The Initial Valuation For

City of Keytesville

as of May 31, 2022

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GRS
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October 25, 2022

City of Keytesville
Keytesville, 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, 2022.

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 May 31, 2022. 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,
Gabriel, Roeder, Smith & Company

Mita Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

GRS

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 Keytesville

Employer Contribution Rates
5 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates: 0%	2%	4%	6%
		Percents of Active Member Payroll						
L-1	General	6.60%	0.20%	6.80%	13.60%	11.70%	9.80%	7.90%
L-3	General	8.10	0.30	8.50	16.90	15.00	13.10	11.20
LT-4(65)	General	7.30	0.20	7.20	14.70	12.80	10.90	9.00
LT-5(65)	General	8.60	0.30	8.80	17.70	15.80	13.90	12.00
L-7	General	9.50	0.30	10.20	20.00	18.10	16.20	14.30
LT-8(65)	General	9.90	0.30	10.40	20.60	18.70	16.80	14.90
L-12	General	10.90	0.40	11.90	23.20	21.30	19.40	17.50
LT-14(65)	General	11.10	0.40	12.00	23.50	21.60	19.70	17.80
L-6	General	12.40	0.50	13.60	26.50	24.60	22.70	20.80

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

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

City of Keytesville

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%	7.00%	14.00%	12.10%	10.20%	8.30%
L-3	General	8.30	0.30	8.70	17.30	15.40	13.50	11.60
LT-4(65)	General	7.60	0.20	7.40	15.20	13.30	11.40	9.50
LT-5(65)	General	8.90	0.30	9.00	18.20	16.30	14.40	12.50
L-7	General	9.80	0.30	10.50	20.60	18.70	16.80	14.90
LT-8(65)	General	10.20	0.30	10.70	21.20	19.30	17.40	15.50
L-12	General	11.30	0.40	12.20	23.90	22.00	20.10	18.20
LT-14(65)	General	11.50	0.40	12.30	24.20	22.30	20.40	18.50
L-6	General	12.80	0.50	14.00	27.30	25.40	23.50	21.60

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

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

City of Keytesville

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	7.10%	0.20%	6.80%	14.10%	12.20%	10.30%	8.40%
L-3	General	8.60	0.30	8.50	17.40	15.50	13.60	11.70
LT-4(65)	General	8.30	0.20	7.30	15.80	13.90	12.00	10.10
LT-5(65)	General	9.50	0.30	8.90	18.70	16.80	14.90	13.00
L-7	General	10.10	0.30	10.30	20.70	18.80	16.90	15.00
LT-8(65)	General	10.80	0.30	10.50	21.60	19.70	17.80	15.90
L-12	General	11.70	0.40	12.00	24.10	22.20	20.30	18.40
LT-14(65)	General	12.00	0.40	12.10	24.50	22.60	20.70	18.80
L-6	General	13.20	0.50	13.70	27.40	25.50	23.60	21.70

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

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

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

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	7.30%	0.20%	7.10%	14.60%	12.70%	10.80%	8.90%
L-3	General	8.90	0.30	8.80	18.00	16.10	14.20	12.30
LT-4(65)	General	8.50	0.20	7.50	16.20	14.30	12.40	10.50
LT-5(65)	General	9.80	0.30	9.20	19.30	17.40	15.50	13.60
L-7	General	10.50	0.30	10.60	21.40	19.50	17.60	15.70
LT-8(65)	General	11.10	0.30	10.80	22.20	20.30	18.40	16.50
L-12	General	12.10	0.40	12.40	24.90	23.00	21.10	19.20
LT-14(65)	General	12.40	0.40	12.50	25.30	23.40	21.50	19.60
L-6	General	13.70	0.50	14.10	28.30	26.40	24.50	22.60

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

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

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

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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	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 9,383	$ 8,072	$ 6,761	$ 5,451
L-3	11,660	10,349	9,038	7,727
LT-4(65)	10,142	8,831	7,520	6,209
LT-5(65)	12,212	10,901	9,590	8,279
L-7	13,799	12,488	11,177	9,866
LT-8(65)	14,213	12,902	11,591	10,280
L-12	16,007	14,696	13,385	12,074
LT-14(65)	16,214	14,903	13,592	12,281
L-6	18,283	16,973	15,662	14,351

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 9,659	$ 8,348	$ 7,037	$ 5,727
L-3	11,936	10,625	9,314	8,003
LT-4(65)	10,487	9,176	7,865	6,554
LT-5(65)	12,557	11,246	9,935	8,624
L-7	14,213	12,902	11,591	10,280
LT-8(65)	14,627	13,316	12,005	10,694
L-12	16,490	15,179	13,868	12,557
LT-14(65)	16,697	15,386	14,075	12,764
L-6	18,835	17,524	16,214	14,903

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 9,728	$ 8,417	$ 7,106	$ 5,795
L-3	12,005	10,694	9,383	8,072
LT-4(65)	10,901	9,590	8,279	6,968
LT-5(65)	12,902	11,591	10,280	8,969
L-7	14,282	12,971	11,660	10,349
LT-8(65)	14,903	13,592	12,281	10,970
L-12	16,628	15,317	14,006	12,695
LT-14(65)	16,904	15,593	14,282	12,971
L-6	18,904	17,593	16,283	14,972

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 10,073	$ 8,762	$ 7,451	$ 6,140
L-3	12,419	11,108	9,797	8,486
LT-4(65)	11,177	9,866	8,555	7,244
LT-5(65)	13,316	12,005	10,694	9,383
L-7	14,765	13,454	12,143	10,832
LT-8(65)	15,317	14,006	12,695	11,384
L-12	17,180	15,869	14,558	13,247
LT-14(65)	17,455	16,145	14,834	13,523
L-6	19,525	18,214	16,904	15,593

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.

