



The Initial Valuation For
City of Kirkwood
as of September 30, 2021



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November 11, 2021

City of Kirkwood
Kirkwood, 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 - 105.685 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 September 30, 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.

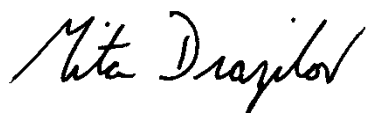
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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 Kirkwood

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	6.60%	0.20%	1.00%	7.80%	5.90%	4.00%	2.10%
L-3	General	8.10	0.30	1.30	9.70	7.80	5.90	4.00
LT-4(65)	General	7.30	0.20	1.10	8.60	6.70	4.80	2.90
LT-5(65)	General	8.60	0.30	1.30	10.20	8.30	6.40	4.50
L-7	General	9.50	0.30	1.50	11.30	9.40	7.50	5.60
LT-8(65)	General	9.80	0.30	1.60	11.70	9.80	7.90	6.00
L-12	General	10.90	0.40	1.80	13.10	11.20	9.30	7.40
LT-14(65)	General	11.10	0.40	1.80	13.30	11.40	9.50	7.60
L-6	General	12.30	0.50	2.00	14.80	12.90	11.00	9.10

* Prior service given for vesting purposes only.

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 Kirkwood

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	6.80%	0.20%	1.10%	8.10%	6.20%	4.30%	2.40%
L-3	General	8.30	0.30	1.30	9.90	8.00	6.10	4.20
LT-4(65)	General	7.50	0.20	1.10	8.80	6.90	5.00	3.10
LT-5(65)	General	8.80	0.30	1.40	10.50	8.60	6.70	4.80
L-7	General	9.80	0.30	1.60	11.70	9.80	7.90	6.00
LT-8(65)	General	10.10	0.30	1.60	12.00	10.10	8.20	6.30
L-12	General	11.30	0.40	1.80	13.50	11.60	9.70	7.80
LT-14(65)	General	11.40	0.40	1.90	13.70	11.80	9.90	8.00
L-6	General	12.70	0.50	2.10	15.30	13.40	11.50	9.60

* Prior service given for vesting purposes only.

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 Kirkwood

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	7.00%	0.20%	1.00%	8.20%	6.30%	4.40%	2.50%
L-3	General	8.50	0.30	1.20	10.00	8.10	6.20	4.30
LT-4(65)	General	8.20	0.20	1.10	9.50	7.60	5.70	3.80
LT-5(65)	General	9.40	0.30	1.30	11.00	9.10	7.20	5.30
L-7	General	10.10	0.30	1.50	11.90	10.00	8.10	6.20
LT-8(65)	General	10.70	0.30	1.50	12.50	10.60	8.70	6.80
L-12	General	11.60	0.40	1.70	13.70	11.80	9.90	8.00
LT-14(65)	General	11.90	0.40	1.80	14.10	12.20	10.30	8.40
L-6	General	13.10	0.50	2.00	15.60	13.70	11.80	9.90

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.

* Prior service given for vesting purposes only.

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 Kirkwood

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	7.20%	0.20%	1.00%	8.40%	6.50%	4.60%	2.70%
L-3	General	8.80	0.30	1.30	10.40	8.50	6.60	4.70
LT-4(65)	General	8.50	0.20	1.20	9.90	8.00	6.10	4.20
LT-5(65)	General	9.70	0.30	1.40	11.40	9.50	7.60	5.70
L-7	General	10.40	0.30	1.50	12.20	10.30	8.40	6.50
LT-8(65)	General	11.00	0.30	1.60	12.90	11.00	9.10	7.20
L-12	General	12.00	0.40	1.80	14.20	12.30	10.40	8.50
LT-14(65)	General	12.30	0.40	1.80	14.50	12.60	10.70	8.80
L-6	General	13.60	0.50	2.00	16.10	14.20	12.30	10.40

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.

* Prior service given for vesting purposes only.

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 Kirkwood

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

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 916,963	\$ 693,601	\$ 470,238	\$ 246,875
L-3	1,140,326	916,963	693,601	470,238
LT-4(65)	1,011,011	787,648	564,285	340,922
LT-5(65)	1,199,106	975,743	752,380	529,017
L-7	1,328,421	1,105,059	881,696	658,333
LT-8(65)	1,375,445	1,152,082	928,719	705,357
L-12	1,540,028	1,316,666	1,093,303	869,940
LT-14(65)	1,563,540	1,340,177	1,116,815	893,452
L-6	1,739,879	1,516,517	1,293,154	1,069,791

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 952,231	\$ 728,868	\$ 505,506	\$ 282,143
L-3	1,163,838	940,475	717,112	493,750
LT-4(65)	1,034,523	811,160	587,797	364,434
LT-5(65)	1,234,374	1,011,011	787,648	564,285
L-7	1,375,445	1,152,082	928,719	705,357
LT-8(65)	1,410,713	1,187,350	963,987	740,624
L-12	1,587,052	1,363,689	1,140,326	916,963
LT-14(65)	1,610,564	1,387,201	1,163,838	940,475
L-6	1,798,659	1,575,296	1,351,933	1,128,570

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 963,987	\$ 740,624	\$ 517,261	\$ 293,899
L-3	1,175,594	952,231	728,868	505,506
LT-4(65)	1,116,815	893,452	670,089	446,726
LT-5(65)	1,293,154	1,069,791	846,428	623,065
L-7	1,398,957	1,175,594	952,231	728,868
LT-8(65)	1,469,493	1,246,130	1,022,767	799,404
L-12	1,610,564	1,387,201	1,163,838	940,475
LT-14(65)	1,657,588	1,434,225	1,210,862	987,499
L-6	1,833,927	1,610,564	1,387,201	1,163,838

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 987,499	\$ 764,136	\$ 540,773	\$ 317,410
L-3	1,222,618	999,255	775,892	552,529
LT-4(65)	1,163,838	940,475	717,112	493,750
LT-5(65)	1,340,177	1,116,815	893,452	670,089
L-7	1,434,225	1,210,862	987,499	764,136
LT-8(65)	1,516,517	1,293,154	1,069,791	846,428
L-12	1,669,344	1,445,981	1,222,618	999,255
LT-14(65)	1,704,612	1,481,249	1,257,886	1,034,523
L-6	1,892,707	1,669,344	1,445,981	1,222,618

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 Kirkwood

Employees and Payroll Included in the Valuation

	General
Number of Employees	176
Annual Payroll	\$ 11,755,942

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 Kirkwood

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 2,056,732	\$ 2,117,873
L-3	General	2,570,979	2,647,327
LT-4(65)	General	2,201,516	2,267,508
LT-5(65)	General	2,679,516	2,759,566
L-7	General	3,085,171	3,176,752
LT-8(65)	General	3,157,593	3,251,646
L-12	General	3,599,320	3,706,274
LT-14(65)	General	3,635,512	3,743,665
L-6	General	4,113,424	4,235,674

City of Kirkwood

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	\$ 1,974,931	\$ 2,035,500
L-3	General	2,468,567	2,544,310
LT-4(65)	General	2,245,567	2,315,588
LT-5(65)	General	2,671,532	2,754,477
L-7	General	2,962,443	3,053,157
LT-8(65)	General	3,097,725	3,193,258
L-12	General	3,456,016	3,562,227
LT-14(65)	General	3,523,571	3,632,251
L-6	General	3,949,686	4,071,129

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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹ to age 65) 1.00% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹ to age 65) 1.25% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹ to age 65)
1.50% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	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%

¹ "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.

² "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.

³ 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 ¹ to age 65)
1.75% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	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%

¹ "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.

² "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.

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

City of Kirkwood - General

September 30, 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
Under 20									
20-24	5							5	\$ 189,537
25-29	11	1						12	\$ 630,175
30-34	14	3						17	\$ 893,112
35-39	10	5	5					20	\$ 1,221,686
40-44	5	8	2	3				18	\$ 1,328,092
45-49	5	3	2		2			12	\$ 795,508
50-54	9	3	5	4	3		1	25	\$ 1,559,248
55-59	2	2	4	3	2	2	7	22	\$ 1,743,674
60-64	3	5	2	2	5	5	10	32	\$ 2,662,915
65-69	2	3	1		2	1	3	12	\$ 686,996
70 & Over		1						1	\$ 44,999
Totals	66	34	21	12	14	8	21	176	\$ 11,755,942

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

Age: 48.0 years.

Benefit Service: 0.0 years.

Annual Pay: \$66,795.

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.



