



The Initial Valuation For  
**City of Bunker**  
as of August 31, 2021



# Table of Contents

	<b>Page</b>
Actuary's Certification Letter .....	1
Alternate Plans Available .....	3
Employer Contribution Rates	
Regular Eligibility:	
5-Year Final Average Salary .....	4
3-Year Final Average Salary .....	5
Rule of 80 Eligibility:	
5-Year Final Average Salary .....	6
3-Year Final Average Salary .....	7
Employer Contribution Dollars .....	8
Appendix I	
Unfunded Actuarial Accrued Liability .....	10
Appendix II	
Summary of Financial Assumptions .....	12
Appendix III	
Summary of LAGERS Provisions .....	16
Appendix IV	
Benefit Illustrations.....	19
Appendix V	
Age and Service Characteristics of Employees .....	28
Appendix VI	
Risk Commentary.....	29



October 8, 2021

City of Bunker  
Bunker, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of the actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, the benefits provided by the Missouri Local Government Employees Retirement System (LAGERS). This report contains the information needed to comply with Missouri State disclosure requirements regarding the adoption of LAGERS benefits by a political subdivision (Sections 105.660 - 106.685 RSMo). This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

This report was prepared at the request of the political subdivision and is intended for use by the political subdivision and those designated or approved by the political subdivision. This report may be provided to parties other than the political subdivision only in its entirety and only with the permission of the political subdivision. GRS is not responsible for unauthorized use of this report.

The contribution requirement for benefits likely to accrue as a result of the future service of your employees is described on pages 4 thru 7 as the normal cost rate and the casualty rate. This contribution rate, expressed as a percent of active employee payroll, will depend on the benefit program adopted.

The contribution requirement to pay for benefits likely to result from service rendered by your employees before you join LAGERS is described on pages 4 thru 7 as the prior service cost rate. The value established for prior service is called the unfunded actuarial accrued liability (these amounts are further described in Appendix I). The prior service cost rate is the rate of contribution designed to pay for the unfunded actuarial accrued liability over a period of not more than 30 years.

Section 70.730 of the Revised Statutes of Missouri requires participating employers to contribute the normal cost rate, casualty rate, and prior service cost rate (the total employer contribution rate as shown on pages 4 thru 7). These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on pages 8 and 9 represent the dollar cost of each benefit program for a one year period based on the payroll reported for this actuarial valuation. In budgeting amounts for LAGERS contributions you should consider any changes in payroll which have been made since data was submitted for the valuation and any changes anticipated to be made before the end of the period for which you are preparing the budget.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2021.

The computed contributions required for LAGERS participation will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the State law which governs LAGERS. This valuation assumed the ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our expertise and not performed. Summary provisions of the law as well as benefit illustrations can be found in Appendices III and IV.

Projections needed to comply with Missouri State disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision are available upon request from LAGERS.

Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing body. This action would not be binding on your subdivision, yet would establish the beginning date of the 45 day waiting period.

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was August 31, 2021. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

This report includes risk commentary in Appendix VI, but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

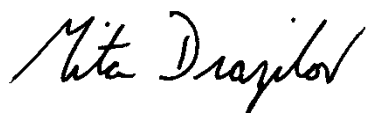
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the political subdivision as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the actuarial standards of practice issued by the Actuarial Standards Board, and with applicable statutes.

Mita D. Drazilov is a member of the American Academy of Actuaries and meets the Qualification Standards of the Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA



## Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for a member contribution rate of either 0%, 2%, 4% or 6%, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

**Member Contribution Rate - 0% Plan.** Under the 0% plan, there is no individual employee contribution to the plan, no individual account maintained for each employee, and no refund paid to employees who terminate before being eligible for a benefit.

**Member Contribution Rate - 2%, 4% or 6% Plan.** Under any plan other than 0%, each covered member contributes a percentage of compensation to LAGERS. If an employee terminates before being eligible for an immediate benefit, the member's contributions, plus any interest credited to the member's individual account, are refunded upon request.

The law further provides for nine different benefit programs (benefit formula factors) and allows an employer to elect "rule of 80" eligibility for benefits. Under the rule of 80, employees are eligible for unreduced benefits at the earlier of (i) attainment of their minimum service retirement age or (ii) such time as their years of age plus years of LAGERS credited service equals 80.

In total this allows for 144 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program which they feel best suits their particular situation.

The applicable combinations of these items may be changed from time to time, however, there are limitations on the frequency of changes. A more detailed description of plan provisions may be found in Appendix III of this report.

# City of Bunker

## Employer Contribution Rates 5 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	5.90%	0.20%	0.90%	7.00%	5.10%	3.20%	1.30%
L-3	General	7.10	0.30	1.10	8.50	6.60	4.70	2.80
LT-4(65)	General	6.10	0.20	1.00	7.30	5.40	3.50	1.60
LT-5(65)	General	7.30	0.30	1.20	8.80	6.90	5.00	3.10
L-7	General	8.30	0.30	1.40	10.00	8.10	6.20	4.30
LT-8(65)	General	8.50	0.30	1.40	10.20	8.30	6.40	4.50
L-12	General	9.60	0.40	1.60	11.60	9.70	7.80	5.90
LT-14(65)	General	9.60	0.40	1.60	11.60	9.70	7.80	5.90
L-6	General	10.80	0.50	1.80	13.10	11.20	9.30	7.40

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

# City of Bunker

## Employer Contribution Rates 3 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	6.00%	0.20%	0.90%	7.10%	5.20%	3.30%	1.40%
L-3	General	7.30	0.30	1.20	8.80	6.90	5.00	3.10
LT-4(65)	General	6.30	0.20	1.00	7.50	5.60	3.70	1.80
LT-5(65)	General	7.50	0.30	1.20	9.00	7.10	5.20	3.30
L-7	General	8.60	0.30	1.40	10.30	8.40	6.50	4.60
LT-8(65)	General	8.70	0.30	1.40	10.40	8.50	6.60	4.70
L-12	General	9.90	0.40	1.60	11.90	10.00	8.10	6.20
LT-14(65)	General	9.90	0.40	1.70	12.00	10.10	8.20	6.30
L-6	General	11.10	0.50	1.90	13.50	11.60	9.70	7.80

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

# City of Bunker

## Employer Contribution Rates 5 Year FAS - Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	6.30%	0.20%	1.00%	7.50%	5.60%	3.70%	1.80%
L-3	General	7.70	0.30	1.30	9.30	7.40	5.50	3.60
LT-4(65)	General	7.30	0.20	1.30	8.80	6.90	5.00	3.10
LT-5(65)	General	8.40	0.30	1.50	10.20	8.30	6.40	4.50
L-7	General	9.10	0.30	1.60	11.00	9.10	7.20	5.30
LT-8(65)	General	9.50	0.30	1.70	11.50	9.60	7.70	5.80
L-12	General	10.40	0.40	1.80	12.60	10.70	8.80	6.90
LT-14(65)	General	10.70	0.40	1.90	13.00	11.10	9.20	7.30
L-6	General	11.80	0.50	2.10	14.40	12.50	10.60	8.70

# The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.



# City of Bunker

## Employer Contribution Rates 3 Year FAS - Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	6.50%	0.20%	1.10%	7.80%	5.90%	4.00%	2.10%
L-3	General	7.90	0.30	1.30	9.50	7.60	5.70	3.80
LT-4(65)	General	7.50	0.20	1.30	9.00	7.10	5.20	3.30
LT-5(65)	General	8.70	0.30	1.50	10.50	8.60	6.70	4.80
L-7	General	9.30	0.30	1.60	11.20	9.30	7.40	5.50
LT-8(65)	General	9.80	0.30	1.80	11.90	10.00	8.10	6.20
L-12	General	10.80	0.40	1.90	13.10	11.20	9.30	7.40
LT-14(65)	General	11.00	0.40	2.00	13.40	11.50	9.60	7.70
L-6	General	12.20	0.50	2.20	14.90	13.00	11.10	9.20

# The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

# City of Bunker

## Employer Contribution Dollars General

Employer contributions are payable monthly, and each month's actual dollar contribution will be the contribution percent multiplied by the payroll during the month. If payroll during your first year of LAGERS participation equals the annual payroll reported for this valuation, the approximate employer dollar contribution for the year would be as follows:

### Regular Retirement Eligibility

Benefit Program	5 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 5,180	\$ 3,774	\$ 2,368	\$ 962
L-3	6,290	4,884	3,478	2,072
LT-4(65)	5,402	3,996	2,590	1,184
LT-5(65)	6,512	5,106	3,700	2,294
L-7	7,400	5,994	4,588	3,182
LT-8(65)	7,548	6,142	4,736	3,330
L-12	8,584	7,178	5,772	4,366
LT-14(65)	8,584	7,178	5,772	4,366
L-6	9,694	8,288	6,882	5,476

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 5,254	\$ 3,848	\$ 2,442	\$ 1,036
L-3	6,512	5,106	3,700	2,294
LT-4(65)	5,550	4,144	2,738	1,332
LT-5(65)	6,660	5,254	3,848	2,442
L-7	7,622	6,216	4,810	3,404
LT-8(65)	7,696	6,290	4,884	3,478
L-12	8,806	7,400	5,994	4,588
LT-14(65)	8,880	7,474	6,068	4,662
L-6	9,990	8,584	7,178	5,772

### Rule of 80 Retirement Eligibility

Benefit Program	5 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 5,550	\$ 4,144	\$ 2,738	\$ 1,332
L-3	6,882	5,476	4,070	2,664
LT-4(65)	6,512	5,106	3,700	2,294
LT-5(65)	7,548	6,142	4,736	3,330
L-7	8,140	6,734	5,328	3,922
LT-8(65)	8,510	7,104	5,698	4,292
L-12	9,324	7,918	6,512	5,106
LT-14(65)	9,620	8,214	6,808	5,402
L-6	10,656	9,250	7,844	6,438

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 5,772	\$ 4,366	\$ 2,960	\$ 1,554
L-3	7,030	5,624	4,218	2,812
LT-4(65)	6,660	5,254	3,848	2,442
LT-5(65)	7,770	6,364	4,958	3,552
L-7	8,288	6,882	5,476	4,070
LT-8(65)	8,806	7,400	5,994	4,588
L-12	9,694	8,288	6,882	5,476
LT-14(65)	9,916	8,510	7,104	5,698
L-6	11,026	9,620	8,214	6,808

PLEASE NOTE THAT THE ABOVE INFORMATION IS BASED ON THE PERSONNEL AND PAYROLL DATA SUBMITTED FOR THE ACTUARIAL VALUATION. IN BUDGETING AMOUNTS FOR LAGERS CONTRIBUTIONS YOU SHOULD CONSIDER ANY CHANGES WHICH HAVE BEEN MADE SINCE DATA WAS SUBMITTED FOR THE VALUATION AND ANY CHANGES ANTICIPATED TO BE MADE BEFORE THE END OF THE PERIOD FOR WHICH YOU ARE PREPARING THE BUDGET.