Employees and Payroll Included in the Valuation

	General
Number of Employees	2
Annual Payroll	$ 68,994

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 Keytesville

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	$ 80,095	$ 82,660
L-3	General	100,110	103,321
LT-4(65)	General	84,770	87,494
LT-5(65)	General	103,617	106,936
L-7	General	120,125	123,975
LT-8(65)	General	122,470	126,391
L-12	General	140,161	144,630
LT-14(65)	General	141,339	145,838
L-6	General	160,176	165,286

City of Keytesville

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	$ 80,836	$ 83,413
L-3	General	101,031	104,280
LT-4(65)	General	86,438	89,203
LT-5(65)	General	105,236	108,622
L-7	General	121,244	125,145
LT-8(65)	General	124,046	128,039
L-12	General	141,458	145,989
LT-14(65)	General	142,863	147,436
L-6	General	161,665	166,846

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 and has no material limitations or known weaknesses. 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							
		General/Public Safety Members							
Sample	Years of	Men		Women		Police		Fire	
Ages	Service	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 Men	General Members Women	Retirement Ages	Police/ Public Safety	Fire
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 Men	General Members Women	Retirement Ages	Police/ Public Safety	Fire
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	General Members		Police/	
Ages	Men	Women	Public Safety	Fire
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, 2022
(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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 525	$ 936	$1,461	97%
2,000	700	1,073	1,773	89%
2,500	875	1,208	2,083	83%
3,000	1,050	1,343	2,393	80%
3,500	1,225	1,480	2,705	77%
4,000	1,400	1,614	3,014	75%
25 Years of Service:				
$1,500	$ 375	$ 936	$1,311	87%
2,000	500	1,073	1,573	79%
2,500	625	1,208	1,833	73%
3,000	750	1,343	2,093	70%
3,500	875	1,480	2,355	67%
4,000	1,000	1,614	2,614	65%
15 Years of Service:				
$1,500	$225	$ 936	$1,161	77%
2,000	300	1,073	1,373	69%
2,500	375	1,208	1,583	63%
3,000	450	1,343	1,793	60%
3,500	525	1,480	2,005	57%
4,000	600	1,614	2,214	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 2022 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 656	$ 936	$1,592	106%
2,000	875	1,073	1,948	97%
2,500	1,094	1,208	2,302	92%
3,000	1,313	1,343	2,656	89%
3,500	1,531	1,480	3,011	86%
4,000	1,750	1,614	3,364	84%
25 Years of Service:				
$1,500	$ 469	$ 936	$1,405	94%
2,000	625	1,073	1,698	85%
2,500	781	1,208	1,989	80%
3,000	938	1,343	2,281	76%
3,500	1,094	1,480	2,574	74%
4,000	1,250	1,614	2,864	72%
15 Years of Service:				
$1,500	$281	$ 936	$1,217	81%
2,000	375	1,073	1,448	72%
2,500	469	1,208	1,677	67%
3,000	563	1,343	1,906	64%
3,500	656	1,480	2,136	61%
4,000	750	1,614	2,364	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 2022 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 788	$ 936	$1,724	115%
2,000	1,050	1,073	2,123	106%
2,500	1,313	1,208	2,521	101%
3,000	1,575	1,343	2,918	97%
3,500	1,838	1,480	3,318	95%
4,000	2,100	1,614	3,714	93%
25 Years of Service:				
$1,500	$ 563	$ 936	$1,499	100%
2,000	750	1,073	1,823	91%
2,500	938	1,208	2,146	86%
3,000	1,125	1,343	2,468	82%
3,500	1,313	1,480	2,793	80%
4,000	1,500	1,614	3,114	78%
15 Years of Service:				
$1,500	$338	$ 936	$1,274	85%
2,000	450	1,073	1,523	76%
2,500	563	1,208	1,771	71%
3,000	675	1,343	2,018	67%
3,500	788	1,480	2,268	65%
4,000	900	1,614	2,514	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 2022 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 919	$ 936	$1,855	124%
2,000	1,225	1,073	2,298	115%
2,500	1,531	1,208	2,739	110%
3,000	1,838	1,343	3,181	106%
3,500	2,144	1,480	3,624	104%
4,000	2,450	1,614	4,064	102%
25 Years of Service:				
$1,500	$ 656	$ 936	$1,592	106%
2,000	875	1,073	1,948	97%
2,500	1,094	1,208	2,302	92%
3,000	1,313	1,343	2,656	89%
3,500	1,531	1,480	3,011	86%
4,000	1,750	1,614	3,364	84%
15 Years of Service:				
$1,500	$ 394	$ 936	$1,330	89%
2,000	525	1,073	1,598	80%
2,500	656	1,208	1,864	75%
3,000	788	1,343	2,131	71%
3,500	919	1,480	2,399	69%
4,000	1,050	1,614	2,664	67%

