6%	84.1%	90.9%	99.8%	102.3%	94.3%	85.6%
6. Annual Payroll	\$862,391	\$283,338	\$1,302,631	\$455,208	\$1,780,309	\$1,541,373	\$873,955
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.59%	2.90%	6.58%	5.92%	5.97%	5.42%	10.31%
Prior Service	<u>3.19%</u>	<u>3.12%</u>	<u>0.74%</u>	<u>0.03%</u>	<u>-0.27%</u>	<u>0.66%</u>	<u>4.22%</u>
Total Retirement	9.78%	6.02%	7.32%	5.95%	5.70%	6.08%	14.53%
Supplemental Death	<u>0.18%</u>	<u>0.21%</u>	<u>0.22%</u>	<u>0.09%</u>	<u>0.10%</u>	<u>0.33%</u>	<u>0.24%</u>
Total Rate	9.96%	6.23%	7.54%	6.04%	5.80%	6.41%	14.77%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	10.50%	N/A	N/A	N/A	13.50%	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.1 years	10.6 years	23.3 years	6.0 years	25.0 years	25.7 years	24.9 years
Number of annuitants	8	5	9	0	7	19	17
Number of active contributing members	15	8	27	8	36	39	24
Number of inactive members	14	1	12	4	44	30	21
Average age of contributing members	47.1 years	41.6 years	45.6 years	42.9 years	39.8 years	48.2 years	48.3 years
Average length of service of contributing members	8.4 years	6.9 years	7.8 years	10.3 years	9.3 years	9.9 years	5.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Justin	Karnes City	Katy	Kaufman	Keene	Keller	Kemah
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,138,245	\$1,669,466	\$31,670,068	\$6,262,777	\$2,966,115	\$48,443,652	\$3,024,139
b. Noncontributing Members	603,283	411,859	3,760,724	996,802	2,666,458	16,319,125	865,576
c. Annuitants	<u>370,966</u>	<u>945,784</u>	<u>15,578,137</u>	<u>7,443,894</u>	<u>4,558,049</u>	<u>39,053,230</u>	<u>1,396,468</u>
2. Total Actuarial Accrued Liability	\$2,112,494	\$3,027,109	\$51,008,929	\$14,703,473	\$10,190,622	\$103,816,007	\$5,286,183
3. Actuarial value of assets	<u>1,841,503</u>	<u>2,374,246</u>	<u>45,955,369</u>	<u>12,418,331</u>	<u>9,197,443</u>	<u>87,543,646</u>	<u>5,120,443</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$270,991	\$652,863	\$5,053,560	\$2,285,142	\$993,179	\$16,272,361	\$165,740
5. Funded Ratio: (3) / (2)	87.2%	78.4%	90.1%	84.5%	90.3%	84.3%	96.9%
6. Annual Payroll	\$1,764,292	\$1,374,047	\$14,673,279	\$3,023,062	\$2,338,757	\$19,332,431	\$2,224,492
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.44%	5.80%	11.35%	9.92%	9.20%	10.15%	6.42%
Prior Service	<u>0.99%</u>	<u>2.94%</u>	<u>2.27%</u>	<u>4.86%</u>	<u>2.97%</u>	<u>5.68%</u>	<u>0.51%</u>
Total Retirement	7.43%	8.74%	13.62%	14.78%	12.17%	15.83%	6.93%
Supplemental Death	<u>0.00%</u>	<u>0.16%</u>	<u>0.15%</u>	<u>0.22%</u>	<u>0.17%</u>	<u>0.13%</u>	<u>0.18%</u>
Total Rate	7.43%	8.90%	13.77%	15.00%	12.34%	15.96%	7.11%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	23.1 years	24.7 years	22.3 years	23.3 years	20.5 years	21.6 years	23.0 years
Number of annuitants	10	12	66	52	25	161	15
Number of active contributing members	32	28	232	55	46	285	35
Number of inactive members	28	15	69	54	54	214	35
Average age of contributing members	38.9 years	46.2 years	40.1 years	44.7 years	39.9 years	40.8 years	46.2 years
Average length of service of contributing members	5.4 years	9.5 years	8.5 years	12.5 years	7.8 years	11.4 years	13.0 years

	Kemp	Kenedy	Kennedale	Kerens	Kermit	Kerrville	Kerrville PUB
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$365,417	\$1,300,615	\$6,456,693	\$252,259	\$5,121,490	\$36,388,738	\$10,563,798
b. Noncontributing Members	289,264	1,019,487	5,501,428	5,273	2,227,629	7,929,271	6,521,085
c. Annuitants	<u>262,043</u>	<u>738,564</u>	<u>4,914,572</u>	<u>161,650</u>	<u>5,165,904</u>	<u>38,399,167</u>	<u>11,093,904</u>
2. Total Actuarial Accrued Liability	\$916,724	\$3,058,666	\$16,872,693	\$419,182	\$12,515,023	\$82,717,176	\$28,178,787
3. Actuarial value of assets	<u>940,006</u>	<u>2,766,481</u>	<u>14,990,065</u>	<u>161,682</u>	<u>9,909,311</u>	<u>75,424,588</u>	<u>26,117,460</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$23,282)	\$292,185	\$1,882,628	\$257,500	\$2,605,712	\$7,292,588	\$2,061,327
5. Funded Ratio: (3) / (2)	102.5%	90.4%	88.8%	38.6%	79.2%	91.2%	92.7%
6. Annual Payroll	\$695,451	\$2,116,685	\$4,085,036	\$420,160	\$2,400,675	\$17,654,078	\$4,041,538
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.02%	3.08%	10.58%	2.18%	9.04%	7.61%	8.74%
Prior Service	<u>-0.23%</u>	<u>0.85%</u>	<u>2.99%</u>	<u>5.97%</u>	<u>6.67%</u>	<u>5.22%</u>	<u>3.32%</u>
Total Retirement	5.79%	3.93%	13.57%	8.15%	15.71%	10.13%	12.06%
Supplemental Death	<u>0.00%</u>	<u>0.17%</u>	<u>0.23%</u>	<u>0.18%</u>	<u>0.26%</u>	<u>0.19%</u>	<u>0.17%</u>
Total Rate	5.79%	4.10%	13.80%	8.33%	15.97%	10.32%	12.23%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	7.50%	N/A	N/A	N/A	15.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.1 years	24.7 years	13.0 years	24.9 years	25.2 years	22.8 years
Number of annuitants	8	11	39	1	28	245	39
Number of active contributing members	19	49	72	11	52	305	53
Number of inactive members	25	37	110	4	107	179	30
Average age of contributing members	40.1 years	42.6 years	43.7 years	47.0 years	44.1 years	43.3 years	44.2 years
Average length of service of contributing members	4.2 years	6.8 years	11.3 years	9.3 years	7.0 years	10.0 years	11.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Kilgore	Killeen	Kingsville	Kirby	Kirbyville	Knox City	Kosse
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$18,241,018	\$86,427,575	\$26,868,197	\$3,447,594	\$697,403	\$221,274	\$47,825
b. Noncontributing Members	3,067,399	13,616,332	7,311,276	1,102,401	191,923	297,944	824
c. Annuitants	<u>24,074,366</u>	<u>96,849,633</u>	<u>29,352,486</u>	<u>4,509,932</u>	<u>1,151,767</u>	<u>132,433</u>	<u>0</u>
2. Total Actuarial Accrued Liability	\$45,382,783	\$196,893,540	\$63,531,959	\$9,059,927	\$2,041,093	\$651,651	\$48,649
3. Actuarial value of assets	<u>40,529,101</u>	<u>169,226,375</u>	<u>59,879,605</u>	<u>7,679,359</u>	<u>1,699,289</u>	<u>740,376</u>	<u>17,384</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$4,853,682	\$27,667,165	\$3,652,354	\$1,380,568	\$341,804	(\$88,725)	\$31,265
5. Funded Ratio: (3) / (2)	89.3%	85.9%	94.3%	84.8%	83.3%	113.6%	35.7%
6. Annual Payroll	\$7,979,504	\$46,699,039	\$11,987,332	\$2,252,573	\$872,501	\$352,847	\$134,976
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.95%	5.77%	6.58%	11.03%	3.19%	3.91%	2.00%
Prior Service	<u>3.83%</u>	<u>5.50%</u>	<u>2.22%</u>	<u>3.74%</u>	<u>2.63%</u>	<u>-1.54%</u>	<u>3.36%</u>
Total Retirement	13.78%	11.27%	8.80%	14.77%	5.82%	2.37%	5.36%
Supplemental Death	<u>0.25%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.12%</u>	<u>0.38%</u>	<u>0.45%</u>	<u>0.20%</u>
Total Rate	14.03%	11.45%	8.80%	14.89%	6.20%	2.82%	5.56%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	N/A	7.50%	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.0 years	13.9 years	19.2 years	25.3 years	25.0 years	25.0 years	8.1 years
Number of annuitants	126	525	175	30	19	5	0
Number of active contributing members	155	956	260	59	24	8	4
Number of inactive members	91	551	172	88	29	11	1
Average age of contributing members	44.0 years	42.9 years	44.3 years	41.0 years	50.1 years	52.8 years	51.1 years
Average length of service of contributing members	9.6 years	11.1 years	10.1 years	7.9 years	6.1 years	12.4 years	7.8 years

	Kountze	Kress	Krugerville	Krum	Kyle	La Coste	La Feria
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$640,388	\$9,198	\$436,593	\$1,157,266	\$19,470,093	\$323,575	\$2,284,964
b. Noncontributing Members	92,636	6,323	77,188	749,623	2,075,413	751	932,543
c. Annuitants	<u>180,791</u>	<u>242,661</u>	<u>89,716</u>	<u>160,474</u>	<u>3,292,556</u>	<u>46,722</u>	<u>3,892,692</u>
2. Total Actuarial Accrued Liability	\$913,815	\$258,182	\$603,497	\$2,067,363	\$24,838,062	\$371,048	\$7,110,199
3. Actuarial value of assets	<u>897,829</u>	<u>338,328</u>	<u>573,760</u>	<u>2,068,095</u>	<u>21,128,928</u>	<u>408,844</u>	<u>5,628,127</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$15,986	(\$80,146)	\$29,737	(\$732)	\$3,709,134	(\$37,796)	\$1,482,072
5. Funded Ratio: (3) / (2)	98.3%	131.0%	95.1%	100.0%	85.1%	110.2%	79.2%
6. Annual Payroll	\$1,008,646	\$29,721	\$622,937	\$1,975,150	\$11,708,038	\$324,189	\$2,083,458
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.28%	2.91%	7.71%	6.57%	10.56%	2.02%	4.89%
Prior Service	<u>0.10%</u>	<u>-2.91%</u>	<u>0.46%</u>	<u>0.00%</u>	<u>1.96%</u>	<u>-0.72%</u>	<u>6.34%</u>
Total Retirement	1.38%	0.00%	8.17%	6.57%	12.52%	1.30%	11.23%
Supplemental Death	<u>0.15%</u>	<u>0.00%</u>	<u>0.12%</u>	<u>0.14%</u>	<u>0.12%</u>	<u>0.00%</u>	<u>0.24%</u>
Total Rate	1.53%	0.00%	8.29%	6.71%	12.64%	1.30%	11.47%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	13.50%	13.50%	7.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.4 years	25.0 years	13.4 years	25.0 years	24.7 years	25.0 years	14.6 years
Number of annuitants	4	3	3	7	25	3	31
Number of active contributing members	25	1	9	37	200	8	55
Number of inactive members	49	1	5	35	103	1	46
Average age of contributing members	42.8 years	40.0 years	47.3 years	41.6 years	39.6 years	50.7 years	44.0 years
Average length of service of contributing members	6.3 years	3.7 years	10.3 years	8.8 years	8.0 years	14.2 years	8.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	La Grange	La Grulla	La Joya	La Marque	La Porte	La Vernia	Lacy-Lakeview
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$9,855,970	\$378,315	\$739,444	\$10,083,987	\$79,462,183	\$269,938	\$5,091,548
b. Noncontributing Members	1,206,629	39,135	254,508	5,220,596	10,463,644	77,349	704,831
c. Annuitants	<u>5,220,413</u>	<u>291,354</u>	<u>583,636</u>	<u>13,198,950</u>	<u>74,584,510</u>	<u>235,027</u>	<u>2,980,215</u>
2. Total Actuarial Accrued Liability	\$16,283,012	\$708,804	\$1,577,588	\$28,503,533	\$164,510,337	\$582,314	\$8,776,594
3. Actuarial value of assets	<u>14,520,324</u>	<u>869,935</u>	<u>772,156</u>	<u>24,108,780</u>	<u>147,848,080</u>	<u>451,166</u>	<u>7,033,363</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,762,688	(\$161,131)	\$805,432	\$4,394,753	\$16,662,257	\$131,148	\$1,743,231
5. Funded Ratio: (3) / (2)	89.2%	122.7%	48.9%	84.6%	89.9%	77.5%	80.1%
6. Annual Payroll	\$2,997,702	\$612,867	\$1,137,048	\$6,352,537	\$23,726,658	\$780,013	\$2,140,170
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.32%	6.81%	1.53%	9.56%	9.28%	2.05%	9.43%
Prior Service	<u>4.74%</u>	<u>-1.68%</u>	<u>5.30%</u>	<u>4.36%</u>	<u>6.10%</u>	<u>1.07%</u>	<u>4.97%</u>
Total Retirement	14.06%	5.13%	6.83%	13.92%	15.38%	3.12%	14.40%
Supplemental Death	<u>0.28%</u>	<u>0.19%</u>	<u>0.25%</u>	<u>0.16%</u>	<u>0.17%</u>	<u>0.15%</u>	<u>0.21%</u>
Total Rate	14.34%	5.32%	7.08%	14.08%	15.55%	3.27%	14.61%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	11.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	16.7 years	25.0 years	18.6 years	25.6 years	15.1 years	23.5 years	25.2 years
Number of annuitants	33	8	8	90	218	4	23
Number of active contributing members	66	24	36	114	370	21	50
Number of inactive members	37	16	78	131	184	16	29
Average age of contributing members	50.2 years	41.8 years	45.0 years	41.1 years	42.7 years	42.5 years	41.5 years
Average length of service of contributing members	11.2 years	5.8 years	6.6 years	7.5 years	12.3 years	6.7 years	9.9 years

	Ladonia	Lago Vista	Laguna Vista	Lake Dallas	Lake Jackson	Lake Worth	Lakeport
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$22,794	\$6,837,022	\$762,068	\$1,684,374	\$33,219,034	\$11,816,657	\$134,440
b. Noncontributing Members	20,876	1,689,839	28,521	2,191,481	6,626,484	3,342,722	112,751
c. Annuitants	<u>44,599</u>	<u>2,633,581</u>	<u>0</u>	<u>5,404,686</u>	<u>26,557,825</u>	<u>7,596,575</u>	<u>26,165</u>
2. Total Actuarial Accrued Liability	\$88,269	\$11,160,442	\$790,589	\$9,280,541	\$66,403,343	\$22,755,954	\$273,356
3. Actuarial value of assets	<u>125,977</u>	<u>10,288,568</u>	<u>851,669</u>	<u>8,479,149</u>	<u>61,604,939</u>	<u>18,034,999</u>	<u>403,614</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$37,708)	\$871,874	(\$61,080)	\$801,392	\$4,798,404	\$4,720,955	(\$130,258)
5. Funded Ratio: (3) / (2)	142.7%	92.2%	107.7%	91.4%	92.8%	79.3%	147.7%
6. Annual Payroll	\$50,228	\$4,323,863	\$776,551	\$1,945,087	\$11,917,278	\$5,475,364	\$214,065
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.87%	6.80%	4.80%	10.43%	8.08%	10.44%	2.84%
Prior Service	<u>-4.61%</u>	<u>1.32%</u>	<u>-0.48%</u>	<u>2.63%</u>	<u>3.96%</u>	<u>5.61%</u>	<u>-2.84%</u>
Total Retirement	3.26%	8.12%	4.32%	13.06%	12.04%	16.05%	0.00%
Supplemental Death	<u>0.37%</u>	<u>0.24%</u>	<u>0.17%</u>	<u>0.18%</u>	<u>0.21%</u>	<u>0.15%</u>	<u>0.10%</u>
Total Rate	3.63%	8.36%	4.49%	13.24%	12.25%	16.20%	0.10%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	12.50%	N/A	13.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	22.6 years	25.0 years	23.5 years	12.9 years	22.8 years	25.0 years
Number of annuitants	3	31	0	41	129	42	1
Number of active contributing members	2	90	17	31	221	97	6
Number of inactive members	6	59	9	47	177	64	3
Average age of contributing members	48.4 years	48.4 years	50.0 years	44.8 years	43.2 years	42.7 years	40.1 years
Average length of service of contributing members	2.0 years	8.4 years	8.8 years	8.4 years	10.6 years	10.5 years	6.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Lakeside	Lakeside City	Lakeway	Lamesa	Lampasas	Lancaster	Laredo
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,072,407	\$115,969	\$14,438,830	\$5,372,840	\$15,008,470	\$32,168,077	\$407,751,983
b. Noncontributing Members	258,282	27,011	2,837,044	2,030,113	1,855,993	14,196,757	22,783,797
c. Annuitants	<u>84,102</u>	<u>54,989</u>	<u>5,550,924</u>	<u>8,450,637</u>	<u>9,903,042</u>	<u>39,571,756</u>	<u>229,611,042</u>
2. Total Actuarial Accrued Liability	\$1,414,791	\$197,969	\$22,826,798	\$15,853,590	\$26,767,505	\$85,936,590	\$660,146,822
3. Actuarial value of assets	<u>1,308,582</u>	<u>197,862</u>	<u>18,432,310</u>	<u>16,013,129</u>	<u>21,957,706</u>	<u>71,934,700</u>	<u>509,210,733</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$106,209	\$107	\$4,394,488	(\$159,539)	\$4,809,799	\$14,001,890	\$150,936,089
5. Funded Ratio: (3) / (2)	92.5%	99.9%	80.7%	101.0%	82.0%	83.7%	77.1%
6. Annual Payroll	\$791,096	\$193,863	\$7,172,807	\$3,561,259	\$5,501,859	\$17,701,686	\$115,662,307
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.54%	2.07%	10.12%	5.05%	9.65%	8.61%	9.96%
Prior Service	<u>1.01%</u>	<u>0.01%</u>	<u>3.78%</u>	<u>-0.29%</u>	<u>5.90%</u>	<u>4.84%</u>	<u>10.81%</u>
Total Retirement	8.55%	2.08%	13.90%	4.76%	15.55%	13.45%	20.77%
Supplemental Death	<u>0.34%</u>	<u>0.27%</u>	<u>0.17%</u>	<u>0.00%</u>	<u>0.20%</u>	<u>0.14%</u>	<u>0.21%</u>
Total Rate	8.89%	2.35%	14.07%	4.76%	15.75%	13.59%	20.98%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	12.50%	N/A	15.50%	13.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.4 years	5.9 years	24.9 years	25.0 years	21.6 years	25.2 years	16.1 years
Number of annuitants	4	3	57	54	65	197	979
Number of active contributing members	16	5	109	75	116	265	2,136
Number of inactive members	21	2	96	66	66	240	595
Average age of contributing members	50.5 years	53.4 years	44.2 years	45.3 years	43.7 years	39.8 years	44.6 years
Average length of service of contributing members	15.6 years	9.2 years	8.6 years	7.4 years	10.3 years	7.7 years	11.8 years

	Lavon	League City	Leander	Lefors	Leon Valley	Leonard	Levelland
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$674,929	\$79,810,554	\$29,153,532	\$50,086	\$13,603,116	\$170,039	\$12,768,642
b. Noncontributing Members	440,183	14,476,165	3,056,522	16,658	6,952,071	242,518	2,949,427
c. Annuitants	<u>102,685</u>	<u>58,664,901</u>	<u>6,189,446</u>	<u>0</u>	<u>23,961,717</u>	<u>379,718</u>	<u>12,796,413</u>
2. Total Actuarial Accrued Liability	\$1,217,797	\$152,951,620	\$38,399,500	\$66,744	\$44,516,904	\$792,275	\$28,514,482
3. Actuarial value of assets	<u>1,164,113</u>	<u>127,763,933</u>	<u>31,671,770</u>	<u>53,746</u>	<u>39,033,623</u>	<u>877,906</u>	<u>26,890,108</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$53,684	\$25,187,687	\$6,727,730	\$12,998	\$5,483,281	(\$85,631)	\$1,624,374
5. Funded Ratio: (3) / (2)	95.6%	83.5%	82.5%	80.5%	87.7%	110.8%	94.3%
6. Annual Payroll	\$911,616	\$34,033,940	\$18,406,975	\$117,291	\$6,227,367	\$668,974	\$5,281,370
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.10%	9.35%	9.80%	1.68%	10.84%	1.94%	8.77%
Prior Service	<u>0.41%</u>	<u>5.37%</u>	<u>2.24%</u>	<u>2.37%</u>	<u>6.28%</u>	<u>-0.79%</u>	<u>2.67%</u>
Total Retirement	6.51%	14.72%	12.04%	4.05%	17.12%	1.15%	11.44%
Supplemental Death	<u>0.17%</u>	<u>0.17%</u>	<u>0.14%</u>	<u>0.09%</u>	<u>0.20%</u>	<u>0.17%</u>	<u>0.19%</u>
Total Rate	6.68%	14.89%	12.18%	4.14%	17.32%	1.32%	11.63%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	15.50%	13.50%	N/A	N/A	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.9 years	19.4 years	25.1 years	5.2 years	19.9 years	25.0 years	15.1 years
Number of annuitants	3	237	54	0	101	7	53
Number of active contributing members	18	518	289	4	107	16	90
Number of inactive members	18	267	104	11	77	22	32
Average age of contributing members	45.7 years	41.9 years	42.0 years	43.0 years	44.1 years	41.3 years	44.1 years
Average length of service of contributing members	8.6 years	9.7 years	8.6 years	3.7 years	12.1 years	5.2 years	11.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Lewisville	Lexington	Liberty	Liberty Hill	Lindale	Linden	Lipan
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$158,035,576	\$192,168	\$7,057,344	\$789,548	\$5,520,534	\$360,709	\$176,442
b. Noncontributing Members	21,000,553	389,375	2,700,003	141,444	895,742	86,249	2,793
c. Annuitants	<u>136,647,951</u>	<u>1,318,430</u>	<u>6,317,817</u>	<u>103,975</u>	<u>1,963,433</u>	<u>383,344</u>	<u>0</u>
2. Total Actuarial Accrued Liability	\$315,684,080	\$1,899,973	\$16,075,164	\$1,034,967	\$8,379,709	\$830,302	\$179,235
3. Actuarial value of assets	<u>271,481,331</u>	<u>1,704,161</u>	<u>11,076,018</u>	<u>986,378</u>	<u>6,130,791</u>	<u>886,253</u>	<u>173,718</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$44,202,749	\$195,812	\$4,999,146	\$48,589	\$2,248,918	(\$55,951)	\$5,517
5. Funded Ratio: (3) / (2)	86.0%	89.7%	68.9%	95.3%	73.2%	106.7%	96.9%
6. Annual Payroll	\$54,923,274	\$520,410	\$4,554,465	\$1,674,376	\$2,623,673	\$538,669	\$152,393
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.25%	6.34%	5.39%	6.89%	8.32%	1.92%	1.87%
Prior Service	<u>6.32%</u>	<u>2.48%</u>	<u>12.09%</u>	<u>0.19%</u>	<u>6.47%</u>	<u>-0.64%</u>	<u>0.59%</u>
Total Retirement	16.57%	8.82%	17.48%	7.08%	14.79%	1.28%	2.46%
Supplemental Death	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.30%</u>	<u>0.27%</u>
Total Rate	16.57%	8.82%	17.48%	7.28%	14.79%	1.58%	2.73%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	7.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.3 years	22.4 years	11.6 years	22.7 years	18.3 years	25.0 years	7.1 years
Number of annuitants	429	9	42	1	12	6	0
Number of active contributing members	776	11	96	31	54	15	4
Number of inactive members	374	20	132	12	31	12	1
Average age of contributing members	41.4 years	39.5 years	42.7 years	46.6 years	43.9 years	48.8 years	55.7 years
Average length of service of contributing members	11.7 years	4.8 years	9.1 years	6.1 years	8.4 years	8.4 years	12.3 years

