



June 4, 2021

City # 00689

City of Kempner  
PO Box 660  
Kempner, TX 76539-0660

**Attention: Finance Director**

**Subject: 2022 City Contribution Rate**

Based on your TMRS plan provisions in effect as of April 1, 2021, your city's 2022 monthly contribution rates are shown below. These rates were determined by the December 31, 2020 actuarial valuation.

Normal Cost	1.72%
Prior Service	<u>0.04%</u>
Total Retirement Rate	1.76%
Supplemental Death Benefit	<u>0.09%</u>
Total Combined Contribution	1.85%

Detailed information on your city's TMRS plan is contained in the attached report. The Total Retirement Rate shown above represents the Actuarially Determined Employer Contribution (ADEC) for 2022.

If you have questions about your city's Contribution Rate or would like to evaluate potential changes in your TMRS plan, please contact me at 512-225-3760 or [lhady@tmrs.com](mailto:lhady@tmrs.com).

Sincerely,

A handwritten signature in blue ink that reads "Leslee S. Hardy". The signature is written in a cursive, flowing style.

Leslee S. Hardy, ASA, EA, FCA, MAAA  
Director of Actuarial Services

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<b>Historical and Projected Accumulation of the BAF Balance</b>	This schedule provides your city with historical cash flows, interest credits and the year-end balance of its Benefit Accumulation Fund (BAF), as well as projected values for calendar years 2021 and 2022.
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## Rate Stabilization Techniques

Contribution rate stabilization is a strategic goal of the TMRS Board of Trustees. Since 2007, the Board has approved many actuarial changes to minimize short-term volatility in contribution rates while maximizing long-term System sustainability. Under the current funding policy in which rates are actuarially determined each year, contribution rate stabilization is fully optimized at the System level; therefore, any further rate stabilization must be achieved at the city level.

For cities with an Unfunded Actuarial Accrued Liability (UAAL), the most effective way for a city to stabilize its TMRS contribution rate is to determine an affordable contribution rate that exceeds the required rate and continue to pay that same rate even when the calculated rate decreases in subsequent valuations. These additional contributions at a predetermined fixed rate accomplish the following:

- Provide a stable annual contribution rate for budgeting purposes;
- Directly reduces the UAAL dollar for dollar;
- Pays off the UAAL quicker;
- Produce cost savings over the long run; and
- Provide a contribution rate cushion for future adverse plan experience.

For cities with an Overfunded Actuarial Accrued Liability (OAAL or surplus), the calculated contribution rate is determined by decreasing the normal cost rate (the cost of the current year accruals for active employees) by a prior service rate calculated to keep the funded ratio at approximately the current level. The result is a required contribution rate less than the normal cost. It is important to note that there is still a chance that adverse plan experience could result in the funded ratio dropping below 100%. In order to dampen contribution rate volatility and to increase the likelihood of maintaining a funded ratio greater than 100%, TMRS encourages cities in a surplus position to consider paying the full normal cost rate (or as much as possible toward the full normal cost rate) until the funded ratio is at least 110%.

Because additional contributions are entirely voluntary, a city may revert to paying the minimum required rate if financial circumstances change during the year. There is no formal action that needs to be taken by a city to contribute at a higher level than the required monthly minimum. Additional monthly contributions may be made during the normal payroll reporting process by simply filling out line 2. A. of Form TMRS 3 with the increased city contribution rate.

If your city would like to explore the impact of any of these rate stabilization techniques on your TMRS plan, please contact Leslee Hardy, Director of Actuarial Services, at [lh Hardy@tmrs.com](mailto:lh Hardy@tmrs.com).

## Executive Summary

Valuation as of	12/31/2020
Membership as of the Valuation Date	
• Number of	
- Active members	4
- Retirees and beneficiaries	0
- Inactive members	<u>0</u>
- Total	4
• Prior year's payroll provided by TMRS	\$ 22,105
• Valuation Payroll	\$ 132,631
Benefit Accumulation Fund (BAF) Assets	
• Market BAF Balance	\$ 1,483
• BAF crediting rate	7.45%
• Interest credited on beginning BAF balance	\$ 0
• Employer contributions	378
• Member contributions during year	1,105
• Benefit and refund payments	0
Actuarial Value of Assets (AVA)	
• Market BAF Balance	\$ 1,483
• Actuarial Value of Assets (AVA)	1,454
• AVA as a Percentage of BAF	98.0%
• Return on AVA	N/A
Actuarial Information	
• Actuarial accrued liability (AAL)	\$ 1,839
• Actuarial value of assets (AVA)	1,454
• Unfunded actuarial accrued liability (UAAL)	385
• UAAL as % of pay	1.7%
• Funded ratio (AVA/AAL)	79.1%
• Employer normal cost	1.72%
• Prior Service Rate	0.04%
Contribution Rates	2022
• Member	5.00%
• Full retirement rate (ADEC)	1.76%
• Supplemental Death rate	0.09%
Total Employer Contribution Estimates	2022
• Projected payroll	\$ 136,278
• Combined contribution rate	1.85%
• Estimated employer contribution	\$ 2,521