[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 2022 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$1,050	$ 936	$1,986	132%
2,000	1,400	1,073	2,473	124%
2,500	1,750	1,208	2,958	118%
3,000	2,100	1,343	3,443	115%
3,500	2,450	1,480	3,930	112%
4,000	2,800	1,614	4,414	110%
25 Years of Service:				
$1,500	$ 750	$ 936	$1,686	112%
2,000	1,000	1,073	2,073	104%
2,500	1,250	1,208	2,458	98%
3,000	1,500	1,343	2,843	95%
3,500	1,750	1,480	3,230	92%
4,000	2,000	1,614	3,614	90%
15 Years of Service:				
$1,500	$ 450	$ 936	$1,386	92%
2,000	600	1,073	1,673	84%
2,500	750	1,208	1,958	78%
3,000	900	1,343	2,243	75%
3,500	1,050	1,480	2,530	72%
4,000	1,200	1,614	2,814	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 2022 - 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	$ 936	$1,050	$1,461	70%	97%
2,000	1,400	700	1,073	1,400	1,773	70%	89%
2,500	1,750	875	1,208	1,750	2,083	70%	83%
3,000	2,100	1,050	1,343	2,100	2,393	70%	80%
3,500	2,450	1,225	1,480	2,450	2,705	70%	77%
4,000	2,800	1,400	1,614	2,800	3,014	70%	75%
25 Years of Service:							
$1,500	$ 750	$ 375	$ 936	$ 750	$1,311	50%	87%
2,000	1,000	500	1,073	1,000	1,573	50%	79%
2,500	1,250	625	1,208	1,250	1,833	50%	73%
3,000	1,500	750	1,343	1,500	2,093	50%	70%
3,500	1,750	875	1,480	1,750	2,355	50%	67%
4,000	2,000	1,000	1,614	2,000	2,614	50%	65%
15 Years of Service:							
$1,500	$ 450	$225	$ 936	$ 450	$1,161	30%	77%
2,000	600	300	1,073	600	1,373	30%	69%
2,500	750	375	1,208	750	1,583	30%	63%
3,000	900	450	1,343	900	1,793	30%	60%
3,500	1,050	525	1,480	1,050	2,005	30%	57%
4,000	1,200	600	1,614	1,200	2,214	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 2022 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 656	$ 936	$1,050	$1,592	70%	106%
2,000	1,400	875	1,073	1,400	1,948	70%	97%
2,500	1,750	1,094	1,208	1,750	2,302	70%	92%
3,000	2,100	1,313	1,343	2,100	2,656	70%	89%
3,500	2,450	1,531	1,480	2,450	3,011	70%	86%
4,000	2,800	1,750	1,614	2,800	3,364	70%	84%
25 Years of Service:							
$1,500	$ 750	$ 469	$ 936	$ 750	$1,405	50%	94%
2,000	1,000	625	1,073	1,000	1,698	50%	85%
2,500	1,250	781	1,208	1,250	1,989	50%	80%
3,000	1,500	938	1,343	1,500	2,281	50%	76%
3,500	1,750	1,094	1,480	1,750	2,574	50%	74%
4,000	2,000	1,250	1,614	2,000	2,864	50%	72%
15 Years of Service:							
$1,500	$ 450	$281	$ 936	$ 450	$1,217	30%	81%
2,000	600	375	1,073	600	1,448	30%	72%
2,500	750	469	1,208	750	1,677	30%	67%
3,000	900	563	1,343	900	1,906	30%	64%
3,500	1,050	656	1,480	1,050	2,136	30%	61%
4,000	1,200	750	1,614	1,200	2,364	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 2022 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 788	$ 936	$1,050	$1,724	70%	115%
2,000	1,400	1,050	1,073	1,400	2,123	70%	106%
2,500	1,750	1,313	1,208	1,750	2,521	70%	101%
3,000	2,100	1,575	1,343	2,100	2,918	70%	97%
3,500	2,450	1,838	1,480	2,450	3,318	70%	95%
4,000	2,800	2,100	1,614	2,800	3,714	70%	93%
25 Years of Service:							
$1,500	$ 750	$ 563	$ 936	$ 750	$1,499	50%	100%
2,000	1,000	750	1,073	1,000	1,823	50%	91%
2,500	1,250	938	1,208	1,250	2,146	50%	86%
3,000	1,500	1,125	1,343	1,500	2,468	50%	82%
3,500	1,750	1,313	1,480	1,750	2,793	50%	80%
4,000	2,000	1,500	1,614	2,000	3,114	50%	78%
15 Years of Service:							
$1,500	$ 450	$338	$ 936	$ 450	$1,274	30%	85%
2,000	600	450	1,073	600	1,523	30%	76%
2,500	750	563	1,208	750	1,771	30%	71%
3,000	900	675	1,343	900	2,018	30%	67%
3,500	1,050	788	1,480	1,050	2,268	30%	65%
4,000	1,200	900	1,614	1,200	2,514	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 2022 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 919	$ 936	$1,050	$1,855	70%	124%
2,000	1,400	1,225	1,073	1,400	2,298	70%	115%
2,500	1,750	1,531	1,208	1,750	2,739	70%	110%
3,000	2,100	1,838	1,343	2,100	3,181	70%	106%
3,500	2,450	2,144	1,480	2,450	3,624	70%	104%
4,000	2,800	2,450	1,614	2,800	4,064	70%	102%
25 Years of Service:							
$1,500	$ 750	$ 656	$ 936	$ 750	$1,592	50%	106%
2,000	1,000	875	1,073	1,000	1,948	50%	97%
2,500	1,250	1,094	1,208	1,250	2,302	50%	92%
3,000	1,500	1,313	1,343	1,500	2,656	50%	89%
3,500	1,750	1,531	1,480	1,750	3,011	50%	86%
4,000	2,000	1,750	1,614	2,000	3,364	50%	84%
15 Years of Service:							
$1,500	$ 450	$ 394	$ 936	$ 450	$1,330	30%	89%
2,000	600	525	1,073	600	1,598	30%	80%
2,500	750	656	1,208	750	1,864	30%	75%
3,000	900	788	1,343	900	2,131	30%	71%
3,500	1,050	919	1,480	1,050	2,399	30%	69%
4,000	1,200	1,050	1,614	1,200	2,664	30%	67%

[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 2022 - 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 Keytesville - General

May 31, 2022

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									
25-29									
30-34	1							1	$ 40,147
35-39									
40-44									
45-49									
50-54									
55-59									
60-64					1			1	$ 28,847
65-69									
70 & Over									
Totals	**1**				**1**			**2**	**$ 68,994**

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

Age: 46.9 years.
Benefit Service: 12.7 years.
Annual Pay: $34,497.