	Little Elm	Littlefield	Live Oak	Liverpool	Livingston	Llano	Lockhart
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$28,925,564	\$3,315,414	\$23,436,975	\$55,149	\$15,403,266	\$4,259,033	\$15,397,331
b. Noncontributing Members	5,520,519	1,541,049	5,338,747	21,571	912,833	812,809	4,607,648
c. Annuitants	<u>4,230,641</u>	<u>3,828,546</u>	<u>15,067,829</u>	<u>0</u>	<u>11,982,495</u>	<u>3,517,215</u>	<u>13,748,370</u>
2. Total Actuarial Accrued Liability	\$38,676,724	\$8,685,009	\$43,843,551	\$76,720	\$28,298,594	\$8,589,057	\$33,753,349
3. Actuarial value of assets	<u>32,511,022</u>	<u>7,952,718</u>	<u>36,818,830</u>	<u>75,241</u>	<u>24,804,641</u>	<u>6,529,829</u>	<u>29,192,886</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$6,165,702	\$732,291	\$7,024,721	\$1,479	\$3,493,953	\$2,059,228	\$4,560,463
5. Funded Ratio: (3) / (2)	84.1%	91.6%	84.0%	98.1%	87.7%	76.0%	86.5%
6. Annual Payroll	\$16,512,038	\$2,370,980	\$6,762,897	\$193,445	\$4,309,274	\$2,330,044	\$6,556,913
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	11.13%	6.48%	10.56%	1.82%	8.69%	7.64%	7.35%
Prior Service	<u>2.34%</u>	<u>2.45%</u>	<u>7.70%</u>	<u>0.12%</u>	<u>6.87%</u>	<u>6.95%</u>	<u>5.46%</u>
Total Retirement	13.47%	8.93%	18.26%	1.94%	15.56%	14.59%	12.81%
Supplemental Death	<u>0.12%</u>	<u>0.26%</u>	<u>0.19%</u>	<u>0.20%</u>	<u>0.23%</u>	<u>0.29%</u>	<u>0.24%</u>
Total Rate	13.59%	9.19%	18.45%	2.14%	15.79%	14.88%	13.05%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	11.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.1 years	17.8 years	18.8 years	7.6 years	15.6 years	18.6 years	18.5 years
Number of annuitants	47	47	72	0	42	41	79
Number of active contributing members	245	57	109	5	79	47	136
Number of inactive members	149	46	61	4	13	26	121
Average age of contributing members	41.2 years	43.1 years	44.4 years	43.3 years	44.9 years	46.5 years	42.9 years
Average length of service of contributing members	8.7 years	9.0 years	14.3 years	2.8 years	12.2 years	9.1 years	10.0 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Lockney	Lone Star	Longview	Loraine	Lorena	Lorenzo	Los Fresnos
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$66,264	\$603,348	\$82,002,405	\$4,789	\$1,105,098	\$140,226	\$3,222,636
b. Noncontributing Members	63,112	382,169	12,159,361	85,773	331,529	84,219	529,691
c. Annuitants	<u>285,372</u>	<u>553,473</u>	<u>88,554,281</u>	<u>19,767</u>	<u>262,127</u>	<u>213,698</u>	<u>1,057,695</u>
2. Total Actuarial Accrued Liability	\$414,748	\$1,538,990	\$182,716,047	\$110,329	\$1,698,754	\$438,143	\$4,810,022
3. Actuarial value of assets	<u>771,681</u>	<u>1,583,651</u>	<u>165,739,882</u>	<u>120,261</u>	<u>1,510,582</u>	<u>584,526</u>	<u>4,034,011</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$356,933)	(\$44,661)	\$16,976,165	(\$9,932)	\$188,172	(\$146,383)	\$776,011
5. Funded Ratio: (3) / (2)	186.1%	102.9%	90.7%	109.0%	88.9%	133.4%	83.9%
6. Annual Payroll	\$221,610	\$469,589	\$34,793,140	\$88,761	\$713,003	\$295,841	\$2,059,967
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.61%	3.18%	7.19%	4.08%	9.04%	5.29%	4.98%
Prior Service	<u>-2.61%</u>	<u>-0.64%</u>	<u>3.67%</u>	<u>-0.69%</u>	<u>1.74%</u>	<u>-3.04%</u>	<u>2.36%</u>
Total Retirement	0.00%	2.54%	10.86%	3.39%	10.78%	2.25%	7.34%
Supplemental Death	<u>0.32%</u>	<u>0.18%</u>	<u>0.22%</u>	<u>0.14%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.19%</u>
Total Rate	0.32%	2.72%	11.08%	3.53%	10.98%	2.25%	7.53%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	7.50%	15.50%	N/A	12.50%	9.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	18.4 years	25.0 years	22.4 years	25.0 years	24.1 years
Number of annuitants	3	6	502	1	8	6	16
Number of active contributing members	7	11	648	2	19	9	54
Number of inactive members	4	14	326	8	11	8	39
Average age of contributing members	46.4 years	41.7 years	43.0 years	51.5 years	47.8 years	41.7 years	41.2 years
Average length of service of contributing members	2.7 years	9.7 years	10.3 years	0.7 years	10.0 years	3.2 years	9.7 years

	Lott	Lovelady	Lubbock	Lucas	Lufkin	Luling	Lumberton
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$130,984	\$69,028	\$292,516,686	\$2,505,908	\$51,636,032	\$5,650,788	\$6,872,027
b. Noncontributing Members	49,704	3,551	43,942,407	712,654	7,478,563	618,723	349,241
c. Annuitants	<u>27,003</u>	<u>11,404</u>	<u>391,529,459</u>	<u>1,110,404</u>	<u>45,189,923</u>	<u>4,007,856</u>	<u>3,359,074</u>
2. Total Actuarial Accrued Liability	\$207,691	\$83,983	\$727,988,552	\$4,328,966	\$104,304,518	\$10,277,367	\$10,580,342
3. Actuarial value of assets	<u>222,073</u>	<u>76,432</u>	<u>618,799,822</u>	<u>3,660,380</u>	<u>86,938,042</u>	<u>8,987,724</u>	<u>8,905,339</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$14,382)	\$7,551	\$109,188,730	\$668,586	\$17,366,476	\$1,289,643	\$1,675,003
5. Funded Ratio: (3) / (2)	106.9%	91.0%	85.0%	84.6%	83.4%	87.5%	84.2%
6. Annual Payroll	\$371,550	\$119,826	\$104,677,150	\$2,432,175	\$17,582,427	\$3,620,101	\$2,316,800
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.48%	6.23%	9.92%	10.68%	8.46%	5.81%	10.48%
Prior Service	<u>-0.24%</u>	<u>1.42%</u>	<u>7.65%</u>	<u>1.82%</u>	<u>7.71%</u>	<u>2.79%</u>	<u>5.50%</u>
Total Retirement	1.24%	7.65%	17.57%	12.50%	16.17%	8.60%	15.98%
Supplemental Death	<u>0.10%</u>	<u>0.13%</u>	<u>0.00%</u>	<u>0.13%</u>	<u>0.22%</u>	<u>0.30%</u>	<u>0.23%</u>
Total Rate	1.34%	7.78%	17.57%	12.63%	16.39%	8.90%	16.21%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	15.50%	N/A	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	4.9 years	19.1 years	22.2 years	17.5 years	17.4 years	18.1 years
Number of annuitants	4	1	1,377	17	235	42	24
Number of active contributing members	7	3	1,758	39	356	85	42
Number of inactive members	24	2	795	21	190	64	10
Average age of contributing members	37.9 years	40.7 years	43.3 years	40.3 years	43.5 years	44.8 years	44.7 years
Average length of service of contributing members	4.0 years	4.7 years	10.6 years	6.5 years	10.5 years	9.7 years	10.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Lyford	Lytle	Madisonville	Magnolia	Malakoff	Manor	Mansfield
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$633,446	\$3,434,235	\$2,135,724	\$815,569	\$1,797,721	\$3,588,182	\$110,758,840
b. Noncontributing Members	8,063	72,678	441,695	373,281	223,346	463,622	9,507,632
c. Annuitants	<u>9,600</u>	<u>246,039</u>	<u>2,027,178</u>	<u>272,237</u>	<u>707,434</u>	<u>555,326</u>	<u>55,473,358</u>
2. Total Actuarial Accrued Liability	\$651,109	\$3,752,952	\$4,604,597	\$1,461,087	\$2,728,501	\$4,607,130	\$175,739,830
3. Actuarial value of assets	<u>526,699</u>	<u>3,179,674</u>	<u>3,962,032</u>	<u>1,561,916</u>	<u>2,413,241</u>	<u>3,183,238</u>	<u>150,450,083</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$124,410	\$573,278	\$642,565	(\$100,829)	\$315,260	\$1,423,892	\$25,289,747
5. Funded Ratio: (3) / (2)	80.9%	84.7%	86.0%	106.9%	88.4%	69.1%	85.6%
6. Annual Payroll	\$440,982	\$1,115,579	\$1,590,900	\$1,582,682	\$1,377,427	\$3,800,271	\$37,642,317
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.31%	6.30%	6.69%	2.01%	6.16%	5.69%	10.88%
Prior Service	<u>2.76%</u>	<u>3.93%</u>	<u>2.80%</u>	<u>-0.39%</u>	<u>1.48%</u>	<u>3.42%</u>	<u>4.51%</u>
Total Retirement	4.07%	10.23%	9.49%	1.62%	7.64%	9.11%	15.39%
Supplemental Death	<u>0.00%</u>	<u>0.20%</u>	<u>0.31%</u>	<u>0.34%</u>	<u>0.25%</u>	<u>0.12%</u>	<u>0.16%</u>
Total Rate	4.07%	10.43%	9.80%	1.96%	7.89%	9.23%	15.55%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	11.50%	11.50%	8.50%	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.0 years	18.0 years	20.7 years	25.0 years	23.1 years	14.2 years	21.8 years
Number of annuitants	1	3	24	11	15	7	196
Number of active contributing members	17	23	38	30	26	71	486
Number of inactive members	8	8	34	33	12	35	185
Average age of contributing members	45.8 years	45.0 years	43.8 years	44.4 years	49.3 years	38.0 years	41.9 years
Average length of service of contributing members	10.7 years	11.3 years	7.8 years	7.9 years	9.8 years	7.6 years	11.7 years

	Marvel	Marble Falls	Marfa	Marion	Marlin	Marquez	Marshall
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$3,039,354	\$13,131,374	\$1,527,307	\$388,154	\$1,326,269	\$109,878	\$21,602,416
b. Noncontributing Members	430,063	2,508,025	249,457	76,736	1,087,871	0	3,285,723
c. Annuitants	<u>540,892</u>	<u>9,227,593</u>	<u>1,143,876</u>	<u>414,653</u>	<u>3,003,192</u>	<u>0</u>	<u>33,606,991</u>
2. Total Actuarial Accrued Liability	\$4,010,309	\$24,866,992	\$2,920,640	\$879,543	\$5,417,332	\$109,878	\$58,495,130
3. Actuarial value of assets	<u>2,845,451</u>	<u>22,355,172</u>	<u>3,208,027</u>	<u>1,055,688</u>	<u>4,844,439</u>	<u>3,471</u>	<u>51,176,664</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,164,858	\$2,511,820	(\$287,387)	(\$176,145)	\$572,893	\$106,407	\$7,318,466
5. Funded Ratio: (3) / (2)	71.0%	89.9%	109.8%	120.0%	89.4%	3.2%	87.5%
6. Annual Payroll	\$2,646,205	\$6,933,027	\$1,700,222	\$467,050	\$2,068,499	\$93,490	\$8,619,257
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.02%	7.49%	4.25%	5.74%	6.84%	2.21%	9.95%
Prior Service	<u>4.68%</u>	<u>2.27%</u>	<u>-1.04%</u>	<u>-2.32%</u>	<u>1.87%</u>	<u>16.60%</u>	<u>6.17%</u>
Total Retirement	10.70%	9.76%	3.21%	3.42%	8.71%	18.81%	16.12%
Supplemental Death	<u>0.11%</u>	<u>0.19%</u>	<u>0.35%</u>	<u>0.43%</u>	<u>0.27%</u>	<u>0.25%</u>	<u>0.24%</u>
Total Rate	10.81%	9.95%	3.56%	3.85%	8.98%	19.06%	16.36%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	13.50%	11.50%	11.50%	11.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	11.7 years	24.2 years	25.0 years	25.0 years	25.0 years	8.0 years	20.5 years
Number of annuitants	9	83	21	7	49	0	178
Number of active contributing members	49	115	39	10	54	3	185
Number of inactive members	37	65	28	12	108	0	77
Average age of contributing members	40.8 years	43.2 years	48.3 years	46.5 years	43.3 years	57.4 years	44.6 years
Average length of service of contributing members	7.4 years	10.3 years	6.3 years	10.1 years	5.0 years	11.0 years	10.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Mart	Martindale	Mason	Matador	Mathis	Maud	Maypearl
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$441,840	\$95,487	\$2,593,068	\$92,492	\$899,684	\$124,790	\$112,540
b. Noncontributing Members	416,568	89,338	348,110	4,938	804,737	33,745	114,766
c. Annuitants	407,998	12,271	656,970	143,484	1,275,604	0	49,473
2. Total Actuarial Accrued Liability	\$1,266,406	\$197,096	\$3,598,148	\$240,914	\$2,980,025	\$158,535	\$276,779
3. Actuarial value of assets	1,546,697	160,788	3,352,269	195,471	3,627,231	118,222	272,090
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$280,291)	\$36,308	\$245,879	\$45,443	(\$647,206)	\$40,313	\$4,689
5. Funded Ratio: (3) / (2)	122.1%	81.6%	93.2%	81.1%	121.7%	74.6%	98.3%
6. Annual Payroll	\$548,176	\$123,883	\$1,204,163	\$128,213	\$2,106,281	\$263,208	\$197,364
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.17%	6.03%	4.69%	1.78%	5.53%	1.88%	2.37%
Prior Service	-3.14%	5.99%	1.88%	6.18%	-1.89%	1.59%	0.32%
Total Retirement	2.03%	12.02%	6.57%	7.96%	3.64%	3.47%	2.69%
Supplemental Death	0.25%	0.19%	0.34%	0.36%	0.25%	0.18%	0.28%
Total Rate	2.28%	12.21%	6.91%	8.32%	3.89%	3.65%	2.97%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	9.50%	N/A	13.50%	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	5.5 years	14.0 years	6.5 years	25.0 years	12.0 years	8.9 years
Number of annuitants	8	1	11	2	28	0	3
Number of active contributing members	14	3	28	3	47	9	6
Number of inactive members	31	6	12	1	105	7	13
Average age of contributing members	45.2 years	53.7 years	49.4 years	48.7 years	40.0 years	43.3 years	51.7 years
Average length of service of contributing members	6.3 years	8.1 years	11.2 years	9.2 years	4.1 years	4.8 years	11.2 years

	McAllen	McCamey	McGregor	McKinney	McLean	McLendon-Chisholm	Meadow
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$151,997,081	\$1,562,551	\$3,919,181	\$184,950,410	\$222,523	\$15,303	\$68,312
b. Noncontributing Members	26,430,264	15,314	1,242,389	33,477,075	95,969	19,171	3,167
c. Annuitants	100,134,435	228,253	2,456,357	81,247,114	164,866	82,228	0
2. Total Actuarial Accrued Liability	\$278,561,780	\$1,806,118	\$7,617,927	\$299,674,599	\$483,358	\$116,702	\$71,479
3. Actuarial value of assets	258,502,432	1,917,493	7,176,697	255,331,894	475,456	133,717	41,726
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$20,059,348	(\$111,375)	\$441,230	\$44,342,705	\$7,902	(\$17,015)	\$29,753
5. Funded Ratio: (3) / (2)	92.8%	106.2%	94.2%	85.2%	98.4%	114.6%	58.4%
6. Annual Payroll	\$74,374,962	\$593,839	\$2,743,849	\$80,275,295	\$233,833	\$248,964	\$167,650
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.83%	2.82%	8.65%	11.51%	2.15%	1.94%	1.90%
Prior Service	2.98%	-1.15%	1.00%	3.39%	0.43%	-0.42%	2.34%
Total Retirement	7.81%	1.67%	9.65%	14.90%	2.58%	1.52%	4.24%
Supplemental Death	0.00%	0.15%	0.28%	0.13%	0.34%	0.08%	0.15%
Total Rate	7.81%	1.82%	9.93%	15.03%	2.92%	1.60%	4.39%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	9.50%	12.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	11.1 years	25.0 years	24.5 years	25.0 years	9.3 years	25.0 years	9.0 years
Number of annuitants	564	4	33	313	3	2	0
Number of active contributing members	1,584	12	57	1,116	6	7	6
Number of inactive members	446	3	47	445	4	1	7
Average age of contributing members	41.8 years	44.5 years	46.1 years	41.4 years	56.4 years	38.6 years	45.6 years
Average length of service of contributing members	10.0 years	11.2 years	10.2 years	10.3 years	8.7 years	7.0 years	4.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Meadowlakes	Meadows Place	Melissa	Memorial Villages PD	Memphis	Menard	Mercedes
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$549,218	\$3,061,473	\$4,410,662	\$3,885,431	\$985,132	\$82,451	\$11,083,949
b. Noncontributing Members	35,676	1,346,952	663,383	1,457,043	79,426	228,384	2,259,134
c. Annuitants	<u>9,823</u>	<u>3,029,355</u>	<u>587,109</u>	<u>9,800,469</u>	<u>1,388,784</u>	<u>1,210,704</u>	<u>9,115,747</u>
2. Total Actuarial Accrued Liability	\$594,717	\$7,437,780	\$5,661,154	\$15,142,943	\$2,453,342	\$1,521,539	\$22,458,830
3. Actuarial value of assets	<u>606,585</u>	<u>6,808,305</u>	<u>4,080,881</u>	<u>12,403,863</u>	<u>2,562,450</u>	<u>1,853,009</u>	<u>18,168,691</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$11,868)	\$629,475	\$1,580,273	\$2,739,080	(\$109,108)	(\$331,470)	\$4,290,139
5. Funded Ratio: (3) / (2)	102.0%	91.5%	72.1%	81.9%	104.4%	121.8%	80.9%
6. Annual Payroll	\$812,195	\$1,701,874	\$2,929,851	\$3,261,163	\$625,157	\$269,820	\$4,458,909
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.47%	5.86%	9.36%	6.46%	4.74%	3.43%	10.83%
Prior Service	<u>-0.09%</u>	<u>3.68%</u>	<u>3.48%</u>	<u>5.15%</u>	<u>-1.15%</u>	<u>-3.43%</u>	<u>7.26%</u>
Total Retirement	2.38%	9.54%	12.84%	11.61%	3.59%	0.00%	18.09%
Supplemental Death	<u>0.21%</u>	<u>0.14%</u>	<u>0.16%</u>	<u>0.18%</u>	<u>0.25%</u>	<u>0.00%</u>	<u>0.19%</u>
Total Rate	2.59%	9.68%	13.00%	11.79%	3.84%	0.00%	18.28%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	13.2 years	23.1 years	25.1 years	25.0 years	25.0 years	18.3 years
Number of annuitants	1	16	13	41	9	6	56
Number of active contributing members	19	29	54	43	18	9	106
Number of inactive members	7	30	42	24	12	7	78
Average age of contributing members	46.1 years	42.9 years	42.8 years	44.9 years	46.4 years	42.2 years	44.4 years
Average length of service of contributing members	4.1 years	11.0 years	9.9 years	11.4 years	10.1 years	4.4 years	10.0 years