# City of Bunker

## Employees and Payroll Included in the Valuation

	General
Number of Employees	3
Annual Payroll	\$ 74,000

Information regarding the age and service characteristics of the employees is contained in Appendix V.

## **APPENDIX I**

---

### **UNFUNDED ACTUARIAL ACCRUED LIABILITY**

## Unfunded Actuarial Accrued Liability (UAAL)

If the decision is made to join LAGERS the governing body also must decide how much credit to grant employees for their service before the membership date. The options are to cover 25%, 50%, 75% or 100% of prior service. The granting of prior service credit results in the establishment of an actuarial accrued liability. Because your political subdivision will not have established an asset balance with the System as of the membership date, the value established for prior service is an unfunded actuarial accrued liability.

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 7 as the "Prior Service Cost Rate" are designed to pay for the applicable unfunded actuarial accrued liability. This procedure will allow your political subdivision to retire the unfunded actuarial accrued liability in an orderly fashion over a period of years without the need for an immediate large payment upon joining the System.

Should the governing body elect to grant credit for 100% of the employees' prior service, the unfunded actuarial accrued liability as of the date of this valuation would be as follows:

### City of Bunker

#### Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 11,410	\$ 11,840
L-3	General	14,275	14,807
LT-4(65)	General	12,284	12,759
LT-5(65)	General	14,921	15,494
L-7	General	17,141	17,768
LT-8(65)	General	17,578	18,211
L-12	General	19,983	20,729
LT-14(65)	General	20,210	20,950
L-6	General	22,849	23,673

# City of Bunker

## Unfunded Actuarial Accrued Liability (UAAL)

### Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 13,162	\$ 13,650
L-3	General	16,456	17,061
LT-4(65)	General	16,430	17,041
LT-5(65)	General	18,909	19,606
L-7	General	19,753	20,499
LT-8(65)	General	21,383	22,190
L-12	General	23,028	23,894
LT-14(65)	General	23,842	24,739
L-6	General	26,317	27,306

## **APPENDIX II**

---

### **SUMMARY OF FINANCIAL ASSUMPTIONS**

# Summary of Assumptions Used in Actuarial Valuations

## Assumptions Adopted by Board of Trustees After Consulting With Actuary

1. The investment return rate used in making the valuations was 7.00% per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. The price inflation rate used in making the valuations was 2.25% and the wage inflation rate used in making the valuations was 2.75%. The 7.00% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.25%. Adopted 2021.
2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubG-2010 Retiree Mortality Table for males and females. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubNS-2010 Disabled Retiree Mortality Table for males and females. The pre-retirement mortality tables used were 75% of the PubG-2010 Employee Mortality Table for males and females of General groups and 75% of the PubS-2010 Employee Mortality Table for males and females of Police, Fire and Public Safety groups. Mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scale to the above described tables. Adopted 2021.
3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2021.
4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2021.
5. Post-retirement cost of living allowances are assumed to be 2.00% per year. Adopted 2021.
6. Total active member payroll is assumed to increase 2.75% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2021.
7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.
9. This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.



## Schedule 1.

### Separations From Active Employment (Not Including Death-in-Service) Before Age & Service Retirement and Individual Pay Increase Assumptions

		Percent of Active Members Separating Within Next Year							
Sample Ages	Years of Service	General/Public Safety Members				Police		Fire	
		Men		Women		Disability	Withdrawal	Disability	Withdrawal
		Disability	Withdrawal	Disability	Withdrawal				
All	0		20.00%		23.00%		18.00%		12.00%
	1		18.00		21.00		17.00		10.00
	2		16.00		18.00		16.00		8.00
	3		13.00		15.00		14.00		8.00
	4		12.00		13.00		13.00		7.00
25	5 & Over	0.07%	8.80	0.02%	12.40	0.10%	10.80	0.07%	6.00
30		0.10	7.10	0.03	10.20	0.11	8.50	0.11	4.50
35		0.13	5.60	0.06	7.80	0.16	6.30	0.25	3.20
40		0.18	4.10	0.09	5.80	0.22	4.60	0.39	2.40
45		0.25	3.10	0.15	4.40	0.34	3.40	0.62	1.90
50		0.37	2.40	0.22	3.50	0.53	2.10	0.95	1.30
55		0.57	1.70	0.32	2.50	0.88	1.10	1.46	0.70
60		0.86	1.10	0.45	1.40		0.00		0.00
65			0.00		0.00		0.00		0.00

Percent Increase in Individual's Pay During Next Year			
Sample Ages	General/ Public Safety	Police	Fire
25	6.75%	6.55%	7.15%
30	5.95	5.75	6.05
35	5.35	5.25	5.15
40	4.85	4.75	4.45
45	4.25	4.25	4.05
50	3.85	3.85	3.85
55	3.65	3.65	3.45

## Schedule 2.

### Percent of Eligible Active Members Retiring Within Next Year Without Rule of 80 Eligibility

#### Early Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
55	3.00%	3.00%	50	2.50%	2.25%
56	3.00%	3.00%	51	2.50%	2.25%
57	3.00%	3.00%	52	3.00%	2.25%
58	3.00%	3.00%	53	3.00%	2.25%
59	3.00%	3.00%	54	3.50%	2.25%

#### Normal Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
60	10%	10%	55	11%	13%
61	10	10	56	11	13
62	25	15	57	11	13
63	20	15	58	11	13
64	20	15	59	11	13
65	25	25	60	11	15
66	25	30	61	11	20
67	20	25	62	22	20
68	20	25	63	18	20
69	20	20	64	18	20
70	100	100	65	100	100

## Schedule 2. (Concluded)

### Percent of Eligible Active Members Retiring Within Next Year With Rule of 80 Eligibility

Retirement Ages	General Members		Police/ Public Safety	Fire
	Men	Women		
50	20%	15%	25%	25%
51	20	15	25	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	25	15	20	45
63	25	15	20	45
64	25	20	20	45
65	30	25	100	100
66	30	25		
67	20	25		
68	20	25		
69	20	25		
70	100	100		

## **APPENDIX III**

---

### **SUMMARY OF LAGERS PROVISIONS**

# Missouri Local Government Employees Retirement System

## Brief Summary of LAGERS

### Benefits and Conditions Evaluated and/or Considered as of February 28, 2021

#### (Section references are to RSMo)

**Voluntary Retirement.** Sections 70.645 & 70.600. A member may retire with an age & service allowance after both (i) completing 5 years of credited service, and (ii) attaining the minimum service retirement age.

The minimum service retirement age is age 60 for a general employee and age 55 for a police, public safety or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

**Final Average Salary.** Section 70.600. The average of a member's monthly compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) of credited service producing the highest monthly average, which period is contained within the 120 consecutive months of credited service immediately preceding retirement.

**Age & Service Allowance.** Section 70.655. The allowance, payable monthly for life, equals a specified percent of a member's final average salary multiplied by the number of years of credited service. Each employer elects the percent applicable to its members, from the following programs:

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4(65) Benefit Program:	1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Program:	1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Program:	1.50% for life, plus 0.50% to age 65
LT-14(65) Benefit Program:	1.75% for life, plus 0.25% to age 65

The only LT benefit programs available for adoption after August 1, 1994 are the LT(65) programs.

Benefit programs L-9 and LT-10(65) are unavailable for adoption after August 1, 2005.

Benefit program L-11, available only to groups not covered by social security, provides for 2.5% for life.

Subsequent to joining the System the governing body can elect to change benefit programs for the employees, but not more often than once every 2 years.

**Early Allowance.** Section 70.670. A member may retire with an early allowance after both (i) completing 5 years of credited service, and (ii) attaining age 55 if a general employee or age 50 if a police, public safety or fire employee.

The early allowance amount, payable monthly for life, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of early retirement, but reduced to reflect the fact that the age when payments begin is younger than the minimum service retirement age. The amount of the reduction is 1/2 of 1% (.005) for each month the age at retirement is younger than the minimum service retirement age.

**Deferred Allowance.** Section 70.675. If a member leaves LAGERS-covered employment (i) before attaining the early retirement age, and (ii) after completing 5 years of credited service, the member becomes eligible for a deferred allowance; provided the former member lives to the minimum service retirement age and does not withdraw the accumulated contributions.

The deferred allowance amount, payable monthly for life from the minimum service retirement age, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of leaving LAGERS coverage.

Deferred allowances are also payable any time after reaching the early retirement age, with the reduction for early retirement noted on the previous page.

**Non-Duty Disability Allowance.** Section 70.680. A member with 5 or more years of credited service who becomes totally and permanently disabled from other than duty-connected causes becomes eligible to receive a non-duty disability allowance computed in the same manner as an age & service allowance, based upon the service & earnings record to time of disability.

**Duty Disability Allowance.** Section 70.680. A member regardless of credited service who becomes totally and permanently disabled from duty-connected causes becomes eligible to receive a duty disability allowance computed in the same manner as an age & service allowance, based upon the earnings record to time of disability but based upon the years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

**Death-in-Service.** Section 70.661. Upon the death of a member who had completed 5 years of credited service, the eligible surviving dependents receive the following benefits:

- (a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.
- (b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death.
- (c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

**Benefit Changes After Retirement.** Section 70.655. For retirements effective after September 28, 1975, there is an annual redetermination of monthly benefit amount, beginning the October first following 12 months of retirement. As of each October first the amount of each eligible benefit is redetermined as follows:

- (a) Subject to the maximum in (b), the redetermined amount is the amount other-wise payable multiplied by: 100% plus up to 4%, as determined by the LAGERS Board of Trustees, for each full year of retirement.
- (b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement.

**Member Contributions.** Sections 70.690 & 70.705. Each member contributes a percent of compensation beginning after completion of sufficient employment for 6 months of credited service. The law governing LAGERS has a provision for the adoption of a 2%, 4% or 6% member contribution rate.

If a member leaves LAGERS-covered employment before an allowance is payable, the accumulated contributions are refunded to the member. If the member dies, his accumulated contributions are refunded to a designated beneficiary.

The law governing LAGERS also has a provision for the adoption of a 0% plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the 0% plan may be done at the time of membership or a later date; however, a change in the member contribution rate may not be made more frequently than every 2 years. Under the 0% plan there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

**Employer Contributions.** Section 70.730. Each employer contributes the remainder amounts necessary to finance the employees' participation in LAGERS. Contributions to LAGERS are determined based upon level-percent-of-payroll principles, so that contribution rates do not have to increase over decades of time.