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.

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

October 25, 2022 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 May 31, 2022 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Keytesville

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

October 25, 2022

City of Keytesville
Keytesville, 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 May 31, 2022 Initial Valuation for the City of Keytesville dated October 25, 2022.

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, 2022. 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,
Gabriel, Roeder, Smith & Company

Mita Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

City of Keytesville - General

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

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	13.6%	$9,383	$ 80,095	16.9%	$11,660	$ 100,110	14.7%	$10,142	$ 84,770
2023	70,891	13.6	9,641	80,863	16.9	11,981	101,070	14.7	10,421	85,583
2024	72,841	13.6	9,906	81,552	16.9	12,310	101,931	14.7	10,708	86,312
2025	74,844	13.6	10,179	82,153	16.9	12,649	102,682	14.7	11,002	86,948
2026	76,902	13.6	10,459	82,655	16.9	12,996	103,310	14.7	11,305	87,479
2027	79,017	13.6	10,746	83,048	16.9	13,354	103,801	14.7	11,615	87,895
2028	81,190	13.6	11,042	83,320	16.9	13,721	104,141	14.7	11,935	88,183
2029	83,423	13.6	11,346	83,459	16.9	14,098	104,315	14.7	12,263	88,330
2030	85,717	13.6	11,658	83,451	16.9	14,486	104,305	14.7	12,600	88,322
2031	88,074	13.6	11,978	83,282	16.9	14,885	104,093	14.7	12,947	88,143

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	17.7%	$12,212	$ 103,617	20.0%	$13,799	$ 120,125	20.6%	$14,213	$ 122,470
2023	70,891	17.7	12,548	104,611	20.0	14,178	121,277	20.6	14,604	123,645
2024	72,841	17.7	12,893	105,502	20.0	14,568	122,310	20.6	15,005	124,699
2025	74,844	17.7	13,247	106,279	20.0	14,969	123,211	20.6	15,418	125,617
2026	76,902	17.7	13,612	106,929	20.0	15,380	123,964	20.6	15,842	126,385
2027	79,017	17.7	13,986	107,437	20.0	15,803	124,553	20.6	16,278	126,986
2028	81,190	17.7	14,371	107,789	20.0	16,238	124,961	20.6	16,725	127,402
2029	83,423	17.7	14,766	107,969	20.0	16,685	125,169	20.6	17,185	127,614
2030	85,717	17.7	15,172	107,959	20.0	17,143	125,157	20.6	17,658	127,602
2031	88,074	17.7	15,589	107,740	20.0	17,615	124,903	20.6	18,143	127,343

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	23.2%	$16,007	$ 140,161	23.5%	$16,214	$ 141,339	26.5%	$18,283	$ 160,176
2023	70,891	23.2	16,447	141,506	23.5	16,659	142,695	26.5	18,786	161,713
2024	72,841	23.2	16,899	142,712	23.5	17,118	143,911	26.5	19,303	163,091
2025	74,844	23.2	17,364	143,763	23.5	17,588	144,971	26.5	19,834	164,292
2026	76,902	23.2	17,841	144,642	23.5	18,072	145,857	26.5	20,379	165,296
2027	79,017	23.2	18,332	145,330	23.5	18,569	146,550	26.5	20,940	166,082
2028	81,190	23.2	18,836	145,806	23.5	19,080	147,030	26.5	21,515	166,626
2029	83,423	23.2	19,354	146,049	23.5	19,604	147,275	26.5	22,107	166,904
2030	85,717	23.2	19,886	146,035	23.5	20,143	147,261	26.5	22,715	166,888
2031	88,074	23.2	20,433	145,738	23.5	20,697	146,962	26.5	23,340	166,549

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 Keytesville - General

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	11.7%	$8,072	$ 80,095	15.0%	$10,349	$ 100,110	12.8%	$8,831	$ 84,770
2023	70,891	11.7	8,294	80,863	15.0	10,634	101,070	12.8	9,074	85,583
2024	72,841	11.7	8,522	81,552	15.0	10,926	101,931	12.8	9,324	86,312
2025	74,844	11.7	8,757	82,153	15.0	11,227	102,682	12.8	9,580	86,948
2026	76,902	11.7	8,998	82,655	15.0	11,535	103,310	12.8	9,843	87,479
2027	79,017	11.7	9,245	83,048	15.0	11,853	103,801	12.8	10,114	87,895
2028	81,190	11.7	9,499	83,320	15.0	12,179	104,141	12.8	10,392	88,183
2029	83,423	11.7	9,760	83,459	15.0	12,513	104,315	12.8	10,678	88,330
2030	85,717	11.7	10,029	83,451	15.0	12,858	104,305	12.8	10,972	88,322
2031	88,074	11.7	10,305	83,282	15.0	13,211	104,093	12.8	11,273	88,143