November 11, 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 September 30, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Kirkwood

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



November 11, 2021

City of Kirkwood
Kirkwood, Missouri

Ladies and Gentlemen:

This report contains 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. This report is intended to be a supplement to the September 30, 2021 Initial Valuation for the City of Kirkwood dated November 11, 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 Kirkwood - 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 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	\$ 11,755,942	7.8%	\$916,963	\$ 2,056,732	9.7%	\$1,140,326	\$ 2,570,979	8.6%	\$1,011,011	\$ 2,201,516
2022	12,079,231	7.8	942,180	2,076,462	9.7	1,171,685	2,595,642	8.6	1,038,814	2,222,634
2023	12,411,410	7.8	968,090	2,094,156	9.7	1,203,907	2,617,760	8.6	1,067,381	2,241,573
2024	12,752,724	7.8	994,712	2,109,578	9.7	1,237,014	2,637,038	8.6	1,096,734	2,258,080
2025	13,103,424	7.8	1,022,067	2,122,472	9.7	1,271,032	2,653,156	8.6	1,126,894	2,271,882
2026	13,463,768	7.8	1,050,174	2,132,563	9.7	1,305,985	2,665,770	8.6	1,157,884	2,282,683
2027	13,834,022	7.8	1,079,054	2,139,552	9.7	1,341,900	2,674,506	8.6	1,189,726	2,290,164
2028	14,214,458	7.8	1,108,728	2,143,117	9.7	1,378,802	2,678,962	8.6	1,222,443	2,293,980
2029	14,605,356	7.8	1,139,218	2,142,911	9.7	1,416,720	2,678,704	8.6	1,256,061	2,293,759
2030	15,007,003	7.8	1,170,546	2,138,559	9.7	1,455,679	2,673,264	8.6	1,290,602	2,289,101

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	\$ 11,755,942	10.2%	\$1,199,106	\$ 2,679,516	11.3%	\$1,328,421	\$ 3,085,171	11.7%	\$1,375,445	\$ 3,157,593
2022	12,079,231	10.2	1,232,082	2,705,220	11.3	1,364,953	3,114,766	11.7	1,413,270	3,187,883
2023	12,411,410	10.2	1,265,964	2,728,272	11.3	1,402,489	3,141,307	11.7	1,452,135	3,215,047
2024	12,752,724	10.2	1,300,778	2,748,364	11.3	1,441,058	3,164,440	11.7	1,492,069	3,238,723
2025	13,103,424	10.2	1,336,549	2,765,163	11.3	1,480,687	3,183,782	11.7	1,533,101	3,258,519
2026	13,463,768	10.2	1,373,304	2,778,309	11.3	1,521,406	3,198,918	11.7	1,575,261	3,274,011
2027	13,834,022	10.2	1,411,070	2,787,414	11.3	1,563,244	3,209,401	11.7	1,618,581	3,284,740
2028	14,214,458	10.2	1,449,875	2,792,058	11.3	1,606,234	3,214,748	11.7	1,663,092	3,290,213
2029	14,605,356	10.2	1,489,746	2,791,789	11.3	1,650,405	3,214,439	11.7	1,708,827	3,289,896
2030	15,007,003	10.2	1,530,714	2,786,119	11.3	1,695,791	3,207,911	11.7	1,755,819	3,283,215

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	\$ 11,755,942	13.1%	\$1,540,028	\$ 3,599,320	13.3%	\$1,563,540	\$ 3,635,512	14.8%	\$1,739,879	\$ 4,113,424
2022	12,079,231	13.1	1,582,379	3,633,847	13.3	1,606,538	3,670,386	14.8	1,787,726	4,152,883
2023	12,411,410	13.1	1,625,895	3,664,812	13.3	1,650,718	3,701,662	14.8	1,836,889	4,188,270
2024	12,752,724	13.1	1,670,607	3,691,801	13.3	1,696,112	3,728,922	14.8	1,887,403	4,219,113
2025	13,103,424	13.1	1,716,549	3,714,366	13.3	1,742,755	3,751,714	14.8	1,939,307	4,244,901
2026	13,463,768	13.1	1,763,754	3,732,025	13.3	1,790,681	3,769,550	14.8	1,992,638	4,265,082
2027	13,834,022	13.1	1,812,257	3,744,255	13.3	1,839,925	3,781,903	14.8	2,047,435	4,279,059
2028	14,214,458	13.1	1,862,094	3,750,493	13.3	1,890,523	3,788,204	14.8	2,103,740	4,286,188
2029	14,605,356	13.1	1,913,302	3,750,132	13.3	1,942,512	3,787,839	14.8	2,161,593	4,285,776
2030	15,007,003	13.1	1,965,917	3,742,516	13.3	1,995,931	3,780,147	14.8	2,221,036	4,277,072

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	5.9%	\$693,601	\$ 2,056,732	7.8%	\$916,963	\$ 2,570,979	6.7%	\$787,648	\$ 2,201,516
2022	12,079,231	5.9	712,675	2,076,462	7.8	942,180	2,595,642	6.7	809,308	2,222,634
2023	12,411,410	5.9	732,273	2,094,156	7.8	968,090	2,617,760	6.7	831,564	2,241,573
2024	12,752,724	5.9	752,411	2,109,578	7.8	994,712	2,637,038	6.7	854,433	2,258,080
2025	13,103,424	5.9	773,102	2,122,472	7.8	1,022,067	2,653,156	6.7	877,929	2,271,882
2026	13,463,768	5.9	794,362	2,132,563	7.8	1,050,174	2,665,770	6.7	902,072	2,282,683
2027	13,834,022	5.9	816,207	2,139,552	7.8	1,079,054	2,674,506	6.7	926,879	2,290,164
2028	14,214,458	5.9	838,653	2,143,117	7.8	1,108,728	2,678,962	6.7	952,369	2,293,980
2029	14,605,356	5.9	861,716	2,142,911	7.8	1,139,218	2,678,704	6.7	978,559	2,293,759
2030	15,007,003	5.9	885,413	2,138,559	7.8	1,170,546	2,673,264	6.7	1,005,469	2,289,101

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	\$ 11,755,942	8.3%	\$975,743	\$ 2,679,516	9.4%	\$1,105,059	\$ 3,085,171	9.8%	\$1,152,082	\$ 3,157,593
2022	12,079,231	8.3	1,002,576	2,705,220	9.4	1,135,448	3,114,766	9.8	1,183,765	3,187,883
2023	12,411,410	8.3	1,030,147	2,728,272	9.4	1,166,673	3,141,307	9.8	1,216,318	3,215,047
2024	12,752,724	8.3	1,058,476	2,748,364	9.4	1,198,756	3,164,440	9.8	1,249,767	3,238,723
2025	13,103,424	8.3	1,087,584	2,765,163	9.4	1,231,722	3,183,782	9.8	1,284,136	3,258,519
2026	13,463,768	8.3	1,117,493	2,778,309	9.4	1,265,594	3,198,918	9.8	1,319,449	3,274,011
2027	13,834,022	8.3	1,148,224	2,787,414	9.4	1,300,398	3,209,401	9.8	1,355,734	3,284,740
2028	14,214,458	8.3	1,179,800	2,792,058	9.4	1,336,159	3,214,748	9.8	1,393,017	3,290,213
2029	14,605,356	8.3	1,212,245	2,791,789	9.4	1,372,903	3,214,439	9.8	1,431,325	3,289,896
2030	15,007,003	8.3	1,245,581	2,786,119	9.4	1,410,658	3,207,911	9.8	1,470,686	3,283,215

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	\$ 11,755,942	11.2%	\$1,316,666	\$ 3,599,320	11.4%	\$1,340,177	\$ 3,635,512	12.9%	\$1,516,517	\$ 4,113,424
2022	12,079,231	11.2	1,352,874	3,633,847	11.4	1,377,032	3,670,386	12.9	1,558,221	4,152,883
2023	12,411,410	11.2	1,390,078	3,664,812	11.4	1,414,901	3,701,662	12.9	1,601,072	4,188,270
2024	12,752,724	11.2	1,428,305	3,691,801	11.4	1,453,811	3,728,922	12.9	1,645,101	4,219,113
2025	13,103,424	11.2	1,467,583	3,714,366	11.4	1,493,790	3,751,714	12.9	1,690,342	4,244,901
2026	13,463,768	11.2	1,507,942	3,732,025	11.4	1,534,870	3,769,550	12.9	1,736,826	4,265,082
2027	13,834,022	11.2	1,549,410	3,744,255	11.4	1,577,079	3,781,903	12.9	1,784,589	4,279,059
2028	14,214,458	11.2	1,592,019	3,750,493	11.4	1,620,448	3,788,204	12.9	1,833,665	4,286,188
2029	14,605,356	11.2	1,635,800	3,750,132	11.4	1,665,011	3,787,839	12.9	1,884,091	4,285,776
2030	15,007,003	11.2	1,680,784	3,742,516	11.4	1,710,798	3,780,147	12.9	1,935,903	4,277,072

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	4.0%	\$470,238	\$ 2,056,732	5.9%	\$693,601	\$ 2,570,979	4.8%	\$564,285	\$ 2,201,516
2022	12,079,231	4.0	483,169	2,076,462	5.9	712,675	2,595,642	4.8	579,803	2,222,634
2023	12,411,410	4.0	496,456	2,094,156	5.9	732,273	2,617,760	4.8	595,748	2,241,573
2024	12,752,724	4.0	510,109	2,109,578	5.9	752,411	2,637,038	4.8	612,131	2,258,080
2025	13,103,424	4.0	524,137	2,122,472	5.9	773,102	2,653,156	4.8	628,964	2,271,882
2026	13,463,768	4.0	538,551	2,132,563	5.9	794,362	2,665,770	4.8	646,261	2,282,683
2027	13,834,022	4.0	553,361	2,139,552	5.9	816,207	2,674,506	4.8	664,033	2,290,164
2028	14,214,458	4.0	568,578	2,143,117	5.9	838,653	2,678,962	4.8	682,294	2,293,980
2029	14,605,356	4.0	584,214	2,142,911	5.9	861,716	2,678,704	4.8	701,057	2,293,759
2030	15,007,003	4.0	600,280	2,138,559	5.9	885,413	2,673,264	4.8	720,336	2,289,101