	Meridian	Merkel	Mertzon	Mesquite	Mexia	Miami	Midland
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$631,975	\$585,324	\$56,569	\$220,085,754	\$8,572,653	\$165,317	\$116,117,907
b. Noncontributing Members	19,415	216,252	150,312	23,592,089	1,853,697	0	25,197,187
c. Annuitants	<u>94,536</u>	<u>910,078</u>	<u>260,141</u>	<u>255,206,439</u>	<u>7,255,983</u>	<u>0</u>	<u>185,160,979</u>
2. Total Actuarial Accrued Liability	\$745,926	\$1,711,654	\$467,022	\$498,884,282	\$17,682,333	\$165,317	\$326,476,073
3. Actuarial value of assets	<u>826,916</u>	<u>1,425,597</u>	<u>252,351</u>	<u>434,674,334</u>	<u>16,144,369</u>	<u>113,795</u>	<u>288,615,641</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$80,990)	\$286,057	\$214,671	\$64,209,948	\$1,537,964	\$51,522	\$37,860,432
5. Funded Ratio: (3) / (2)	110.9%	83.3%	54.0%	87.1%	91.3%	68.8%	88.4%
6. Annual Payroll	\$443,234	\$538,235	\$201,913	\$78,628,941	\$4,195,095	\$97,280	\$48,803,414
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.08%	8.12%	4.74%	8.14%	9.86%	2.78%	8.61%
Prior Service	<u>-1.12%</u>	<u>3.38%</u>	<u>7.07%</u>	<u>8.48%</u>	<u>2.25%</u>	<u>8.68%</u>	<u>5.80%</u>
Total Retirement	2.96%	11.50%	11.81%	16.62%	12.11%	11.46%	14.41%
Supplemental Death	<u>0.13%</u>	<u>0.15%</u>	<u>0.17%</u>	<u>0.00%</u>	<u>0.21%</u>	<u>0.45%</u>	<u>0.22%</u>
Total Rate	3.09%	11.65%	11.98%	16.62%	12.32%	11.91%	14.63%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	N/A	N/A	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	23.6 years	22.1 years	12.0 years	25.0 years	7.0 years	18.6 years
Number of annuitants	2	8	2	815	61	0	624
Number of active contributing members	10	14	5	1,117	95	3	731
Number of inactive members	7	18	11	422	92	0	691
Average age of contributing members	40.5 years	40.9 years	41.6 years	42.6 years	44.8 years	62.5 years	41.6 years
Average length of service of contributing members	9.2 years	5.1 years	2.2 years	11.3 years	8.6 years	12.4 years	9.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Midlothian	Milano	Miles	Milford	Mineola	Mineral Wells	Mission
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$28,305,108	\$24,908	\$50,902	\$188,104	\$2,742,493	\$11,274,577	\$61,339,759
b. Noncontributing Members	6,320,938	0	153,096	66,268	784,837	3,121,285	6,295,790
c. Annuitants	<u>15,652,971</u>	<u>0</u>	<u>43,763</u>	<u>575,493</u>	<u>3,373,806</u>	<u>19,482,813</u>	<u>29,612,226</u>
2. Total Actuarial Accrued Liability	\$50,279,017	\$24,908	\$247,761	\$829,865	\$6,901,136	\$33,878,675	\$97,247,775
3. Actuarial value of assets	<u>41,958,470</u>	<u>16,074</u>	<u>322,456</u>	<u>731,996</u>	<u>7,154,435</u>	<u>31,855,926</u>	<u>87,090,836</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$8,320,547	\$8,834	(\$74,695)	\$97,869	(\$253,299)	\$2,022,749	\$10,156,939
5. Funded Ratio: (3) / (2)	83.5%	64.5%	130.1%	88.2%	103.7%	94.0%	89.6%
6. Annual Payroll	\$15,120,566	\$33,629	\$136,812	\$267,875	\$2,241,840	\$8,382,831	\$31,215,757
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	11.39%	3.72%	2.43%	3.41%	5.23%	6.74%	6.45%
Prior Service	<u>3.37%</u>	<u>7.77%</u>	<u>-2.43%</u>	<u>5.02%</u>	<u>-0.69%</u>	<u>2.08%</u>	<u>2.07%</u>
Total Retirement	14.76%	11.49%	0.00%	8.43%	4.54%	8.82%	8.52%
Supplemental Death	<u>0.14%</u>	<u>0.64%</u>	<u>0.33%</u>	<u>0.15%</u>	<u>0.17%</u>	<u>0.24%</u>	<u>0.15%</u>
Total Rate	14.90%	12.13%	0.33%	8.58%	4.71%	9.06%	8.67%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	7.50%	N/A	11.50%	11.50%	12.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	3.7 years	25.0 years	8.9 years	25.0 years	15.3 years	23.6 years
Number of annuitants	93	0	1	6	30	118	197
Number of active contributing members	240	1	3	7	48	164	693
Number of inactive members	117	0	9	7	37	114	334
Average age of contributing members	41.0 years	69.2 years	52.1 years	35.7 years	42.0 years	44.0 years	42.4 years
Average length of service of contributing members	10.0 years	9.3 years	13.4 years	5.7 years	9.0 years	8.8 years	9.8 years

	Missouri City	Monahans	Mont Belvieu	Montgomery	Moody	Morgan's Point	Morgan's Point Resort
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$44,685,300	\$8,793,925	\$11,581,256	\$698,492	\$323,142	\$1,564,812	\$1,469,959
b. Noncontributing Members	13,622,380	1,298,000	1,683,270	327,969	14,491	508,514	1,079,569
c. Annuitants	<u>52,126,054</u>	<u>4,324,532</u>	<u>9,565,106</u>	<u>312,826</u>	<u>516,414</u>	<u>2,498,954</u>	<u>1,242,929</u>
2. Total Actuarial Accrued Liability	\$110,433,734	\$14,416,457	\$22,829,632	\$1,339,287	\$854,047	\$4,572,280	\$3,792,457
3. Actuarial value of assets	<u>103,806,520</u>	<u>13,304,236</u>	<u>18,454,437</u>	<u>1,502,521</u>	<u>804,687</u>	<u>4,467,047</u>	<u>3,413,798</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$6,627,214	\$1,112,221	\$4,375,195	(\$163,234)	\$49,360	\$105,233	\$378,659
5. Funded Ratio: (3) / (2)	94.0%	92.3%	80.8%	112.2%	94.2%	97.7%	90.0%
6. Annual Payroll	\$24,293,554	\$3,823,863	\$6,062,336	\$1,306,117	\$508,450	\$857,624	\$1,186,266
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.50%	5.27%	9.89%	6.82%	1.43%	9.04%	9.74%
Prior Service	<u>3.36%</u>	<u>2.09%</u>	<u>4.47%</u>	<u>-0.77%</u>	<u>0.86%</u>	<u>0.98%</u>	<u>2.08%</u>
Total Retirement	8.86%	7.36%	14.36%	6.05%	2.29%	10.02%	11.82%
Supplemental Death	<u>0.14%</u>	<u>0.25%</u>	<u>0.13%</u>	<u>0.00%</u>	<u>0.19%</u>	<u>0.12%</u>	<u>0.17%</u>
Total Rate	9.00%	7.61%	14.49%	6.05%	2.48%	10.14%	11.99%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	15.50%	N/A	N/A	13.50%	7.50%	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	9.8 years	19.6 years	24.7 years	25.0 years	14.8 years	17.0 years	25.3 years
Number of annuitants	193	24	31	9	4	18	26
Number of active contributing members	346	64	96	23	12	12	30
Number of inactive members	193	47	29	25	13	4	16
Average age of contributing members	40.7 years	44.2 years	40.0 years	42.9 years	43.7 years	42.9 years	40.5 years
Average length of service of contributing members	10.0 years	11.3 years	7.9 years	6.4 years	8.3 years	12.6 years	5.7 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Morton	Moulton	Mount Enterprise	Mt. Pleasant	Mt. Vernon	Muenster	Muleshoe
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,745,471	\$629,538	\$73,482	\$21,029,245	\$2,113,138	\$442,543	\$5,134,377
b. Noncontributing Members	366,467	568,637	2,626	6,854,802	481,993	324,205	1,205,066
c. Annuitants	<u>259,670</u>	<u>1,070,629</u>	<u>133,839</u>	<u>12,294,297</u>	<u>1,194,705</u>	<u>767,933</u>	<u>4,374,981</u>
2. Total Actuarial Accrued Liability	\$2,371,608	\$2,268,804	\$209,947	\$40,178,344	\$3,789,836	\$1,534,681	\$10,714,424
3. Actuarial value of assets	<u>2,531,123</u>	<u>2,261,859</u>	<u>208,644</u>	<u>34,010,837</u>	<u>3,411,907</u>	<u>1,838,293</u>	<u>8,758,180</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$159,515)	\$6,945	\$1,303	\$6,167,507	\$377,929	(\$303,612)	\$1,956,244
5. Funded Ratio: (3) / (2)	106.7%	99.7%	99.4%	84.6%	90.0%	119.8%	81.7%
6. Annual Payroll	\$379,267	\$460,509	\$98,947	\$8,419,701	\$952,398	\$538,756	\$1,421,311
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.66%	4.60%	2.17%	10.01%	8.77%	5.10%	8.81%
Prior Service	<u>-2.63%</u>	<u>0.13%</u>	<u>0.29%</u>	<u>4.97%</u>	<u>2.63%</u>	<u>-3.46%</u>	<u>10.29%</u>
Total Retirement	4.03%	4.73%	2.46%	14.98%	11.40%	1.64%	19.10%
Supplemental Death	<u>0.22%</u>	<u>0.21%</u>	<u>0.19%</u>	<u>0.17%</u>	<u>0.26%</u>	<u>0.00%</u>	<u>0.22%</u>
Total Rate	4.25%	4.94%	2.65%	15.15%	11.66%	1.64%	19.32%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	13.50%	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	16.0 years	5.1 years	21.4 years	22.8 years	25.0 years	18.6 years
Number of annuitants	3	12	1	97	17	10	27
Number of active contributing members	9	10	1	160	24	12	32
Number of inactive members	6	20	2	96	14	8	28
Average age of contributing members	50.4 years	47.0 years	56.6 years	40.9 years	45.0 years	53.1 years	45.3 years
Average length of service of contributing members	18.8 years	10.4 years	13.1 years	9.1 years	8.9 years	6.9 years	11.5 years

	Munday	Murphy	Nacogdoches	Naples	Nash	Nassau Bay	Natalia
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$131,216	\$11,964,909	\$49,998,827	\$150,579	\$2,775,334	\$5,827,502	\$221,633
b. Noncontributing Members	47,150	5,827,167	4,956,863	55,694	127,596	1,195,024	86,737
c. Annuitants	<u>197,568</u>	<u>4,701,668</u>	<u>49,552,173</u>	<u>299,954</u>	<u>641,309</u>	<u>4,013,025</u>	<u>69,276</u>
2. Total Actuarial Accrued Liability	\$375,934	\$22,493,744	\$104,507,863	\$506,227	\$3,544,239	\$11,035,551	\$377,646
3. Actuarial value of assets	<u>297,327</u>	<u>19,524,901</u>	<u>90,482,543</u>	<u>583,605</u>	<u>2,249,352</u>	<u>8,235,135</u>	<u>323,639</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$78,607	\$2,968,843	\$14,025,320	(\$77,378)	\$1,294,887	\$2,800,416	\$54,007
5. Funded Ratio: (3) / (2)	79.1%	86.8%	86.6%	115.3%	63.5%	74.6%	85.7%
6. Annual Payroll	\$303,012	\$7,926,243	\$17,289,876	\$366,808	\$1,067,582	\$2,748,323	\$431,607
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.55%	11.66%	8.34%	3.47%	8.96%	9.49%	2.13%
Prior Service	<u>1.83%</u>	<u>2.32%</u>	<u>5.81%</u>	<u>-1.30%</u>	<u>8.58%</u>	<u>6.25%</u>	<u>1.04%</u>
Total Retirement	3.38%	13.98%	14.15%	2.17%	17.54%	15.74%	3.17%
Supplemental Death	<u>0.18%</u>	<u>0.16%</u>	<u>0.20%</u>	<u>0.31%</u>	<u>0.19%</u>	<u>0.18%</u>	<u>0.26%</u>
Total Rate	3.56%	14.14%	14.35%	2.48%	17.73%	15.92%	3.43%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	15.50%	N/A	9.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.2 years	24.7 years	19.7 years	25.0 years	20.6 years	25.0 years	16.0 years
Number of annuitants	4	39	222	6	8	27	2
Number of active contributing members	8	119	309	8	20	40	10
Number of inactive members	5	109	130	13	7	34	15
Average age of contributing members	43.3 years	41.2 years	42.8 years	50.6 years	43.6 years	45.4 years	52.9 years
Average length of service of contributing members	6.9 years	10.9 years	12.1 years	6.6 years	9.2 years	14.7 years	8.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Navasota	Nederland	Needville	New Boston	New Braunfels	New Braunfels Utilities	New Deal
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$5,900,651	\$27,915,144	\$1,676,341	\$1,361,906	\$100,865,571	\$45,634,158	\$180,414
b. Noncontributing Members	1,124,718	3,470,137	364,727	458,344	13,594,572	6,808,116	38,129
c. Annuitants	<u>6,338,213</u>	<u>25,285,828</u>	<u>812,254</u>	<u>1,923,495</u>	<u>55,507,145</u>	<u>38,159,318</u>	<u>108,118</u>
2. Total Actuarial Accrued Liability	\$13,363,582	\$56,671,109	\$2,853,322	\$3,743,745	\$169,967,288	\$90,601,592	\$326,661
3. Actuarial value of assets	<u>12,754,521</u>	<u>59,002,254</u>	<u>2,799,151</u>	<u>3,994,314</u>	<u>133,634,875</u>	<u>74,879,883</u>	<u>383,165</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$609,061	(\$2,331,145)	\$54,171	(\$250,569)	\$36,332,413	\$15,721,709	(\$56,504)
5. Funded Ratio: (3) / (2)	95.4%	104.1%	98.1%	106.7%	78.6%	82.6%	117.3%
6. Annual Payroll	\$3,344,260	\$8,558,760	\$894,044	\$1,405,834	\$39,701,875	\$18,475,786	\$232,898
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.87%	8.14%	3.76%	3.16%	11.22%	10.02%	2.35%
Prior Service	<u>1.73%</u>	<u>-1.67%</u>	<u>0.45%</u>	<u>-1.09%</u>	<u>5.63%</u>	<u>7.20%</u>	<u>-1.63%</u>
Total Retirement	7.60%	6.47%	4.21%	2.07%	16.85%	17.22%	0.72%
Supplemental Death	<u>0.22%</u>	<u>0.00%</u>	<u>0.48%</u>	<u>0.23%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.00%</u>
Total Rate	7.82%	6.47%	4.69%	2.30%	17.00%	17.37%	0.72%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	9.50%	7.50%	N/A	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.5 years	25.0 years	19.5 years	25.0 years	25.0 years	15.7 years	25.0 years
Number of annuitants	50	97	9	17	258	120	2
Number of active contributing members	72	120	18	39	612	292	4
Number of inactive members	53	28	12	31	301	82	4
Average age of contributing members	43.0 years	45.2 years	55.6 years	47.9 years	41.8 years	41.3 years	57.5 years
Average length of service of contributing members	9.7 years	15.7 years	13.1 years	8.2 years	10.6 years	8.6 years	8.0 years

	New Fairview	New London	New Summerfield	New Waverly	Newark	Newton	Nixon
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$150,505	\$744,726	\$381,682	\$420,117	\$49,738	\$3,353,501	\$483,922
b. Noncontributing Members	0	125,243	85,954	0	1,626	25,825	132,104
c. Annuitants	<u>15,715</u>	<u>201,173</u>	<u>58,708</u>	<u>282,006</u>	<u>31,221</u>	<u>3,177,254</u>	<u>193,443</u>
2. Total Actuarial Accrued Liability	\$166,220	\$1,071,142	\$526,344	\$702,123	\$82,585	\$6,556,580	\$809,469
3. Actuarial value of assets	<u>104,665</u>	<u>1,092,413</u>	<u>540,168</u>	<u>663,570</u>	<u>68,021</u>	<u>5,112,710</u>	<u>876,184</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$61,555	(\$21,271)	(\$13,824)	\$38,553	\$14,564	\$1,443,870	(\$66,715)
5. Funded Ratio: (3) / (2)	63.0%	102.0%	102.6%	94.5%	82.4%	78.0%	108.2%
6. Annual Payroll	\$74,975	\$346,919	\$359,724	\$222,953	\$250,183	\$1,036,855	\$686,659
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.05%	3.77%	7.94%	5.30%	1.72%	10.52%	1.24%
Prior Service	<u>9.64%</u>	<u>-0.38%</u>	<u>-0.24%</u>	<u>2.33%</u>	<u>1.23%</u>	<u>10.62%</u>	<u>-0.60%</u>
Total Retirement	10.69%	3.39%	7.70%	7.63%	2.95%	21.14%	0.64%
Supplemental Death	<u>0.13%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.37%</u>	<u>0.11%</u>	<u>0.28%</u>	<u>0.19%</u>
Total Rate	10.82%	3.39%	7.70%	8.00%	3.06%	21.42%	0.83%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	10.53%	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	7.50%	13.50%	9.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	10.3 years	25.0 years	25.0 years	8.8 years	5.2 years	18.1 years	25.0 years
Number of annuitants	1	4	5	3	1	15	6
Number of active contributing members	1	8	9	4	6	21	19
Number of inactive members	0	6	8	0	3	5	29
Average age of contributing members	38.5 years	50.4 years	45.9 years	56.6 years	45.2 years	43.4 years	43.2 years
Average length of service of contributing members	16.8 years	14.1 years	7.4 years	19.0 years	2.7 years	12.4 years	6.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Nocona	Nolanville	Normangee	North Richland Hills	Northlake	O'Donnell	Oak Point
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,695,987	\$115,100	\$19,476	\$108,979,024	\$2,726,907	\$97,634	\$1,785,138
b. Noncontributing Members	361,339	92,807	39,477	21,613,090	574,426	47,513	783,664
c. Annuitants	<u>855,008</u>	<u>27,794</u>	<u>133,546</u>	<u>126,870,900</u>	<u>110,772</u>	<u>101,948</u>	<u>246,006</u>
2. Total Actuarial Accrued Liability	\$2,912,334	\$235,701	\$192,499	\$257,463,014	\$3,412,105	\$247,095	\$2,814,808
3. Actuarial value of assets	<u>2,533,132</u>	<u>197,577</u>	<u>283,842</u>	<u>230,315,347</u>	<u>2,982,870</u>	<u>206,624</u>	<u>2,507,615</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$379,202	\$38,124	(\$91,343)	\$27,147,667	\$429,235	\$40,471	\$307,193
5. Funded Ratio: (3) / (2)	87.0%	83.8%	147.5%	89.5%	87.4%	83.6%	89.1%
6. Annual Payroll	\$777,512	\$605,773	\$142,716	\$37,029,808	\$2,248,455	\$113,559	\$1,718,689
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.61%	1.69%	4.80%	10.98%	8.74%	1.67%	6.25%
Prior Service	<u>3.50%</u>	<u>0.43%</u>	<u>-3.93%</u>	<u>5.36%</u>	<u>1.23%</u>	<u>5.80%</u>	<u>1.24%</u>
Total Retirement	10.11%	2.12%	0.87%	16.34%	9.97%	7.47%	7.49%
Supplemental Death	<u>0.31%</u>	<u>0.13%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.10%</u>	<u>0.20%</u>	<u>0.12%</u>
Total Rate	10.42%	2.25%	1.07%	16.34%	10.07%	7.67%	7.61%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	11.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.7 years	21.4 years	25.0 years	19.2 years	23.2 years	7.3 years	20.7 years
Number of annuitants	16	2	3	382	4	2	7
Number of active contributing members	20	16	4	544	33	3	27
Number of inactive members	25	21	8	301	27	1	32
Average age of contributing members	50.6 years	39.2 years	44.0 years	42.2 years	38.5 years	53.5 years	40.7 years
Average length of service of contributing members	9.9 years	5.7 years	1.4 years	12.1 years	8.5 years	14.8 years	7.9 years

	Oak Ridge North	Odem	Odessa	Oglesby	Old River-Winfree	Olmos Park	Olney
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$6,448,796	\$421,530	\$103,330,206	\$8,786	\$41,095	\$1,202,870	\$585,124
b. Noncontributing Members	1,671,633	13,715	23,358,294	0	5,511	1,503,080	248,114
c. Annuitants	<u>2,483,471</u>	<u>803,564</u>	<u>139,619,490</u>	<u>69,849</u>	<u>0</u>	<u>2,862,437</u>	<u>378,495</u>
2. Total Actuarial Accrued Liability	\$10,603,900	\$1,238,809	\$266,307,990	\$78,635	\$46,606	\$5,568,387	\$1,211,733
3. Actuarial value of assets	<u>9,483,273</u>	<u>911,441</u>	<u>233,388,940</u>	<u>78,895</u>	<u>72,049</u>	<u>5,927,937</u>	<u>1,167,151</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,120,627	\$327,368	\$32,919,050	(\$260)	(\$25,443)	(\$359,550)	\$44,582
5. Funded Ratio: (3) / (2)	89.4%	73.6%	87.6%	100.3%	154.6%	106.5%	96.3%
6. Annual Payroll	\$2,710,944	\$498,739	\$42,440,344	\$48,003	\$35,751	\$1,886,835	\$727,724
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.85%	5.26%	7.90%	1.11%	2.39%	3.82%	6.46%
Prior Service	<u>2.55%</u>	<u>4.44%</u>	<u>5.54%</u>	<u>-0.04%</u>	<u>-2.39%</u>	<u>-1.17%</u>	<u>0.44%</u>
Total Retirement	11.40%	9.70%	13.44%	1.07%	0.00%	2.65%	6.90%
Supplemental Death	<u>0.20%</u>	<u>0.36%</u>	<u>0.20%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.24%</u>
Total Rate	11.60%	10.06%	13.64%	1.25%	0.00%	2.65%	7.14%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	7.50%	11.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.8 years	21.5 years	19.8 years	25.0 years	25.0 years	25.0 years	22.1 years
Number of annuitants	13	10	542	2	0	38	8
Number of active contributing members	41	15	692	2	1	36	21
Number of inactive members	31	7	503	0	1	74	13
Average age of contributing members	44.4 years	49.1 years	42.6 years	37.0 years	57.2 years	40.5 years	46.4 years
Average length of service of contributing members	11.0 years	6.6 years	9.5 years	3.3 years	12.6 years	7.2 years	6.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Omaha	Onalaska	Orange	Orange Grove	Ore City	Overton	Ovilla
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$171,898	\$209,402	\$31,655,467	\$504,535	\$118,520	\$590,224	\$1,864,734
b. Noncontributing Members	101,224	67,197	6,137,453	69,315	144,769	415,986	742,005
c. Annuitants	<u>50,008</u>	<u>27,247</u>	<u>35,487,126</u>	<u>634,971</u>	<u>119,314</u>	<u>375,031</u>	<u>687,667</u>
2. Total Actuarial Accrued Liability	\$323,130	\$303,846	\$73,280,046	\$1,208,821	\$382,603	\$1,381,241	\$3,294,406
3. Actuarial value of assets	<u>252,706</u>	<u>375,435</u>	<u>66,720,491</u>	<u>1,282,312</u>	<u>401,906</u>	<u>1,568,587</u>	<u>2,979,190</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$70,424	(\$71,589)	\$6,559,555	(\$73,491)	(\$19,303)	(\$187,346)	\$315,216
5. Funded Ratio: (3) / (2)	78.2%	123.6%	91.0%	106.1%	105.0%	113.6%	90.4%
6. Annual Payroll	\$219,989	\$492,623	\$9,195,194	\$380,048	\$377,248	\$749,099	\$1,279,678
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.94%	2.98%	10.11%	8.39%	1.33%	4.70%	8.26%
Prior Service	<u>3.20%</u>	<u>-0.89%</u>	<u>5.05%</u>	<u>-1.19%</u>	<u>-0.31%</u>	<u>-1.54%</u>	<u>1.57%</u>
Total Retirement	5.14%	2.09%	15.16%	7.20%	1.02%	3.16%	9.83%
Supplemental Death	<u>0.23%</u>	<u>0.15%</u>	<u>0.00%</u>	<u>0.17%</u>	<u>0.11%</u>	<u>0.19%</u>	<u>0.16%</u>
Total Rate	5.37%	2.24%	15.16%	7.37%	1.13%	3.35%	9.99%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	9.50%	N/A	12.50%	7.50%	12.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	12.6 years	25.0 years	20.1 years	25.0 years	25.0 years	25.0 years	23.7 years
Number of annuitants	1	4	134	5	3	12	15
Number of active contributing members	6	12	148	9	9	21	28
Number of inactive members	2	15	64	14	6	26	35
Average age of contributing members	50.8 years	43.7 years	45.3 years	45.1 years	41.5 years	44.2 years	42.9 years
Average length of service of contributing members	8.8 years	4.7 years	13.0 years	7.7 years	4.2 years	7.0 years	10.3 years