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	15.8%	$10,901	$ 103,617	18.1%	$12,488	$ 120,125	18.7%	$12,902	$ 122,470
2023	70,891	15.8	11,201	104,611	18.1	12,831	121,277	18.7	13,257	123,645
2024	72,841	15.8	11,509	105,502	18.1	13,184	122,310	18.7	13,621	124,699
2025	74,844	15.8	11,825	106,279	18.1	13,547	123,211	18.7	13,996	125,617
2026	76,902	15.8	12,151	106,929	18.1	13,919	123,964	18.7	14,381	126,385
2027	79,017	15.8	12,485	107,437	18.1	14,302	124,553	18.7	14,776	126,986
2028	81,190	15.8	12,828	107,789	18.1	14,695	124,961	18.7	15,183	127,402
2029	83,423	15.8	13,181	107,969	18.1	15,100	125,169	18.7	15,600	127,614
2030	85,717	15.8	13,543	107,959	18.1	15,515	125,157	18.7	16,029	127,602
2031	88,074	15.8	13,916	107,740	18.1	15,941	124,903	18.7	16,470	127,343

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	21.3%	$14,696	$ 140,161	21.6%	$14,903	$ 141,339	24.6%	$16,973	$ 160,176
2023	70,891	21.3	15,100	141,506	21.6	15,312	142,695	24.6	17,439	161,713
2024	72,841	21.3	15,515	142,712	21.6	15,734	143,911	24.6	17,919	163,091
2025	74,844	21.3	15,942	143,763	21.6	16,166	144,971	24.6	18,412	164,292
2026	76,902	21.3	16,380	144,642	21.6	16,611	145,857	24.6	18,918	165,296
2027	79,017	21.3	16,831	145,330	21.6	17,068	146,550	24.6	19,438	166,082
2028	81,190	21.3	17,293	145,806	21.6	17,537	147,030	24.6	19,973	166,626
2029	83,423	21.3	17,769	146,049	21.6	18,019	147,275	24.6	20,522	166,904
2030	85,717	21.3	18,258	146,035	21.6	18,515	147,261	24.6	21,086	166,888
2031	88,074	21.3	18,760	145,738	21.6	19,024	146,962	24.6	21,666	166,549

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 Keytesville - General

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

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	9.8%	$6,761	$ 80,095	13.1%	$9,038	$ 100,110	10.9%	$7,520	$ 84,770
2023	70,891	9.8	6,947	80,863	13.1	9,287	101,070	10.9	7,727	85,583
2024	72,841	9.8	7,138	81,552	13.1	9,542	101,931	10.9	7,940	86,312
2025	74,844	9.8	7,335	82,153	13.1	9,805	102,682	10.9	8,158	86,948
2026	76,902	9.8	7,536	82,655	13.1	10,074	103,310	10.9	8,382	87,479
2027	79,017	9.8	7,744	83,048	13.1	10,351	103,801	10.9	8,613	87,895
2028	81,190	9.8	7,957	83,320	13.1	10,636	104,141	10.9	8,850	88,183
2029	83,423	9.8	8,175	83,459	13.1	10,928	104,315	10.9	9,093	88,330
2030	85,717	9.8	8,400	83,451	13.1	11,229	104,305	10.9	9,343	88,322
2031	88,074	9.8	8,631	83,282	13.1	11,538	104,093	10.9	9,600	88,143

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	13.9%	$9,590	$ 103,617	16.2%	$11,177	$ 120,125	16.8%	$11,591	$ 122,470
2023	70,891	13.9	9,854	104,611	16.2	11,484	121,277	16.8	11,910	123,645
2024	72,841	13.9	10,125	105,502	16.2	11,800	122,310	16.8	12,237	124,699
2025	74,844	13.9	10,403	106,279	16.2	12,125	123,211	16.8	12,574	125,617
2026	76,902	13.9	10,689	106,929	16.2	12,458	123,964	16.8	12,920	126,385
2027	79,017	13.9	10,983	107,437	16.2	12,801	124,553	16.8	13,275	126,986
2028	81,190	13.9	11,285	107,789	16.2	13,153	124,961	16.8	13,640	127,402
2029	83,423	13.9	11,596	107,969	16.2	13,515	125,169	16.8	14,015	127,614
2030	85,717	13.9	11,915	107,959	16.2	13,886	125,157	16.8	14,400	127,602
2031	88,074	13.9	12,242	107,740	16.2	14,268	124,903	16.8	14,796	127,343

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	19.4%	$13,385	$ 140,161	19.7%	$13,592	$ 141,339	22.7%	$15,662	$ 160,176
2023	70,891	19.4	13,753	141,506	19.7	13,966	142,695	22.7	16,092	161,713
2024	72,841	19.4	14,131	142,712	19.7	14,350	143,911	22.7	16,535	163,091
2025	74,844	19.4	14,520	143,763	19.7	14,744	144,971	22.7	16,990	164,292
2026	76,902	19.4	14,919	144,642	19.7	15,150	145,857	22.7	17,457	165,296
2027	79,017	19.4	15,329	145,330	19.7	15,566	146,550	22.7	17,937	166,082
2028	81,190	19.4	15,751	145,806	19.7	15,994	147,030	22.7	18,430	166,626
2029	83,423	19.4	16,184	146,049	19.7	16,434	147,275	22.7	18,937	166,904
2030	85,717	19.4	16,629	146,035	19.7	16,886	147,261	22.7	19,458	166,888
2031	88,074	19.4	17,086	145,738	19.7	17,351	146,962	22.7	19,993	166,549