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	\$ 11,755,942	6.4%	\$752,380	\$ 2,679,516	7.5%	\$881,696	\$ 3,085,171	7.9%	\$928,719	\$ 3,157,593
2022	12,079,231	6.4	773,071	2,705,220	7.5	905,942	3,114,766	7.9	954,259	3,187,883
2023	12,411,410	6.4	794,330	2,728,272	7.5	930,856	3,141,307	7.9	980,501	3,215,047
2024	12,752,724	6.4	816,174	2,748,364	7.5	956,454	3,164,440	7.9	1,007,465	3,238,723
2025	13,103,424	6.4	838,619	2,765,163	7.5	982,757	3,183,782	7.9	1,035,170	3,258,519
2026	13,463,768	6.4	861,681	2,778,309	7.5	1,009,783	3,198,918	7.9	1,063,638	3,274,011
2027	13,834,022	6.4	885,377	2,787,414	7.5	1,037,552	3,209,401	7.9	1,092,888	3,284,740
2028	14,214,458	6.4	909,725	2,792,058	7.5	1,066,084	3,214,748	7.9	1,122,942	3,290,213
2029	14,605,356	6.4	934,743	2,791,789	7.5	1,095,402	3,214,439	7.9	1,153,823	3,289,896
2030	15,007,003	6.4	960,448	2,786,119	7.5	1,125,525	3,207,911	7.9	1,185,553	3,283,215

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	\$ 11,755,942	9.3%	\$1,093,303	\$ 3,599,320	9.5%	\$1,116,815	\$ 3,635,512	11.0%	\$1,293,154	\$ 4,113,424
2022	12,079,231	9.3	1,123,368	3,633,847	9.5	1,147,527	3,670,386	11.0	1,328,715	4,152,883
2023	12,411,410	9.3	1,154,261	3,664,812	9.5	1,179,084	3,701,662	11.0	1,365,255	4,188,270
2024	12,752,724	9.3	1,186,003	3,691,801	9.5	1,211,509	3,728,922	11.0	1,402,800	4,219,113
2025	13,103,424	9.3	1,218,618	3,714,366	9.5	1,244,825	3,751,714	11.0	1,441,377	4,244,901
2026	13,463,768	9.3	1,252,130	3,732,025	9.5	1,279,058	3,769,550	11.0	1,481,014	4,265,082
2027	13,834,022	9.3	1,286,564	3,744,255	9.5	1,314,232	3,781,903	11.0	1,521,742	4,279,059
2028	14,214,458	9.3	1,321,945	3,750,493	9.5	1,350,374	3,788,204	11.0	1,563,590	4,286,188
2029	14,605,356	9.3	1,358,298	3,750,132	9.5	1,387,509	3,787,839	11.0	1,606,589	4,285,776
2030	15,007,003	9.3	1,395,651	3,742,516	9.5	1,425,665	3,780,147	11.0	1,650,770	4,277,072

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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 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	\$ 11,755,942	2.1%	\$246,875	\$ 2,056,732	4.0%	\$470,238	\$ 2,570,979	2.9%	\$340,922	\$ 2,201,516
2022	12,079,231	2.1	253,664	2,076,462	4.0	483,169	2,595,642	2.9	350,298	2,222,634
2023	12,411,410	2.1	260,640	2,094,156	4.0	496,456	2,617,760	2.9	359,931	2,241,573
2024	12,752,724	2.1	267,807	2,109,578	4.0	510,109	2,637,038	2.9	369,829	2,258,080
2025	13,103,424	2.1	275,172	2,122,472	4.0	524,137	2,653,156	2.9	379,999	2,271,882
2026	13,463,768	2.1	282,739	2,132,563	4.0	538,551	2,665,770	2.9	390,449	2,282,683
2027	13,834,022	2.1	290,514	2,139,552	4.0	553,361	2,674,506	2.9	401,187	2,290,164
2028	14,214,458	2.1	298,504	2,143,117	4.0	568,578	2,678,962	2.9	412,219	2,293,980
2029	14,605,356	2.1	306,712	2,142,911	4.0	584,214	2,678,704	2.9	423,555	2,293,759
2030	15,007,003	2.1	315,147	2,138,559	4.0	600,280	2,673,264	2.9	435,203	2,289,101

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	\$ 11,755,942	4.5%	\$529,017	\$ 2,679,516	5.6%	\$658,333	\$ 3,085,171	6.0%	\$705,357	\$ 3,157,593
2022	12,079,231	4.5	543,565	2,705,220	5.6	676,437	3,114,766	6.0	724,754	3,187,883
2023	12,411,410	4.5	558,513	2,728,272	5.6	695,039	3,141,307	6.0	744,685	3,215,047
2024	12,752,724	4.5	573,873	2,748,364	5.6	714,153	3,164,440	6.0	765,163	3,238,723
2025	13,103,424	4.5	589,654	2,765,163	5.6	733,792	3,183,782	6.0	786,205	3,258,519
2026	13,463,768	4.5	605,870	2,778,309	5.6	753,971	3,198,918	6.0	807,826	3,274,011
2027	13,834,022	4.5	622,531	2,787,414	5.6	774,705	3,209,401	6.0	830,041	3,284,740
2028	14,214,458	4.5	639,651	2,792,058	5.6	796,010	3,214,748	6.0	852,867	3,290,213
2029	14,605,356	4.5	657,241	2,791,789	5.6	817,900	3,214,439	6.0	876,321	3,289,896
2030	15,007,003	4.5	675,315	2,786,119	5.6	840,392	3,207,911	6.0	900,420	3,283,215

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	\$ 11,755,942	7.4%	\$869,940	\$ 3,599,320	7.6%	\$893,452	\$ 3,635,512	9.1%	\$1,069,791	\$ 4,113,424
2022	12,079,231	7.4	893,863	3,633,847	7.6	918,022	3,670,386	9.1	1,099,210	4,152,883
2023	12,411,410	7.4	918,444	3,664,812	7.6	943,267	3,701,662	9.1	1,129,438	4,188,270
2024	12,752,724	7.4	943,702	3,691,801	7.6	969,207	3,728,922	9.1	1,160,498	4,219,113
2025	13,103,424	7.4	969,653	3,714,366	7.6	995,860	3,751,714	9.1	1,192,412	4,244,901
2026	13,463,768	7.4	996,319	3,732,025	7.6	1,023,246	3,769,550	9.1	1,225,203	4,265,082
2027	13,834,022	7.4	1,023,718	3,744,255	7.6	1,051,386	3,781,903	9.1	1,258,896	4,279,059
2028	14,214,458	7.4	1,051,870	3,750,493	7.6	1,080,299	3,788,204	9.1	1,293,516	4,286,188
2029	14,605,356	7.4	1,080,796	3,750,132	7.6	1,110,007	3,787,839	9.1	1,329,087	4,285,776
2030	15,007,003	7.4	1,110,518	3,742,516	7.6	1,140,532	3,780,147	9.1	1,365,637	4,277,072

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	8.1%	\$952,231	\$ 2,117,873	9.9%	\$1,163,838	\$ 2,647,327	8.8%	\$1,034,523	\$ 2,267,508
2022	12,079,231	8.1	978,418	2,138,189	9.9	1,195,844	2,672,722	8.8	1,062,972	2,289,259
2023	12,411,410	8.1	1,005,324	2,156,409	9.9	1,228,730	2,695,497	8.8	1,092,204	2,308,766
2024	12,752,724	8.1	1,032,971	2,172,289	9.9	1,262,520	2,715,347	8.8	1,122,240	2,325,768
2025	13,103,424	8.1	1,061,377	2,185,567	9.9	1,297,239	2,731,944	8.8	1,153,101	2,339,984
2026	13,463,768	8.1	1,090,565	2,195,958	9.9	1,332,913	2,744,932	8.8	1,184,812	2,351,109
2027	13,834,022	8.1	1,120,556	2,203,154	9.9	1,369,568	2,753,927	8.8	1,217,394	2,358,814
2028	14,214,458	8.1	1,151,371	2,206,825	9.9	1,407,231	2,758,515	8.8	1,250,872	2,362,744
2029	14,605,356	8.1	1,183,034	2,206,613	9.9	1,445,930	2,758,250	8.8	1,285,271	2,362,517
2030	15,007,003	8.1	1,215,567	2,202,132	9.9	1,485,693	2,752,648	8.8	1,320,616	2,357,719

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	\$ 11,755,942	10.5%	\$1,234,374	\$ 2,759,566	11.7%	\$1,375,445	\$ 3,176,752	12.0%	\$1,410,713	\$ 3,251,646
2022	12,079,231	10.5	1,268,319	2,786,038	11.7	1,413,270	3,207,226	12.0	1,449,508	3,282,838
2023	12,411,410	10.5	1,303,198	2,809,778	11.7	1,452,135	3,234,555	12.0	1,489,369	3,310,812
2024	12,752,724	10.5	1,339,036	2,830,470	11.7	1,492,069	3,258,375	12.0	1,530,327	3,335,194
2025	13,103,424	10.5	1,375,860	2,847,771	11.7	1,533,101	3,278,291	12.0	1,572,411	3,355,579
2026	13,463,768	10.5	1,413,696	2,861,310	11.7	1,575,261	3,293,877	12.0	1,615,652	3,371,532
2027	13,834,022	10.5	1,452,572	2,870,687	11.7	1,618,581	3,304,671	12.0	1,660,083	3,382,581
2028	14,214,458	10.5	1,492,518	2,875,470	11.7	1,663,092	3,310,177	12.0	1,705,735	3,388,217
2029	14,605,356	10.5	1,533,562	2,875,193	11.7	1,708,827	3,309,858	12.0	1,752,643	3,387,891
2030	15,007,003	10.5	1,575,735	2,869,354	11.7	1,755,819	3,303,136	12.0	1,800,840	3,381,011