	Oyster Creek	Paducah	Palacios	Palestine	Palmer	Palmhurst	Palmview
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,045,398	\$56,912	\$2,198,775	\$15,124,085	\$1,438,814	\$595,891	\$844,606
b. Noncontributing Members	169,046	157,483	1,614,220	4,382,073	548,016	172,591	669,949
c. Annuitants	<u>1,206,082</u>	<u>992,764</u>	<u>2,622,010</u>	<u>27,287,387</u>	<u>346,651</u>	<u>59,417</u>	<u>332,245</u>
2. Total Actuarial Accrued Liability	\$3,420,526	\$1,207,159	\$6,435,005	\$46,793,545	\$2,333,481	\$827,899	\$1,846,800
3. Actuarial value of assets	<u>2,998,536</u>	<u>1,452,749</u>	<u>5,083,176</u>	<u>38,314,159</u>	<u>1,924,712</u>	<u>811,240</u>	<u>1,507,347</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$421,990	(\$245,590)	\$1,351,829	\$8,479,386	\$408,769	\$16,659	\$339,453
5. Funded Ratio: (3) / (2)	87.7%	120.3%	79.0%	81.9%	82.5%	98.0%	81.6%
6. Annual Payroll	\$1,127,018	\$165,145	\$1,494,018	\$8,995,409	\$1,213,127	\$1,155,291	\$2,773,699
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.20%	4.49%	10.83%	7.79%	8.93%	5.64%	1.16%
Prior Service	<u>2.56%</u>	<u>-4.49%</u>	<u>6.44%</u>	<u>5.79%</u>	<u>2.11%</u>	<u>0.09%</u>	<u>0.83%</u>
Total Retirement	10.76%	0.00%	17.27%	13.58%	11.04%	5.73%	1.99%
Supplemental Death	<u>0.22%</u>	<u>0.29%</u>	<u>0.27%</u>	<u>0.21%</u>	<u>0.11%</u>	<u>0.11%</u>	<u>0.09%</u>
Total Rate	10.98%	0.29%	17.54%	13.79%	11.15%	5.84%	2.08%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	9.50%	N/A	N/A	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.1 years	25.0 years	20.4 years	25.0 years	24.3 years	22.5 years	21.3 years
Number of annuitants	17	12	21	161	7	4	4
Number of active contributing members	23	4	33	168	23	25	67
Number of inactive members	6	7	45	141	31	39	37
Average age of contributing members	44.5 years	45.9 years	45.7 years	42.2 years	39.1 years	39.0 years	36.8 years
Average length of service of contributing members	8.5 years	3.1 years	7.4 years	8.6 years	5.0 years	6.0 years	5.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Pampa	Panhandle	Panorama Village	Pantego	Paris	Parker	Pasadena
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$19,779,522	\$1,886,784	\$980,575	\$2,762,660	\$28,927,166	\$1,905,679	\$227,097,979
b. Noncontributing Members	2,335,967	522,456	117,681	3,628,374	6,342,786	388,120	30,101,418
c. Annuitants	<u>24,389,337</u>	<u>938,372</u>	<u>935,850</u>	<u>9,931,502</u>	<u>28,387,070</u>	<u>1,615,058</u>	<u>202,609,768</u>
2. Total Actuarial Accrued Liability	\$46,504,826	\$3,347,612	\$2,034,106	\$16,322,536	\$63,657,022	\$3,908,857	\$459,809,165
3. Actuarial value of assets	<u>34,065,199</u>	<u>2,797,932</u>	<u>2,027,510</u>	<u>13,678,360</u>	<u>61,024,239</u>	<u>2,998,537</u>	<u>428,422,784</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$12,439,627	\$549,680	\$6,596	\$2,644,176	\$2,632,783	\$910,320	\$31,386,381
5. Funded Ratio: (3) / (2)	73.3%	83.6%	99.7%	83.8%	95.9%	76.7%	93.2%
6. Annual Payroll	\$7,661,461	\$864,736	\$648,737	\$2,618,276	\$12,123,962	\$1,517,626	\$66,325,479
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.13%	7.09%	6.19%	10.62%	4.14%	7.82%	9.23%
Prior Service	<u>12.35%</u>	<u>4.16%</u>	<u>0.09%</u>	<u>6.55%</u>	<u>3.04%</u>	<u>4.60%</u>	<u>4.23%</u>
Total Retirement	21.48%	11.25%	6.28%	17.17%	7.18%	12.42%	13.46%
Supplemental Death	<u>0.25%</u>	<u>0.00%</u>	<u>0.41%</u>	<u>0.16%</u>	<u>0.25%</u>	<u>0.17%</u>	<u>0.24%</u>
Total Rate	21.73%	11.25%	6.69%	17.33%	7.43%	12.59%	13.70%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	12.50%	N/A	N/A	13.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.1 years	22.6 years	14.2 years	25.2 years	8.4 years	17.9 years	14.9 years
Number of annuitants	146	11	14	51	225	9	748
Number of active contributing members	151	18	12	42	246	25	1,020
Number of inactive members	94	14	7	94	134	12	303
Average age of contributing members	42.3 years	45.1 years	53.6 years	42.7 years	44.6 years	45.5 years	44.4 years
Average length of service of contributing members	9.5 years	10.4 years	10.8 years	10.5 years	12.2 years	14.2 years	12.6 years

	Pearland	Pearsall	Pecos City	Pelican Bay	Penitas	Perryton	Pflugerville
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$97,917,795	\$3,353,307	\$7,203,206	\$230,298	\$482,997	\$15,381,938	\$37,067,287
b. Noncontributing Members	17,340,356	1,348,183	1,890,573	2,820	122,738	1,509,472	10,909,344
c. Annuitants	<u>43,038,348</u>	<u>2,065,912</u>	<u>6,670,340</u>	<u>0</u>	<u>11,447</u>	<u>6,885,473</u>	<u>19,299,091</u>
2. Total Actuarial Accrued Liability	\$158,296,499	\$6,767,402	\$15,764,119	\$233,118	\$617,182	\$23,776,883	\$67,275,722
3. Actuarial value of assets	<u>134,474,637</u>	<u>6,114,505</u>	<u>15,611,766</u>	<u>61,667</u>	<u>421,884</u>	<u>20,987,245</u>	<u>55,624,918</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$23,821,862	\$652,897	\$152,353	\$171,451	\$195,298	\$2,789,638	\$11,650,804
5. Funded Ratio: (3) / (2)	85.0%	90.4%	99.0%	26.5%	68.4%	88.3%	82.7%
6. Annual Payroll	\$46,985,502	\$2,638,680	\$6,168,297	\$483,200	\$1,347,235	\$3,982,196	\$20,958,252
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.02%	3.14%	5.98%	1.39%	3.17%	8.00%	10.04%
Prior Service	<u>3.12%</u>	<u>1.55%</u>	<u>0.16%</u>	<u>2.96%</u>	<u>0.94%</u>	<u>6.96%</u>	<u>3.42%</u>
Total Retirement	13.14%	4.69%	6.14%	4.35%	4.11%	14.96%	13.46%
Supplemental Death	<u>0.12%</u>	<u>0.18%</u>	<u>0.21%</u>	<u>0.09%</u>	<u>0.09%</u>	<u>0.27%</u>	<u>0.14%</u>
Total Rate	13.26%	4.87%	6.35%	4.44%	4.20%	15.23%	13.60%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	15.50%	8.50%	11.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	24.2 years	23.7 years	16.0 years	23.0 years	12.7 years	24.9 years
Number of annuitants	225	24	66	0	1	37	86
Number of active contributing members	681	66	127	15	36	80	345
Number of inactive members	317	76	122	4	30	72	182
Average age of contributing members	41.1 years	40.9 years	44.6 years	39.4 years	36.9 years	43.8 years	41.1 years
Average length of service of contributing members	9.4 years	8.5 years	7.0 years	4.6 years	4.2 years	11.1 years	8.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Pharr	Pilot Point	Pinehurst	Pineland	Piney Point Village	Pittsburg	Plains
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$45,918,423	\$1,965,726	\$2,533,672	\$1,302,244	\$255,559	\$3,654,783	\$1,161,249
b. Noncontributing Members	7,849,713	1,272,794	337,029	17,515	173,157	416,715	35,866
c. Annuitants	<u>32,787,325</u>	<u>1,736,768</u>	<u>3,372,522</u>	<u>1,034,900</u>	<u>198,780</u>	<u>4,230,912</u>	<u>669,952</u>
2. Total Actuarial Accrued Liability	\$86,555,461	\$4,975,288	\$6,243,223	\$2,354,659	\$627,496	\$8,302,410	\$1,867,067
3. Actuarial value of assets	<u>76,682,758</u>	<u>4,195,339</u>	<u>4,804,509</u>	<u>2,323,171</u>	<u>617,210</u>	<u>7,635,931</u>	<u>1,917,427</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$9,872,703	\$779,949	\$1,438,714	\$31,488	\$10,286	\$666,479	(\$50,360)
5. Funded Ratio: (3) / (2)	88.6%	84.3%	77.0%	98.7%	98.4%	92.0%	102.7%
6. Annual Payroll	\$29,862,376	\$2,467,396	\$1,154,520	\$510,822	\$501,102	\$1,554,569	\$382,610
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.30%	9.54%	11.54%	5.21%	6.63%	9.51%	5.03%
Prior Service	<u>2.56%</u>	<u>1.96%</u>	<u>8.28%</u>	<u>1.03%</u>	<u>0.29%</u>	<u>3.85%</u>	<u>-0.81%</u>
Total Retirement	7.86%	11.50%	19.82%	6.24%	6.92%	13.36%	4.22%
Supplemental Death	<u>0.14%</u>	<u>0.15%</u>	<u>0.25%</u>	<u>0.23%</u>	<u>0.23%</u>	<u>0.21%</u>	<u>0.22%</u>
Total Rate	8.00%	11.65%	20.07%	6.49%	7.15%	13.57%	4.44%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	12.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.7 years	24.6 years	24.9 years	6.9 years	8.1 years	15.5 years	25.0 years
Number of annuitants	222	21	30	6	5	21	5
Number of active contributing members	618	50	21	14	5	35	8
Number of inactive members	167	62	9	3	8	30	4
Average age of contributing members	40.4 years	41.8 years	47.9 years	48.3 years	56.3 years	42.9 years	44.4 years
Average length of service of contributing members	9.0 years	6.5 years	9.9 years	11.6 years	16.3 years	8.7 years	12.7 years

	Plainview	Plano	Pleasanton	Point	Ponder	Port Aransas	Port Arthur
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$13,672,749	\$547,339,447	\$8,615,464	\$250,955	\$803,738	\$9,584,575	\$86,618,108
b. Noncontributing Members	5,596,822	65,698,718	2,646,861	178,915	92,678	914,997	12,024,348
c. Annuitants	<u>22,661,267</u>	<u>453,248,011</u>	<u>8,470,656</u>	<u>147,154</u>	<u>58,149</u>	<u>5,959,335</u>	<u>104,267,555</u>
2. Total Actuarial Accrued Liability	\$41,930,838	\$1,066,286,176	\$19,732,981	\$577,024	\$954,565	\$16,458,907	\$202,910,011
3. Actuarial value of assets	<u>39,468,896</u>	<u>959,057,583</u>	<u>14,859,663</u>	<u>484,769</u>	<u>888,011</u>	<u>13,308,370</u>	<u>173,942,376</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,461,942	\$107,228,593	\$4,873,318	\$92,255	\$66,554	\$3,150,537	\$28,967,635
5. Funded Ratio: (3) / (2)	94.1%	89.9%	75.3%	84.0%	93.0%	80.9%	85.7%
6. Annual Payroll	\$6,437,980	\$171,076,692	\$5,146,278	\$377,881	\$743,470	\$5,837,617	\$36,631,421
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.28%	11.33%	9.12%	10.51%	5.49%	8.36%	6.99%
Prior Service	<u>2.99%</u>	<u>5.38%</u>	<u>6.10%</u>	<u>2.61%</u>	<u>0.73%</u>	<u>3.31%</u>	<u>6.75%</u>
Total Retirement	12.27%	16.71%	15.22%	13.12%	6.22%	11.67%	13.74%
Supplemental Death	<u>0.00%</u>	<u>0.00%</u>	<u>0.16%</u>	<u>0.00%</u>	<u>0.42%</u>	<u>0.24%</u>	<u>0.25%</u>
Total Rate	12.27%	16.71%	15.38%	13.12%	6.64%	11.91%	13.99%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	12.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.5 years	15.4 years	23.2 years	12.0 years	16.6 years	25.1 years	15.5 years
Number of annuitants	113	1,275	44	3	3	53	489
Number of active contributing members	137	2,410	101	11	14	109	556
Number of inactive members	50	1,072	80	17	6	66	149
Average age of contributing members	46.3 years	43.3 years	40.7 years	35.1 years	54.9 years	47.9 years	47.2 years
Average length of service of contributing members	9.7 years	12.0 years	7.2 years	3.9 years	10.0 years	8.5 years	12.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Port Isabel	Port Lavaca	Port Neches	Portland	Post	Poteet	Poth
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,395,476	\$4,066,730	\$20,783,091	\$15,659,784	\$992,878	\$494,172	\$486,067
b. Noncontributing Members	875,324	1,805,332	1,380,762	2,171,670	368,097	158,143	33,563
c. Annuitants	<u>2,018,235</u>	<u>5,542,526</u>	<u>26,144,126</u>	<u>10,008,705</u>	<u>953,350</u>	<u>667,520</u>	<u>182,416</u>
2. Total Actuarial Accrued Liability	\$5,289,035	\$11,414,588	\$48,307,979	\$27,840,159	\$2,314,325	\$1,319,835	\$702,046
3. Actuarial value of assets	<u>5,452,024</u>	<u>10,613,522</u>	<u>44,194,574</u>	<u>22,592,351</u>	<u>1,629,607</u>	<u>1,569,008</u>	<u>591,802</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$162,989)	\$801,066	\$4,113,405	\$5,247,808	\$684,718	(\$249,173)	\$110,244
5. Funded Ratio: (3) / (2)	103.1%	93.0%	91.5%	81.2%	70.4%	118.9%	84.3%
6. Annual Payroll	\$2,505,921	\$3,842,506	\$7,091,163	\$7,230,625	\$780,966	\$962,786	\$430,898
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.08%	4.61%	8.96%	8.06%	6.70%	3.73%	2.34%
Prior Service	<u>-0.40%</u>	<u>1.28%</u>	<u>4.23%</u>	<u>5.12%</u>	<u>7.56%</u>	<u>-1.59%</u>	<u>1.93%</u>
Total Retirement	3.68%	5.89%	13.19%	13.18%	14.26%	2.14%	4.27%
Supplemental Death	<u>0.17%</u>	<u>0.25%</u>	<u>0.00%</u>	<u>0.23%</u>	<u>0.43%</u>	<u>0.18%</u>	<u>0.34%</u>
Total Rate	3.85%	6.14%	13.19%	13.41%	14.69%	2.32%	4.61%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	9.50%	N/A	N/A	N/A	9.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	19.7 years	20.2 years	15.7 years	25.0 years	18.3 years
Number of annuitants	29	69	85	66	14	12	4
Number of active contributing members	72	84	95	133	20	26	10
Number of inactive members	73	121	27	88	16	41	11
Average age of contributing members	41.2 years	40.5 years	41.5 years	43.2 years	48.1 years	40.9 years	49.4 years
Average length of service of contributing members	6.9 years	6.6 years	14.1 years	10.2 years	6.0 years	7.1 years	9.5 years

	Pottsboro	Prairie View	Premont	Presidio	Primera	Princeton	Prosper
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$975,127	\$382,362	\$214,639	\$828,169	\$293,307	\$4,337,718	\$15,122,137
b. Noncontributing Members	281,396	6,512	63,378	566,985	91,420	813,770	4,738,893
c. Annuitants	<u>159,917</u>	<u>0</u>	<u>343,150</u>	<u>168,792</u>	<u>162,583</u>	<u>1,852,162</u>	<u>1,639,375</u>
2. Total Actuarial Accrued Liability	\$1,416,440	\$388,874	\$621,167	\$1,563,946	\$547,310	\$7,003,650	\$21,500,405
3. Actuarial value of assets	<u>1,374,265</u>	<u>128,115</u>	<u>968,390</u>	<u>1,751,368</u>	<u>656,627</u>	<u>6,508,882</u>	<u>18,519,767</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$42,175	\$260,759	(\$347,223)	(\$187,422)	(\$109,317)	\$494,768	\$2,980,638
5. Funded Ratio: (3) / (2)	97.0%	32.9%	155.9%	112.0%	120.0%	92.9%	86.1%
6. Annual Payroll	\$938,105	\$782,836	\$563,522	\$1,602,522	\$568,335	\$4,449,262	\$13,457,675
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.45%	1.99%	1.92%	1.47%	1.15%	10.06%	12.16%
Prior Service	<u>0.30%</u>	<u>2.29%</u>	<u>-1.92%</u>	<u>-0.72%</u>	<u>-1.15%</u>	<u>0.69%</u>	<u>1.38%</u>
Total Retirement	6.75%	4.28%	0.00%	0.75%	0.00%	10.75%	13.54%
Supplemental Death	<u>0.18%</u>	<u>0.20%</u>	<u>0.30%</u>	<u>0.22%</u>	<u>0.13%</u>	<u>0.12%</u>	<u>0.00%</u>
Total Rate	6.93%	4.48%	0.30%	0.97%	0.13%	10.87%	13.54%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	N/A	7.50%	N/A	7.50%	13.50%	15.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	22.3 years	21.0 years	25.0 years	25.0 years	25.0 years	24.5 years	24.3 years
Number of annuitants	11	0	10	6	4	18	19
Number of active contributing members	20	21	18	42	18	83	189
Number of inactive members	14	3	18	33	21	26	91
Average age of contributing members	44.7 years	48.7 years	48.6 years	45.7 years	41.4 years	41.1 years	41.3 years
Average length of service of contributing members	11.5 years	5.9 years	4.4 years	7.3 years	6.1 years	5.9 years	8.1 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Providence Village	Quanah	Queen City	Quinlan	Quintana	Quitaque	Quitman
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$222,525	\$592,383	\$453,810	\$575,209	\$47,271	\$219,293	\$2,812,412
b. Noncontributing Members	0	236,277	278,616	99,374	61,163	0	312,402
c. Annuitants	0	2,422,746	5,993	50,106	0	33,634	1,049,625
2. Total Actuarial Accrued Liability	\$222,525	\$3,251,406	\$738,419	\$724,689	\$108,434	\$252,927	\$4,174,439
3. Actuarial value of assets	160,037	3,084,737	807,593	744,710	103,263	228,856	4,289,625
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$62,488	\$166,669	(\$69,174)	(\$20,021)	\$5,171	\$24,071	(\$115,186)
5. Funded Ratio: (3) / (2)	71.9%	94.9%	109.4%	102.8%	95.2%	90.5%	102.8%
6. Annual Payroll	\$495,303	\$507,798	\$465,953	\$700,294	\$177,280	\$127,670	\$1,023,960
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.70%	5.03%	2.62%	10.14%	2.40%	1.38%	6.26%
Prior Service	1.89%	4.05%	-0.91%	-0.18%	0.47%	3.22%	-0.69%
Total Retirement	7.59%	9.08%	1.71%	9.96%	2.87%	4.60%	5.57%
Supplemental Death	0.20%	0.31%	0.34%	0.11%	0.17%	0.25%	0.23%
Total Rate	7.79%	9.39%	2.05%	10.07%	3.04%	4.85%	5.80%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	7.50%	12.50%	N/A	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	7.8 years	10.2 years	25.0 years	25.0 years	7.1 years	6.7 years	25.0 years
Number of annuitants	0	17	3	2	0	1	10
Number of active contributing members	8	12	12	18	3	4	23
Number of inactive members	0	8	23	20	6	0	11
Average age of contributing members	49.0 years	42.4 years	45.9 years	40.1 years	53.5 years	45.3 years	43.9 years
Average length of service of contributing members	9.2 years	8.9 years	6.9 years	8.1 years	2.4 years	13.5 years	11.5 years