## **APPENDIX IV**

---

### **BENEFIT ILLUSTRATIONS**



**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(L-1 Benefit Program is Years of Credited Service  
times: 1.00% of FAS <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 916	\$1,441	96%
2,000	700	1,055	1,755	88%
2,500	875	1,192	2,067	83%
3,000	1,050	1,330	2,380	79%
3,500	1,225	1,469	2,694	77%
4,000	1,400	1,605	3,005	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 916	\$1,291	86%
2,000	500	1,055	1,555	78%
2,500	625	1,192	1,817	73%
3,000	750	1,330	2,080	69%
3,500	875	1,469	2,344	67%
4,000	1,000	1,605	2,605	65%
15 Years of Service:				
\$1,500	\$225	\$ 916	\$1,141	76%
2,000	300	1,055	1,355	68%
2,500	375	1,192	1,567	63%
3,000	450	1,330	1,780	59%
3,500	525	1,469	1,994	57%
4,000	600	1,605	2,205	55%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(L-3 Benefit Program is Years of Credited Service  
times: 1.25% of FAS <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 916	\$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
25 Years of Service:				
\$1,500	\$ 469	\$ 916	\$1,385	92%
2,000	625	1,055	1,680	84%
2,500	781	1,192	1,973	79%
3,000	938	1,330	2,268	76%
3,500	1,094	1,469	2,563	73%
4,000	1,250	1,605	2,855	71%
15 Years of Service:				
\$1,500	\$281	\$ 916	\$1,197	80%
2,000	375	1,055	1,430	72%
2,500	469	1,192	1,661	66%
3,000	563	1,330	1,893	63%
3,500	656	1,469	2,125	61%
4,000	750	1,605	2,355	59%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(L-7 Benefit Program is Years of Credited Service  
times: 1.50% of FAS <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 916	\$1,704	114%
2,000	1,050	1,055	2,105	105%
2,500	1,313	1,192	2,505	100%
3,000	1,575	1,330	2,905	97%
3,500	1,838	1,469	3,307	94%
4,000	2,100	1,605	3,705	93%
25 Years of Service:				
\$1,500	\$ 563	\$ 916	\$1,479	99%
2,000	750	1,055	1,805	90%
2,500	938	1,192	2,130	85%
3,000	1,125	1,330	2,455	82%
3,500	1,313	1,469	2,782	79%
4,000	1,500	1,605	3,105	78%
15 Years of Service:				
\$1,500	\$338	\$ 916	\$1,254	84%
2,000	450	1,055	1,505	75%
2,500	563	1,192	1,755	70%
3,000	675	1,330	2,005	67%
3,500	788	1,469	2,257	64%
4,000	900	1,605	2,505	63%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(L-12 Benefit Program is Years of Credited Service  
times: 1.75% of FAS <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 916	\$1,835	122%
2,000	1,225	1,055	2,280	114%
2,500	1,531	1,192	2,723	109%
3,000	1,838	1,330	3,168	106%
3,500	2,144	1,469	3,613	103%
4,000	2,450	1,605	4,055	101%
25 Years of Service:				
\$1,500	\$ 656	\$ 916	\$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 916	\$1,310	87%
2,000	525	1,055	1,580	79%
2,500	656	1,192	1,848	74%
3,000	788	1,330	2,118	71%
3,500	919	1,469	2,388	68%
4,000	1,050	1,605	2,655	66%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

# Missouri LAGERS

## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary (L-6 Benefit Program is Years of Credited Service times: 2.00% of FAS <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 916	\$1,966	131%
2,000	1,400	1,055	2,455	123%
2,500	1,750	1,192	2,942	118%
3,000	2,100	1,330	3,430	114%
3,500	2,450	1,469	3,919	112%
4,000	2,800	1,605	4,405	110%
25 Years of Service:				
\$1,500	\$ 750	\$ 916	\$1,666	111%
2,000	1,000	1,055	2,055	103%
2,500	1,250	1,192	2,442	98%
3,000	1,500	1,330	2,830	94%
3,500	1,750	1,469	3,219	92%
4,000	2,000	1,605	3,605	90%
15 Years of Service:				
\$1,500	\$ 450	\$ 916	\$1,366	91%
2,000	600	1,055	1,655	83%
2,500	750	1,192	1,942	78%
3,000	900	1,330	2,230	74%
3,500	1,050	1,469	2,519	72%
4,000	1,200	1,605	2,805	70%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

# Missouri LAGERS

## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary (LT-4(65) Benefit Program is Years of Credited Service times: 2.00% of FAS <sup>1</sup> to age 65) 1.00% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 916	\$1,050	\$1,441	70%	96%
2,000	1,400	700	1,055	1,400	1,755	70%	88%
2,500	1,750	875	1,192	1,750	2,067	70%	83%
3,000	2,100	1,050	1,330	2,100	2,380	70%	79%
3,500	2,450	1,225	1,469	2,450	2,694	70%	77%
4,000	2,800	1,400	1,605	2,800	3,005	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 916	\$ 750	\$1,291	50%	86%
2,000	1,000	500	1,055	1,000	1,555	50%	78%
2,500	1,250	625	1,192	1,250	1,817	50%	73%
3,000	1,500	750	1,330	1,500	2,080	50%	69%
3,500	1,750	875	1,469	1,750	2,344	50%	67%
4,000	2,000	1,000	1,605	2,000	2,605	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 916	\$ 450	\$1,141	30%	76%
2,000	600	300	1,055	600	1,355	30%	68%
2,500	750	375	1,192	750	1,567	30%	63%
3,000	900	450	1,330	900	1,780	30%	59%
3,500	1,050	525	1,469	1,050	1,994	30%	57%
4,000	1,200	600	1,605	1,200	2,205	30%	55%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
**(LT-5(65) Benefit Program is Years of Credited Service**  
**times: 2.00% of FAS <sup>1</sup> to age 65)**  
**1.25% of FAS <sup>1</sup> at age 65)**

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 916	\$1,050	\$1,572	70%	105%
2,000	1,400	875	1,055	1,400	1,930	70%	97%
2,500	1,750	1,094	1,192	1,750	2,286	70%	91%
3,000	2,100	1,313	1,330	2,100	2,643	70%	88%
3,500	2,450	1,531	1,469	2,450	3,000	70%	86%
4,000	2,800	1,750	1,605	2,800	3,355	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 916	\$ 750	\$1,385	50%	92%
2,000	1,000	625	1,055	1,000	1,680	50%	84%
2,500	1,250	781	1,192	1,250	1,973	50%	79%
3,000	1,500	938	1,330	1,500	2,268	50%	76%
3,500	1,750	1,094	1,469	1,750	2,563	50%	73%
4,000	2,000	1,250	1,605	2,000	2,855	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 916	\$ 450	\$1,197	30%	80%
2,000	600	375	1,055	600	1,430	30%	72%
2,500	750	469	1,192	750	1,661	30%	66%
3,000	900	563	1,330	900	1,893	30%	63%
3,500	1,050	656	1,469	1,050	2,125	30%	61%
4,000	1,200	750	1,605	1,200	2,355	30%	59%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
**(LT-8(65) Benefit Program is Years of Credited Service**  
**times: 2.00% of FAS <sup>1</sup> to age 65)**  
**1.50% of FAS <sup>1</sup> at age 65)**

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 916	\$1,050	\$1,704	70%	114%
2,000	1,400	1,050	1,055	1,400	2,105	70%	105%
2,500	1,750	1,313	1,192	1,750	2,505	70%	100%
3,000	2,100	1,575	1,330	2,100	2,905	70%	97%
3,500	2,450	1,838	1,469	2,450	3,307	70%	94%
4,000	2,800	2,100	1,605	2,800	3,705	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 916	\$ 750	\$1,479	50%	99%
2,000	1,000	750	1,055	1,000	1,805	50%	90%
2,500	1,250	938	1,192	1,250	2,130	50%	85%
3,000	1,500	1,125	1,330	1,500	2,455	50%	82%
3,500	1,750	1,313	1,469	1,750	2,782	50%	79%
4,000	2,000	1,500	1,605	2,000	3,105	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 916	\$ 450	\$1,254	30%	84%
2,000	600	450	1,055	600	1,505	30%	75%
2,500	750	563	1,192	750	1,755	30%	70%
3,000	900	675	1,330	900	2,005	30%	67%
3,500	1,050	788	1,469	1,050	2,257	30%	64%
4,000	1,200	900	1,605	1,200	2,505	30%	63%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(LT-14(65) Benefit Program is Years of Credited Service  
times: 2.00% of FAS <sup>1</sup> to age 65)  
1.75% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 916	\$1,050	\$1,835	70%	122%
2,000	1,400	1,225	1,055	1,400	2,280	70%	114%
2,500	1,750	1,531	1,192	1,750	2,723	70%	109%
3,000	2,100	1,838	1,330	2,100	3,168	70%	106%
3,500	2,450	2,144	1,469	2,450	3,613	70%	103%
4,000	2,800	2,450	1,605	2,800	4,055	70%	101%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 916	\$ 750	\$1,572	50%	105%
2,000	1,000	875	1,055	1,000	1,930	50%	97%
2,500	1,250	1,094	1,192	1,250	2,286	50%	91%
3,000	1,500	1,313	1,330	1,500	2,643	50%	88%
3,500	1,750	1,531	1,469	1,750	3,000	50%	86%
4,000	2,000	1,750	1,605	2,000	3,355	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 916	\$ 450	\$1,310	30%	87%
2,000	600	525	1,055	600	1,580	30%	79%
2,500	750	656	1,192	750	1,848	30%	74%
3,000	900	788	1,330	900	2,118	30%	71%
3,500	1,050	919	1,469	1,050	2,388	30%	68%
4,000	1,200	1,050	1,605	1,200	2,655	30%	66%

<sup>1</sup> "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

## **APPENDIX V**

---

### **AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES**

# City of Bunker - General

August 31, 2021

## By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
<b>Under 20</b>									
20-24									
25-29	1							1	\$ 25,000
30-34		1						1	\$ 20,000
35-39									
40-44									
45-49									
50-54									
55-59									
60-64	1							1	\$ 29,000
65-69									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>2</b>	<b>1</b>						<b>3</b>	<b>\$ 74,000</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 38.7 years.  
 Benefit Service: 2.6 years.  
 Annual Pay: \$24,667.

## **APPENDIX VI**

---

### **RISK COMMENTARY**

## Risk Commentary

The determination of the accrued liability and the actuarially determined contribution (i.e., total employer contribution rate) 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 result 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 Risk** – 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, contributions and contribution rates 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; and
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 on pages 4 thru 7 may be considered as a minimum contribution rate for the selected benefit provisions that complies with the Board's funding policy. 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.

# Risk Commentary (Concluded)

## 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 are described below.

### **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 2.0 times the payroll, a return on assets 5% different 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 plan sponsor contributions as a percentage of payroll.

### **RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL**

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. 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.

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 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% 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.