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	\$ 11,755,942	13.5%	\$1,587,052	\$ 3,706,274	13.7%	\$1,610,564	\$ 3,743,665	15.3%	\$1,798,659	\$ 4,235,674
2022	12,079,231	13.5	1,630,696	3,741,827	13.7	1,654,855	3,779,577	15.3	1,848,122	4,276,305
2023	12,411,410	13.5	1,675,540	3,773,712	13.7	1,700,363	3,811,783	15.3	1,898,946	4,312,744
2024	12,752,724	13.5	1,721,618	3,801,503	13.7	1,747,123	3,839,854	15.3	1,951,167	4,344,504
2025	13,103,424	13.5	1,768,962	3,824,739	13.7	1,795,169	3,863,324	15.3	2,004,824	4,371,059
2026	13,463,768	13.5	1,817,609	3,842,922	13.7	1,844,536	3,881,691	15.3	2,059,957	4,391,840
2027	13,834,022	13.5	1,867,593	3,855,516	13.7	1,895,261	3,894,412	15.3	2,116,605	4,406,232
2028	14,214,458	13.5	1,918,952	3,861,940	13.7	1,947,381	3,900,901	15.3	2,174,812	4,413,573
2029	14,605,356	13.5	1,971,723	3,861,568	13.7	2,000,934	3,900,526	15.3	2,234,619	4,413,148
2030	15,007,003	13.5	2,025,945	3,853,726	13.7	2,055,959	3,892,605	15.3	2,296,071	4,404,186

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	6.2%	\$728,868	\$ 2,117,873	8.0%	\$940,475	\$ 2,647,327	6.9%	\$811,160	\$ 2,267,508
2022	12,079,231	6.2	748,912	2,138,189	8.0	966,338	2,672,722	6.9	833,467	2,289,259
2023	12,411,410	6.2	769,507	2,156,409	8.0	992,913	2,695,497	6.9	856,387	2,308,766
2024	12,752,724	6.2	790,669	2,172,289	8.0	1,020,218	2,715,347	6.9	879,938	2,325,768
2025	13,103,424	6.2	812,412	2,185,567	8.0	1,048,274	2,731,944	6.9	904,136	2,339,984
2026	13,463,768	6.2	834,754	2,195,958	8.0	1,077,101	2,744,932	6.9	929,000	2,351,109
2027	13,834,022	6.2	857,709	2,203,154	8.0	1,106,722	2,753,927	6.9	954,548	2,358,814
2028	14,214,458	6.2	881,296	2,206,825	8.0	1,137,157	2,758,515	6.9	980,798	2,362,744
2029	14,605,356	6.2	905,532	2,206,613	8.0	1,168,428	2,758,250	6.9	1,007,770	2,362,517
2030	15,007,003	6.2	930,434	2,202,132	8.0	1,200,560	2,752,648	6.9	1,035,483	2,357,719

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	\$ 11,755,942	8.6%	\$1,011,011	\$ 2,759,566	9.8%	\$1,152,082	\$ 3,176,752	10.1%	\$1,187,350	\$ 3,251,646
2022	12,079,231	8.6	1,038,814	2,786,038	9.8	1,183,765	3,207,226	10.1	1,220,002	3,282,838
2023	12,411,410	8.6	1,067,381	2,809,778	9.8	1,216,318	3,234,555	10.1	1,253,552	3,310,812
2024	12,752,724	8.6	1,096,734	2,830,470	9.8	1,249,767	3,258,375	10.1	1,288,025	3,335,194
2025	13,103,424	8.6	1,126,894	2,847,771	9.8	1,284,136	3,278,291	10.1	1,323,446	3,355,579
2026	13,463,768	8.6	1,157,884	2,861,310	9.8	1,319,449	3,293,877	10.1	1,359,841	3,371,532
2027	13,834,022	8.6	1,189,726	2,870,687	9.8	1,355,734	3,304,671	10.1	1,397,236	3,382,581
2028	14,214,458	8.6	1,222,443	2,875,470	9.8	1,393,017	3,310,177	10.1	1,435,660	3,388,217
2029	14,605,356	8.6	1,256,061	2,875,193	9.8	1,431,325	3,309,858	10.1	1,475,141	3,387,891
2030	15,007,003	8.6	1,290,602	2,869,354	9.8	1,470,686	3,303,136	10.1	1,515,707	3,381,011

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	\$ 11,755,942	11.6%	\$1,363,689	\$ 3,706,274	11.8%	\$1,387,201	\$ 3,743,665	13.4%	\$1,575,296	\$ 4,235,674
2022	12,079,231	11.6	1,401,191	3,741,827	11.8	1,425,349	3,779,577	13.4	1,618,617	4,276,305
2023	12,411,410	11.6	1,439,724	3,773,712	11.8	1,464,546	3,811,783	13.4	1,663,129	4,312,744
2024	12,752,724	11.6	1,479,316	3,801,503	11.8	1,504,821	3,839,854	13.4	1,708,865	4,344,504
2025	13,103,424	11.6	1,519,997	3,824,739	11.8	1,546,204	3,863,324	13.4	1,755,859	4,371,059
2026	13,463,768	11.6	1,561,797	3,842,922	11.8	1,588,725	3,881,691	13.4	1,804,145	4,391,840
2027	13,834,022	11.6	1,604,747	3,855,516	11.8	1,632,415	3,894,412	13.4	1,853,759	4,406,232
2028	14,214,458	11.6	1,648,877	3,861,940	11.8	1,677,306	3,900,901	13.4	1,904,737	4,413,573
2029	14,605,356	11.6	1,694,221	3,861,568	11.8	1,723,432	3,900,526	13.4	1,957,118	4,413,148
2030	15,007,003	11.6	1,740,812	3,853,726	11.8	1,770,826	3,892,605	13.4	2,010,938	4,404,186

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	4.3%	\$505,506	\$ 2,117,873	6.1%	\$717,112	\$ 2,647,327	5.0%	\$587,797	\$ 2,267,508
2022	12,079,231	4.3	519,407	2,138,189	6.1	736,833	2,672,722	5.0	603,962	2,289,259
2023	12,411,410	4.3	533,691	2,156,409	6.1	757,096	2,695,497	5.0	620,571	2,308,766
2024	12,752,724	4.3	548,367	2,172,289	6.1	777,916	2,715,347	5.0	637,636	2,325,768
2025	13,103,424	4.3	563,447	2,185,567	6.1	799,309	2,731,944	5.0	655,171	2,339,984
2026	13,463,768	4.3	578,942	2,195,958	6.1	821,290	2,744,932	5.0	673,188	2,351,109
2027	13,834,022	4.3	594,863	2,203,154	6.1	843,875	2,753,927	5.0	691,701	2,358,814
2028	14,214,458	4.3	611,222	2,206,825	6.1	867,082	2,758,515	5.0	710,723	2,362,744
2029	14,605,356	4.3	628,030	2,206,613	6.1	890,927	2,758,250	5.0	730,268	2,362,517
2030	15,007,003	4.3	645,301	2,202,132	6.1	915,427	2,752,648	5.0	750,350	2,357,719

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	\$ 11,755,942	6.7%	\$787,648	\$ 2,759,566	7.9%	\$928,719	\$ 3,176,752	8.2%	\$963,987	\$ 3,251,646
2022	12,079,231	6.7	809,308	2,786,038	7.9	954,259	3,207,226	8.2	990,497	3,282,838
2023	12,411,410	6.7	831,564	2,809,778	7.9	980,501	3,234,555	8.2	1,017,736	3,310,812
2024	12,752,724	6.7	854,433	2,830,470	7.9	1,007,465	3,258,375	8.2	1,045,723	3,335,194
2025	13,103,424	6.7	877,929	2,847,771	7.9	1,035,170	3,278,291	8.2	1,074,481	3,355,579
2026	13,463,768	6.7	902,072	2,861,310	7.9	1,063,638	3,293,877	8.2	1,104,029	3,371,532
2027	13,834,022	6.7	926,879	2,870,687	7.9	1,092,888	3,304,671	8.2	1,134,390	3,382,581
2028	14,214,458	6.7	952,369	2,875,470	7.9	1,122,942	3,310,177	8.2	1,165,586	3,388,217
2029	14,605,356	6.7	978,559	2,875,193	7.9	1,153,823	3,309,858	8.2	1,197,639	3,387,891
2030	15,007,003	6.7	1,005,469	2,869,354	7.9	1,185,553	3,303,136	8.2	1,230,574	3,381,011

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	\$ 11,755,942	9.7%	\$1,140,326	\$ 3,706,274	9.9%	\$1,163,838	\$ 3,743,665	11.5%	\$1,351,933	\$ 4,235,674
2022	12,079,231	9.7	1,171,685	3,741,827	9.9	1,195,844	3,779,577	11.5	1,389,112	4,276,305
2023	12,411,410	9.7	1,203,907	3,773,712	9.9	1,228,730	3,811,783	11.5	1,427,312	4,312,744
2024	12,752,724	9.7	1,237,014	3,801,503	9.9	1,262,520	3,839,854	11.5	1,466,563	4,344,504
2025	13,103,424	9.7	1,271,032	3,824,739	9.9	1,297,239	3,863,324	11.5	1,506,894	4,371,059
2026	13,463,768	9.7	1,305,985	3,842,922	9.9	1,332,913	3,881,691	11.5	1,548,333	4,391,840
2027	13,834,022	9.7	1,341,900	3,855,516	9.9	1,369,568	3,894,412	11.5	1,590,913	4,406,232
2028	14,214,458	9.7	1,378,802	3,861,940	9.9	1,407,231	3,900,901	11.5	1,634,663	4,413,573
2029	14,605,356	9.7	1,416,720	3,861,568	9.9	1,445,930	3,900,526	11.5	1,679,616	4,413,148
2030	15,007,003	9.7	1,455,679	3,853,726	9.9	1,485,693	3,892,605	11.5	1,725,805	4,404,186