	Ralls	Rancho Viejo	Ranger	Rankin	Ransom Canyon	Raymondville	Red Oak
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$274,419	\$1,616,645	\$1,368,961	\$98,558	\$1,669,241	\$3,088,658	\$6,143,867
b. Noncontributing Members	170,865	88,323	413,501	127,962	83,336	604,642	1,670,000
c. Annuitants	1,232,630	1,040,821	294,673	455,497	322,874	4,381,799	2,135,234
2. Total Actuarial Accrued Liability	\$1,677,914	\$2,745,789	\$2,077,135	\$682,017	\$2,075,451	\$8,075,099	\$9,949,101
3. Actuarial value of assets	1,586,670	2,662,806	2,221,269	701,820	1,405,859	9,304,035	8,653,376
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$91,244	\$82,983	(\$144,134)	(\$19,803)	\$669,592	(\$1,228,936)	\$1,295,725
5. Funded Ratio: (3) / (2)	94.6%	97.0%	106.9%	102.9%	67.7%	115.2%	87.0%
6. Annual Payroll	\$374,270	\$576,224	\$837,363	\$208,958	\$548,566	\$2,233,473	\$6,388,530
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.72%	5.08%	8.95%	1.29%	5.17%	4.36%	5.81%
Prior Service	2.03%	1.63%	-1.06%	-0.58%	10.57%	-3.38%	1.29%
Total Retirement	7.75%	6.71%	7.89%	0.71%	15.74%	0.98%	7.10%
Supplemental Death	0.57%	0.11%	0.00%	0.22%	0.25%	0.26%	0.13%
Total Rate	8.32%	6.82%	7.89%	0.93%	15.99%	1.24%	7.23%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	11.50%	12.50%	7.50%	N/A	15.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	17.6 years	10.8 years	25.0 years	25.0 years	15.2 years	25.0 years	23.8 years
Number of annuitants	10	2	7	4	3	49	28
Number of active contributing members	11	10	21	3	12	70	99
Number of inactive members	12	6	67	4	2	35	63
Average age of contributing members	51.4 years	38.9 years	39.4 years	42.8 years	46.7 years	41.5 years	40.3 years
Average length of service of contributing members	7.5 years	12.4 years	6.1 years	8.1 years	13.3 years	7.1 years	8.8 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Redwater	Refugio	Reklaw	Reno (Lamar County)	Reno (Parker County)	Rhome	Rice
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$178,151	\$1,037,627	\$483,277	\$605,162	\$239,886	\$232,900	\$121,959
b. Noncontributing Members	104,311	80,244	728,030	368,400	79,881	611,505	70,834
c. Annuitants	<u>0</u>	<u>806,998</u>	<u>258,724</u>	<u>41,005</u>	<u>29,910</u>	<u>333,278</u>	<u>53,725</u>
2. Total Actuarial Accrued Liability	\$282,462	\$1,924,869	\$1,470,031	\$1,014,567	\$349,677	\$1,177,683	\$246,518
3. Actuarial value of assets	<u>271,164</u>	<u>2,562,456</u>	<u>1,284,228</u>	<u>1,121,986</u>	<u>398,699</u>	<u>1,166,539</u>	<u>271,304</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$11,298	(\$637,587)	\$185,803	(\$107,419)	(\$49,022)	\$11,144	(\$24,786)
5. Funded Ratio: (3) / (2)	96.0%	133.1%	87.4%	110.6%	114.0%	99.1%	110.1%
6. Annual Payroll	\$247,769	\$1,222,495	\$234,644	\$590,833	\$682,228	\$754,255	\$359,125
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.60%	1.05%	8.18%	5.54%	4.55%	6.98%	1.62%
Prior Service	<u>0.59%</u>	<u>-1.05%</u>	<u>8.58%</u>	<u>-1.14%</u>	<u>-0.44%</u>	<u>0.14%</u>	<u>-0.42%</u>
Total Retirement	3.19%	0.00%	16.76%	4.40%	4.11%	7.12%	1.20%
Supplemental Death	<u>0.16%</u>	<u>0.00%</u>	<u>0.30%</u>	<u>0.10%</u>	<u>0.20%</u>	<u>0.14%</u>	<u>0.13%</u>
Total Rate	3.35%	0.00%	17.06%	4.50%	4.31%	7.26%	1.33%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	7.50%	N/A	11.50%	N/A	13.50%	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	9.2 years	25.0 years	12.1 years	25.0 years	25.0 years	14.0 years	25.0 years
Number of annuitants	0	18	3	1	5	10	2
Number of active contributing members	7	29	5	14	17	17	12
Number of inactive members	1	9	3	10	17	20	16
Average age of contributing members	50.4 years	45.4 years	50.5 years	41.4 years	39.4 years	39.8 years	41.4 years
Average length of service of contributing members	6.3 years	9.9 years	10.0 years	8.3 years	7.2 years	7.3 years	4.3 years

	Richardson	Richland Hills	Richland Springs	Richmond	Richwood	Riesel	Rio Grande City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$244,801,624	\$6,273,108	\$8,469	\$22,550,197	\$1,165,893	\$330,729	\$6,316,504
b. Noncontributing Members	42,232,735	6,596,470	0	4,339,415	401,065	101,702	1,669,622
c. Annuitants	<u>258,055,312</u>	<u>18,979,313</u>	<u>97,502</u>	<u>18,420,560</u>	<u>2,603,594</u>	<u>58,631</u>	<u>2,334,989</u>
2. Total Actuarial Accrued Liability	\$545,089,671	\$31,848,891	\$105,971	\$45,310,172	\$4,170,552	\$491,062	\$10,321,115
3. Actuarial value of assets	<u>490,140,485</u>	<u>29,062,418</u>	<u>203,744</u>	<u>40,103,031</u>	<u>3,568,708</u>	<u>339,031</u>	<u>9,358,753</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$54,949,186	\$2,786,473	(\$97,773)	\$5,207,141	\$601,844	\$152,031	\$962,362
5. Funded Ratio: (3) / (2)	89.9%	91.3%	192.3%	88.5%	85.6%	69.0%	90.7%
6. Annual Payroll	\$76,121,946	\$4,933,927	\$23,245	\$9,183,565	\$1,289,755	\$342,091	\$5,651,543
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.97%	11.71%	5.65%	10.35%	7.93%	1.09%	5.79%
Prior Service	<u>6.75%</u>	<u>3.92%</u>	<u>-5.65%</u>	<u>4.28%</u>	<u>3.16%</u>	<u>4.74%</u>	<u>1.04%</u>
Total Retirement	14.72%	15.63%	0.00%	14.63%	11.09%	5.83%	6.83%
Supplemental Death	<u>0.00%</u>	<u>0.21%</u>	<u>0.25%</u>	<u>0.17%</u>	<u>0.14%</u>	<u>0.18%</u>	<u>0.14%</u>
Total Rate	14.72%	15.84%	0.25%	14.80%	11.23%	6.01%	6.97%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.7 years	20.7 years	25.0 years	18.3 years	21.4 years	11.6 years	25.1 years
Number of annuitants	730	101	2	75	18	2	21
Number of active contributing members	991	79	1	159	27	7	142
Number of inactive members	436	115	0	103	20	7	103
Average age of contributing members	43.8 years	41.5 years	49.5 years	41.7 years	43.2 years	40.0 years	42.7 years
Average length of service of contributing members	13.9 years	9.5 years	2.3 years	11.2 years	7.3 years	9.9 years	7.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Rio Vista	Rising Star	River Oaks	Roanoke	Robert Lee	Robinson	Robstown
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$67,580	\$50,086	\$5,838,188	\$28,562,850	\$5,181	\$9,274,772	\$6,968,173
b. Noncontributing Members	323,707	109,674	1,481,903	6,718,513	10,691	1,184,986	1,449,265
c. Annuitants	<u>154,421</u>	<u>17,588</u>	<u>6,591,600</u>	<u>4,079,803</u>	<u>149,119</u>	<u>3,124,431</u>	<u>7,884,718</u>
2. Total Actuarial Accrued Liability	\$545,708	\$177,348	\$13,911,691	\$39,361,166	\$164,991	\$13,584,189	\$16,302,156
3. Actuarial value of assets	<u>491,017</u>	<u>256,581</u>	<u>12,516,726</u>	<u>31,649,766</u>	<u>113,789</u>	<u>10,633,932</u>	<u>15,336,356</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$54,691	(\$79,233)	\$1,394,965	\$7,711,400	\$51,202	\$2,950,257	\$965,800
5. Funded Ratio: (3) / (2)	90.0%	144.7%	90.0%	80.4%	69.0%	78.3%	94.1%
6. Annual Payroll	\$244,580	\$267,083	\$2,552,252	\$10,452,932	\$127,868	\$3,592,423	\$5,792,093
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.43%	1.88%	10.31%	12.82%	1.27%	8.55%	4.38%
Prior Service	<u>1.90%</u>	<u>-1.82%</u>	<u>4.08%</u>	<u>4.52%</u>	<u>4.26%</u>	<u>5.04%</u>	<u>1.41%</u>
Total Retirement	4.33%	0.06%	14.39%	17.34%	5.53%	13.59%	5.79%
Supplemental Death	<u>0.11%</u>	<u>0.28%</u>	<u>0.28%</u>	<u>0.00%</u>	<u>0.13%</u>	<u>0.21%</u>	<u>0.13%</u>
Total Rate	4.44%	0.34%	14.67%	17.34%	5.66%	13.80%	5.92%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	N/A	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	15.6 years	25.0 years	18.6 years	25.1 years	12.4 years	25.0 years	15.7 years
Number of annuitants	2	1	51	25	3	20	55
Number of active contributing members	7	7	56	124	6	68	98
Number of inactive members	11	17	45	70	7	33	75
Average age of contributing members	43.2 years	45.0 years	44.7 years	43.0 years	33.0 years	44.2 years	40.5 years
Average length of service of contributing members	3.1 years	7.5 years	10.8 years	12.9 years	0.9 years	12.0 years	8.3 years

	Robstown Utility Systems	Roby	Rockdale	Rockport	Rocksprings	Rockwall	Rogers
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$7,211,020	\$119,366	\$3,399,179	\$16,710,354	\$102,541	\$55,775,641	\$250,906
b. Noncontributing Members	1,225,023	142,158	749,717	2,808,185	12,443	8,228,635	168,641
c. Annuitants	<u>6,901,407</u>	<u>439,480</u>	<u>1,460,311</u>	<u>14,341,074</u>	<u>294,144</u>	<u>29,297,113</u>	<u>525,795</u>
2. Total Actuarial Accrued Liability	\$15,337,450	\$701,004	\$5,609,207	\$33,859,613	\$409,128	\$93,301,389	\$945,342
3. Actuarial value of assets	<u>13,127,056</u>	<u>734,623</u>	<u>4,958,307</u>	<u>27,438,715</u>	<u>454,592</u>	<u>81,559,725</u>	<u>816,656</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,210,394	(\$33,619)	\$650,900	\$6,420,898	(\$45,464)	\$11,741,664	\$128,686
5. Funded Ratio: (3) / (2)	85.6%	104.8%	88.4%	81.0%	111.1%	87.4%	86.4%
6. Annual Payroll	\$2,351,207	\$72,400	\$2,016,401	\$6,521,559	\$237,772	\$20,109,941	\$332,913
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.98%	6.37%	7.01%	11.32%	2.48%	11.87%	5.41%
Prior Service	<u>7.74%</u>	<u>-3.11%</u>	<u>1.98%</u>	<u>6.55%</u>	<u>-1.17%</u>	<u>3.58%</u>	<u>3.27%</u>
Total Retirement	12.72%	3.26%	8.99%	17.87%	1.31%	15.45%	8.68%
Supplemental Death	<u>0.30%</u>	<u>0.59%</u>	<u>0.37%</u>	<u>0.26%</u>	<u>0.00%</u>	<u>0.15%</u>	<u>0.00%</u>
Total Rate	13.02%	3.85%	9.36%	18.13%	1.31%	15.60%	8.68%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	11.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	16.2 years	25.0 years	25.1 years	22.0 years	25.0 years	25.0 years	15.6 years
Number of annuitants	38	4	24	72	2	108	6
Number of active contributing members	43	2	47	114	7	273	8
Number of inactive members	58	3	36	72	10	98	13
Average age of contributing members	43.3 years	45.2 years	48.5 years	45.7 years	45.9 years	43.8 years	40.5 years
Average length of service of contributing members	14.0 years	11.4 years	9.5 years	11.0 years	3.9 years	13.3 years	7.7 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Rollingwood	Roma	Roscoe	Rosebud	Rosenberg	Rotan	Round Rock
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,199,999	\$8,983,901	\$428,008	\$172,148	\$33,861,723	\$357,382	\$177,655,489
b. Noncontributing Members	370,841	1,014,182	51,513	38,149	11,606,293	99,701	20,615,621
c. Annuitants	<u>1,077,023</u>	<u>3,795,597</u>	<u>90,292</u>	<u>57,229</u>	<u>32,136,401</u>	<u>5,281</u>	<u>85,215,601</u>
2. Total Actuarial Accrued Liability	\$2,647,863	\$13,793,680	\$569,813	\$267,526	\$77,604,417	\$462,364	\$283,486,711
3. Actuarial value of assets	<u>2,294,456</u>	<u>12,177,945</u>	<u>563,367</u>	<u>273,012</u>	<u>62,102,171</u>	<u>616,323</u>	<u>240,615,691</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$353,407	\$1,615,735	\$6,446	(\$5,486)	\$15,502,246	(\$153,959)	\$42,871,020
5. Funded Ratio: (3) / (2)	86.7%	88.3%	98.9%	102.1%	80.0%	133.3%	84.9%
6. Annual Payroll	\$980,886	\$4,220,698	\$335,795	\$414,926	\$16,144,953	\$275,474	\$63,993,175
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.13%	6.75%	2.08%	2.03%	9.79%	1.40%	10.78%
Prior Service	<u>2.75%</u>	<u>3.44%</u>	<u>0.22%</u>	<u>-0.08%</u>	<u>6.40%</u>	<u>-1.40%</u>	<u>4.57%</u>
Total Retirement	11.88%	10.19%	2.30%	1.95%	16.19%	0.00%	15.35%
Supplemental Death	<u>0.28%</u>	<u>0.42%</u>	<u>0.42%</u>	<u>0.31%</u>	<u>0.12%</u>	<u>0.28%</u>	<u>0.14%</u>
Total Rate	12.16%	10.46%	2.72%	2.26%	16.31%	0.28%	15.49%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	11.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.0 years	14.4 years	11.4 years	25.0 years	22.0 years	25.0 years	21.2 years
Number of annuitants	9	46	3	6	159	1	324
Number of active contributing members	16	127	8	12	251	6	947
Number of inactive members	18	102	2	10	176	6	418
Average age of contributing members	44.7 years	46.3 years	57.4 years	50.3 years	38.7 years	49.3 years	42.2 years
Average length of service of contributing members	7.8 years	10.8 years	11.3 years	6.3 years	9.2 years	11.3 years	11.0 years

	Rowlett	Royce City	Rule	Runaway Bay	Runge	Rusk	Sabinal
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$65,178,705	\$6,440,136	\$4,501	\$135,470	\$559,652	\$2,585,787	\$571,844
b. Noncontributing Members	20,711,391	1,531,786	77,387	143,475	143,670	447,410	67,700
c. Annuitants	<u>47,734,885</u>	<u>1,831,837</u>	<u>141,957</u>	<u>344,994</u>	<u>38,223</u>	<u>1,122,941</u>	<u>457,099</u>
2. Total Actuarial Accrued Liability	\$133,624,981	\$9,803,759	\$223,845	\$623,939	\$741,545	\$4,156,138	\$1,096,643
3. Actuarial value of assets	<u>118,999,637</u>	<u>7,734,084</u>	<u>262,350</u>	<u>783,994</u>	<u>586,809</u>	<u>4,323,568</u>	<u>1,102,334</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$14,625,344	\$2,069,675	(\$38,505)	(\$160,055)	\$154,736	(\$167,430)	(\$5,691)
5. Funded Ratio: (3) / (2)	89.1%	78.9%	117.2%	125.7%	79.1%	104.0%	100.5%
6. Annual Payroll	\$26,513,875	\$4,064,630	\$76,164	\$673,715	\$124,124	\$1,785,661	\$440,992
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.46%	12.12%	5.27%	3.32%	4.44%	6.59%	3.32%
Prior Service	<u>3.59%</u>	<u>3.23%</u>	<u>-3.10%</u>	<u>-1.59%</u>	<u>14.22%</u>	<u>-0.58%</u>	<u>-0.08%</u>
Total Retirement	13.05%	15.35%	2.17%	1.73%	18.66%	6.01%	3.24%
Supplemental Death	<u>0.00%</u>	<u>0.17%</u>	<u>0.15%</u>	<u>0.21%</u>	<u>0.54%</u>	<u>0.21%</u>	<u>0.42%</u>
Total Rate	13.05%	15.52%	2.32%	1.94%	19.20%	6.22%	3.66%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	11.50%	9.50%	N/A	10.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	22.8 years	23.7 years	25.0 years	25.0 years	11.1 years	25.0 years	25.0 years
Number of annuitants	231	20	1	10	1	16	7
Number of active contributing members	389	71	3	18	3	38	12
Number of inactive members	265	46	5	25	3	21	31
Average age of contributing members	42.0 years	42.1 years	47.2 years	40.9 years	64.1 years	46.1 years	50.6 years
Average length of service of contributing members	10.6 years	7.4 years	0.4 years	3.1 years	18.5 years	12.4 years	10.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Sachse	Saginaw	Saint Jo	Salado	San Angelo	San Antonio	San Antonio Water System
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$16,179,304	\$28,799,282	\$23,917	\$116,183	\$97,409,870	\$793,698,264	\$98,518,854
b. Noncontributing Members	6,049,151	2,475,983	63,159	327,576	14,921,324	133,795,328	18,115,883
c. Annuitants	<u>11,441,657</u>	<u>12,764,754</u>	<u>398,808</u>	<u>158,073</u>	<u>129,706,298</u>	<u>797,861,586</u>	<u>102,539,433</u>
2. Total Actuarial Accrued Liability	\$33,670,112	\$44,040,019	\$485,884	\$601,832	\$242,037,492	\$1,725,355,178	\$219,174,170
3. Actuarial value of assets	<u>27,864,007</u>	<u>30,940,493</u>	<u>590,067</u>	<u>700,244</u>	<u>198,814,274</u>	<u>1,495,661,618</u>	<u>194,396,838</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$5,806,105	\$13,099,526	(\$104,183)	(\$98,412)	\$43,223,218	\$229,693,560	\$24,777,332
5. Funded Ratio: (3) / (2)	82.8%	70.3%	121.4%	116.4%	82.1%	86.7%	88.7%
6. Annual Payroll	\$9,646,351	\$8,829,626	\$174,059	\$527,247	\$36,344,302	\$393,626,053	\$111,921,856
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.91%	11.52%	6.22%	6.85%	8.39%	6.78%	2.04%
Prior Service	<u>3.73%</u>	<u>10.15%</u>	<u>-3.68%</u>	<u>-1.15%</u>	<u>9.04%</u>	<u>4.89%</u>	<u>1.60%</u>
Total Retirement	14.64%	21.67%	2.54%	5.70%	17.43%	11.67%	3.64%
Supplemental Death	<u>0.13%</u>	<u>0.19%</u>	<u>0.33%</u>	<u>0.22%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Total Rate	14.77%	21.86%	2.87%	5.92%	17.43%	11.67%	3.64%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	10.50%	N/A	N/A	N/A	5.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.7 years	21.1 years	25.0 years	25.0 years	18.5 years	15.8 years	19.4 years
Number of annuitants	81	56	6	5	625	4,845	1,269
Number of active contributing members	149	150	5	10	715	7,028	1,709
Number of inactive members	137	78	14	17	331	2,995	701
Average age of contributing members	40.9 years	43.9 years	38.6 years	43.2 years	43.2 years	45.1 years	44.6 years
Average length of service of contributing members	9.3 years	12.9 years	1.2 years	8.8 years	9.9 years	10.7 years	13.2 years

	San Augustine	San Benito	San Felipe	San Juan	San Marcos	San Saba	Sanger
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,679,303	\$5,974,457	\$202,981	\$7,608,623	\$120,219,248	\$3,150,315	\$7,137,766
b. Noncontributing Members	971,339	1,688,423	13,759	2,771,953	17,141,562	323,187	932,457
c. Annuitants	<u>1,645,403</u>	<u>5,535,227</u>	<u>132,023</u>	<u>2,522,831</u>	<u>85,887,060</u>	<u>2,949,133</u>	<u>2,377,570</u>
2. Total Actuarial Accrued Liability	\$5,296,045	\$13,198,107	\$348,763	\$12,903,407	\$223,247,870	\$6,422,635	\$10,447,793
3. Actuarial value of assets	<u>5,164,297</u>	<u>11,998,694</u>	<u>299,656</u>	<u>13,279,217</u>	<u>182,156,187</u>	<u>5,701,382</u>	<u>9,271,465</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$131,748	\$1,199,413	\$49,107	(\$375,810)	\$41,091,683	\$721,253	\$1,176,328
5. Funded Ratio: (3) / (2)	97.5%	90.9%	85.9%	102.9%	81.6%	88.8%	88.7%
6. Annual Payroll	\$1,177,051	\$5,878,434	\$195,125	\$8,547,406	\$44,185,517	\$1,827,383	\$3,868,300
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.46%	3.85%	1.79%	2.76%	10.31%	6.04%	6.28%
Prior Service	<u>0.73%</u>	<u>1.42%</u>	<u>2.83%</u>	<u>-0.27%</u>	<u>6.98%</u>	<u>2.42%</u>	<u>1.88%</u>
Total Retirement	8.19%	5.27%	4.62%	2.49%	17.29%	8.46%	8.16%
Supplemental Death	<u>0.26%</u>	<u>0.21%</u>	<u>0.20%</u>	<u>0.17%</u>	<u>0.16%</u>	<u>0.29%</u>	<u>0.15%</u>
Total Rate	8.45%	5.48%	4.82%	2.66%	17.45%	8.75%	8.31%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	11.50%	N/A	10.50%	N/A	10.50%	12.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	22.6 years	20.6 years	10.9 years	25.0 years	18.5 years	25.0 years	24.7 years
Number of annuitants	21	93	3	58	315	24	19
Number of active contributing members	28	160	4	213	650	45	70
Number of inactive members	24	121	3	132	270	17	28
Average age of contributing members	48.6 years	43.2 years	48.6 years	42.2 years	42.3 years	44.6 years	42.7 years
Average length of service of contributing members	7.4 years	8.5 years	14.8 years	9.1 years	10.2 years	8.6 years	12.3 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Sansom Park	Santa Fe	Savoy	Schertz	Schulenburg	Seabrook	Seadrift
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$717,546	\$5,533,908	\$71,880	\$41,672,717	\$5,349,312	\$18,147,967	\$607,623
b. Noncontributing Members	964,180	2,224,820	116,612	7,910,569	1,190,891	1,872,290	106,017
c. Annuitants	<u>509,442</u>	<u>5,723,690</u>	<u>59,913</u>	<u>22,398,045</u>	<u>7,868,984</u>	<u>17,421,467</u>	<u>51,904</u>
2. Total Actuarial Accrued Liability	\$2,191,168	\$13,482,418	\$248,405	\$71,981,331	\$14,409,187	\$37,441,724	\$765,544
3. Actuarial value of assets	<u>2,426,051</u>	<u>11,025,682</u>	<u>329,945</u>	<u>54,951,959</u>	<u>12,012,777</u>	<u>32,470,298</u>	<u>650,563</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$234,883)	\$2,456,736	(\$81,540)	\$17,029,372	\$2,396,410	\$4,971,426	\$114,981
5. Funded Ratio: (3) / (2)	110.7%	81.8%	132.8%	76.3%	83.4%	86.7%	85.0%
6. Annual Payroll	\$1,315,658	\$3,223,913	\$108,388	\$19,180,232	\$1,846,985	\$6,629,557	\$623,863
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.13%	6.63%	4.16%	10.35%	9.93%	9.61%	1.37%
Prior Service	<u>-1.10%</u>	<u>5.20%</u>	<u>-4.16%</u>	<u>5.45%</u>	<u>11.57%</u>	<u>6.27%</u>	<u>2.27%</u>
Total Retirement	6.03%	11.83%	0.00%	15.80%	21.50%	15.88%	3.64%
Supplemental Death	<u>0.13%</u>	<u>0.00%</u>	<u>0.25%</u>	<u>0.12%</u>	<u>0.25%</u>	<u>0.16%</u>	<u>0.19%</u>
Total Rate	6.16%	11.83%	0.25%	15.92%	21.75%	16.04%	3.83%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	10.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	21.2 years	25.0 years	25.0 years	15.0 years	15.9 years	9.8 years
Number of annuitants	14	29	3	111	27	73	3
Number of active contributing members	30	59	3	328	37	95	13
Number of inactive members	89	69	8	191	20	40	3
Average age of contributing members	38.6 years	43.3 years	47.1 years	41.4 years	48.7 years	43.2 years	46.0 years
Average length of service of contributing members	5.9 years	8.4 years	5.1 years	9.3 years	11.7 years	12.3 years	10.4 years