### **RATIO OF NET CASH FLOW TO 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 ACTUARIAL ACCRUED LIABILITY**

The duration of the actuarial accrued liability 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 liability would increase approximately 10% if the assumed rate of return were lowered 1%.

## ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



October 8, 2021 E-mail

Mr. Robert Wilson, Executive Director  
Missouri Local Government  
Employees Retirement System  
P.O. Box 1665  
Jefferson City, Missouri 65102

Dear Bob:

Enclosed is the report of the August 31, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Bunker

Sincerely,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive, flowing style.

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp



October 8, 2021

City of Bunker  
Bunker, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the August 31, 2021 Initial Valuation for the City of Bunker dated October 8, 2021.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2021. The unfunded actuarial accrued liability shown for each member contribution rate option is based on the 0% member contribution rate plan.

Mita Drazilov is a member of the American Academy of Actuaries and meets the Qualification Standards of the Academy of Actuaries to render the actuarial opinions herein.

Respectfully submitted,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive, flowing style.

Mita D. Drazilov, ASA, FCA, MAAA



# City of Bunker - General

## Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	7.0%	\$5,180	\$ 11,410	8.5%	\$6,290	\$ 14,275	7.3%	\$5,402	\$ 12,284
2022	76,035	7.0	5,322	11,519	8.5	6,463	14,412	7.3	5,551	12,402
2023	78,126	7.0	5,469	11,617	8.5	6,641	14,535	7.3	5,703	12,508
2024	80,274	7.0	5,619	11,703	8.5	6,823	14,642	7.3	5,860	12,600
2025	82,482	7.0	5,774	11,775	8.5	7,011	14,731	7.3	6,021	12,677
2026	84,750	7.0	5,933	11,831	8.5	7,204	14,801	7.3	6,187	12,737
2027	87,081	7.0	6,096	11,870	8.5	7,402	14,850	7.3	6,357	12,779
2028	89,476	7.0	6,263	11,890	8.5	7,605	14,875	7.3	6,532	12,800
2029	91,937	7.0	6,436	11,889	8.5	7,815	14,874	7.3	6,711	12,799
2030	94,465	7.0	6,613	11,865	8.5	8,030	14,844	7.3	6,896	12,773

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	8.8%	\$6,512	\$ 14,921	10.0%	\$7,400	\$ 17,141	10.2%	\$7,548	\$ 17,578
2022	76,035	8.8	6,691	15,064	10.0	7,604	17,305	10.2	7,756	17,747
2023	78,126	8.8	6,875	15,192	10.0	7,813	17,452	10.2	7,969	17,898
2024	80,274	8.8	7,064	15,304	10.0	8,027	17,581	10.2	8,188	18,030
2025	82,482	8.8	7,258	15,398	10.0	8,248	17,688	10.2	8,413	18,140
2026	84,750	8.8	7,458	15,471	10.0	8,475	17,772	10.2	8,645	18,226
2027	87,081	8.8	7,663	15,522	10.0	8,708	17,830	10.2	8,882	18,286
2028	89,476	8.8	7,874	15,548	10.0	8,948	17,860	10.2	9,127	18,316
2029	91,937	8.8	8,090	15,547	10.0	9,194	17,858	10.2	9,378	18,314
2030	94,465	8.8	8,313	15,515	10.0	9,447	17,822	10.2	9,635	18,277

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	11.6%	\$8,584	\$ 19,983	11.6%	\$8,584	\$ 20,210	13.1%	\$9,694	\$ 22,849
2022	76,035	11.6	8,820	20,175	11.6	8,820	20,404	13.1	9,961	23,068
2023	78,126	11.6	9,063	20,347	11.6	9,063	20,578	13.1	10,235	23,265
2024	80,274	11.6	9,312	20,497	11.6	9,312	20,730	13.1	10,516	23,436
2025	82,482	11.6	9,568	20,622	11.6	9,568	20,857	13.1	10,805	23,579
2026	84,750	11.6	9,831	20,720	11.6	9,831	20,956	13.1	11,102	23,691
2027	87,081	11.6	10,101	20,788	11.6	10,101	21,025	13.1	11,408	23,769
2028	89,476	11.6	10,379	20,823	11.6	10,379	21,060	13.1	11,721	23,809
2029	91,937	11.6	10,665	20,821	11.6	10,665	21,058	13.1	12,044	23,807
2030	94,465	11.6	10,958	20,779	11.6	10,958	21,015	13.1	12,375	23,759

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	5.1%	\$3,774	\$ 11,410	6.6%	\$4,884	\$ 14,275	5.4%	\$3,996	\$ 12,284
2022	76,035	5.1	3,878	11,519	6.6	5,018	14,412	5.4	4,106	12,402
2023	78,126	5.1	3,984	11,617	6.6	5,156	14,535	5.4	4,219	12,508
2024	80,274	5.1	4,094	11,703	6.6	5,298	14,642	5.4	4,335	12,600
2025	82,482	5.1	4,207	11,775	6.6	5,444	14,731	5.4	4,454	12,677
2026	84,750	5.1	4,322	11,831	6.6	5,594	14,801	5.4	4,577	12,737
2027	87,081	5.1	4,441	11,870	6.6	5,747	14,850	5.4	4,702	12,779
2028	89,476	5.1	4,563	11,890	6.6	5,905	14,875	5.4	4,832	12,800
2029	91,937	5.1	4,689	11,889	6.6	6,068	14,874	5.4	4,965	12,799
2030	94,465	5.1	4,818	11,865	6.6	6,235	14,844	5.4	5,101	12,773

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	6.9%	\$5,106	\$ 14,921	8.1%	\$5,994	\$ 17,141	8.3%	\$6,142	\$ 17,578
2022	76,035	6.9	5,246	15,064	8.1	6,159	17,305	8.3	6,311	17,747
2023	78,126	6.9	5,391	15,192	8.1	6,328	17,452	8.3	6,484	17,898
2024	80,274	6.9	5,539	15,304	8.1	6,502	17,581	8.3	6,663	18,030
2025	82,482	6.9	5,691	15,398	8.1	6,681	17,688	8.3	6,846	18,140
2026	84,750	6.9	5,848	15,471	8.1	6,865	17,772	8.3	7,034	18,226
2027	87,081	6.9	6,009	15,522	8.1	7,054	17,830	8.3	7,228	18,286
2028	89,476	6.9	6,174	15,548	8.1	7,248	17,860	8.3	7,427	18,316
2029	91,937	6.9	6,344	15,547	8.1	7,447	17,858	8.3	7,631	18,314
2030	94,465	6.9	6,518	15,515	8.1	7,652	17,822	8.3	7,841	18,277

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	9.7%	\$7,178	\$ 19,983	9.7%	\$7,178	\$ 20,210	11.2%	\$8,288	\$ 22,849
2022	76,035	9.7	7,375	20,175	9.7	7,375	20,404	11.2	8,516	23,068
2023	78,126	9.7	7,578	20,347	9.7	7,578	20,578	11.2	8,750	23,265
2024	80,274	9.7	7,787	20,497	9.7	7,787	20,730	11.2	8,991	23,436
2025	82,482	9.7	8,001	20,622	9.7	8,001	20,857	11.2	9,238	23,579
2026	84,750	9.7	8,221	20,720	9.7	8,221	20,956	11.2	9,492	23,691
2027	87,081	9.7	8,447	20,788	9.7	8,447	21,025	11.2	9,753	23,769
2028	89,476	9.7	8,679	20,823	9.7	8,679	21,060	11.2	10,021	23,809
2029	91,937	9.7	8,918	20,821	9.7	8,918	21,058	11.2	10,297	23,807
2030	94,465	9.7	9,163	20,779	9.7	9,163	21,015	11.2	10,580	23,759

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	3.2%	\$2,368	\$ 11,410	4.7%	\$3,478	\$ 14,275	3.5%	\$2,590	\$ 12,284
2022	76,035	3.2	2,433	11,519	4.7	3,574	14,412	3.5	2,661	12,402
2023	78,126	3.2	2,500	11,617	4.7	3,672	14,535	3.5	2,734	12,508
2024	80,274	3.2	2,569	11,703	4.7	3,773	14,642	3.5	2,810	12,600
2025	82,482	3.2	2,639	11,775	4.7	3,877	14,731	3.5	2,887	12,677
2026	84,750	3.2	2,712	11,831	4.7	3,983	14,801	3.5	2,966	12,737
2027	87,081	3.2	2,787	11,870	4.7	4,093	14,850	3.5	3,048	12,779
2028	89,476	3.2	2,863	11,890	4.7	4,205	14,875	3.5	3,132	12,800
2029	91,937	3.2	2,942	11,889	4.7	4,321	14,874	3.5	3,218	12,799
2030	94,465	3.2	3,023	11,865	4.7	4,440	14,844	3.5	3,306	12,773

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	5.0%	\$3,700	\$ 14,921	6.2%	\$4,588	\$ 17,141	6.4%	\$4,736	\$ 17,578
2022	76,035	5.0	3,802	15,064	6.2	4,714	17,305	6.4	4,866	17,747
2023	78,126	5.0	3,906	15,192	6.2	4,844	17,452	6.4	5,000	17,898
2024	80,274	5.0	4,014	15,304	6.2	4,977	17,581	6.4	5,138	18,030
2025	82,482	5.0	4,124	15,398	6.2	5,114	17,688	6.4	5,279	18,140
2026	84,750	5.0	4,238	15,471	6.2	5,255	17,772	6.4	5,424	18,226
2027	87,081	5.0	4,354	15,522	6.2	5,399	17,830	6.4	5,573	18,286
2028	89,476	5.0	4,474	15,548	6.2	5,548	17,860	6.4	5,726	18,316
2029	91,937	5.0	4,597	15,547	6.2	5,700	17,858	6.4	5,884	18,314
2030	94,465	5.0	4,723	15,515	6.2	5,857	17,822	6.4	6,046	18,277

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.8%	\$5,772	\$ 19,983	7.8%	\$5,772	\$ 20,210	9.3%	\$6,882	\$ 22,849
2022	76,035	7.8	5,931	20,175	7.8	5,931	20,404	9.3	7,071	23,068
2023	78,126	7.8	6,094	20,347	7.8	6,094	20,578	9.3	7,266	23,265
2024	80,274	7.8	6,261	20,497	7.8	6,261	20,730	9.3	7,465	23,436
2025	82,482	7.8	6,434	20,622	7.8	6,434	20,857	9.3	7,671	23,579
2026	84,750	7.8	6,611	20,720	7.8	6,611	20,956	9.3	7,882	23,691
2027	87,081	7.8	6,792	20,788	7.8	6,792	21,025	9.3	8,099	23,769
2028	89,476	7.8	6,979	20,823	7.8	6,979	21,060	9.3	8,321	23,809
2029	91,937	7.8	7,171	20,821	7.8	7,171	21,058	9.3	8,550	23,807
2030	94,465	7.8	7,368	20,779	7.8	7,368	21,015	9.3	8,785	23,759