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 Keytesville - General

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

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	7.9%	$5,451	$ 80,095	11.2%	$7,727	$ 100,110	9.0%	$6,209	$ 84,770
2023	70,891	7.9	5,600	80,863	11.2	7,940	101,070	9.0	6,380	85,583
2024	72,841	7.9	5,754	81,552	11.2	8,158	101,931	9.0	6,556	86,312
2025	74,844	7.9	5,913	82,153	11.2	8,383	102,682	9.0	6,736	86,948
2026	76,902	7.9	6,075	82,655	11.2	8,613	103,310	9.0	6,921	87,479
2027	79,017	7.9	6,242	83,048	11.2	8,850	103,801	9.0	7,112	87,895
2028	81,190	7.9	6,414	83,320	11.2	9,093	104,141	9.0	7,307	88,183
2029	83,423	7.9	6,590	83,459	11.2	9,343	104,315	9.0	7,508	88,330
2030	85,717	7.9	6,772	83,451	11.2	9,600	104,305	9.0	7,715	88,322
2031	88,074	7.9	6,958	83,282	11.2	9,864	104,093	9.0	7,927	88,143

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	12.0%	$8,279	$ 103,617	14.3%	$9,866	$ 120,125	14.9%	$10,280	$ 122,470
2023	70,891	12.0	8,507	104,611	14.3	10,137	121,277	14.9	10,563	123,645
2024	72,841	12.0	8,741	105,502	14.3	10,416	122,310	14.9	10,853	124,699
2025	74,844	12.0	8,981	106,279	14.3	10,703	123,211	14.9	11,152	125,617
2026	76,902	12.0	9,228	106,929	14.3	10,997	123,964	14.9	11,458	126,385
2027	79,017	12.0	9,482	107,437	14.3	11,299	124,553	14.9	11,774	126,986
2028	81,190	12.0	9,743	107,789	14.3	11,610	124,961	14.9	12,097	127,402
2029	83,423	12.0	10,011	107,969	14.3	11,929	125,169	14.9	12,430	127,614
2030	85,717	12.0	10,286	107,959	14.3	12,258	125,157	14.9	12,772	127,602
2031	88,074	12.0	10,569	107,740	14.3	12,595	124,903	14.9	13,123	127,343

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	17.5%	$12,074	$ 140,161	17.8%	$12,281	$ 141,339	20.8%	$14,351	$ 160,176
2023	70,891	17.5	12,406	141,506	17.8	12,619	142,695	20.8	14,745	161,713
2024	72,841	17.5	12,747	142,712	17.8	12,966	143,911	20.8	15,151	163,091
2025	74,844	17.5	13,098	143,763	17.8	13,322	144,971	20.8	15,568	164,292
2026	76,902	17.5	13,458	144,642	17.8	13,689	145,857	20.8	15,996	165,296
2027	79,017	17.5	13,828	145,330	17.8	14,065	146,550	20.8	16,436	166,082
2028	81,190	17.5	14,208	145,806	17.8	14,452	147,030	20.8	16,888	166,626
2029	83,423	17.5	14,599	146,049	17.8	14,849	147,275	20.8	17,352	166,904
2030	85,717	17.5	15,000	146,035	17.8	15,258	147,261	20.8	17,829	166,888
2031	88,074	17.5	15,413	145,738	17.8	15,677	146,962	20.8	18,319	166,549

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 Keytesville - General

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

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	14.0%	$9,659	$ 82,660	17.3%	$11,936	$ 103,321	15.2%	$10,487	$ 87,494
2023	70,891	14.0	9,925	83,453	17.3	12,264	104,312	15.2	10,775	88,333
2024	72,841	14.0	10,198	84,164	17.3	12,601	105,201	15.2	11,072	89,086
2025	74,844	14.0	10,478	84,784	17.3	12,948	105,976	15.2	11,376	89,742
2026	76,902	14.0	10,766	85,302	17.3	13,304	106,624	15.2	11,689	90,291
2027	79,017	14.0	11,062	85,708	17.3	13,670	107,131	15.2	12,011	90,720
2028	81,190	14.0	11,367	85,989	17.3	14,046	107,482	15.2	12,341	91,017
2029	83,423	14.0	11,679	86,132	17.3	14,432	107,661	15.2	12,680	91,169
2030	85,717	14.0	12,000	86,124	17.3	14,829	107,651	15.2	13,029	91,160
2031	88,074	14.0	12,330	85,949	17.3	15,237	107,432	15.2	13,387	90,975

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	18.2%	$12,557	$ 106,936	20.6%	$14,213	$ 123,975	21.2%	$14,627	$ 126,391
2023	70,891	18.2	12,902	107,962	20.6	14,604	125,164	21.2	15,029	127,603
2024	72,841	18.2	13,257	108,882	20.6	15,005	126,231	21.2	15,442	128,690
2025	74,844	18.2	13,622	109,684	20.6	15,418	127,161	21.2	15,867	129,638
2026	76,902	18.2	13,996	110,354	20.6	15,842	127,938	21.2	16,303	130,430
2027	79,017	18.2	14,381	110,879	20.6	16,278	128,546	21.2	16,752	131,050
2028	81,190	18.2	14,777	111,242	20.6	16,725	128,967	21.2	17,212	131,479
2029	83,423	18.2	15,183	111,427	20.6	17,185	129,182	21.2	17,686	131,698
2030	85,717	18.2	15,600	111,416	20.6	17,658	129,170	21.2	18,172	131,685
2031	88,074	18.2	16,029	111,190	20.6	18,143	128,908	21.2	18,672	131,418