## Summary of Benefit Provisions

The plan provisions are adopted by the governing body of the City, within the options available in the state statutes governing TMRS. Plan provisions for the City in effect as of April 1, 2021 were as follows:

Employee deposit rate	5%
Matching ratio (city to employee)	1 to 1
Years required for vesting	5
Retirement Eligibility (Age/Service)	60/5, 0/20
Updated Service Credit	0%
Annuity Increase (to retirees)	0% of CPI
Supplemental Death Benefit to Active Employees	Yes
Supplemental Death Benefit to Retirees	Yes

If you have any questions about your city's benefit provisions or would like to discuss plan changes, please contact the City Services Department at [cityservices@tmrs.com](mailto:cityservices@tmrs.com).

## Calculation of Contribution Requirements

	<u>December 31, 2020</u>
1. Prior year's payroll reported to TMRS	\$ 22,105
2. Valuation payroll	132,631
3. Employer normal cost rate	1.72%
4. Actuarial liabilities	
a. Active members	\$ 1,839
b. Inactive members	0
c. Annuitants	<u>0</u>
d. Total actuarial accrued liability	\$ 1,839
5. Actuarial value of assets	<u>1,454</u>
6. Unfunded actuarial accrued liability (UAAL) (4d - 5)	\$ 385
7. Funded ratio (5 / 4d)	79.1%
8. Equivalent Single Amortization Period*	9.0 Years
9. Assumed payroll growth rate	2.75%
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Contribution Rates:	2022
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10. Full retirement rate	
a. Normal cost	1.72%
b. Prior service	<u>0.04%</u>
c. Full retirement rate	1.76%
11. Supplemental Death rate	0.09%
12. Combined contribution rates (10c+11)	1.85%

\* New Losses are laddered on a 9-year period.

## UAAL/OAAL Amortization Bases and Payments

Year Established	Description	Years Remaining	Remaining Base	Payment
2020	2020 Experience	9	<u>\$ 385</u>	<u>\$ 51</u>
<b>Total</b>			385	51

TMRS amortizes the UAAL/OAAL through the process of laddering each base created during the valuation process. The City's UAAL/OAAL equals the total of the remaining amortization bases. The City's Prior Service Rate equals the total amortization payments divided by the valuation payroll (Item 2 of the prior page).

## Historical and Projected Accumulation of the BAF Balance

Year Ending December 31, (1)	Payroll for the Year (2)	Effective Retirement Contribution Rate <sup>a</sup> (3)	Employer Contributions for the Year (4)	Member Contributions for the Year (5)	Benefit Payments (6)	External Cash Flow for the Year (7)	Interest Credit (8)	BAF Balance <sup>b</sup> (9)
		(4) / (2)				(4) + (5) + (6)		
2020	\$ 22,105	1.71%	\$ 378	\$ 1,105	\$ 0	\$ 1,483	\$ 0	\$ 1,483
2021	132,631	1.71%	2,268	6,632	(823)	8,077	100	9,660
2022	136,278	1.76%	2,398	6,814	(1,441)	7,771	652	18,083

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

b. BAF Balance may not sum due to rounding.



## **Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution**

Risk measures help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that results from the differences between actual plan experience and the actuarial assumptions. 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:

Ratio of Market Value of Assets to Payroll	0.1
Ratio of Actuarial Accrued Liability to Payroll	0.1
Ratio of Actives to Retirees and Beneficiaries	N/A
Net Cash Flow as a Percentage of Market Value of Assets	100.0%
Duration of Liabilities	27.3
Change in Contribution Rate with 10% Decline in Assets (Smoothed)	0.00%
Change in Contribution Rate with 10% Decline in Assets (Unsmoothed)	0.01%

**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 city 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 city 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%.

**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.