	Seagoville	Seagraves	Sealy	Seguin	Selma	Seminole	Seven Points
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$12,317,502	\$311,224	\$7,841,423	\$53,665,521	\$12,363,813	\$6,555,622	\$285,303
b. Noncontributing Members	1,914,489	143,331	3,497,839	8,106,515	2,249,978	2,335,323	110,844
c. Annuitants	<u>5,109,541</u>	<u>1,617,879</u>	<u>5,513,785</u>	<u>51,077,972</u>	<u>6,075,024</u>	<u>7,828,707</u>	<u>404,408</u>
2. Total Actuarial Accrued Liability	\$19,341,532	\$2,072,434	\$16,853,047	\$112,850,008	\$20,688,815	\$16,719,652	\$800,555
3. Actuarial value of assets	<u>17,093,046</u>	<u>1,789,264</u>	<u>14,117,411</u>	<u>79,542,484</u>	<u>17,370,843</u>	<u>15,288,251</u>	<u>1,573,772</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,248,486	\$283,170	\$2,735,636	\$33,307,524	\$3,317,972	\$1,431,401	(\$773,217)
5. Funded Ratio: (3) / (2)	88.4%	86.3%	83.8%	70.5%	84.0%	91.4%	196.6%
6. Annual Payroll	\$5,028,140	\$688,875	\$3,318,565	\$21,853,013	\$5,832,965	\$3,017,809	\$601,605
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.86%	7.67%	9.80%	10.41%	11.17%	8.68%	9.00%
Prior Service	<u>3.08%</u>	<u>2.55%</u>	<u>5.06%</u>	<u>11.81%</u>	<u>3.47%</u>	<u>3.35%</u>	<u>-7.89%</u>
Total Retirement	10.94%	10.22%	14.86%	22.22%	14.64%	12.03%	1.11%
Supplemental Death	<u>0.22%</u>	<u>0.46%</u>	<u>0.18%</u>	<u>0.19%</u>	<u>0.11%</u>	<u>0.25%</u>	<u>0.20%</u>
Total Rate	11.16%	10.68%	15.04%	22.41%	14.75%	12.28%	1.31%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	N/A	N/A	N/A	N/A	N/A	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.9 years	24.7 years	25.0 years	17.7 years	25.2 years	20.2 years	25.0 years
Number of annuitants	53	14	29	243	22	33	7
Number of active contributing members	96	17	57	374	85	56	19
Number of inactive members	68	33	48	195	44	53	27
Average age of contributing members	44.4 years	49.5 years	40.3 years	41.7 years	40.4 years	40.6 years	43.1 years
Average length of service of contributing members	11.9 years	4.5 years	8.9 years	9.5 years	10.6 years	7.2 years	3.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Seymour	Shady Shores	Shallowater	Shamrock	Shavano Park	Shenandoah	Shepherd
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,611,711	\$69,937	\$704,068	\$476,229	\$4,226,405	\$5,718,687	\$372,602
b. Noncontributing Members	333,583	0	445,617	226,444	2,505,348	4,137,924	82,857
c. Annuitants	<u>2,627,818</u>	<u>0</u>	<u>318,188</u>	<u>1,663,534</u>	<u>2,159,339</u>	<u>4,593,317</u>	<u>109,390</u>
2. Total Actuarial Accrued Liability	\$4,573,112	\$69,937	\$1,467,873	\$2,366,207	\$8,891,092	\$14,449,928	\$564,849
3. Actuarial value of assets	<u>4,113,931</u>	<u>61,452</u>	<u>1,469,173</u>	<u>1,865,630</u>	<u>7,664,742</u>	<u>10,468,551</u>	<u>705,080</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$459,181	\$8,485	(\$1,300)	\$500,577	\$1,226,350	\$3,981,377	(\$140,231)
5. Funded Ratio: (3) / (2)	90.0%	87.9%	100.1%	78.8%	86.2%	72.4%	124.8%
6. Annual Payroll	\$1,216,004	\$111,946	\$620,350	\$687,509	\$2,969,852	\$3,547,932	\$365,029
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	3.47%	7.74%	4.57%	3.09%	10.79%	11.38%	4.95%
Prior Service	<u>3.73%</u>	<u>1.77%</u>	<u>-0.01%</u>	<u>5.66%</u>	<u>2.56%</u>	<u>6.86%</u>	<u>-2.36%</u>
Total Retirement	7.20%	9.51%	4.56%	8.75%	13.35%	18.24%	2.59%
Supplemental Death	<u>0.39%</u>	<u>0.07%</u>	<u>0.16%</u>	<u>0.73%</u>	<u>0.14%</u>	<u>0.14%</u>	<u>0.21%</u>
Total Rate	7.59%	9.58%	4.72%	9.48%	13.49%	18.38%	2.80%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	8.50%	N/A	10.50%	N/A	13.50%	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.5 years	4.7 years	25.0 years	17.6 years	24.5 years	25.2 years	25.0 years
Number of annuitants	26	0	6	20	29	22	2
Number of active contributing members	32	2	14	12	49	49	11
Number of inactive members	23	0	9	9	80	44	6
Average age of contributing members	47.1 years	46.7 years	43.8 years	51.3 years	42.1 years	41.7 years	50.0 years
Average length of service of contributing members	9.3 years	10.5 years	6.8 years	7.9 years	9.1 years	9.8 years	6.5 years

	Sherman	Shiner	Shoreacres	Silsbee	Silverton	Simonton	Sinton
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$67,071,800	\$1,830,775	\$274,413	\$7,509,258	\$66,197	\$7,219	\$4,538,852
b. Noncontributing Members	8,342,817	488,871	756,977	1,467,170	49,482	0	1,091,723
c. Annuitants	<u>73,459,223</u>	<u>2,137,420</u>	<u>715,069</u>	<u>10,102,966</u>	<u>700,713</u>	<u>0</u>	<u>3,726,728</u>
2. Total Actuarial Accrued Liability	\$148,873,840	\$4,457,066	\$1,746,459	\$19,079,394	\$816,392	\$7,219	\$9,357,303
3. Actuarial value of assets	<u>129,261,748</u>	<u>3,735,729</u>	<u>1,935,534</u>	<u>14,817,676</u>	<u>829,329</u>	<u>2,009</u>	<u>7,804,287</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$19,612,092	\$721,337	(\$189,075)	\$4,261,718	(\$12,937)	\$5,210	\$1,553,016
5. Funded Ratio: (3) / (2)	86.8%	83.8%	110.8%	77.7%	101.6%	27.8%	83.4%
6. Annual Payroll	\$25,352,078	\$1,315,888	\$660,430	\$3,166,199	\$154,039	\$99,854	\$2,259,581
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.71%	3.44%	6.28%	9.83%	5.96%	1.55%	8.12%
Prior Service	<u>5.63%</u>	<u>4.56%</u>	<u>-1.79%</u>	<u>9.14%</u>	<u>-0.57%</u>	<u>0.85%</u>	<u>4.21%</u>
Total Retirement	14.34%	8.00%	4.49%	18.97%	5.39%	2.40%	12.33%
Supplemental Death	<u>0.20%</u>	<u>0.36%</u>	<u>0.28%</u>	<u>0.00%</u>	<u>0.21%</u>	<u>0.04%</u>	<u>0.21%</u>
Total Rate	14.54%	8.36%	4.77%	18.97%	5.60%	2.44%	12.54%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	9.50%	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	19.5 years	16.0 years	25.0 years	21.4 years	25.0 years	7.0 years	25.1 years
Number of annuitants	334	16	7	52	3	0	25
Number of active contributing members	439	32	10	63	4	2	51
Number of inactive members	161	16	20	28	4	0	56
Average age of contributing members	42.8 years	48.5 years	53.4 years	45.7 years	42.7 years	42.5 years	42.5 years
Average length of service of contributing members	10.9 years	11.7 years	4.3 years	10.3 years	4.6 years	1.5 years	8.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Skellytown	Slaton	Smithville	Smyer	Snyder	Somerset	Somerville
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$27,570	\$3,081,004	\$3,793,255	\$292,415	\$13,219,304	\$80,497	\$397,718
b. Noncontributing Members	82,764	826,436	1,228,799	3,749	3,648,639	134,354	285,170
c. Annuitants	<u>86,496</u>	<u>3,937,591</u>	<u>1,440,976</u>	<u>0</u>	<u>14,965,873</u>	<u>87,859</u>	<u>480,468</u>
2. Total Actuarial Accrued Liability	\$196,830	\$7,845,031	\$6,463,030	\$296,164	\$31,833,816	\$302,710	\$1,163,356
3. Actuarial value of assets	<u>255,148</u>	<u>7,746,039</u>	<u>5,795,421</u>	<u>283,438</u>	<u>28,997,371</u>	<u>337,835</u>	<u>1,270,686</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$58,318)	\$98,992	\$667,609	\$12,726	\$2,836,445	(\$35,125)	(\$107,330)
5. Funded Ratio: (3) / (2)	129.6%	98.7%	89.7%	95.7%	91.1%	111.6%	109.2%
6. Annual Payroll	\$151,951	\$2,026,981	\$2,558,383	\$101,112	\$5,149,679	\$417,121	\$589,045
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.27%	6.48%	5.00%	5.69%	9.86%	3.00%	5.37%
Prior Service	<u>-2.36%</u>	<u>0.31%</u>	<u>1.94%</u>	<u>3.99%</u>	<u>3.77%</u>	<u>-0.32%</u>	<u>-1.12%</u>
Total Retirement	1.91%	6.79%	6.94%	9.68%	13.63%	2.68%	4.25%
Supplemental Death	<u>0.24%</u>	<u>0.26%</u>	<u>0.27%</u>	<u>0.18%</u>	<u>0.24%</u>	<u>0.45%</u>	<u>0.37%</u>
Total Rate	2.15%	7.05%	7.21%	9.86%	13.87%	3.13%	4.62%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	12.50%	9.50%	13.50%	N/A	9.50%	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	24.1 years	18.8 years	3.4 years	21.1 years	25.0 years	25.0 years
Number of annuitants	2	31	31	0	57	4	13
Number of active contributing members	6	46	62	2	79	12	15
Number of inactive members	9	30	67	1	57	31	16
Average age of contributing members	49.0 years	43.1 years	47.0 years	57.0 years	43.0 years	42.5 years	49.9 years
Average length of service of contributing members	1.3 years	9.8 years	8.3 years	22.3 years	9.7 years	2.0 years	4.8 years

	Sonora	Sour Lake	South Houston	South Padre Island	Southlake	Southmayd	Southside Place
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,063,112	\$692,290	\$15,239,094	\$19,343,284	\$58,782,343	\$53,645	\$2,962,570
b. Noncontributing Members	294,051	132,762	2,435,770	5,000,055	17,968,429	33,315	582,489
c. Annuitants	<u>3,220,556</u>	<u>239,400</u>	<u>8,145,406</u>	<u>12,469,413</u>	<u>25,381,202</u>	<u>68,445</u>	<u>2,096,144</u>
2. Total Actuarial Accrued Liability	\$4,577,719	\$1,064,452	\$25,820,270	\$36,812,752	\$102,131,974	\$155,405	\$5,641,203
3. Actuarial value of assets	<u>4,198,027</u>	<u>1,168,730</u>	<u>24,161,201</u>	<u>34,268,764</u>	<u>90,556,856</u>	<u>84,505</u>	<u>4,835,960</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$379,692	(\$104,278)	\$1,659,069	\$2,543,988	\$11,575,118	\$70,900	\$805,243
5. Funded Ratio: (3) / (2)	91.7%	109.8%	93.6%	93.1%	88.7%	54.4%	85.7%
6. Annual Payroll	\$1,165,575	\$643,913	\$5,621,154	\$8,938,902	\$24,354,791	\$288,420	\$1,575,750
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	6.46%	6.22%	6.36%	11.18%	9.54%	1.62%	8.49%
Prior Service	<u>1.99%</u>	<u>-0.99%</u>	<u>3.47%</u>	<u>1.75%</u>	<u>2.91%</u>	<u>3.55%</u>	<u>3.12%</u>
Total Retirement	8.45%	5.23%	9.83%	12.93%	12.45%	5.17%	11.61%
Supplemental Death	<u>0.28%</u>	<u>0.24%</u>	<u>0.28%</u>	<u>0.16%</u>	<u>0.13%</u>	<u>0.12%</u>	<u>0.22%</u>
Total Rate	8.73%	5.47%	10.11%	13.09%	12.58%	5.29%	11.83%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	13.50%	N/A	13.50%	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	25.0 years	10.3 years	25.0 years	25.1 years	8.1 years	25.2 years
Number of annuitants	31	4	56	66	119	1	14
Number of active contributing members	31	13	115	168	345	9	23
Number of inactive members	26	32	77	94	211	4	14
Average age of contributing members	42.9 years	43.9 years	47.1 years	43.5 years	41.6 years	39.8 years	47.0 years
Average length of service of contributing members	6.8 years	12.8 years	12.3 years	9.6 years	11.5 years	3.0 years	10.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Spearman	Splendora	Spring Valley Village	Springtown	Spur	Stafford	Stamford
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,019,679	\$410,731	\$3,412,024	\$1,502,759	\$302,950	\$18,832,598	\$1,473,144
b. Noncontributing Members	582,052	18,824	1,334,112	1,257,957	206,536	4,321,734	387,072
c. Annuitants	<u>3,524,377</u>	<u>250,679</u>	<u>6,616,309</u>	<u>1,883,583</u>	<u>393,076</u>	<u>20,043,114</u>	<u>1,531,185</u>
2. Total Actuarial Accrued Liability	\$6,126,108	\$680,234	\$11,362,445	\$4,644,299	\$902,562	\$43,197,446	\$3,391,401
3. Actuarial value of assets	<u>5,681,020</u>	<u>165,347</u>	<u>11,006,466</u>	<u>5,053,611</u>	<u>832,994</u>	<u>38,794,272</u>	<u>3,485,599</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$445,088	\$514,887	\$355,979	(\$409,312)	\$69,568	\$4,403,174	(\$94,198)
5. Funded Ratio: (3) / (2)	92.7%	24.3%	96.9%	108.8%	92.3%	89.8%	102.8%
6. Annual Payroll	\$1,126,771	\$1,109,588	\$2,882,701	\$1,681,376	\$329,502	\$10,591,247	\$958,804
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	8.96%	2.67%	6.15%	10.80%	2.48%	11.39%	5.56%
Prior Service	<u>2.42%</u>	<u>2.92%</u>	<u>0.76%</u>	<u>-1.49%</u>	<u>2.69%</u>	<u>2.74%</u>	<u>-0.60%</u>
Total Retirement	11.38%	5.59%	6.91%	9.31%	5.17%	14.13%	4.96%
Supplemental Death	<u>0.28%</u>	<u>0.18%</u>	<u>0.17%</u>	<u>0.17%</u>	<u>0.21%</u>	<u>0.18%</u>	<u>0.39%</u>
Total Rate	11.66%	5.77%	7.07%	9.48%	5.38%	14.31%	5.35%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	N/A	N/A	13.50%	N/A	N/A	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.1 years	24.0 years	25.2 years	25.0 years	9.5 years	22.4 years	25.0 years
Number of annuitants	22	1	35	24	3	83	22
Number of active contributing members	25	24	40	43	11	182	25
Number of inactive members	33	6	22	59	12	86	24
Average age of contributing members	45.1 years	42.6 years	42.4 years	40.5 years	47.1 years	43.1 years	46.6 years
Average length of service of contributing members	7.3 years	3.9 years	12.2 years	7.1 years	8.3 years	8.4 years	10.1 years

	Stanton	Star Harbor	Stephenville	Sterling City	Stinnett	Stockdale	Stratford
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,116,589	\$403,290	\$18,735,099	\$297,148	\$699,513	\$204,109	\$521,990
b. Noncontributing Members	226,877	54,985	4,723,521	33,778	397,360	1,329	106,154
c. Annuitants	<u>1,278,290</u>	<u>419,197</u>	<u>16,550,313</u>	<u>223,025</u>	<u>789,965</u>	<u>38,504</u>	<u>518,287</u>
2. Total Actuarial Accrued Liability	\$3,621,756	\$877,472	\$40,008,933	\$553,951	\$1,886,838	\$243,942	\$1,146,431
3. Actuarial value of assets	<u>3,226,728</u>	<u>827,404</u>	<u>41,094,694</u>	<u>555,800</u>	<u>2,282,003</u>	<u>167,454</u>	<u>1,194,008</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$395,028	\$50,068	(\$1,085,761)	(\$1,849)	(\$395,165)	\$76,488	(\$47,577)
5. Funded Ratio: (3) / (2)	89.1%	94.3%	102.7%	100.3%	120.9%	68.6%	104.2%
6. Annual Payroll	\$1,265,724	\$163,382	\$9,090,042	\$268,742	\$714,969	\$371,401	\$672,439
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.61%	7.72%	7.40%	1.15%	2.44%	2.71%	5.60%
Prior Service	<u>3.05%</u>	<u>2.98%</u>	<u>-0.73%</u>	<u>-0.04%</u>	<u>-2.44%</u>	<u>2.82%</u>	<u>-0.43%</u>
Total Retirement	7.66%	10.70%	6.67%	1.11%	0.00%	5.53%	5.17%
Supplemental Death	<u>0.20%</u>	<u>0.42%</u>	<u>0.20%</u>	<u>0.00%</u>	<u>0.21%</u>	<u>0.38%</u>	<u>0.31%</u>
Total Rate	7.86%	11.12%	6.87%	1.11%	0.21%	5.91%	5.48%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	N/A	7.50%	9.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.0 years	13.1 years	25.0 years	25.0 years	25.0 years	8.6 years	25.0 years
Number of annuitants	8	6	93	4	9	1	11
Number of active contributing members	21	5	155	6	16	8	13
Number of inactive members	8	5	111	4	14	1	19
Average age of contributing members	45.9 years	50.7 years	42.8 years	46.3 years	40.4 years	51.0 years	42.8 years
Average length of service of contributing members	11.1 years	11.4 years	10.7 years	11.7 years	5.9 years	13.1 years	7.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Sudan	Sugar Land	Sulphur Springs	Sundown	Sunnyvale	Sunray	Sunrise Beach Village
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$424,831	\$164,584,257	\$21,470,474	\$1,314,542	\$2,093,901	\$1,103,324	\$182,572
b. Noncontributing Members	3,489	25,070,109	2,415,159	951,964	1,589,846	228,302	42,782
c. Annuitants	<u>263,226</u>	<u>63,278,868</u>	<u>17,385,448</u>	<u>1,054,481</u>	<u>2,419,585</u>	<u>1,291,918</u>	<u>121,967</u>
2. Total Actuarial Accrued Liability	\$691,546	\$252,933,234	\$41,271,081	\$3,320,987	\$6,103,332	\$2,623,544	\$347,321
3. Actuarial value of assets	<u>752,618</u>	<u>223,793,760</u>	<u>38,972,369</u>	<u>2,924,627</u>	<u>5,377,762</u>	<u>2,264,610</u>	<u>353,979</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$61,072)	\$29,139,474	\$2,298,712	\$396,360	\$725,570	\$358,934	(\$6,658)
5. Funded Ratio: (3) / (2)	108.8%	88.5%	94.4%	88.1%	88.1%	86.3%	101.9%
6. Annual Payroll	\$377,936	\$54,729,351	\$8,480,956	\$566,291	\$2,435,831	\$548,482	\$499,022
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.49%	11.03%	5.14%	7.01%	9.73%	9.44%	1.42%
Prior Service	<u>0.02%</u>	<u>3.57%</u>	<u>2.63%</u>	<u>4.74%</u>	<u>1.83%</u>	<u>5.00%</u>	<u>-0.08%</u>
Total Retirement	1.51%	14.60%	7.77%	11.75%	11.56%	14.44%	1.34%
Supplemental Death	<u>0.00%</u>	<u>0.16%</u>	<u>0.24%</u>	<u>0.21%</u>	<u>0.21%</u>	<u>0.33%</u>	<u>0.14%</u>
Total Rate	1.51%	14.76%	8.01%	11.96%	11.77%	14.77%	1.48%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	7.50%	N/A	N/A	N/A	N/A	N/A	7.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	0.0 years	21.8 years	13.1 years	21.5 years	25.1 years	18.0 years	25.0 years
Number of annuitants	3	229	118	15	17	9	3
Number of active contributing members	8	750	148	13	45	8	10
Number of inactive members	2	299	73	12	39	12	10
Average age of contributing members	46.5 years	42.6 years	45.7 years	47.2 years	42.6 years	45.4 years	42.3 years
Average length of service of contributing members	11.4 years	11.9 years	12.7 years	9.4 years	8.4 years	10.0 years	7.8 years