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	23.9%	$16,490	$ 144,630	24.2%	$16,697	$ 145,838	27.3%	$18,835	$ 165,286
2023	70,891	23.9	16,943	146,017	24.2	17,156	147,237	27.3	19,353	166,872
2024	72,841	23.9	17,409	147,261	24.2	17,628	148,492	27.3	19,886	168,294
2025	74,844	23.9	17,888	148,345	24.2	18,112	149,586	27.3	20,432	169,533
2026	76,902	23.9	18,380	149,252	24.2	18,610	150,500	27.3	20,994	170,569
2027	79,017	23.9	18,885	149,962	24.2	19,122	151,216	27.3	21,572	171,380
2028	81,190	23.9	19,404	150,453	24.2	19,648	151,712	27.3	22,165	171,942
2029	83,423	23.9	19,938	150,704	24.2	20,188	151,965	27.3	22,774	172,228
2030	85,717	23.9	20,486	150,689	24.2	20,744	151,950	27.3	23,401	172,211
2031	88,074	23.9	21,050	150,383	24.2	21,314	151,641	27.3	24,044	171,861

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 28^{th} 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 Keytesville - General

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	12.1%	$8,348	$ 82,660	15.4%	$10,625	$ 103,321	13.3%	$9,176	$ 87,494
2023	70,891	12.1	8,578	83,453	15.4	10,917	104,312	13.3	9,429	88,333
2024	72,841	12.1	8,814	84,164	15.4	11,218	105,201	13.3	9,688	89,086
2025	74,844	12.1	9,056	84,784	15.4	11,526	105,976	13.3	9,954	89,742
2026	76,902	12.1	9,305	85,302	15.4	11,843	106,624	13.3	10,228	90,291
2027	79,017	12.1	9,561	85,708	15.4	12,169	107,131	13.3	10,509	90,720
2028	81,190	12.1	9,824	85,989	15.4	12,503	107,482	13.3	10,798	91,017
2029	83,423	12.1	10,094	86,132	15.4	12,847	107,661	13.3	11,095	91,169
2030	85,717	12.1	10,372	86,124	15.4	13,200	107,651	13.3	11,400	91,160
2031	88,074	12.1	10,657	85,949	15.4	13,563	107,432	13.3	11,714	90,975

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	16.3%	$11,246	$ 106,936	18.7%	$12,902	$ 123,975	19.3%	$13,316	$ 126,391
2023	70,891	16.3	11,555	107,962	18.7	13,257	125,164	19.3	13,682	127,603
2024	72,841	16.3	11,873	108,882	18.7	13,621	126,231	19.3	14,058	128,690
2025	74,844	16.3	12,200	109,684	18.7	13,996	127,161	19.3	14,445	129,638
2026	76,902	16.3	12,535	110,354	18.7	14,381	127,938	19.3	14,842	130,430
2027	79,017	16.3	12,880	110,879	18.7	14,776	128,546	19.3	15,250	131,050
2028	81,190	16.3	13,234	111,242	18.7	15,183	128,967	19.3	15,670	131,479
2029	83,423	16.3	13,598	111,427	18.7	15,600	129,182	19.3	16,101	131,698
2030	85,717	16.3	13,972	111,416	18.7	16,029	129,170	19.3	16,543	131,685
2031	88,074	16.3	14,356	111,190	18.7	16,470	128,908	19.3	16,998	131,418

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	22.0%	$15,179	$ 144,630	22.3%	$15,386	$ 145,838	25.4%	$17,524	$ 165,286
2023	70,891	22.0	15,596	146,017	22.3	15,809	147,237	25.4	18,006	166,872
2024	72,841	22.0	16,025	147,261	22.3	16,244	148,492	25.4	18,502	168,294
2025	74,844	22.0	16,466	148,345	22.3	16,690	149,586	25.4	19,010	169,533
2026	76,902	22.0	16,918	149,252	22.3	17,149	150,500	25.4	19,533	170,569
2027	79,017	22.0	17,384	149,962	22.3	17,621	151,216	25.4	20,070	171,380
2028	81,190	22.0	17,862	150,453	22.3	18,105	151,712	25.4	20,622	171,942
2029	83,423	22.0	18,353	150,704	22.3	18,603	151,965	25.4	21,189	172,228
2030	85,717	22.0	18,858	150,689	22.3	19,115	151,950	25.4	21,772	172,211
2031	88,074	22.0	19,376	150,383	22.3	19,641	151,641	25.4	22,371	171,861

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 Keytesville - General

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2022	$ 68,994	10.2%	$7,037	$ 82,660	13.5%	$9,314	$ 103,321	11.4%	$7,865	$ 87,494
2023	70,891	10.2	7,231	83,453	13.5	9,570	104,312	11.4	8,082	88,333
2024	72,841	10.2	7,430	84,164	13.5	9,834	105,201	11.4	8,304	89,086
2025	74,844	10.2	7,634	84,784	13.5	10,104	105,976	11.4	8,532	89,742
2026	76,902	10.2	7,844	85,302	13.5	10,382	106,624	11.4	8,767	90,291
2027	79,017	10.2	8,060	85,708	13.5	10,667	107,131	11.4	9,008	90,720
2028	81,190	10.2	8,281	85,989	13.5	10,961	107,482	11.4	9,256	91,017
2029	83,423	10.2	8,509	86,132	13.5	11,262	107,661	11.4	9,510	91,169
2030	85,717	10.2	8,743	86,124	13.5	11,572	107,651	11.4	9,772	91,160
2031	88,074	10.2	8,984	85,949	13.5	11,890	107,432	11.4	10,040	90,975