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	2.4%	\$282,143	\$ 2,117,873	4.2%	\$493,750	\$ 2,647,327	3.1%	\$364,434	\$ 2,267,508
2022	12,079,231	2.4	289,902	2,138,189	4.2	507,328	2,672,722	3.1	374,456	2,289,259
2023	12,411,410	2.4	297,874	2,156,409	4.2	521,279	2,695,497	3.1	384,754	2,308,766
2024	12,752,724	2.4	306,065	2,172,289	4.2	535,614	2,715,347	3.1	395,334	2,325,768
2025	13,103,424	2.4	314,482	2,185,567	4.2	550,344	2,731,944	3.1	406,206	2,339,984
2026	13,463,768	2.4	323,130	2,195,958	4.2	565,478	2,744,932	3.1	417,377	2,351,109
2027	13,834,022	2.4	332,017	2,203,154	4.2	581,029	2,753,927	3.1	428,855	2,358,814
2028	14,214,458	2.4	341,147	2,206,825	4.2	597,007	2,758,515	3.1	440,648	2,362,744
2029	14,605,356	2.4	350,529	2,206,613	4.2	613,425	2,758,250	3.1	452,766	2,362,517
2030	15,007,003	2.4	360,168	2,202,132	4.2	630,294	2,752,648	3.1	465,217	2,357,719

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	\$ 11,755,942	4.8%	\$564,285	\$ 2,759,566	6.0%	\$705,357	\$ 3,176,752	6.3%	\$740,624	\$ 3,251,646
2022	12,079,231	4.8	579,803	2,786,038	6.0	724,754	3,207,226	6.3	760,992	3,282,838
2023	12,411,410	4.8	595,748	2,809,778	6.0	744,685	3,234,555	6.3	781,919	3,310,812
2024	12,752,724	4.8	612,131	2,830,470	6.0	765,163	3,258,375	6.3	803,422	3,335,194
2025	13,103,424	4.8	628,964	2,847,771	6.0	786,205	3,278,291	6.3	825,516	3,355,579
2026	13,463,768	4.8	646,261	2,861,310	6.0	807,826	3,293,877	6.3	848,217	3,371,532
2027	13,834,022	4.8	664,033	2,870,687	6.0	830,041	3,304,671	6.3	871,543	3,382,581
2028	14,214,458	4.8	682,294	2,875,470	6.0	852,867	3,310,177	6.3	895,511	3,388,217
2029	14,605,356	4.8	701,057	2,875,193	6.0	876,321	3,309,858	6.3	920,137	3,387,891
2030	15,007,003	4.8	720,336	2,869,354	6.0	900,420	3,303,136	6.3	945,441	3,381,011

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	\$ 11,755,942	7.8%	\$916,963	\$ 3,706,274	8.0%	\$940,475	\$ 3,743,665	9.6%	\$1,128,570	\$ 4,235,674
2022	12,079,231	7.8	942,180	3,741,827	8.0	966,338	3,779,577	9.6	1,159,606	4,276,305
2023	12,411,410	7.8	968,090	3,773,712	8.0	992,913	3,811,783	9.6	1,191,495	4,312,744
2024	12,752,724	7.8	994,712	3,801,503	8.0	1,020,218	3,839,854	9.6	1,224,262	4,344,504
2025	13,103,424	7.8	1,022,067	3,824,739	8.0	1,048,274	3,863,324	9.6	1,257,929	4,371,059
2026	13,463,768	7.8	1,050,174	3,842,922	8.0	1,077,101	3,881,691	9.6	1,292,522	4,391,840
2027	13,834,022	7.8	1,079,054	3,855,516	8.0	1,106,722	3,894,412	9.6	1,328,066	4,406,232
2028	14,214,458	7.8	1,108,728	3,861,940	8.0	1,137,157	3,900,901	9.6	1,364,588	4,413,573
2029	14,605,356	7.8	1,139,218	3,861,568	8.0	1,168,428	3,900,526	9.6	1,402,114	4,413,148
2030	15,007,003	7.8	1,170,546	3,853,726	8.0	1,200,560	3,892,605	9.6	1,440,672	4,404,186

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	8.2%	\$963,987	\$ 1,974,931	10.0%	\$1,175,594	\$ 2,468,567	9.5%	\$1,116,815	\$ 2,245,567
2022	12,079,231	8.2	990,497	1,993,876	10.0	1,207,923	2,492,247	9.5	1,147,527	2,267,108
2023	12,411,410	8.2	1,017,736	2,010,866	10.0	1,241,141	2,513,484	9.5	1,179,084	2,286,426
2024	12,752,724	8.2	1,045,723	2,025,674	10.0	1,275,272	2,531,994	9.5	1,211,509	2,303,264
2025	13,103,424	8.2	1,074,481	2,038,055	10.0	1,310,342	2,547,470	9.5	1,244,825	2,317,342
2026	13,463,768	8.2	1,104,029	2,047,744	10.0	1,346,377	2,559,581	9.5	1,279,058	2,328,359
2027	13,834,022	8.2	1,134,390	2,054,455	10.0	1,383,402	2,567,969	9.5	1,314,232	2,335,989
2028	14,214,458	8.2	1,165,586	2,057,878	10.0	1,421,446	2,572,248	9.5	1,350,374	2,339,881
2029	14,605,356	8.2	1,197,639	2,057,680	10.0	1,460,536	2,572,000	9.5	1,387,509	2,339,656
2030	15,007,003	8.2	1,230,574	2,053,501	10.0	1,500,700	2,566,777	9.5	1,425,665	2,334,905

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	\$ 11,755,942	11.0%	\$1,293,154	\$ 2,671,532	11.9%	\$1,398,957	\$ 2,962,443	12.5%	\$1,469,493	\$ 3,097,725
2022	12,079,231	11.0	1,328,715	2,697,159	11.9	1,437,428	2,990,861	12.5	1,509,904	3,127,440
2023	12,411,410	11.0	1,365,255	2,720,142	11.9	1,476,958	3,016,347	12.5	1,551,426	3,154,089
2024	12,752,724	11.0	1,402,800	2,740,174	11.9	1,517,574	3,038,560	12.5	1,594,091	3,177,316
2025	13,103,424	11.0	1,441,377	2,756,923	11.9	1,559,307	3,057,132	12.5	1,637,928	3,196,737
2026	13,463,768	11.0	1,481,014	2,770,030	11.9	1,602,188	3,071,666	12.5	1,682,971	3,211,935
2027	13,834,022	11.0	1,521,742	2,779,108	11.9	1,646,249	3,081,732	12.5	1,729,253	3,222,461
2028	14,214,458	11.0	1,563,590	2,783,738	11.9	1,691,521	3,086,867	12.5	1,776,807	3,227,830
2029	14,605,356	11.0	1,606,589	2,783,470	11.9	1,738,037	3,086,570	12.5	1,825,670	3,227,519
2030	15,007,003	11.0	1,650,770	2,777,817	11.9	1,785,833	3,080,302	12.5	1,875,875	3,220,964

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	\$ 11,755,942	13.7%	\$1,610,564	\$ 3,456,016	14.1%	\$1,657,588	\$ 3,523,571	15.6%	\$1,833,927	\$ 3,949,686
2022	12,079,231	13.7	1,654,855	3,489,168	14.1	1,703,172	3,557,371	15.6	1,884,360	3,987,574
2023	12,411,410	13.7	1,700,363	3,518,900	14.1	1,750,009	3,587,684	15.6	1,936,180	4,021,553
2024	12,752,724	13.7	1,747,123	3,544,814	14.1	1,798,134	3,614,105	15.6	1,989,425	4,051,169
2025	13,103,424	13.7	1,795,169	3,566,481	14.1	1,847,583	3,636,195	15.6	2,044,134	4,075,931
2026	13,463,768	13.7	1,844,536	3,583,437	14.1	1,898,391	3,653,482	15.6	2,100,348	4,095,309
2027	13,834,022	13.7	1,895,261	3,595,180	14.1	1,950,597	3,665,455	15.6	2,158,107	4,108,730
2028	14,214,458	13.7	1,947,381	3,601,170	14.1	2,004,239	3,671,562	15.6	2,217,455	4,115,576
2029	14,605,356	13.7	2,000,934	3,600,823	14.1	2,059,355	3,671,209	15.6	2,278,436	4,115,180
2030	15,007,003	13.7	2,055,959	3,593,510	14.1	2,115,987	3,663,753	15.6	2,341,092	4,106,823

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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 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	\$ 11,755,942	6.3%	\$740,624	\$ 1,974,931	8.1%	\$952,231	\$ 2,468,567	7.6%	\$893,452	\$ 2,245,567
2022	12,079,231	6.3	760,992	1,993,876	8.1	978,418	2,492,247	7.6	918,022	2,267,108
2023	12,411,410	6.3	781,919	2,010,866	8.1	1,005,324	2,513,484	7.6	943,267	2,286,426
2024	12,752,724	6.3	803,422	2,025,674	8.1	1,032,971	2,531,994	7.6	969,207	2,303,264
2025	13,103,424	6.3	825,516	2,038,055	8.1	1,061,377	2,547,470	7.6	995,860	2,317,342
2026	13,463,768	6.3	848,217	2,047,744	8.1	1,090,565	2,559,581	7.6	1,023,246	2,328,359
2027	13,834,022	6.3	871,543	2,054,455	8.1	1,120,556	2,567,969	7.6	1,051,386	2,335,989
2028	14,214,458	6.3	895,511	2,057,878	8.1	1,151,371	2,572,248	7.6	1,080,299	2,339,881
2029	14,605,356	6.3	920,137	2,057,680	8.1	1,183,034	2,572,000	7.6	1,110,007	2,339,656
2030	15,007,003	6.3	945,441	2,053,501	8.1	1,215,567	2,566,777	7.6	1,140,532	2,334,905