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	1.3%	\$962	\$ 11,410	2.8%	\$2,072	\$ 14,275	1.6%	\$1,184	\$ 12,284
2022	76,035	1.3	988	11,519	2.8	2,129	14,412	1.6	1,217	12,402
2023	78,126	1.3	1,016	11,617	2.8	2,188	14,535	1.6	1,250	12,508
2024	80,274	1.3	1,044	11,703	2.8	2,248	14,642	1.6	1,284	12,600
2025	82,482	1.3	1,072	11,775	2.8	2,309	14,731	1.6	1,320	12,677
2026	84,750	1.3	1,102	11,831	2.8	2,373	14,801	1.6	1,356	12,737
2027	87,081	1.3	1,132	11,870	2.8	2,438	14,850	1.6	1,393	12,779
2028	89,476	1.3	1,163	11,890	2.8	2,505	14,875	1.6	1,432	12,800
2029	91,937	1.3	1,195	11,889	2.8	2,574	14,874	1.6	1,471	12,799
2030	94,465	1.3	1,228	11,865	2.8	2,645	14,844	1.6	1,511	12,773

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	3.1%	\$2,294	\$ 14,921	4.3%	\$3,182	\$ 17,141	4.5%	\$3,330	\$ 17,578
2022	76,035	3.1	2,357	15,064	4.3	3,270	17,305	4.5	3,422	17,747
2023	78,126	3.1	2,422	15,192	4.3	3,359	17,452	4.5	3,516	17,898
2024	80,274	3.1	2,488	15,304	4.3	3,452	17,581	4.5	3,612	18,030
2025	82,482	3.1	2,557	15,398	4.3	3,547	17,688	4.5	3,712	18,140
2026	84,750	3.1	2,627	15,471	4.3	3,644	17,772	4.5	3,814	18,226
2027	87,081	3.1	2,700	15,522	4.3	3,744	17,830	4.5	3,919	18,286
2028	89,476	3.1	2,774	15,548	4.3	3,847	17,860	4.5	4,026	18,316
2029	91,937	3.1	2,850	15,547	4.3	3,953	17,858	4.5	4,137	18,314
2030	94,465	3.1	2,928	15,515	4.3	4,062	17,822	4.5	4,251	18,277

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	5.9%	\$4,366	\$ 19,983	5.9%	\$4,366	\$ 20,210	7.4%	\$5,476	\$ 22,849
2022	76,035	5.9	4,486	20,175	5.9	4,486	20,404	7.4	5,627	23,068
2023	78,126	5.9	4,609	20,347	5.9	4,609	20,578	7.4	5,781	23,265
2024	80,274	5.9	4,736	20,497	5.9	4,736	20,730	7.4	5,940	23,436
2025	82,482	5.9	4,866	20,622	5.9	4,866	20,857	7.4	6,104	23,579
2026	84,750	5.9	5,000	20,720	5.9	5,000	20,956	7.4	6,272	23,691
2027	87,081	5.9	5,138	20,788	5.9	5,138	21,025	7.4	6,444	23,769
2028	89,476	5.9	5,279	20,823	5.9	5,279	21,060	7.4	6,621	23,809
2029	91,937	5.9	5,424	20,821	5.9	5,424	21,058	7.4	6,803	23,807
2030	94,465	5.9	5,573	20,779	5.9	5,573	21,015	7.4	6,990	23,759

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.1%	\$5,254	\$ 11,840	8.8%	\$6,512	\$ 14,807	7.5%	\$5,550	\$ 12,759
2022	76,035	7.1	5,398	11,954	8.8	6,691	14,949	7.5	5,703	12,881
2023	78,126	7.1	5,547	12,056	8.8	6,875	15,076	7.5	5,859	12,991
2024	80,274	7.1	5,699	12,145	8.8	7,064	15,187	7.5	6,021	13,087
2025	82,482	7.1	5,856	12,219	8.8	7,258	15,280	7.5	6,186	13,167
2026	84,750	7.1	6,017	12,277	8.8	7,458	15,353	7.5	6,356	13,230
2027	87,081	7.1	6,183	12,317	8.8	7,663	15,403	7.5	6,531	13,273
2028	89,476	7.1	6,353	12,338	8.8	7,874	15,429	7.5	6,711	13,295
2029	91,937	7.1	6,528	12,337	8.8	8,090	15,428	7.5	6,895	13,294
2030	94,465	7.1	6,707	12,312	8.8	8,313	15,397	7.5	7,085	13,267

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	9.0%	\$6,660	\$ 15,494	10.3%	\$7,622	\$ 17,768	10.4%	\$7,696	\$ 18,211
2022	76,035	9.0	6,843	15,643	10.3	7,832	17,938	10.4	7,908	18,386
2023	78,126	9.0	7,031	15,776	10.3	8,047	18,091	10.4	8,125	18,543
2024	80,274	9.0	7,225	15,892	10.3	8,268	18,224	10.4	8,348	18,680
2025	82,482	9.0	7,423	15,989	10.3	8,496	18,335	10.4	8,578	18,794
2026	84,750	9.0	7,628	16,065	10.3	8,729	18,422	10.4	8,814	18,883
2027	87,081	9.0	7,837	16,118	10.3	8,969	18,482	10.4	9,056	18,945
2028	89,476	9.0	8,053	16,145	10.3	9,216	18,513	10.4	9,306	18,977
2029	91,937	9.0	8,274	16,143	10.3	9,470	18,511	10.4	9,561	18,975
2030	94,465	9.0	8,502	16,110	10.3	9,730	18,473	10.4	9,824	18,936

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	11.9%	\$8,806	\$ 20,729	12.0%	\$8,880	\$ 20,950	13.5%	\$9,990	\$ 23,673
2022	76,035	11.9	9,048	20,928	12.0	9,124	21,151	13.5	10,265	23,900
2023	78,126	11.9	9,297	21,106	12.0	9,375	21,331	13.5	10,547	24,104
2024	80,274	11.9	9,553	21,261	12.0	9,633	21,488	13.5	10,837	24,282
2025	82,482	11.9	9,815	21,391	12.0	9,898	21,619	13.5	11,135	24,430
2026	84,750	11.9	10,085	21,493	12.0	10,170	21,722	13.5	11,441	24,546
2027	87,081	11.9	10,363	21,563	12.0	10,450	21,793	13.5	11,756	24,626
2028	89,476	11.9	10,648	21,599	12.0	10,737	21,829	13.5	12,079	24,667
2029	91,937	11.9	10,941	21,597	12.0	11,032	21,827	13.5	12,411	24,665
2030	94,465	11.9	11,241	21,553	12.0	11,336	21,783	13.5	12,753	24,615

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	5.2%	\$3,848	\$ 11,840	6.9%	\$5,106	\$ 14,807	5.6%	\$4,144	\$ 12,759
2022	76,035	5.2	3,954	11,954	6.9	5,246	14,949	5.6	4,258	12,881
2023	78,126	5.2	4,063	12,056	6.9	5,391	15,076	5.6	4,375	12,991
2024	80,274	5.2	4,174	12,145	6.9	5,539	15,187	5.6	4,495	13,087
2025	82,482	5.2	4,289	12,219	6.9	5,691	15,280	5.6	4,619	13,167
2026	84,750	5.2	4,407	12,277	6.9	5,848	15,353	5.6	4,746	13,230
2027	87,081	5.2	4,528	12,317	6.9	6,009	15,403	5.6	4,877	13,273
2028	89,476	5.2	4,653	12,338	6.9	6,174	15,429	5.6	5,011	13,295
2029	91,937	5.2	4,781	12,337	6.9	6,344	15,428	5.6	5,148	13,294
2030	94,465	5.2	4,912	12,312	6.9	6,518	15,397	5.6	5,290	13,267

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.1%	\$5,254	\$ 15,494	8.4%	\$6,216	\$ 17,768	8.5%	\$6,290	\$ 18,211
2022	76,035	7.1	5,398	15,643	8.4	6,387	17,938	8.5	6,463	18,386
2023	78,126	7.1	5,547	15,776	8.4	6,563	18,091	8.5	6,641	18,543
2024	80,274	7.1	5,699	15,892	8.4	6,743	18,224	8.5	6,823	18,680
2025	82,482	7.1	5,856	15,989	8.4	6,928	18,335	8.5	7,011	18,794
2026	84,750	7.1	6,017	16,065	8.4	7,119	18,422	8.5	7,204	18,883
2027	87,081	7.1	6,183	16,118	8.4	7,315	18,482	8.5	7,402	18,945
2028	89,476	7.1	6,353	16,145	8.4	7,516	18,513	8.5	7,605	18,977
2029	91,937	7.1	6,528	16,143	8.4	7,723	18,511	8.5	7,815	18,975
2030	94,465	7.1	6,707	16,110	8.4	7,935	18,473	8.5	8,030	18,936

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	10.0%	\$7,400	\$ 20,729	10.1%	\$7,474	\$ 20,950	11.6%	\$8,584	\$ 23,673
2022	76,035	10.0	7,604	20,928	10.1	7,680	21,151	11.6	8,820	23,900
2023	78,126	10.0	7,813	21,106	10.1	7,891	21,331	11.6	9,063	24,104
2024	80,274	10.0	8,027	21,261	10.1	8,108	21,488	11.6	9,312	24,282
2025	82,482	10.0	8,248	21,391	10.1	8,331	21,619	11.6	9,568	24,430
2026	84,750	10.0	8,475	21,493	10.1	8,560	21,722	11.6	9,831	24,546
2027	87,081	10.0	8,708	21,563	10.1	8,795	21,793	11.6	10,101	24,626
2028	89,476	10.0	8,948	21,599	10.1	9,037	21,829	11.6	10,379	24,667
2029	91,937	10.0	9,194	21,597	10.1	9,286	21,827	11.6	10,665	24,665
2030	94,465	10.0	9,447	21,553	10.1	9,541	21,783	11.6	10,958	24,615

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	3.3%	\$2,442	\$ 11,840	5.0%	\$3,700	\$ 14,807	3.7%	\$2,738	\$ 12,759
2022	76,035	3.3	2,509	11,954	5.0	3,802	14,949	3.7	2,813	12,881
2023	78,126	3.3	2,578	12,056	5.0	3,906	15,076	3.7	2,891	12,991
2024	80,274	3.3	2,649	12,145	5.0	4,014	15,187	3.7	2,970	13,087
2025	82,482	3.3	2,722	12,219	5.0	4,124	15,280	3.7	3,052	13,167
2026	84,750	3.3	2,797	12,277	5.0	4,238	15,353	3.7	3,136	13,230
2027	87,081	3.3	2,874	12,317	5.0	4,354	15,403	3.7	3,222	13,273
2028	89,476	3.3	2,953	12,338	5.0	4,474	15,429	3.7	3,311	13,295
2029	91,937	3.3	3,034	12,337	5.0	4,597	15,428	3.7	3,402	13,294
2030	94,465	3.3	3,117	12,312	5.0	4,723	15,397	3.7	3,495	13,267