	Sunset Valley	Surfside Beach	Sweeny	Sweetwater	TMRS	Taft	Tahoka
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$4,122,989	\$386,111	\$1,617,898	\$16,797,533	\$32,538,236	\$979,946	\$1,079,565
b. Noncontributing Members	1,304,114	151,512	381,600	1,059,062	2,561,886	653,417	91,398
c. Annuitants	<u>1,401,523</u>	<u>49,662</u>	<u>3,568,747</u>	<u>15,820,619</u>	<u>14,290,781</u>	<u>1,807,797</u>	<u>1,101,876</u>
2. Total Actuarial Accrued Liability	\$6,828,626	\$587,285	\$5,568,245	\$33,677,214	\$49,390,903	\$3,441,160	\$2,272,839
3. Actuarial value of assets	<u>5,956,963</u>	<u>720,752</u>	<u>4,457,267</u>	<u>27,773,457</u>	<u>41,295,238</u>	<u>2,731,998</u>	<u>2,859,828</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$871,663	(\$133,467)	\$1,110,978	\$5,903,757	\$8,095,665	\$709,162	(\$586,989)
5. Funded Ratio: (3) / (2)	87.2%	122.7%	80.0%	82.5%	83.6%	79.4%	125.8%
6. Annual Payroll	\$2,056,982	\$836,509	\$1,049,690	\$5,627,794	\$12,000,142	\$902,778	\$734,199
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	10.57%	2.32%	9.93%	9.47%	11.17%	12.96%	3.97%
Prior Service	<u>2.61%</u>	<u>-0.98%</u>	<u>7.18%</u>	<u>8.26%</u>	<u>4.57%</u>	<u>4.92%</u>	<u>-3.97%</u>
Total Retirement	13.18%	1.34%	17.11%	17.73%	15.74%	17.88%	0.00%
Supplemental Death	<u>0.12%</u>	<u>0.26%</u>	<u>0.32%</u>	<u>0.24%</u>	<u>0.19%</u>	<u>0.31%</u>	<u>0.29%</u>
Total Rate	13.30%	1.60%	17.43%	17.97%	15.93%	18.19%	0.29%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	13.50%	9.50%	N/A	N/A	N/A	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.9 years	25.0 years	21.4 years	17.3 years	21.5 years	24.2 years	25.0 years
Number of annuitants	7	2	18	79	35	16	11
Number of active contributing members	31	20	23	105	114	22	19
Number of inactive members	21	28	18	35	30	89	6
Average age of contributing members	41.7 years	44.5 years	43.3 years	46.5 years	47.5 years	44.6 years	44.7 years
Average length of service of contributing members	9.4 years	5.6 years	7.8 years	12.5 years	11.5 years	8.0 years	8.6 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Talty	Tatum	Taylor	Teague	Temple	Tenaha	Terrell
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$71,645	\$222,335	\$12,585,420	\$585,200	\$88,547,636	\$55,818	\$32,344,144
b. Noncontributing Members	8,288	93,565	5,080,671	674,189	15,509,537	8,970	2,646,883
c. Annuitants	<u>41,670</u>	<u>73,221</u>	<u>14,370,968</u>	<u>1,668,561</u>	<u>100,995,007</u>	<u>235,271</u>	<u>23,958,815</u>
2. Total Actuarial Accrued Liability	\$121,603	\$389,121	\$32,037,059	\$2,927,950	\$205,052,180	\$300,059	\$58,949,842
3. Actuarial value of assets	<u>40,431</u>	<u>371,132</u>	<u>26,588,489</u>	<u>2,952,024</u>	<u>171,285,542</u>	<u>368,605</u>	<u>50,966,005</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$81,172	\$17,989	\$5,448,570	(\$24,074)	\$33,766,638	(\$68,546)	\$7,983,837
5. Funded Ratio: (3) / (2)	33.2%	95.4%	83.0%	100.8%	83.5%	122.8%	86.5%
6. Annual Payroll	\$119,682	\$386,418	\$8,144,815	\$852,253	\$33,685,233	\$318,968	\$10,357,559
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.70%	1.42%	7.46%	9.21%	10.12%	1.62%	10.61%
Prior Service	<u>8.19%</u>	<u>0.39%</u>	<u>4.10%</u>	<u>-0.17%</u>	<u>6.79%</u>	<u>-1.32%</u>	<u>5.28%</u>
Total Retirement	10.89%	1.81%	11.56%	9.04%	16.91%	0.30%	15.89%
Supplemental Death	<u>0.59%</u>	<u>0.17%</u>	<u>0.22%</u>	<u>0.24%</u>	<u>0.20%</u>	<u>0.16%</u>	<u>0.21%</u>
Total Rate	11.48%	1.98%	11.78%	9.28%	17.11%	0.46%	16.10%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	7.50%	N/A	13.50%	N/A	7.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	10.0 years	16.0 years	25.0 years	25.0 years	21.4 years	25.0 years	21.1 years
Number of annuitants	1	4	102	23	421	6	128
Number of active contributing members	4	10	153	21	669	10	178
Number of inactive members	1	14	132	36	402	2	58
Average age of contributing members	57.9 years	43.3 years	42.4 years	40.7 years	43.7 years	41.4 years	44.4 years
Average length of service of contributing members	8.8 years	5.7 years	8.8 years	6.3 years	10.3 years	2.8 years	11.6 years

	Terrell Hills	Tex Municipal League IEBP	Tex Municipal League IRP	Texarkana	Texarkana Police Dept	Texarkana Water Utilities	Texas City
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$6,124,909	\$21,018,215	\$105,788,244	\$19,923,036	\$18,071,454	\$19,495,993	\$63,790,765
b. Noncontributing Members	2,622,990	5,426,020	11,740,874	4,728,797	3,512,071	2,092,083	5,908,545
c. Annuitants	<u>5,899,945</u>	<u>7,474,078</u>	<u>36,677,042</u>	<u>31,671,445</u>	<u>25,239,783</u>	<u>20,546,098</u>	<u>82,141,738</u>
2. Total Actuarial Accrued Liability	\$14,647,844	\$33,918,313	\$154,206,160	\$56,323,278	\$46,823,308	\$42,134,174	\$151,841,048
3. Actuarial value of assets	<u>12,089,400</u>	<u>32,096,333</u>	<u>152,819,089</u>	<u>48,678,243</u>	<u>42,569,646</u>	<u>35,869,069</u>	<u>131,999,715</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,558,444	\$1,821,980	\$1,387,071	\$7,645,035	\$4,253,662	\$6,265,105	\$19,841,333
5. Funded Ratio: (3) / (2)	82.5%	94.6%	99.1%	86.4%	90.9%	85.1%	86.9%
6. Annual Payroll	\$2,785,506	\$11,245,339	\$25,893,213	\$8,886,314	\$6,313,716	\$7,266,602	\$23,040,245
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	9.69%	4.26%	10.13%	9.44%	10.24%	9.39%	9.68%
Prior Service	<u>5.69%</u>	<u>1.66%</u>	<u>0.38%</u>	<u>6.12%</u>	<u>4.18%</u>	<u>6.73%</u>	<u>6.56%</u>
Total Retirement	15.38%	5.92%	10.51%	15.56%	14.42%	16.12%	16.24%
Supplemental Death	<u>0.18%</u>	<u>0.21%</u>	<u>0.21%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Total Rate	15.56%	6.13%	10.72%	15.56%	14.42%	16.12%	16.24%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	12.50%	N/A	N/A	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	24.6 years	13.0 years	20.3 years	21.3 years	25.0 years	17.5 years	18.1 years
Number of annuitants	30	26	81	190	75	114	308
Number of active contributing members	50	141	245	202	87	163	414
Number of inactive members	56	73	44	99	29	39	191
Average age of contributing members	38.7 years	49.0 years	49.2 years	46.7 years	37.6 years	44.0 years	43.3 years
Average length of service of contributing members	8.4 years	10.3 years	15.0 years	9.5 years	12.6 years	9.6 years	10.7 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Texas Municipal League	The Colony	Thompsons	Thorndale	Thrall	Three Rivers	Throckmorton
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$11,747,539	\$49,333,679	\$197,565	\$363,360	\$82,599	\$5,874,514	\$75,005
b. Noncontributing Members	2,541,641	8,179,035	0	53,515	63,111	255,432	122,290
c. Annuitants	<u>8,236,897</u>	<u>38,773,696</u>	<u>25,145</u>	<u>441,474</u>	<u>0</u>	<u>3,282,677</u>	<u>466,553</u>
2. Total Actuarial Accrued Liability	\$22,526,077	\$96,286,410	\$222,710	\$858,349	\$145,710	\$9,412,623	\$663,848
3. Actuarial value of assets	<u>19,635,017</u>	<u>84,512,778</u>	<u>202,274</u>	<u>816,994</u>	<u>110,339</u>	<u>5,606,628</u>	<u>676,519</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$2,891,060	\$11,773,632	\$20,436	\$41,355	\$35,371	\$3,805,995	(\$12,671)
5. Funded Ratio: (3) / (2)	87.2%	87.8%	90.8%	95.2%	75.7%	59.6%	101.9%
6. Annual Payroll	\$3,212,410	\$23,831,125	\$128,643	\$244,597	\$182,936	\$2,119,120	\$140,311
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.60%	9.66%	2.03%	6.40%	3.95%	9.94%	5.46%
Prior Service	<u>7.25%</u>	<u>3.26%</u>	<u>2.28%</u>	<u>1.69%</u>	<u>3.46%</u>	<u>12.70%</u>	<u>-0.55%</u>
Total Retirement	14.85%	12.92%	4.31%	8.09%	7.41%	22.64%	4.91%
Supplemental Death	<u>0.19%</u>	<u>0.14%</u>	<u>0.23%</u>	<u>0.34%</u>	<u>0.45%</u>	<u>0.34%</u>	<u>0.22%</u>
Total Rate	15.04%	13.06%	4.54%	8.43%	7.86%	22.98%	5.13%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	9.50%	N/A	N/A	9.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	18.2 years	22.3 years	8.2 years	12.7 years	6.3 years	20.1 years	25.0 years
Number of annuitants	26	186	1	8	0	20	7
Number of active contributing members	34	344	3	7	4	41	5
Number of inactive members	18	179	0	6	4	26	2
Average age of contributing members	48.4 years	42.5 years	57.7 years	54.8 years	58.3 years	46.1 years	39.2 years
Average length of service of contributing members	13.3 years	10.5 years	13.8 years	7.4 years	6.7 years	10.0 years	3.9 years

	Tiki Island	Timpson	Tioga	Tolar	Tom Bean	Tomball	Trent
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$401,743	\$835,720	\$354,214	\$232,599	\$156,672	\$22,410,223	\$225,553
b. Noncontributing Members	181,871	47,076	38,220	121,909	52,672	4,758,281	0
c. Annuitants	<u>102,498</u>	<u>107,842</u>	<u>0</u>	<u>210,976</u>	<u>28,036</u>	<u>16,900,303</u>	<u>13,765</u>
2. Total Actuarial Accrued Liability	\$686,112	\$990,638	\$392,434	\$565,484	\$237,380	\$44,068,807	\$239,318
3. Actuarial value of assets	<u>620,118</u>	<u>1,030,418</u>	<u>420,216</u>	<u>549,484</u>	<u>293,449</u>	<u>37,449,092</u>	<u>230,582</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$65,994	(\$39,780)	(\$27,782)	\$16,000	(\$56,069)	\$6,619,715	\$8,736
5. Funded Ratio: (3) / (2)	90.4%	104.0%	107.1%	97.2%	123.6%	85.0%	96.3%
6. Annual Payroll	\$491,165	\$428,082	\$394,106	\$252,261	\$285,540	\$11,180,729	\$90,095
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.37%	2.58%	1.89%	7.09%	3.89%	9.86%	5.36%
Prior Service	<u>1.39%</u>	<u>-0.57%</u>	<u>-0.43%</u>	<u>0.65%</u>	<u>-1.21%</u>	<u>3.63%</u>	<u>2.52%</u>
Total Retirement	3.76%	2.01%	1.46%	7.74%	2.68%	13.49%	7.88%
Supplemental Death	<u>0.23%</u>	<u>0.46%</u>	<u>0.13%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.20%</u>	<u>0.53%</u>
Total Rate	3.99%	2.47%	1.59%	7.89%	2.83%	13.69%	8.41%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	7.50%	9.50%	N/A	10.50%	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	12.1 years	25.0 years	25.0 years	12.3 years	25.0 years	25.1 years	4.2 years
Number of annuitants	1	3	0	3	2	86	1
Number of active contributing members	8	9	10	5	8	174	2
Number of inactive members	7	6	8	7	12	80	0
Average age of contributing members	52.5 years	52.5 years	39.9 years	43.9 years	44.6 years	41.5 years	63.7 years
Average length of service of contributing members	8.1 years	14.8 years	7.7 years	8.4 years	6.6 years	9.2 years	22.0 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Trenton	Trinidad	Trinity	Trophy Club	Troup	Troy	Tulia
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$130,673	\$294,416	\$836,922	\$6,639,616	\$789,788	\$810,851	\$3,219,441
b. Noncontributing Members	33,546	50,735	176,386	7,053,253	143,423	36,955	730,881
c. Annuitants	<u>174,470</u>	<u>136,190</u>	<u>520,111</u>	<u>6,162,092</u>	<u>492,358</u>	<u>230,144</u>	<u>5,535,929</u>
2. Total Actuarial Accrued Liability	\$338,689	\$481,341	\$1,533,419	\$19,854,961	\$1,425,569	\$1,077,950	\$9,486,251
3. Actuarial value of assets	<u>382,507</u>	<u>465,719</u>	<u>1,439,958</u>	<u>17,939,881</u>	<u>1,323,152</u>	<u>988,983</u>	<u>9,063,542</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$43,818)	\$15,622	\$93,461	\$1,915,080	\$102,417	\$88,967	\$422,709
5. Funded Ratio: (3) / (2)	112.9%	96.8%	93.9%	90.4%	92.8%	91.7%	95.5%
6. Annual Payroll	\$165,114	\$221,908	\$836,185	\$5,197,784	\$901,896	\$682,510	\$1,570,166
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	5.05%	2.12%	6.18%	10.85%	4.68%	9.84%	8.45%
Prior Service	<u>-1.63%</u>	<u>0.95%</u>	<u>0.68%</u>	<u>2.24%</u>	<u>0.68%</u>	<u>1.27%</u>	<u>2.24%</u>
Total Retirement	3.42%	3.07%	6.86%	13.09%	5.36%	11.11%	10.69%
Supplemental Death	<u>0.34%</u>	<u>0.42%</u>	<u>0.30%</u>	<u>0.17%</u>	<u>0.31%</u>	<u>0.40%</u>	<u>0.24%</u>
Total Rate	3.76%	3.49%	7.16%	13.26%	5.67%	11.51%	10.93%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	7.50%	11.50%	N/A	9.50%	13.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	9.1 years	25.6 years	25.4 years	25.8 years	13.0 years	16.0 years
Number of annuitants	4	4	9	37	12	9	29
Number of active contributing members	5	5	25	77	23	13	39
Number of inactive members	8	9	39	107	16	5	23
Average age of contributing members	49.3 years	54.5 years	45.2 years	43.5 years	44.7 years	54.2 years	43.6 years
Average length of service of contributing members	9.7 years	11.7 years	5.9 years	11.7 years	9.6 years	16.7 years	9.4 years

	Turkey	Tye	Tyler	Universal City	University Park	Uvalde	Valley Mills
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$17,062	\$569,394	\$109,965,537	\$23,983,772	\$49,614,211	\$8,000,755	\$49,201
b. Noncontributing Members	3,127	42,193	13,020,098	3,147,866	5,091,986	2,428,295	28,876
c. Annuitants	<u>244,583</u>	<u>410,966</u>	<u>127,636,663</u>	<u>12,009,799</u>	<u>44,725,943</u>	<u>7,177,483</u>	<u>0</u>
2. Total Actuarial Accrued Liability	\$264,772	\$1,022,553	\$250,622,298	\$39,141,437	\$99,432,140	\$17,606,533	\$78,077
3. Actuarial value of assets	<u>207,580</u>	<u>831,043</u>	<u>196,043,334</u>	<u>29,202,499</u>	<u>94,959,838</u>	<u>16,080,237</u>	<u>80,559</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$57,192	\$191,510	\$54,578,964	\$9,938,938	\$4,472,302	\$1,526,296	(\$2,482)
5. Funded Ratio: (3) / (2)	78.4%	81.3%	78.2%	74.6%	95.5%	91.3%	103.2%
6. Annual Payroll	\$134,016	\$620,862	\$36,941,294	\$7,888,037	\$16,955,259	\$6,834,529	\$324,165
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	2.19%	4.73%	9.23%	10.24%	5.98%	4.52%	2.37%
Prior Service	<u>2.99%</u>	<u>2.17%</u>	<u>11.76%</u>	<u>8.33%</u>	<u>3.47%</u>	<u>1.44%</u>	<u>-0.05%</u>
Total Retirement	5.18%	6.90%	20.99%	18.57%	9.45%	5.96%	2.32%
Supplemental Death	<u>0.41%</u>	<u>0.17%</u>	<u>0.24%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.18%</u>	<u>0.19%</u>
Total Rate	5.59%	7.07%	21.23%	18.75%	9.45%	6.14%	2.51%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	9.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.4 years	21.4 years	17.0 years	22.3 years	9.0 years	23.2 years	25.0 years
Number of annuitants	6	6	573	67	156	73	0
Number of active contributing members	4	15	665	132	215	165	8
Number of inactive members	2	7	301	93	46	125	12
Average age of contributing members	48.4 years	43.9 years	43.9 years	42.4 years	46.2 years	40.2 years	49.8 years
Average length of service of contributing members	2.0 years	10.4 years	10.2 years	10.4 years	15.9 years	7.7 years	3.7 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Valley View	Van	Van Alstyne	Van Horn	Vega	Venus	Vernon
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$30,493	\$1,701,840	\$1,844,523	\$2,436,308	\$670,839	\$882,462	\$7,450,989
b. Noncontributing Members	20,939	226,188	1,882,474	184,953	0	287,229	3,539,853
c. Annuitants	<u>10,763</u>	<u>587,625</u>	<u>1,166,133</u>	<u>1,782,500</u>	<u>1,144,415</u>	<u>723,118</u>	<u>10,966,116</u>
2. Total Actuarial Accrued Liability	\$62,195	\$2,515,653	\$4,893,130	\$4,403,761	\$1,815,254	\$1,892,809	\$21,956,958
3. Actuarial value of assets	<u>63,800</u>	<u>2,558,673</u>	<u>4,358,775</u>	<u>3,903,525</u>	<u>1,526,762</u>	<u>1,847,052</u>	<u>19,292,809</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$1,605)	(\$43,020)	\$534,355	\$500,236	\$288,492	\$45,757	\$2,664,149
5. Funded Ratio: (3) / (2)	102.6%	101.7%	89.1%	88.6%	84.1%	97.6%	87.9%
6. Annual Payroll	\$242,927	\$922,834	\$1,702,132	\$1,134,681	\$262,122	\$1,160,465	\$3,945,028
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	1.87%	7.47%	7.74%	4.66%	10.81%	10.25%	7.37%
Prior Service	<u>-0.04%</u>	<u>-0.29%</u>	<u>2.01%</u>	<u>3.54%</u>	<u>12.48%</u>	<u>0.29%</u>	<u>4.92%</u>
Total Retirement	1.83%	7.18%	9.75%	8.20%	23.29%	10.54%	12.29%
Supplemental Death	<u>0.14%</u>	<u>0.25%</u>	<u>0.17%</u>	<u>0.20%</u>	<u>0.18%</u>	<u>0.00%</u>	<u>0.32%</u>
Total Rate	1.97%	7.43%	9.92%	8.40%	23.47%	10.54%	12.61%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	12.50%	12.50%	9.50%	N/A	13.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	24.9 years	18.5 years	10.8 years	19.1 years	19.3 years
Number of annuitants	1	10	17	15	4	10	70
Number of active contributing members	5	20	40	24	6	23	90
Number of inactive members	7	13	55	9	0	14	106
Average age of contributing members	48.2 years	48.3 years	36.4 years	46.6 years	44.7 years	39.6 years	41.8 years
Average length of service of contributing members	2.3 years	13.8 years	4.8 years	12.7 years	7.2 years	7.2 years	8.5 years

	Victoria	Vidor	Village Fire Department	Village of the Hills	Waco	Waelder	Wake Village
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$75,505,351	\$7,743,644	\$6,443,937	\$21,536	\$248,290,876	\$651,407	\$1,030,300
b. Noncontributing Members	20,548,268	2,072,178	3,330,983	0	24,979,201	207,242	514,099
c. Annuitants	<u>104,919,922</u>	<u>9,916,197</u>	<u>9,730,599</u>	<u>0</u>	<u>235,318,284</u>	<u>206,688</u>	<u>2,845,100</u>
2. Total Actuarial Accrued Liability	\$200,973,541	\$19,732,019	\$19,505,519	\$21,536	\$508,588,361	\$1,065,337	\$4,389,499
3. Actuarial value of assets	<u>161,681,760</u>	<u>17,717,463</u>	<u>18,471,189</u>	<u>19,171</u>	<u>442,534,228</u>	<u>1,022,765</u>	<u>3,748,078</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$39,291,781	\$2,014,556	\$1,034,330	\$2,365	\$66,054,133	\$42,572	\$641,421
5. Funded Ratio: (3) / (2)	80.4%	89.8%	94.7%	89.0%	87.0%	96.0%	85.4%
6. Annual Payroll	\$32,021,745	\$3,503,805	\$3,710,413	\$92,371	\$83,965,529	\$717,585	\$1,108,020
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.61%	9.71%	3.66%	5.60%	7.50%	2.28%	9.30%
Prior Service	<u>8.69%</u>	<u>4.51%</u>	<u>2.63%</u>	<u>0.56%</u>	<u>6.83%</u>	<u>0.47%</u>	<u>3.54%</u>
Total Retirement	16.30%	14.22%	6.29%	6.16%	14.33%	2.75%	12.84%
Supplemental Death	<u>0.19%</u>	<u>0.24%</u>	<u>0.14%</u>	<u>0.06%</u>	<u>0.00%</u>	<u>0.25%</u>	<u>0.23%</u>
Total Rate	16.49%	14.46%	6.43%	6.22%	14.33%	3.00%	13.07%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	7.50%	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.1 years	17.4 years	13.8 years	5.0 years	15.1 years	17.4 years	25.2 years
Number of annuitants	471	50	28	0	1,051	5	23
Number of active contributing members	579	68	48	1	1,422	19	27
Number of inactive members	400	43	31	0	612	18	17
Average age of contributing members	40.6 years	46.7 years	39.1 years	45.3 years	44.7 years	42.8 years	37.6 years
Average length of service of contributing members	9.9 years	8.6 years	10.3 years	19.8 years	12.0 years	9.5 years	5.4 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Waller	Wallis	Walnut Springs	Waskom	Watauga	Waxahachie	Weatherford
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$1,085,323	\$411,661	\$82,066	\$1,115,111	\$24,807,185	\$39,634,262	\$62,674,036
b. Noncontributing Members	247,039	332,599	0	180,731	9,651,579	5,105,321	9,677,056
c. Annuitants	<u>1,950,525</u>	<u>413,628</u>	<u>75,667</u>	<u>1,019,387</u>	<u>17,079,638</u>	<u>27,625,988</u>	<u>49,735,518</u>
2. Total Actuarial Accrued Liability	\$3,282,887	\$1,157,888	\$157,733	\$2,315,229	\$51,538,402	\$72,365,571	\$122,086,610
3. Actuarial value of assets	<u>3,324,609</u>	<u>1,226,030</u>	<u>149,492</u>	<u>1,947,348</u>	<u>45,711,696</u>	<u>59,634,667</u>	<u>108,952,907</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$41,722)	(\$68,142)	\$8,241	\$367,881	\$5,826,706	\$12,730,904	\$13,133,703
5. Funded Ratio: (3) / (2)	101.3%	105.9%	94.8%	84.1%	88.7%	82.4%	89.2%
6. Annual Payroll	\$1,729,108	\$631,710	\$91,219	\$775,259	\$9,520,427	\$16,116,678	\$22,511,783
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.11%	3.06%	1.54%	3.23%	10.15%	9.87%	9.42%
Prior Service	<u>-0.15%</u>	<u>-0.66%</u>	<u>2.39%</u>	<u>3.60%</u>	<u>4.05%</u>	<u>5.49%</u>	<u>3.95%</u>
Total Retirement	3.96%	2.40%	3.93%	6.83%	14.20%	15.36%	13.37%
Supplemental Death	<u>0.34%</u>	<u>0.19%</u>	<u>0.16%</u>	<u>0.24%</u>	<u>0.17%</u>	<u>0.19%</u>	<u>0.17%</u>
Total Rate	4.30%	2.59%	4.09%	7.07%	14.37%	15.55%	13.54%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	8.50%	N/A	7.50%	N/A	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	25.0 years	4.1 years	19.2 years	22.2 years	20.6 years	21.5 years
Number of annuitants	21	5	2	8	101	129	223
Number of active contributing members	34	16	2	16	162	275	359
Number of inactive members	21	18	0	12	166	47	172
Average age of contributing members	46.9 years	43.6 years	49.8 years	49.3 years	43.3 years	42.2 years	41.4 years
Average length of service of contributing members	6.3 years	4.7 years	9.2 years	12.0 years	11.5 years	10.2 years	10.8 years