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	\$ 11,755,942	9.1%	\$1,069,791	\$ 2,671,532	10.0%	\$1,175,594	\$ 2,962,443	10.6%	\$1,246,130	\$ 3,097,725
2022	12,079,231	9.1	1,099,210	2,697,159	10.0	1,207,923	2,990,861	10.6	1,280,398	3,127,440
2023	12,411,410	9.1	1,129,438	2,720,142	10.0	1,241,141	3,016,347	10.6	1,315,609	3,154,089
2024	12,752,724	9.1	1,160,498	2,740,174	10.0	1,275,272	3,038,560	10.6	1,351,789	3,177,316
2025	13,103,424	9.1	1,192,412	2,756,923	10.0	1,310,342	3,057,132	10.6	1,388,963	3,196,737
2026	13,463,768	9.1	1,225,203	2,770,030	10.0	1,346,377	3,071,666	10.6	1,427,159	3,211,935
2027	13,834,022	9.1	1,258,896	2,779,108	10.0	1,383,402	3,081,732	10.6	1,466,406	3,222,461
2028	14,214,458	9.1	1,293,516	2,783,738	10.0	1,421,446	3,086,867	10.6	1,506,733	3,227,830
2029	14,605,356	9.1	1,329,087	2,783,470	10.0	1,460,536	3,086,570	10.6	1,548,168	3,227,519
2030	15,007,003	9.1	1,365,637	2,777,817	10.0	1,500,700	3,080,302	10.6	1,590,742	3,220,964

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	\$ 11,755,942	11.8%	\$1,387,201	\$ 3,456,016	12.2%	\$1,434,225	\$ 3,523,571	13.7%	\$1,610,564	\$ 3,949,686
2022	12,079,231	11.8	1,425,349	3,489,168	12.2	1,473,666	3,557,371	13.7	1,654,855	3,987,574
2023	12,411,410	11.8	1,464,546	3,518,900	12.2	1,514,192	3,587,684	13.7	1,700,363	4,021,553
2024	12,752,724	11.8	1,504,821	3,544,814	12.2	1,555,832	3,614,105	13.7	1,747,123	4,051,169
2025	13,103,424	11.8	1,546,204	3,566,481	12.2	1,598,618	3,636,195	13.7	1,795,169	4,075,931
2026	13,463,768	11.8	1,588,725	3,583,437	12.2	1,642,580	3,653,482	13.7	1,844,536	4,095,309
2027	13,834,022	11.8	1,632,415	3,595,180	12.2	1,687,751	3,665,455	13.7	1,895,261	4,108,730
2028	14,214,458	11.8	1,677,306	3,601,170	12.2	1,734,164	3,671,562	13.7	1,947,381	4,115,576
2029	14,605,356	11.8	1,723,432	3,600,823	12.2	1,781,853	3,671,209	13.7	2,000,934	4,115,180
2030	15,007,003	11.8	1,770,826	3,593,510	12.2	1,830,854	3,663,753	13.7	2,055,959	4,106,823

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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 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	\$ 11,755,942	4.4%	\$517,261	\$ 1,974,931	6.2%	\$728,868	\$ 2,468,567	5.7%	\$670,089	\$ 2,245,567
2022	12,079,231	4.4	531,486	1,993,876	6.2	748,912	2,492,247	5.7	688,516	2,267,108
2023	12,411,410	4.4	546,102	2,010,866	6.2	769,507	2,513,484	5.7	707,450	2,286,426
2024	12,752,724	4.4	561,120	2,025,674	6.2	790,669	2,531,994	5.7	726,905	2,303,264
2025	13,103,424	4.4	576,551	2,038,055	6.2	812,412	2,547,470	5.7	746,895	2,317,342
2026	13,463,768	4.4	592,406	2,047,744	6.2	834,754	2,559,581	5.7	767,435	2,328,359
2027	13,834,022	4.4	608,697	2,054,455	6.2	857,709	2,567,969	5.7	788,539	2,335,989
2028	14,214,458	4.4	625,436	2,057,878	6.2	881,296	2,572,248	5.7	810,224	2,339,881
2029	14,605,356	4.4	642,636	2,057,680	6.2	905,532	2,572,000	5.7	832,505	2,339,656
2030	15,007,003	4.4	660,308	2,053,501	6.2	930,434	2,566,777	5.7	855,399	2,334,905

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	\$ 11,755,942	7.2%	\$846,428	\$ 2,671,532	8.1%	\$952,231	\$ 2,962,443	8.7%	\$1,022,767	\$ 3,097,725
2022	12,079,231	7.2	869,705	2,697,159	8.1	978,418	2,990,861	8.7	1,050,893	3,127,440
2023	12,411,410	7.2	893,622	2,720,142	8.1	1,005,324	3,016,347	8.7	1,079,793	3,154,089
2024	12,752,724	7.2	918,196	2,740,174	8.1	1,032,971	3,038,560	8.7	1,109,487	3,177,316
2025	13,103,424	7.2	943,447	2,756,923	8.1	1,061,377	3,057,132	8.7	1,139,998	3,196,737
2026	13,463,768	7.2	969,391	2,770,030	8.1	1,090,565	3,071,666	8.7	1,171,348	3,211,935
2027	13,834,022	7.2	996,050	2,779,108	8.1	1,120,556	3,081,732	8.7	1,203,560	3,222,461
2028	14,214,458	7.2	1,023,441	2,783,738	8.1	1,151,371	3,086,867	8.7	1,236,658	3,227,830
2029	14,605,356	7.2	1,051,586	2,783,470	8.1	1,183,034	3,086,570	8.7	1,270,666	3,227,519
2030	15,007,003	7.2	1,080,504	2,777,817	8.1	1,215,567	3,080,302	8.7	1,305,609	3,220,964

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	\$ 11,755,942	9.9%	\$1,163,838	\$ 3,456,016	10.3%	\$1,210,862	\$ 3,523,571	11.8%	\$1,387,201	\$ 3,949,686
2022	12,079,231	9.9	1,195,844	3,489,168	10.3	1,244,161	3,557,371	11.8	1,425,349	3,987,574
2023	12,411,410	9.9	1,228,730	3,518,900	10.3	1,278,375	3,587,684	11.8	1,464,546	4,021,553
2024	12,752,724	9.9	1,262,520	3,544,814	10.3	1,313,531	3,614,105	11.8	1,504,821	4,051,169
2025	13,103,424	9.9	1,297,239	3,566,481	10.3	1,349,653	3,636,195	11.8	1,546,204	4,075,931
2026	13,463,768	9.9	1,332,913	3,583,437	10.3	1,386,768	3,653,482	11.8	1,588,725	4,095,309
2027	13,834,022	9.9	1,369,568	3,595,180	10.3	1,424,904	3,665,455	11.8	1,632,415	4,108,730
2028	14,214,458	9.9	1,407,231	3,601,170	10.3	1,464,089	3,671,562	11.8	1,677,306	4,115,576
2029	14,605,356	9.9	1,445,930	3,600,823	10.3	1,504,352	3,671,209	11.8	1,723,432	4,115,180
2030	15,007,003	9.9	1,485,693	3,593,510	10.3	1,545,721	3,663,753	11.8	1,770,826	4,106,823

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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 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	\$ 11,755,942	2.5%	\$293,899	\$ 1,974,931	4.3%	\$505,506	\$ 2,468,567	3.8%	\$446,726	\$ 2,245,567
2022	12,079,231	2.5	301,981	1,993,876	4.3	519,407	2,492,247	3.8	459,011	2,267,108
2023	12,411,410	2.5	310,285	2,010,866	4.3	533,691	2,513,484	3.8	471,634	2,286,426
2024	12,752,724	2.5	318,818	2,025,674	4.3	548,367	2,531,994	3.8	484,604	2,303,264
2025	13,103,424	2.5	327,586	2,038,055	4.3	563,447	2,547,470	3.8	497,930	2,317,342
2026	13,463,768	2.5	336,594	2,047,744	4.3	578,942	2,559,581	3.8	511,623	2,328,359
2027	13,834,022	2.5	345,851	2,054,455	4.3	594,863	2,567,969	3.8	525,693	2,335,989
2028	14,214,458	2.5	355,361	2,057,878	4.3	611,222	2,572,248	3.8	540,149	2,339,881
2029	14,605,356	2.5	365,134	2,057,680	4.3	628,030	2,572,000	3.8	555,004	2,339,656
2030	15,007,003	2.5	375,175	2,053,501	4.3	645,301	2,566,777	3.8	570,266	2,334,905

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	\$ 11,755,942	5.3%	\$623,065	\$ 2,671,532	6.2%	\$728,868	\$ 2,962,443	6.8%	\$799,404	\$ 3,097,725
2022	12,079,231	5.3	640,199	2,697,159	6.2	748,912	2,990,861	6.8	821,388	3,127,440
2023	12,411,410	5.3	657,805	2,720,142	6.2	769,507	3,016,347	6.8	843,976	3,154,089
2024	12,752,724	5.3	675,894	2,740,174	6.2	790,669	3,038,560	6.8	867,185	3,177,316
2025	13,103,424	5.3	694,481	2,756,923	6.2	812,412	3,057,132	6.8	891,033	3,196,737
2026	13,463,768	5.3	713,580	2,770,030	6.2	834,754	3,071,666	6.8	915,536	3,211,935
2027	13,834,022	5.3	733,203	2,779,108	6.2	857,709	3,081,732	6.8	940,713	3,222,461
2028	14,214,458	5.3	753,366	2,783,738	6.2	881,296	3,086,867	6.8	966,583	3,227,830
2029	14,605,356	5.3	774,084	2,783,470	6.2	905,532	3,086,570	6.8	993,164	3,227,519
2030	15,007,003	5.3	795,371	2,777,817	6.2	930,434	3,080,302	6.8	1,020,476	3,220,964