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	5.2%	\$3,848	\$ 15,494	6.5%	\$4,810	\$ 17,768	6.6%	\$4,884	\$ 18,211
2022	76,035	5.2	3,954	15,643	6.5	4,942	17,938	6.6	5,018	18,386
2023	78,126	5.2	4,063	15,776	6.5	5,078	18,091	6.6	5,156	18,543
2024	80,274	5.2	4,174	15,892	6.5	5,218	18,224	6.6	5,298	18,680
2025	82,482	5.2	4,289	15,989	6.5	5,361	18,335	6.6	5,444	18,794
2026	84,750	5.2	4,407	16,065	6.5	5,509	18,422	6.6	5,594	18,883
2027	87,081	5.2	4,528	16,118	6.5	5,660	18,482	6.6	5,747	18,945
2028	89,476	5.2	4,653	16,145	6.5	5,816	18,513	6.6	5,905	18,977
2029	91,937	5.2	4,781	16,143	6.5	5,976	18,511	6.6	6,068	18,975
2030	94,465	5.2	4,912	16,110	6.5	6,140	18,473	6.6	6,235	18,936

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	8.1%	\$5,994	\$ 20,729	8.2%	\$6,068	\$ 20,950	9.7%	\$7,178	\$ 23,673
2022	76,035	8.1	6,159	20,928	8.2	6,235	21,151	9.7	7,375	23,900
2023	78,126	8.1	6,328	21,106	8.2	6,406	21,331	9.7	7,578	24,104
2024	80,274	8.1	6,502	21,261	8.2	6,582	21,488	9.7	7,787	24,282
2025	82,482	8.1	6,681	21,391	8.2	6,764	21,619	9.7	8,001	24,430
2026	84,750	8.1	6,865	21,493	8.2	6,950	21,722	9.7	8,221	24,546
2027	87,081	8.1	7,054	21,563	8.2	7,141	21,793	9.7	8,447	24,626
2028	89,476	8.1	7,248	21,599	8.2	7,337	21,829	9.7	8,679	24,667
2029	91,937	8.1	7,447	21,597	8.2	7,539	21,827	9.7	8,918	24,665
2030	94,465	8.1	7,652	21,553	8.2	7,746	21,783	9.7	9,163	24,615

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.





# City of Bunker - General

## Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	1.4%	\$1,036	\$ 11,840	3.1%	\$2,294	\$ 14,807	1.8%	\$1,332	\$ 12,759
2022	76,035	1.4	1,064	11,954	3.1	2,357	14,949	1.8	1,369	12,881
2023	78,126	1.4	1,094	12,056	3.1	2,422	15,076	1.8	1,406	12,991
2024	80,274	1.4	1,124	12,145	3.1	2,488	15,187	1.8	1,445	13,087
2025	82,482	1.4	1,155	12,219	3.1	2,557	15,280	1.8	1,485	13,167
2026	84,750	1.4	1,187	12,277	3.1	2,627	15,353	1.8	1,526	13,230
2027	87,081	1.4	1,219	12,317	3.1	2,700	15,403	1.8	1,567	13,273
2028	89,476	1.4	1,253	12,338	3.1	2,774	15,429	1.8	1,611	13,295
2029	91,937	1.4	1,287	12,337	3.1	2,850	15,428	1.8	1,655	13,294
2030	94,465	1.4	1,323	12,312	3.1	2,928	15,397	1.8	1,700	13,267

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	3.3%	\$2,442	\$ 15,494	4.6%	\$3,404	\$ 17,768	4.7%	\$3,478	\$ 18,211
2022	76,035	3.3	2,509	15,643	4.6	3,498	17,938	4.7	3,574	18,386
2023	78,126	3.3	2,578	15,776	4.6	3,594	18,091	4.7	3,672	18,543
2024	80,274	3.3	2,649	15,892	4.6	3,693	18,224	4.7	3,773	18,680
2025	82,482	3.3	2,722	15,989	4.6	3,794	18,335	4.7	3,877	18,794
2026	84,750	3.3	2,797	16,065	4.6	3,899	18,422	4.7	3,983	18,883
2027	87,081	3.3	2,874	16,118	4.6	4,006	18,482	4.7	4,093	18,945
2028	89,476	3.3	2,953	16,145	4.6	4,116	18,513	4.7	4,205	18,977
2029	91,937	3.3	3,034	16,143	4.6	4,229	18,511	4.7	4,321	18,975
2030	94,465	3.3	3,117	16,110	4.6	4,345	18,473	4.7	4,440	18,936

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	6.2%	\$4,588	\$ 20,729	6.3%	\$4,662	\$ 20,950	7.8%	\$5,772	\$ 23,673
2022	76,035	6.2	4,714	20,928	6.3	4,790	21,151	7.8	5,931	23,900
2023	78,126	6.2	4,844	21,106	6.3	4,922	21,331	7.8	6,094	24,104
2024	80,274	6.2	4,977	21,261	6.3	5,057	21,488	7.8	6,261	24,282
2025	82,482	6.2	5,114	21,391	6.3	5,196	21,619	7.8	6,434	24,430
2026	84,750	6.2	5,255	21,493	6.3	5,339	21,722	7.8	6,611	24,546
2027	87,081	6.2	5,399	21,563	6.3	5,486	21,793	7.8	6,792	24,626
2028	89,476	6.2	5,548	21,599	6.3	5,637	21,829	7.8	6,979	24,667
2029	91,937	6.2	5,700	21,597	6.3	5,792	21,827	7.8	7,171	24,665
2030	94,465	6.2	5,857	21,553	6.3	5,951	21,783	7.8	7,368	24,615

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.





# City of Bunker - General

## Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.5%	\$5,550	\$ 13,162	9.3%	\$6,882	\$ 16,456	8.8%	\$6,512	\$ 16,430
2022	76,035	7.5	5,703	13,288	9.3	7,071	16,614	8.8	6,691	16,588
2023	78,126	7.5	5,859	13,401	9.3	7,266	16,756	8.8	6,875	16,729
2024	80,274	7.5	6,021	13,500	9.3	7,465	16,879	8.8	7,064	16,852
2025	82,482	7.5	6,186	13,583	9.3	7,671	16,982	8.8	7,258	16,955
2026	84,750	7.5	6,356	13,648	9.3	7,882	17,063	8.8	7,458	17,036
2027	87,081	7.5	6,531	13,693	9.3	8,099	17,119	8.8	7,663	17,092
2028	89,476	7.5	6,711	13,716	9.3	8,321	17,148	8.8	7,874	17,120
2029	91,937	7.5	6,895	13,715	9.3	8,550	17,146	8.8	8,090	17,118
2030	94,465	7.5	7,085	13,687	9.3	8,785	17,111	8.8	8,313	17,083

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	10.2%	\$7,548	\$ 18,909	11.0%	\$8,140	\$ 19,753	11.5%	\$8,510	\$ 21,383
2022	76,035	10.2	7,756	19,090	11.0	8,364	19,942	11.5	8,744	21,588
2023	78,126	10.2	7,969	19,253	11.0	8,594	20,112	11.5	8,984	21,772
2024	80,274	10.2	8,188	19,395	11.0	8,830	20,260	11.5	9,232	21,932
2025	82,482	10.2	8,413	19,514	11.0	9,073	20,384	11.5	9,485	22,066
2026	84,750	10.2	8,645	19,607	11.0	9,323	20,481	11.5	9,746	22,171
2027	87,081	10.2	8,882	19,671	11.0	9,579	20,548	11.5	10,014	22,244
2028	89,476	10.2	9,127	19,704	11.0	9,842	20,582	11.5	10,290	22,281
2029	91,937	10.2	9,378	19,702	11.0	10,113	20,580	11.5	10,573	22,279
2030	94,465	10.2	9,635	19,662	11.0	10,391	20,538	11.5	10,863	22,234

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	12.6%	\$9,324	\$ 23,028	13.0%	\$9,620	\$ 23,842	14.4%	\$10,656	\$ 26,317
2022	76,035	12.6	9,580	23,249	13.0	9,885	24,071	14.4	10,949	26,569
2023	78,126	12.6	9,844	23,447	13.0	10,156	24,276	14.4	11,250	26,795
2024	80,274	12.6	10,115	23,620	13.0	10,436	24,455	14.4	11,559	26,992
2025	82,482	12.6	10,393	23,764	13.0	10,723	24,604	14.4	11,877	27,157
2026	84,750	12.6	10,679	23,877	13.0	11,018	24,721	14.4	12,204	27,286
2027	87,081	12.6	10,972	23,955	13.0	11,321	24,802	14.4	12,540	27,375
2028	89,476	12.6	11,274	23,995	13.0	11,632	24,843	14.4	12,885	27,421
2029	91,937	12.6	11,584	23,993	13.0	11,952	24,841	14.4	13,239	27,418
2030	94,465	12.6	11,903	23,944	13.0	12,280	24,791	14.4	13,603	27,362

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	5.6%	\$4,144	\$ 13,162	7.4%	\$5,476	\$ 16,456	6.9%	\$5,106	\$ 16,430
2022	76,035	5.6	4,258	13,288	7.4	5,627	16,614	6.9	5,246	16,588
2023	78,126	5.6	4,375	13,401	7.4	5,781	16,756	6.9	5,391	16,729
2024	80,274	5.6	4,495	13,500	7.4	5,940	16,879	6.9	5,539	16,852
2025	82,482	5.6	4,619	13,583	7.4	6,104	16,982	6.9	5,691	16,955
2026	84,750	5.6	4,746	13,648	7.4	6,272	17,063	6.9	5,848	17,036
2027	87,081	5.6	4,877	13,693	7.4	6,444	17,119	6.9	6,009	17,092
2028	89,476	5.6	5,011	13,716	7.4	6,621	17,148	6.9	6,174	17,120
2029	91,937	5.6	5,148	13,715	7.4	6,803	17,146	6.9	6,344	17,118
2030	94,465	5.6	5,290	13,687	7.4	6,990	17,111	6.9	6,518	17,083