	Webster	Weimar	Wellington	Wells	Weslaco	West	West Columbia
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$34,516,788	\$3,400,334	\$1,758,404	\$47,129	\$17,128,644	\$836,236	\$2,317,419
b. Noncontributing Members	7,392,714	976,255	9,111	35,729	4,521,577	119,536	403,623
c. Annuitants	<u>23,772,318</u>	<u>3,888,011</u>	<u>1,550,077</u>	<u>199,502</u>	<u>20,953,599</u>	<u>1,103,085</u>	<u>1,752,702</u>
2. Total Actuarial Accrued Liability	\$65,681,820	\$8,264,600	\$3,317,592	\$282,360	\$42,603,820	\$2,058,857	\$4,473,744
3. Actuarial value of assets	<u>55,083,624</u>	<u>7,259,624</u>	<u>3,357,744</u>	<u>295,291</u>	<u>38,748,483</u>	<u>2,359,130</u>	<u>5,013,958</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$10,598,196	\$1,004,976	(\$40,152)	(\$12,931)	\$3,855,337	(\$300,273)	(\$540,214)
5. Funded Ratio: (3) / (2)	83.9%	87.8%	101.2%	104.6%	91.0%	114.6%	112.1%
6. Annual Payroll	\$11,629,335	\$1,314,907	\$460,619	\$150,750	\$10,598,318	\$828,382	\$1,667,209
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	12.10%	9.03%	4.81%	3.54%	5.30%	3.63%	5.18%
Prior Service	<u>5.60%</u>	<u>7.86%</u>	<u>-0.54%</u>	<u>-0.58%</u>	<u>2.97%</u>	<u>-2.23%</u>	<u>-1.99%</u>
Total Retirement	17.70%	16.89%	4.27%	2.96%	8.27%	1.40%	3.19%
Supplemental Death	<u>0.21%</u>	<u>0.25%</u>	<u>0.51%</u>	<u>0.00%</u>	<u>0.18%</u>	<u>0.21%</u>	<u>0.00%</u>
Total Rate	17.91%	17.14%	4.78%	2.96%	8.45%	1.61%	3.19%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	7.50%	N/A	9.50%	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	12.6 years	25.0 years	25.0 years	18.2 years	25.0 years	25.0 years
Number of annuitants	105	28	13	2	159	12	22
Number of active contributing members	162	27	13	6	228	20	34
Number of inactive members	99	12	4	3	160	14	35
Average age of contributing members	43.4 years	45.6 years	49.0 years	39.2 years	41.9 years	45.1 years	44.6 years
Average length of service of contributing members	13.1 years	11.9 years	15.4 years	3.8 years	9.4 years	9.3 years	8.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	West Lake Hills	West Orange	West Tawakoni	West Univ. Place	Westlake	Westover Hills	Westworth Village
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,076,767	\$5,163,311	\$971,912	\$20,172,308	\$6,233,839	\$733,000	\$2,916,148
b. Noncontributing Members	2,014,777	852,255	63,248	8,641,737	1,027,667	211,997	1,167,930
c. Annuitants	<u>5,030,071</u>	<u>4,557,125</u>	<u>415,418</u>	<u>23,503,979</u>	<u>922,487</u>	<u>1,096,641</u>	<u>1,922,438</u>
2. Total Actuarial Accrued Liability	\$9,121,615	\$10,572,691	\$1,450,578	\$52,318,024	\$8,183,993	\$2,041,638	\$6,006,516
3. Actuarial value of assets	<u>7,755,685</u>	<u>8,740,062</u>	<u>1,207,588</u>	<u>45,311,663</u>	<u>6,786,136</u>	<u>1,967,650</u>	<u>5,514,696</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$1,365,930	\$1,832,629	\$242,990	\$7,006,361	\$1,397,857	\$73,988	\$491,820
5. Funded Ratio: (3) / (2)	85.0%	82.7%	83.2%	86.6%	82.9%	96.4%	91.8%
6. Annual Payroll	\$1,754,054	\$1,328,205	\$581,447	\$10,027,431	\$3,842,199	\$1,300,567	\$2,473,031
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	11.61%	10.00%	5.20%	8.65%	9.44%	2.00%	10.51%
Prior Service	<u>4.79%</u>	<u>10.02%</u>	<u>3.86%</u>	<u>4.24%</u>	<u>2.33%</u>	<u>0.35%</u>	<u>1.23%</u>
Total Retirement	16.40%	20.02%	9.06%	12.89%	11.77%	2.35%	11.74%
Supplemental Death	<u>0.27%</u>	<u>0.00%</u>	<u>0.22%</u>	<u>0.18%</u>	<u>0.19%</u>	<u>0.30%</u>	<u>0.20%</u>
Total Rate	16.67%	20.02%	9.28%	13.07%	11.96%	2.65%	11.94%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	N/A	N/A	N/A	9.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	19.4 years	15.1 years	25.5 years	23.4 years	24.6 years	24.7 years
Number of annuitants	31	18	11	109	11	23	19
Number of active contributing members	23	24	18	126	43	24	45
Number of inactive members	33	12	10	103	25	9	52
Average age of contributing members	40.9 years	47.4 years	41.7 years	43.1 years	45.8 years	42.4 years	43.1 years
Average length of service of contributing members	7.7 years	13.3 years	6.7 years	12.1 years	10.4 years	9.6 years	9.3 years

	Wharton	Wheeler	White Deer	White Oak	White Settlement	Whiteface	Whitehouse
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$8,789,661	\$215,955	\$180,068	\$5,881,063	\$14,566,048	\$284,164	\$2,682,629
b. Noncontributing Members	2,496,199	73,442	148,662	1,312,453	4,910,536	360,226	1,164,676
c. Annuitants	<u>5,653,417</u>	<u>980,173</u>	<u>320,260</u>	<u>5,541,746</u>	<u>14,762,981</u>	<u>18,142</u>	<u>1,615,146</u>
2. Total Actuarial Accrued Liability	\$16,939,277	\$1,269,570	\$648,990	\$12,735,262	\$34,239,565	\$662,532	\$5,462,451
3. Actuarial value of assets	<u>16,164,204</u>	<u>1,237,793</u>	<u>473,604</u>	<u>11,801,945</u>	<u>26,799,979</u>	<u>745,840</u>	<u>4,852,494</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$775,073	\$31,777	\$175,386	\$933,317	\$7,439,586	(\$83,308)	\$609,957
5. Funded Ratio: (3) / (2)	95.4%	97.5%	73.0%	92.7%	78.3%	112.6%	88.8%
6. Annual Payroll	\$5,675,798	\$288,405	\$218,129	\$2,163,667	\$6,708,853	\$126,166	\$2,048,059
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.78%	7.08%	3.75%	11.76%	9.69%	5.68%	6.67%
Prior Service	<u>0.92%</u>	<u>0.88%</u>	<u>5.81%</u>	<u>2.64%</u>	<u>7.38%</u>	<u>-4.05%</u>	<u>1.99%</u>
Total Retirement	5.70%	7.96%	9.56%	14.40%	17.07%	1.63%	8.66%
Supplemental Death	<u>0.23%</u>	<u>0.14%</u>	<u>0.79%</u>	<u>0.24%</u>	<u>0.16%</u>	<u>0.47%</u>	<u>0.17%</u>
Total Rate	5.93%	8.10%	10.35%	14.64%	17.23%	2.10%	8.83%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	N/A	N/A	N/A	N/A	N/A	11.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	21.7 years	16.8 years	19.5 years	25.1 years	22.1 years	25.0 years	23.4 years
Number of annuitants	40	3	6	31	91	1	20
Number of active contributing members	100	7	5	43	114	2	44
Number of inactive members	65	4	9	20	131	3	35
Average age of contributing members	44.5 years	43.3 years	57.8 years	46.0 years	41.7 years	49.3 years	39.5 years
Average length of service of contributing members	11.2 years	4.7 years	6.6 years	13.5 years	9.1 years	16.5 years	9.2 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Whitesboro	Whitewright	Whitney	Wichita Falls	Willis	Willow Park	Wills Point
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$4,373,077	\$400,243	\$590,348	\$116,423,280	\$3,261,273	\$1,313,682	\$1,254,878
b. Noncontributing Members	844,821	466,209	215,082	15,694,496	758,825	493,040	719,623
c. Annuitants	<u>1,900,920</u>	<u>386,427</u>	<u>350,263</u>	<u>139,435,562</u>	<u>1,958,596</u>	<u>321,822</u>	<u>2,758,698</u>
2. Total Actuarial Accrued Liability	\$7,118,818	\$1,252,879	\$1,155,693	\$271,553,338	\$5,978,694	\$2,128,544	\$4,733,199
3. Actuarial value of assets	<u>6,817,276</u>	<u>1,336,745</u>	<u>1,075,608</u>	<u>228,560,971</u>	<u>5,469,149</u>	<u>1,898,408</u>	<u>3,945,980</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$301,542	(\$83,866)	\$80,085	\$42,992,367	\$509,545	\$230,136	\$787,219
5. Funded Ratio: (3) / (2)	95.8%	106.7%	93.1%	84.2%	91.5%	89.2%	83.4%
6. Annual Payroll	\$2,020,072	\$840,026	\$755,612	\$46,722,157	\$2,177,869	\$2,031,170	\$1,149,853
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.97%	3.74%	3.35%	5.53%	7.99%	6.63%	6.29%
Prior Service	<u>1.41%</u>	<u>-0.61%</u>	<u>0.72%</u>	<u>7.75%</u>	<u>1.47%</u>	<u>0.78%</u>	<u>5.72%</u>
Total Retirement	6.38%	3.13%	4.07%	13.28%	9.46%	7.41%	12.01%
Supplemental Death	<u>0.25%</u>	<u>0.14%</u>	<u>0.19%</u>	<u>0.00%</u>	<u>0.18%</u>	<u>0.13%</u>	<u>0.21%</u>
Total Rate	6.63%	3.27%	4.26%	13.28%	9.64%	7.54%	12.22%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	9.50%	9.50%	7.50%	N/A	13.50%	N/A	N/A
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	13.5 years	25.0 years	24.8 years	15.8 years	24.1 years	20.9 years	17.4 years
Number of annuitants	27	9	12	661	20	10	21
Number of active contributing members	48	20	20	968	41	37	29
Number of inactive members	35	25	20	486	29	38	47
Average age of contributing members	47.0 years	40.1 years	44.1 years	45.6 years	41.4 years	42.4 years	42.4 years
Average length of service of contributing members	11.4 years	4.9 years	9.7 years	11.6 years	10.1 years	8.3 years	5.8 years

	Wilmer	Wimberley	Windcrest	Winfield	Wink	Winnsboro	Winona
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$2,182,556	\$94,709	\$3,197,903	\$43,831	\$532,763	\$1,734,331	\$61,714
b. Noncontributing Members	556,108	278,363	2,420,623	34,974	127,410	765,811	113,771
c. Annuitants	<u>967,092</u>	<u>49,450</u>	<u>4,300,515</u>	<u>0</u>	<u>222,064</u>	<u>3,013,699</u>	<u>304,475</u>
2. Total Actuarial Accrued Liability	\$3,705,756	\$422,522	\$9,919,041	\$78,805	\$882,237	\$5,513,841	\$479,960
3. Actuarial value of assets	<u>3,732,755</u>	<u>336,432</u>	<u>9,508,947</u>	<u>73,519</u>	<u>871,842</u>	<u>4,895,090</u>	<u>755,227</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$26,999)	\$86,090	\$410,094	\$5,286	\$10,395	\$618,751	(\$275,267)
5. Funded Ratio: (3) / (2)	100.7%	79.6%	95.9%	93.3%	98.8%	88.8%	157.4%
6. Annual Payroll	\$2,228,763	\$432,960	\$3,481,083	\$85,036	\$406,159	\$1,643,863	\$195,264
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	4.56%	4.35%	6.55%	3.15%	7.58%	6.73%	10.60%
Prior Service	<u>-0.08%</u>	<u>2.21%</u>	<u>0.72%</u>	<u>0.66%</u>	<u>0.27%</u>	<u>2.37%</u>	<u>-8.66%</u>
Total Retirement	4.48%	6.56%	7.27%	3.81%	7.85%	9.10%	1.94%
Supplemental Death	<u>0.11%</u>	<u>0.17%</u>	<u>0.21%</u>	<u>0.36%</u>	<u>0.28%</u>	<u>0.25%</u>	<u>0.21%</u>
Total Rate	4.59%	6.73%	7.48%	4.17%	8.13%	9.35%	2.15%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	12.50%	N/A	10.50%	N/A	N/A	11.50%	13.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	25.0 years	11.1 years	25.0 years	11.6 years	12.0 years	23.9 years	25.0 years
Number of annuitants	24	5	47	0	3	25	2
Number of active contributing members	50	10	65	2	10	40	5
Number of inactive members	64	11	60	4	3	35	8
Average age of contributing members	40.5 years	38.6 years	45.3 years	57.9 years	51.1 years	44.1 years	47.1 years
Average length of service of contributing members	8.1 years	3.4 years	6.9 years	16.0 years	7.3 years	7.1 years	1.7 years

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF PARTICIPATING MUNICIPALITIES - DECEMBER 31, 2018

	Winters	Wolfforth	Woodcreek	Woodsboro	Woodville	Woodway	Wortham
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$394,419	\$3,301,604	\$63,742	\$286,253	\$6,116,436	\$12,851,976	\$312,644
b. Noncontributing Members	264,849	82,091	4,616	10,144	418,230	2,216,658	98,439
c. Annuitants	<u>2,569,227</u>	<u>931,886</u>	<u>63,515</u>	<u>255,366</u>	<u>2,063,443</u>	<u>12,824,048</u>	<u>267,224</u>
2. Total Actuarial Accrued Liability	\$3,228,495	\$4,315,581	\$131,873	\$551,763	\$8,598,109	\$27,892,682	\$678,307
3. Actuarial value of assets	<u>3,038,016</u>	<u>3,318,881</u>	<u>128,651</u>	<u>776,325</u>	<u>7,200,938</u>	<u>23,315,929</u>	<u>721,971</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$190,479	\$996,700	\$3,222	(\$224,562)	\$1,397,171	\$4,576,753	(\$43,664)
5. Funded Ratio: (3) / (2)	94.1%	76.9%	97.6%	140.7%	83.8%	83.6%	106.4%
6. Annual Payroll	\$549,016	\$1,399,230	\$136,713	\$491,179	\$1,545,745	\$5,174,091	\$330,382
CITY CONTRIBUTION RATES FOR 2020							
Retirement							
Normal Cost	7.87%	6.94%	7.69%	3.55%	9.48%	9.20%	6.20%
Prior Service	<u>2.54%</u>	<u>4.55%</u>	<u>0.34%</u>	<u>-2.81%</u>	<u>7.91%</u>	<u>7.57%</u>	<u>-0.84%</u>
Total Retirement	10.41%	11.49%	8.03%	0.74%	17.39%	16.77%	5.36%
Supplemental Death	<u>0.34%</u>	<u>0.21%</u>	<u>0.71%</u>	<u>0.17%</u>	<u>0.26%</u>	<u>0.16%</u>	<u>0.07%</u>
Total Rate	10.75%	11.70%	8.74%	0.91%	17.65%	16.93%	5.43%
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Statutory Maximum Rate (Total Retirement Only)	11.50%	N/A	N/A	7.50%	N/A	N/A	12.50%
ADDITIONAL INFORMATION							
Equivalent Single Amortization Period as of 1/2020	20.1 years	23.5 years	8.0 years	25.0 years	15.0 years	15.4 years	25.0 years
Number of annuitants	16	6	2	3	13	43	4
Number of active contributing members	15	28	3	12	33	85	8
Number of inactive members	15	17	3	4	13	65	8
Average age of contributing members	43.9 years	42.5 years	66.2 years	46.8 years	46.2 years	41.1 years	37.0 years
Average length of service of contributing members	6.1 years	9.2 years	9.4 years	7.8 years	13.5 years	9.2 years	5.4 years

	Wylie	Yoakum	Yorktown	Zavalla		
SUMMARY OF ACTUARIAL INFORMATION						
1. Actuarial Accrued Liability						
a. Contributing Members	\$52,001,665	\$12,744,073	\$556,444	\$210,267		
b. Noncontributing Members	6,798,839	1,778,638	92,601	148,787		
c. Annuitants	<u>18,117,055</u>	<u>11,967,934</u>	<u>799,449</u>	<u>115,901</u>		
2. Total Actuarial Accrued Liability	\$76,917,559	\$26,490,645	\$1,448,494	\$474,955		
3. Actuarial value of assets	<u>61,826,999</u>	<u>22,246,116</u>	<u>1,469,659</u>	<u>621,422</u>		
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	\$15,090,560	\$4,244,529	(\$21,165)	(\$146,467)		
5. Funded Ratio: (3) / (2)	80.4%	84.0%	101.5%	130.8%		
6. Annual Payroll	\$22,097,588	\$4,049,505	\$406,855	\$269,590		
CITY CONTRIBUTION RATES FOR 2020						
Retirement						
Normal Cost	10.55%	8.07%	1.17%	3.77%		
Prior Service	<u>4.20%</u>	<u>8.07%</u>	<u>-0.32%</u>	<u>-3.68%</u>		
Total Retirement	14.75%	16.14%	0.85%	0.09%		
Supplemental Death	<u>0.11%</u>	<u>0.28%</u>	<u>0.60%</u>	<u>0.00%</u>		
Total Rate	14.86%	16.42%	1.45%	0.09%		
Phase-In Rate (Minimum Contribution), Incl. Supplemental Death	N/A	N/A	N/A	N/A		
Statutory Maximum Rate (Total Retirement Only)	N/A	N/A	7.50%	9.50%		
ADDITIONAL INFORMATION						
Equivalent Single Amortization Period as of 1/2020	24.9 years	17.8 years	25.0 years	25.0 years		
Number of annuitants	104	56	12	1		
Number of active contributing members	324	81	9	9		
Number of inactive members	172	72	19	16		
Average age of contributing members	39.9 years	44.5 years	47.7 years	45.1 years		
Average length of service of contributing members	9.2 years	12.4 years	13.6 years	4.3 years		

TEXAS MUNICIPAL RETIREMENT SYSTEM
ACTUARIAL VALUATION OF INACTIVE MUNICIPALITIES - DECEMBER 31, 2018

	Covington	Crystal Beach	Floresville No. 1	Graham Regional Med Cntr	Roy H. Laird Mem Hospital	Santa Anna	Texhoma
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Noncontributing Members	5,833	0	0	7,153,600	6,576,159	0	120
c. Annuitants	<u>0</u>	<u>73,594</u>	<u>17,061</u>	<u>9,979,159</u>	<u>5,601,664</u>	<u>551</u>	<u>59,453</u>
2. Total Actuarial Accrued Liability	\$5,833	\$73,594	\$17,061	\$17,132,759	\$12,177,823	\$551	\$59,573
3. Actuarial value of assets	<u>8,774</u>	<u>440,788</u>	<u>54,343</u>	<u>18,714,948</u>	<u>11,962,306</u>	<u>615,008</u>	<u>66,291</u>
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$2,941)	(\$367,194)	(\$37,282)	(\$1,582,189)	\$215,517	(\$614,457)	(\$6,718)
5. Funded Ratio: (3) / (2)	150.4%	598.9%	318.5%	109.2%	98.2%	111616.7%	111.3%
6. Annual Payroll	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CITY CONTRIBUTION AMOUNT FOR 2020	\$ -	\$ -	\$ -	\$ -	\$ 31,671	\$ -	\$ -
Amortization Period	N/A	N/A	N/A	N/A	9 years	N/A	N/A
ADDITIONAL INFORMATION							
Number of annuitants	0	3	1	91	56	1	2
Number of inactive members	1	0	0	158	33	0	1

	Volente						
SUMMARY OF ACTUARIAL INFORMATION							
1. Actuarial Accrued Liability							
a. Contributing Members	\$0						
b. Noncontributing Members	28,320						
c. Annuitants	<u>0</u>						
2. Total Actuarial Accrued Liability	\$28,320						
3. Actuarial value of assets	<u>35,709</u>						
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	(\$7,389)						
5. Funded Ratio: (3) / (2)	126.1%						
6. Annual Payroll	\$0						
CITY CONTRIBUTION AMOUNT FOR 2020	\$ -						
Amortization Period	N/A						
ADDITIONAL INFORMATION							
Number of annuitants	0						
Number of inactive members	2						