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	\$ 11,755,942	8.0%	\$940,475	\$ 3,456,016	8.4%	\$987,499	\$ 3,523,571	9.9%	\$1,163,838	\$ 3,949,686
2022	12,079,231	8.0	966,338	3,489,168	8.4	1,014,655	3,557,371	9.9	1,195,844	3,987,574
2023	12,411,410	8.0	992,913	3,518,900	8.4	1,042,558	3,587,684	9.9	1,228,730	4,021,553
2024	12,752,724	8.0	1,020,218	3,544,814	8.4	1,071,229	3,614,105	9.9	1,262,520	4,051,169
2025	13,103,424	8.0	1,048,274	3,566,481	8.4	1,100,688	3,636,195	9.9	1,297,239	4,075,931
2026	13,463,768	8.0	1,077,101	3,583,437	8.4	1,130,957	3,653,482	9.9	1,332,913	4,095,309
2027	13,834,022	8.0	1,106,722	3,595,180	8.4	1,162,058	3,665,455	9.9	1,369,568	4,108,730
2028	14,214,458	8.0	1,137,157	3,601,170	8.4	1,194,014	3,671,562	9.9	1,407,231	4,115,576
2029	14,605,356	8.0	1,168,428	3,600,823	8.4	1,226,850	3,671,209	9.9	1,445,930	4,115,180
2030	15,007,003	8.0	1,200,560	3,593,510	8.4	1,260,588	3,663,753	9.9	1,485,693	4,106,823

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	8.4%	\$987,499	\$ 2,035,500	10.4%	\$1,222,618	\$ 2,544,310	9.9%	\$1,163,838	\$ 2,315,588
2022	12,079,231	8.4	1,014,655	2,055,026	10.4	1,256,240	2,568,717	9.9	1,195,844	2,337,801
2023	12,411,410	8.4	1,042,558	2,072,537	10.4	1,290,787	2,590,605	9.9	1,228,730	2,357,722
2024	12,752,724	8.4	1,071,229	2,087,800	10.4	1,326,283	2,609,683	9.9	1,262,520	2,375,085
2025	13,103,424	8.4	1,100,688	2,100,561	10.4	1,362,756	2,625,634	9.9	1,297,239	2,389,602
2026	13,463,768	8.4	1,130,957	2,110,547	10.4	1,400,232	2,638,117	9.9	1,332,913	2,400,963
2027	13,834,022	8.4	1,162,058	2,117,463	10.4	1,438,738	2,646,762	9.9	1,369,568	2,408,831
2028	14,214,458	8.4	1,194,014	2,120,991	10.4	1,478,304	2,651,172	9.9	1,407,231	2,412,844
2029	14,605,356	8.4	1,226,850	2,120,787	10.4	1,518,957	2,650,917	9.9	1,445,930	2,412,612
2030	15,007,003	8.4	1,260,588	2,116,480	10.4	1,560,728	2,645,533	9.9	1,485,693	2,407,712

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	\$ 11,755,942	11.4%	\$1,340,177	\$ 2,754,477	12.2%	\$1,434,225	\$ 3,053,157	12.9%	\$1,516,517	\$ 3,193,258
2022	12,079,231	11.4	1,377,032	2,780,900	12.2	1,473,666	3,082,445	12.9	1,558,221	3,223,890
2023	12,411,410	11.4	1,414,901	2,804,597	12.2	1,514,192	3,108,711	12.9	1,601,072	3,251,361
2024	12,752,724	11.4	1,453,811	2,825,251	12.2	1,555,832	3,131,604	12.9	1,645,101	3,275,305
2025	13,103,424	11.4	1,493,790	2,842,520	12.2	1,598,618	3,150,745	12.9	1,690,342	3,295,324
2026	13,463,768	11.4	1,534,870	2,856,034	12.2	1,642,580	3,165,724	12.9	1,736,826	3,310,991
2027	13,834,022	11.4	1,577,079	2,865,393	12.2	1,687,751	3,176,098	12.9	1,784,589	3,321,841
2028	14,214,458	11.4	1,620,448	2,870,167	12.2	1,734,164	3,181,390	12.9	1,833,665	3,327,376
2029	14,605,356	11.4	1,665,011	2,869,891	12.2	1,781,853	3,181,084	12.9	1,884,091	3,327,056
2030	15,007,003	11.4	1,710,798	2,864,063	12.2	1,830,854	3,174,624	12.9	1,935,903	3,320,299

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	\$ 11,755,942	14.2%	\$1,669,344	\$ 3,562,227	14.5%	\$1,704,612	\$ 3,632,251	16.1%	\$1,892,707	\$ 4,071,129
2022	12,079,231	14.2	1,715,251	3,596,398	14.5	1,751,488	3,667,094	16.1	1,944,756	4,110,182
2023	12,411,410	14.2	1,762,420	3,627,044	14.5	1,799,654	3,698,342	16.1	1,998,237	4,145,206
2024	12,752,724	14.2	1,810,887	3,653,754	14.5	1,849,145	3,725,577	16.1	2,053,189	4,175,732
2025	13,103,424	14.2	1,860,686	3,676,087	14.5	1,899,996	3,748,349	16.1	2,109,651	4,201,255
2026	13,463,768	14.2	1,911,855	3,693,564	14.5	1,952,246	3,766,169	16.1	2,167,667	4,221,228
2027	13,834,022	14.2	1,964,431	3,705,668	14.5	2,005,933	3,778,511	16.1	2,227,278	4,235,061
2028	14,214,458	14.2	2,018,453	3,711,842	14.5	2,061,096	3,784,807	16.1	2,288,528	4,242,117
2029	14,605,356	14.2	2,073,961	3,711,485	14.5	2,117,777	3,784,443	16.1	2,351,462	4,241,709
2030	15,007,003	14.2	2,130,994	3,703,948	14.5	2,176,015	3,776,757	16.1	2,416,127	4,233,095

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 11,755,942	6.5%	\$764,136	\$ 2,035,500	8.5%	\$999,255	\$ 2,544,310	8.0%	\$940,475	\$ 2,315,588
2022	12,079,231	6.5	785,150	2,055,026	8.5	1,026,735	2,568,717	8.0	966,338	2,337,801
2023	12,411,410	6.5	806,742	2,072,537	8.5	1,054,970	2,590,605	8.0	992,913	2,357,722
2024	12,752,724	6.5	828,927	2,087,800	8.5	1,083,982	2,609,683	8.0	1,020,218	2,375,085
2025	13,103,424	6.5	851,723	2,100,561	8.5	1,113,791	2,625,634	8.0	1,048,274	2,389,602
2026	13,463,768	6.5	875,145	2,110,547	8.5	1,144,420	2,638,117	8.0	1,077,101	2,400,963
2027	13,834,022	6.5	899,211	2,117,463	8.5	1,175,892	2,646,762	8.0	1,106,722	2,408,831
2028	14,214,458	6.5	923,940	2,120,991	8.5	1,208,229	2,651,172	8.0	1,137,157	2,412,844
2029	14,605,356	6.5	949,348	2,120,787	8.5	1,241,455	2,650,917	8.0	1,168,428	2,412,612
2030	15,007,003	6.5	975,455	2,116,480	8.5	1,275,595	2,645,533	8.0	1,200,560	2,407,712

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 11,755,942	9.5%	\$1,116,815	\$ 2,754,477	10.3%	\$1,210,862	\$ 3,053,157	11.0%	\$1,293,154	\$ 3,193,258
2022	12,079,231	9.5	1,147,527	2,780,900	10.3	1,244,161	3,082,445	11.0	1,328,715	3,223,890
2023	12,411,410	9.5	1,179,084	2,804,597	10.3	1,278,375	3,108,711	11.0	1,365,255	3,251,361
2024	12,752,724	9.5	1,211,509	2,825,251	10.3	1,313,531	3,131,604	11.0	1,402,800	3,275,305
2025	13,103,424	9.5	1,244,825	2,842,520	10.3	1,349,653	3,150,745	11.0	1,441,377	3,295,324
2026	13,463,768	9.5	1,279,058	2,856,034	10.3	1,386,768	3,165,724	11.0	1,481,014	3,310,991
2027	13,834,022	9.5	1,314,232	2,865,393	10.3	1,424,904	3,176,098	11.0	1,521,742	3,321,841
2028	14,214,458	9.5	1,350,374	2,870,167	10.3	1,464,089	3,181,390	11.0	1,563,590	3,327,376
2029	14,605,356	9.5	1,387,509	2,869,891	10.3	1,504,352	3,181,084	11.0	1,606,589	3,327,056
2030	15,007,003	9.5	1,425,665	2,864,063	10.3	1,545,721	3,174,624	11.0	1,650,770	3,320,299