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	8.3%	\$6,142	\$ 18,909	9.1%	\$6,734	\$ 19,753	9.6%	\$7,104	\$ 21,383
2022	76,035	8.3	6,311	19,090	9.1	6,919	19,942	9.6	7,299	21,588
2023	78,126	8.3	6,484	19,253	9.1	7,109	20,112	9.6	7,500	21,772
2024	80,274	8.3	6,663	19,395	9.1	7,305	20,260	9.6	7,706	21,932
2025	82,482	8.3	6,846	19,514	9.1	7,506	20,384	9.6	7,918	22,066
2026	84,750	8.3	7,034	19,607	9.1	7,712	20,481	9.6	8,136	22,171
2027	87,081	8.3	7,228	19,671	9.1	7,924	20,548	9.6	8,360	22,244
2028	89,476	8.3	7,427	19,704	9.1	8,142	20,582	9.6	8,590	22,281
2029	91,937	8.3	7,631	19,702	9.1	8,366	20,580	9.6	8,826	22,279
2030	94,465	8.3	7,841	19,662	9.1	8,596	20,538	9.6	9,069	22,234

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	10.7%	\$7,918	\$ 23,028	11.1%	\$8,214	\$ 23,842	12.5%	\$9,250	\$ 26,317
2022	76,035	10.7	8,136	23,249	11.1	8,440	24,071	12.5	9,504	26,569
2023	78,126	10.7	8,359	23,447	11.1	8,672	24,276	12.5	9,766	26,795
2024	80,274	10.7	8,589	23,620	11.1	8,910	24,455	12.5	10,034	26,992
2025	82,482	10.7	8,826	23,764	11.1	9,156	24,604	12.5	10,310	27,157
2026	84,750	10.7	9,068	23,877	11.1	9,407	24,721	12.5	10,594	27,286
2027	87,081	10.7	9,318	23,955	11.1	9,666	24,802	12.5	10,885	27,375
2028	89,476	10.7	9,574	23,995	11.1	9,932	24,843	12.5	11,185	27,421
2029	91,937	10.7	9,837	23,993	11.1	10,205	24,841	12.5	11,492	27,418
2030	94,465	10.7	10,108	23,944	11.1	10,486	24,791	12.5	11,808	27,362

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	3.7%	\$2,738	\$ 13,162	5.5%	\$4,070	\$ 16,456	5.0%	\$3,700	\$ 16,430
2022	76,035	3.7	2,813	13,288	5.5	4,182	16,614	5.0	3,802	16,588
2023	78,126	3.7	2,891	13,401	5.5	4,297	16,756	5.0	3,906	16,729
2024	80,274	3.7	2,970	13,500	5.5	4,415	16,879	5.0	4,014	16,852
2025	82,482	3.7	3,052	13,583	5.5	4,537	16,982	5.0	4,124	16,955
2026	84,750	3.7	3,136	13,648	5.5	4,661	17,063	5.0	4,238	17,036
2027	87,081	3.7	3,222	13,693	5.5	4,789	17,119	5.0	4,354	17,092
2028	89,476	3.7	3,311	13,716	5.5	4,921	17,148	5.0	4,474	17,120
2029	91,937	3.7	3,402	13,715	5.5	5,057	17,146	5.0	4,597	17,118
2030	94,465	3.7	3,495	13,687	5.5	5,196	17,111	5.0	4,723	17,083

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	6.4%	\$4,736	\$ 18,909	7.2%	\$5,328	\$ 19,753	7.7%	\$5,698	\$ 21,383
2022	76,035	6.4	4,866	19,090	7.2	5,475	19,942	7.7	5,855	21,588
2023	78,126	6.4	5,000	19,253	7.2	5,625	20,112	7.7	6,016	21,772
2024	80,274	6.4	5,138	19,395	7.2	5,780	20,260	7.7	6,181	21,932
2025	82,482	6.4	5,279	19,514	7.2	5,939	20,384	7.7	6,351	22,066
2026	84,750	6.4	5,424	19,607	7.2	6,102	20,481	7.7	6,526	22,171
2027	87,081	6.4	5,573	19,671	7.2	6,270	20,548	7.7	6,705	22,244
2028	89,476	6.4	5,726	19,704	7.2	6,442	20,582	7.7	6,890	22,281
2029	91,937	6.4	5,884	19,702	7.2	6,619	20,580	7.7	7,079	22,279
2030	94,465	6.4	6,046	19,662	7.2	6,801	20,538	7.7	7,274	22,234

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	8.8%	\$6,512	\$ 23,028	9.2%	\$6,808	\$ 23,842	10.6%	\$7,844	\$ 26,317
2022	76,035	8.8	6,691	23,249	9.2	6,995	24,071	10.6	8,060	26,569
2023	78,126	8.8	6,875	23,447	9.2	7,188	24,276	10.6	8,281	26,795
2024	80,274	8.8	7,064	23,620	9.2	7,385	24,455	10.6	8,509	26,992
2025	82,482	8.8	7,258	23,764	9.2	7,588	24,604	10.6	8,743	27,157
2026	84,750	8.8	7,458	23,877	9.2	7,797	24,721	10.6	8,984	27,286
2027	87,081	8.8	7,663	23,955	9.2	8,011	24,802	10.6	9,231	27,375
2028	89,476	8.8	7,874	23,995	9.2	8,232	24,843	10.6	9,484	27,421
2029	91,937	8.8	8,090	23,993	9.2	8,458	24,841	10.6	9,745	27,418
2030	94,465	8.8	8,313	23,944	9.2	8,691	24,791	10.6	10,013	27,362

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	1.8%	\$1,332	\$ 13,162	3.6%	\$2,664	\$ 16,456	3.1%	\$2,294	\$ 16,430
2022	76,035	1.8	1,369	13,288	3.6	2,737	16,614	3.1	2,357	16,588
2023	78,126	1.8	1,406	13,401	3.6	2,813	16,756	3.1	2,422	16,729
2024	80,274	1.8	1,445	13,500	3.6	2,890	16,879	3.1	2,488	16,852
2025	82,482	1.8	1,485	13,583	3.6	2,969	16,982	3.1	2,557	16,955
2026	84,750	1.8	1,526	13,648	3.6	3,051	17,063	3.1	2,627	17,036
2027	87,081	1.8	1,567	13,693	3.6	3,135	17,119	3.1	2,700	17,092
2028	89,476	1.8	1,611	13,716	3.6	3,221	17,148	3.1	2,774	17,120
2029	91,937	1.8	1,655	13,715	3.6	3,310	17,146	3.1	2,850	17,118
2030	94,465	1.8	1,700	13,687	3.6	3,401	17,111	3.1	2,928	17,083

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	4.5%	\$3,330	\$ 18,909	5.3%	\$3,922	\$ 19,753	5.8%	\$4,292	\$ 21,383
2022	76,035	4.5	3,422	19,090	5.3	4,030	19,942	5.8	4,410	21,588
2023	78,126	4.5	3,516	19,253	5.3	4,141	20,112	5.8	4,531	21,772
2024	80,274	4.5	3,612	19,395	5.3	4,255	20,260	5.8	4,656	21,932
2025	82,482	4.5	3,712	19,514	5.3	4,372	20,384	5.8	4,784	22,066
2026	84,750	4.5	3,814	19,607	5.3	4,492	20,481	5.8	4,916	22,171
2027	87,081	4.5	3,919	19,671	5.3	4,615	20,548	5.8	5,051	22,244
2028	89,476	4.5	4,026	19,704	5.3	4,742	20,582	5.8	5,190	22,281
2029	91,937	4.5	4,137	19,702	5.3	4,873	20,580	5.8	5,332	22,279
2030	94,465	4.5	4,251	19,662	5.3	5,007	20,538	5.8	5,479	22,234

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 74,000	6.9%	\$5,106	\$ 23,028	7.3%	\$5,402	\$ 23,842	8.7%	\$6,438	\$ 26,317
2022	76,035	6.9	5,246	23,249	7.3	5,551	24,071	8.7	6,615	26,569
2023	78,126	6.9	5,391	23,447	7.3	5,703	24,276	8.7	6,797	26,795
2024	80,274	6.9	5,539	23,620	7.3	5,860	24,455	8.7	6,984	26,992
2025	82,482	6.9	5,691	23,764	7.3	6,021	24,604	8.7	7,176	27,157
2026	84,750	6.9	5,848	23,877	7.3	6,187	24,721	8.7	7,373	27,286
2027	87,081	6.9	6,009	23,955	7.3	6,357	24,802	8.7	7,576	27,375
2028	89,476	6.9	6,174	23,995	7.3	6,532	24,843	8.7	7,784	27,421
2029	91,937	6.9	6,344	23,993	7.3	6,711	24,841	8.7	7,999	27,418
2030	94,465	6.9	6,518	23,944	7.3	6,896	24,791	8.7	8,218	27,362

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.8%	\$5,772	\$ 13,650	9.5%	\$7,030	\$ 17,061	9.0%	\$6,660	\$ 17,041
2022	76,035	7.8	5,931	13,781	9.5	7,223	17,225	9.0	6,843	17,204
2023	78,126	7.8	6,094	13,898	9.5	7,422	17,372	9.0	7,031	17,351
2024	80,274	7.8	6,261	14,000	9.5	7,626	17,500	9.0	7,225	17,479
2025	82,482	7.8	6,434	14,086	9.5	7,836	17,607	9.0	7,423	17,586
2026	84,750	7.8	6,611	14,153	9.5	8,051	17,691	9.0	7,628	17,670
2027	87,081	7.8	6,792	14,199	9.5	8,273	17,749	9.0	7,837	17,728
2028	89,476	7.8	6,979	14,223	9.5	8,500	17,779	9.0	8,053	17,758
2029	91,937	7.8	7,171	14,222	9.5	8,734	17,777	9.0	8,274	17,756
2030	94,465	7.8	7,368	14,193	9.5	8,974	17,741	9.0	8,502	17,720

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	10.5%	\$7,770	\$ 19,606	11.2%	\$8,288	\$ 20,499	11.9%	\$8,806	\$ 22,190
2022	76,035	10.5	7,984	19,794	11.2	8,516	20,696	11.9	9,048	22,403
2023	78,126	10.5	8,203	19,963	11.2	8,750	20,872	11.9	9,297	22,594
2024	80,274	10.5	8,429	20,110	11.2	8,991	21,026	11.9	9,553	22,760
2025	82,482	10.5	8,661	20,233	11.2	9,238	21,155	11.9	9,815	22,899
2026	84,750	10.5	8,899	20,329	11.2	9,492	21,256	11.9	10,085	23,008
2027	87,081	10.5	9,144	20,396	11.2	9,753	21,326	11.9	10,363	23,083
2028	89,476	10.5	9,395	20,430	11.2	10,021	21,362	11.9	10,648	23,121
2029	91,937	10.5	9,653	20,428	11.2	10,297	21,360	11.9	10,941	23,119
2030	94,465	10.5	9,919	20,387	11.2	10,580	21,317	11.9	11,241	23,072