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 11,755,942	12.3%	\$1,445,981	\$ 3,562,227	12.6%	\$1,481,249	\$ 3,632,251	14.2%	\$1,669,344	\$ 4,071,129
2022	12,079,231	12.3	1,485,745	3,596,398	12.6	1,521,983	3,667,094	14.2	1,715,251	4,110,182
2023	12,411,410	12.3	1,526,603	3,627,044	12.6	1,563,838	3,698,342	14.2	1,762,420	4,145,206
2024	12,752,724	12.3	1,568,585	3,653,754	12.6	1,606,843	3,725,577	14.2	1,810,887	4,175,732
2025	13,103,424	12.3	1,611,721	3,676,087	12.6	1,651,031	3,748,349	14.2	1,860,686	4,201,255
2026	13,463,768	12.3	1,656,043	3,693,564	12.6	1,696,435	3,766,169	14.2	1,911,855	4,221,228
2027	13,834,022	12.3	1,701,585	3,705,668	12.6	1,743,087	3,778,511	14.2	1,964,431	4,235,061
2028	14,214,458	12.3	1,748,378	3,711,842	12.6	1,791,022	3,784,807	14.2	2,018,453	4,242,117
2029	14,605,356	12.3	1,796,459	3,711,485	12.6	1,840,275	3,784,443	14.2	2,073,961	4,241,709
2030	15,007,003	12.3	1,845,861	3,703,948	12.6	1,890,882	3,776,757	14.2	2,130,994	4,233,095

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	4.6%	\$540,773	\$ 2,035,500	6.6%	\$775,892	\$ 2,544,310	6.1%	\$717,112	\$ 2,315,588
2022	12,079,231	4.6	555,645	2,055,026	6.6	797,229	2,568,717	6.1	736,833	2,337,801
2023	12,411,410	4.6	570,925	2,072,537	6.6	819,153	2,590,605	6.1	757,096	2,357,722
2024	12,752,724	4.6	586,625	2,087,800	6.6	841,680	2,609,683	6.1	777,916	2,375,085
2025	13,103,424	4.6	602,758	2,100,561	6.6	864,826	2,625,634	6.1	799,309	2,389,602
2026	13,463,768	4.6	619,333	2,110,547	6.6	888,609	2,638,117	6.1	821,290	2,400,963
2027	13,834,022	4.6	636,365	2,117,463	6.6	913,045	2,646,762	6.1	843,875	2,408,831
2028	14,214,458	4.6	653,865	2,120,991	6.6	938,154	2,651,172	6.1	867,082	2,412,844
2029	14,605,356	4.6	671,846	2,120,787	6.6	963,953	2,650,917	6.1	890,927	2,412,612
2030	15,007,003	4.6	690,322	2,116,480	6.6	990,462	2,645,533	6.1	915,427	2,407,712

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	\$ 11,755,942	7.6%	\$893,452	\$ 2,754,477	8.4%	\$987,499	\$ 3,053,157	9.1%	\$1,069,791	\$ 3,193,258
2022	12,079,231	7.6	918,022	2,780,900	8.4	1,014,655	3,082,445	9.1	1,099,210	3,223,890
2023	12,411,410	7.6	943,267	2,804,597	8.4	1,042,558	3,108,711	9.1	1,129,438	3,251,361
2024	12,752,724	7.6	969,207	2,825,251	8.4	1,071,229	3,131,604	9.1	1,160,498	3,275,305
2025	13,103,424	7.6	995,860	2,842,520	8.4	1,100,688	3,150,745	9.1	1,192,412	3,295,324
2026	13,463,768	7.6	1,023,246	2,856,034	8.4	1,130,957	3,165,724	9.1	1,225,203	3,310,991
2027	13,834,022	7.6	1,051,386	2,865,393	8.4	1,162,058	3,176,098	9.1	1,258,896	3,321,841
2028	14,214,458	7.6	1,080,299	2,870,167	8.4	1,194,014	3,181,390	9.1	1,293,516	3,327,376
2029	14,605,356	7.6	1,110,007	2,869,891	8.4	1,226,850	3,181,084	9.1	1,329,087	3,327,056
2030	15,007,003	7.6	1,140,532	2,864,063	8.4	1,260,588	3,174,624	9.1	1,365,637	3,320,299

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	\$ 11,755,942	10.4%	\$1,222,618	\$ 3,562,227	10.7%	\$1,257,886	\$ 3,632,251	12.3%	\$1,445,981	\$ 4,071,129
2022	12,079,231	10.4	1,256,240	3,596,398	10.7	1,292,478	3,667,094	12.3	1,485,745	4,110,182
2023	12,411,410	10.4	1,290,787	3,627,044	10.7	1,328,021	3,698,342	12.3	1,526,603	4,145,206
2024	12,752,724	10.4	1,326,283	3,653,754	10.7	1,364,541	3,725,577	12.3	1,568,585	4,175,732
2025	13,103,424	10.4	1,362,756	3,676,087	10.7	1,402,066	3,748,349	12.3	1,611,721	4,201,255
2026	13,463,768	10.4	1,400,232	3,693,564	10.7	1,440,623	3,766,169	12.3	1,656,043	4,221,228
2027	13,834,022	10.4	1,438,738	3,705,668	10.7	1,480,240	3,778,511	12.3	1,701,585	4,235,061
2028	14,214,458	10.4	1,478,304	3,711,842	10.7	1,520,947	3,784,807	12.3	1,748,378	4,242,117
2029	14,605,356	10.4	1,518,957	3,711,485	10.7	1,562,773	3,784,443	12.3	1,796,459	4,241,709
2030	15,007,003	10.4	1,560,728	3,703,948	10.7	1,605,749	3,776,757	12.3	1,845,861	4,233,095

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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 Kirkwood - 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	\$ 11,755,942	2.7%	\$317,410	\$ 2,035,500	4.7%	\$552,529	\$ 2,544,310	4.2%	\$493,750	\$ 2,315,588
2022	12,079,231	2.7	326,139	2,055,026	4.7	567,724	2,568,717	4.2	507,328	2,337,801
2023	12,411,410	2.7	335,108	2,072,537	4.7	583,336	2,590,605	4.2	521,279	2,357,722
2024	12,752,724	2.7	344,324	2,087,800	4.7	599,378	2,609,683	4.2	535,614	2,375,085
2025	13,103,424	2.7	353,792	2,100,561	4.7	615,861	2,625,634	4.2	550,344	2,389,602
2026	13,463,768	2.7	363,522	2,110,547	4.7	632,797	2,638,117	4.2	565,478	2,400,963
2027	13,834,022	2.7	373,519	2,117,463	4.7	650,199	2,646,762	4.2	581,029	2,408,831
2028	14,214,458	2.7	383,790	2,120,991	4.7	668,080	2,651,172	4.2	597,007	2,412,844
2029	14,605,356	2.7	394,345	2,120,787	4.7	686,452	2,650,917	4.2	613,425	2,412,612
2030	15,007,003	2.7	405,189	2,116,480	4.7	705,329	2,645,533	4.2	630,294	2,407,712

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	\$ 11,755,942	5.7%	\$670,089	\$ 2,754,477	6.5%	\$764,136	\$ 3,053,157	7.2%	\$846,428	\$ 3,193,258
2022	12,079,231	5.7	688,516	2,780,900	6.5	785,150	3,082,445	7.2	869,705	3,223,890
2023	12,411,410	5.7	707,450	2,804,597	6.5	806,742	3,108,711	7.2	893,622	3,251,361
2024	12,752,724	5.7	726,905	2,825,251	6.5	828,927	3,131,604	7.2	918,196	3,275,305
2025	13,103,424	5.7	746,895	2,842,520	6.5	851,723	3,150,745	7.2	943,447	3,295,324
2026	13,463,768	5.7	767,435	2,856,034	6.5	875,145	3,165,724	7.2	969,391	3,310,991
2027	13,834,022	5.7	788,539	2,865,393	6.5	899,211	3,176,098	7.2	996,050	3,321,841
2028	14,214,458	5.7	810,224	2,870,167	6.5	923,940	3,181,390	7.2	1,023,441	3,327,376
2029	14,605,356	5.7	832,505	2,869,891	6.5	949,348	3,181,084	7.2	1,051,586	3,327,056
2030	15,007,003	5.7	855,399	2,864,063	6.5	975,455	3,174,624	7.2	1,080,504	3,320,299

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	\$ 11,755,942	8.5%	\$999,255	\$ 3,562,227	8.8%	\$1,034,523	\$ 3,632,251	10.4%	\$1,222,618	\$ 4,071,129
2022	12,079,231	8.5	1,026,735	3,596,398	8.8	1,062,972	3,667,094	10.4	1,256,240	4,110,182
2023	12,411,410	8.5	1,054,970	3,627,044	8.8	1,092,204	3,698,342	10.4	1,290,787	4,145,206
2024	12,752,724	8.5	1,083,982	3,653,754	8.8	1,122,240	3,725,577	10.4	1,326,283	4,175,732
2025	13,103,424	8.5	1,113,791	3,676,087	8.8	1,153,101	3,748,349	10.4	1,362,756	4,201,255
2026	13,463,768	8.5	1,144,420	3,693,564	8.8	1,184,812	3,766,169	10.4	1,400,232	4,221,228
2027	13,834,022	8.5	1,175,892	3,705,668	8.8	1,217,394	3,778,511	10.4	1,438,738	4,235,061
2028	14,214,458	8.5	1,208,229	3,711,842	8.8	1,250,872	3,784,807	10.4	1,478,304	4,242,117
2029	14,605,356	8.5	1,241,455	3,711,485	8.8	1,285,271	3,784,443	10.4	1,518,957	4,241,709
2030	15,007,003	8.5	1,275,595	3,703,948	8.8	1,320,616	3,776,757	10.4	1,560,728	4,233,095

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 28th 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.