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	13.1%	\$9,694	\$ 23,894	13.4%	\$9,916	\$ 24,739	14.9%	\$11,026	\$ 27,306
2022	76,035	13.1	9,961	24,123	13.4	10,189	24,976	14.9	11,329	27,568
2023	78,126	13.1	10,235	24,329	13.4	10,469	25,189	14.9	11,641	27,803
2024	80,274	13.1	10,516	24,508	13.4	10,757	25,374	14.9	11,961	28,008
2025	82,482	13.1	10,805	24,658	13.4	11,053	25,529	14.9	12,290	28,179
2026	84,750	13.1	11,102	24,775	13.4	11,357	25,650	14.9	12,628	28,313
2027	87,081	13.1	11,408	24,856	13.4	11,669	25,734	14.9	12,975	28,406
2028	89,476	13.1	11,721	24,897	13.4	11,990	25,777	14.9	13,332	28,453
2029	91,937	13.1	12,044	24,895	13.4	12,320	25,775	14.9	13,699	28,450
2030	94,465	13.1	12,375	24,844	13.4	12,658	25,723	14.9	14,075	28,392

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	5.9%	\$4,366	\$ 13,650	7.6%	\$5,624	\$ 17,061	7.1%	\$5,254	\$ 17,041
2022	76,035	5.9	4,486	13,781	7.6	5,779	17,225	7.1	5,398	17,204
2023	78,126	5.9	4,609	13,898	7.6	5,938	17,372	7.1	5,547	17,351
2024	80,274	5.9	4,736	14,000	7.6	6,101	17,500	7.1	5,699	17,479
2025	82,482	5.9	4,866	14,086	7.6	6,269	17,607	7.1	5,856	17,586
2026	84,750	5.9	5,000	14,153	7.6	6,441	17,691	7.1	6,017	17,670
2027	87,081	5.9	5,138	14,199	7.6	6,618	17,749	7.1	6,183	17,728
2028	89,476	5.9	5,279	14,223	7.6	6,800	17,779	7.1	6,353	17,758
2029	91,937	5.9	5,424	14,222	7.6	6,987	17,777	7.1	6,528	17,756
2030	94,465	5.9	5,573	14,193	7.6	7,179	17,741	7.1	6,707	17,720

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	8.6%	\$6,364	\$ 19,606	9.3%	\$6,882	\$ 20,499	10.0%	\$7,400	\$ 22,190
2022	76,035	8.6	6,539	19,794	9.3	7,071	20,696	10.0	7,604	22,403
2023	78,126	8.6	6,719	19,963	9.3	7,266	20,872	10.0	7,813	22,594
2024	80,274	8.6	6,904	20,110	9.3	7,465	21,026	10.0	8,027	22,760
2025	82,482	8.6	7,093	20,233	9.3	7,671	21,155	10.0	8,248	22,899
2026	84,750	8.6	7,289	20,329	9.3	7,882	21,256	10.0	8,475	23,008
2027	87,081	8.6	7,489	20,396	9.3	8,099	21,326	10.0	8,708	23,083
2028	89,476	8.6	7,695	20,430	9.3	8,321	21,362	10.0	8,948	23,121
2029	91,937	8.6	7,907	20,428	9.3	8,550	21,360	10.0	9,194	23,119
2030	94,465	8.6	8,124	20,387	9.3	8,785	21,317	10.0	9,447	23,072

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	11.2%	\$8,288	\$ 23,894	11.5%	\$8,510	\$ 24,739	13.0%	\$9,620	\$ 27,306
2022	76,035	11.2	8,516	24,123	11.5	8,744	24,976	13.0	9,885	27,568
2023	78,126	11.2	8,750	24,329	11.5	8,984	25,189	13.0	10,156	27,803
2024	80,274	11.2	8,991	24,508	11.5	9,232	25,374	13.0	10,436	28,008
2025	82,482	11.2	9,238	24,658	11.5	9,485	25,529	13.0	10,723	28,179
2026	84,750	11.2	9,492	24,775	11.5	9,746	25,650	13.0	11,018	28,313
2027	87,081	11.2	9,753	24,856	11.5	10,014	25,734	13.0	11,321	28,406
2028	89,476	11.2	10,021	24,897	11.5	10,290	25,777	13.0	11,632	28,453
2029	91,937	11.2	10,297	24,895	11.5	10,573	25,775	13.0	11,952	28,450
2030	94,465	11.2	10,580	24,844	11.5	10,863	25,723	13.0	12,280	28,392

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Bunker - General

## Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	4.0%	\$2,960	\$ 13,650	5.7%	\$4,218	\$ 17,061	5.2%	\$3,848	\$ 17,041
2022	76,035	4.0	3,041	13,781	5.7	4,334	17,225	5.2	3,954	17,204
2023	78,126	4.0	3,125	13,898	5.7	4,453	17,372	5.2	4,063	17,351
2024	80,274	4.0	3,211	14,000	5.7	4,576	17,500	5.2	4,174	17,479
2025	82,482	4.0	3,299	14,086	5.7	4,701	17,607	5.2	4,289	17,586
2026	84,750	4.0	3,390	14,153	5.7	4,831	17,691	5.2	4,407	17,670
2027	87,081	4.0	3,483	14,199	5.7	4,964	17,749	5.2	4,528	17,728
2028	89,476	4.0	3,579	14,223	5.7	5,100	17,779	5.2	4,653	17,758
2029	91,937	4.0	3,677	14,222	5.7	5,240	17,777	5.2	4,781	17,756
2030	94,465	4.0	3,779	14,193	5.7	5,385	17,741	5.2	4,912	17,720

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	6.7%	\$4,958	\$ 19,606	7.4%	\$5,476	\$ 20,499	8.1%	\$5,994	\$ 22,190
2022	76,035	6.7	5,094	19,794	7.4	5,627	20,696	8.1	6,159	22,403
2023	78,126	6.7	5,234	19,963	7.4	5,781	20,872	8.1	6,328	22,594
2024	80,274	6.7	5,378	20,110	7.4	5,940	21,026	8.1	6,502	22,760
2025	82,482	6.7	5,526	20,233	7.4	6,104	21,155	8.1	6,681	22,899
2026	84,750	6.7	5,678	20,329	7.4	6,272	21,256	8.1	6,865	23,008
2027	87,081	6.7	5,834	20,396	7.4	6,444	21,326	8.1	7,054	23,083
2028	89,476	6.7	5,995	20,430	7.4	6,621	21,362	8.1	7,248	23,121
2029	91,937	6.7	6,160	20,428	7.4	6,803	21,360	8.1	7,447	23,119
2030	94,465	6.7	6,329	20,387	7.4	6,990	21,317	8.1	7,652	23,072

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	9.3%	\$6,882	\$ 23,894	9.6%	\$7,104	\$ 24,739	11.1%	\$8,214	\$ 27,306
2022	76,035	9.3	7,071	24,123	9.6	7,299	24,976	11.1	8,440	27,568
2023	78,126	9.3	7,266	24,329	9.6	7,500	25,189	11.1	8,672	27,803
2024	80,274	9.3	7,465	24,508	9.6	7,706	25,374	11.1	8,910	28,008
2025	82,482	9.3	7,671	24,658	9.6	7,918	25,529	11.1	9,156	28,179
2026	84,750	9.3	7,882	24,775	9.6	8,136	25,650	11.1	9,407	28,313
2027	87,081	9.3	8,099	24,856	9.6	8,360	25,734	11.1	9,666	28,406
2028	89,476	9.3	8,321	24,897	9.6	8,590	25,777	11.1	9,932	28,453
2029	91,937	9.3	8,550	24,895	9.6	8,826	25,775	11.1	10,205	28,450
2030	94,465	9.3	8,785	24,844	9.6	9,069	25,723	11.1	10,486	28,392

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.





# City of Bunker - General

## Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS) (Member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	2.1%	\$1,554	\$ 13,650	3.8%	\$2,812	\$ 17,061	3.3%	\$2,442	\$ 17,041
2022	76,035	2.1	1,597	13,781	3.8	2,889	17,225	3.3	2,509	17,204
2023	78,126	2.1	1,641	13,898	3.8	2,969	17,372	3.3	2,578	17,351
2024	80,274	2.1	1,686	14,000	3.8	3,050	17,500	3.3	2,649	17,479
2025	82,482	2.1	1,732	14,086	3.8	3,134	17,607	3.3	2,722	17,586
2026	84,750	2.1	1,780	14,153	3.8	3,221	17,691	3.3	2,797	17,670
2027	87,081	2.1	1,829	14,199	3.8	3,309	17,749	3.3	2,874	17,728
2028	89,476	2.1	1,879	14,223	3.8	3,400	17,779	3.3	2,953	17,758
2029	91,937	2.1	1,931	14,222	3.8	3,494	17,777	3.3	3,034	17,756
2030	94,465	2.1	1,984	14,193	3.8	3,590	17,741	3.3	3,117	17,720

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	4.8%	\$3,552	\$ 19,606	5.5%	\$4,070	\$ 20,499	6.2%	\$4,588	\$ 22,190
2022	76,035	4.8	3,650	19,794	5.5	4,182	20,696	6.2	4,714	22,403
2023	78,126	4.8	3,750	19,963	5.5	4,297	20,872	6.2	4,844	22,594
2024	80,274	4.8	3,853	20,110	5.5	4,415	21,026	6.2	4,977	22,760
2025	82,482	4.8	3,959	20,233	5.5	4,537	21,155	6.2	5,114	22,899
2026	84,750	4.8	4,068	20,329	5.5	4,661	21,256	6.2	5,255	23,008
2027	87,081	4.8	4,180	20,396	5.5	4,789	21,326	6.2	5,399	23,083
2028	89,476	4.8	4,295	20,430	5.5	4,921	21,362	6.2	5,548	23,121
2029	91,937	4.8	4,413	20,428	5.5	5,057	21,360	6.2	5,700	23,119
2030	94,465	4.8	4,534	20,387	5.5	5,196	21,317	6.2	5,857	23,072

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 74,000	7.4%	\$5,476	\$ 23,894	7.7%	\$5,698	\$ 24,739	9.2%	\$6,808	\$ 27,306
2022	76,035	7.4	5,627	24,123	7.7	5,855	24,976	9.2	6,995	27,568
2023	78,126	7.4	5,781	24,329	7.7	6,016	25,189	9.2	7,188	27,803
2024	80,274	7.4	5,940	24,508	7.7	6,181	25,374	9.2	7,385	28,008
2025	82,482	7.4	6,104	24,658	7.7	6,351	25,529	9.2	7,588	28,179
2026	84,750	7.4	6,272	24,775	7.7	6,526	25,650	9.2	7,797	28,313
2027	87,081	7.4	6,444	24,856	7.7	6,705	25,734	9.2	8,011	28,406
2028	89,476	7.4	6,621	24,897	7.7	6,890	25,777	9.2	8,232	28,453
2029	91,937	7.4	6,803	24,895	7.7	7,079	25,775	9.2	8,458	28,450
2030	94,465	7.4	6,990	24,844	7.7	7,274	25,723	9.2	8,691	28,392

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