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2022	$ 68,994	14.4%	$9,935	$ 106,936	16.8%	$11,591	$ 123,975	17.4%	$12,005	$ 126,391
2023	70,891	14.4	10,208	107,962	16.8	11,910	125,164	17.4	12,335	127,603
2024	72,841	14.4	10,489	108,882	16.8	12,237	126,231	17.4	12,674	128,690
2025	74,844	14.4	10,778	109,684	16.8	12,574	127,161	17.4	13,023	129,638
2026	76,902	14.4	11,074	110,354	16.8	12,920	127,938	17.4	13,381	130,430
2027	79,017	14.4	11,378	110,879	16.8	13,275	128,546	17.4	13,749	131,050
2028	81,190	14.4	11,691	111,242	16.8	13,640	128,967	17.4	14,127	131,479
2029	83,423	14.4	12,013	111,427	16.8	14,015	129,182	17.4	14,516	131,698
2030	85,717	14.4	12,343	111,416	16.8	14,400	129,170	17.4	14,915	131,685
2031	88,074	14.4	12,683	111,190	16.8	14,796	128,908	17.4	15,325	131,418

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2022	$ 68,994	20.1%	$13,868	$ 144,630	20.4%	$14,075	$ 145,838	23.5%	$16,214	$ 165,286
2023	70,891	20.1	14,249	146,017	20.4	14,462	147,237	23.5	16,659	166,872
2024	72,841	20.1	14,641	147,261	20.4	14,860	148,492	23.5	17,118	168,294
2025	74,844	20.1	15,044	148,345	20.4	15,268	149,586	23.5	17,588	169,533
2026	76,902	20.1	15,457	149,252	20.4	15,688	150,500	23.5	18,072	170,569
2027	79,017	20.1	15,882	149,962	20.4	16,119	151,216	23.5	18,569	171,380
2028	81,190	20.1	16,319	150,453	20.4	16,563	151,712	23.5	19,080	171,942
2029	83,423	20.1	16,768	150,704	20.4	17,018	151,965	23.5	19,604	172,228
2030	85,717	20.1	17,229	150,689	20.4	17,486	151,950	23.5	20,143	172,211
2031	88,074	20.1	17,703	150,383	20.4	17,967	151,641	23.5	20,697	171,861

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 Keytesville - 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: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2022	$ 68,994	8.3%	$5,727	$ 82,660	11.6%	$8,003	$ 103,321	9.5%	$6,554	$ 87,494
2023	70,891	8.3	5,884	83,453	11.6	8,223	104,312	9.5	6,735	88,333
2024	72,841	8.3	6,046	84,164	11.6	8,450	105,201	9.5	6,920	89,086
2025	74,844	8.3	6,212	84,784	11.6	8,682	105,976	9.5	7,110	89,742
2026	76,902	8.3	6,383	85,302	11.6	8,921	106,624	9.5	7,306	90,291
2027	79,017	8.3	6,558	85,708	11.6	9,166	107,131	9.5	7,507	90,720
2028	81,190	8.3	6,739	85,989	11.6	9,418	107,482	9.5	7,713	91,017
2029	83,423	8.3	6,924	86,132	11.6	9,677	107,661	9.5	7,925	91,169
2030	85,717	8.3	7,115	86,124	11.6	9,943	107,651	9.5	8,143	91,160
2031	88,074	8.3	7,310	85,949	11.6	10,217	107,432	9.5	8,367	90,975

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2022	$ 68,994	12.5%	$8,624	$ 106,936	14.9%	$10,280	$ 123,975	15.5%	$10,694	$ 126,391
2023	70,891	12.5	8,861	107,962	14.9	10,563	125,164	15.5	10,988	127,603
2024	72,841	12.5	9,105	108,882	14.9	10,853	126,231	15.5	11,290	128,690
2025	74,844	12.5	9,356	109,684	14.9	11,152	127,161	15.5	11,601	129,638
2026	76,902	12.5	9,613	110,354	14.9	11,458	127,938	15.5	11,920	130,430
2027	79,017	12.5	9,877	110,879	14.9	11,774	128,546	15.5	12,248	131,050
2028	81,190	12.5	10,149	111,242	14.9	12,097	128,967	15.5	12,584	131,479
2029	83,423	12.5	10,428	111,427	14.9	12,430	129,182	15.5	12,931	131,698
2030	85,717	12.5	10,715	111,416	14.9	12,772	129,170	15.5	13,286	131,685
2031	88,074	12.5	11,009	111,190	14.9	13,123	128,908	15.5	13,651	131,418

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2022	$ 68,994	18.2%	$12,557	$ 144,630	18.5%	$12,764	$ 145,838	21.6%	$14,903	$ 165,286
2023	70,891	18.2	12,902	146,017	18.5	13,115	147,237	21.6	15,312	166,872
2024	72,841	18.2	13,257	147,261	18.5	13,476	148,492	21.6	15,734	168,294
2025	74,844	18.2	13,622	148,345	18.5	13,846	149,586	21.6	16,166	169,533
2026	76,902	18.2	13,996	149,252	18.5	14,227	150,500	21.6	16,611	170,569
2027	79,017	18.2	14,381	149,962	18.5	14,618	151,216	21.6	17,068	171,380
2028	81,190	18.2	14,777	150,453	18.5	15,020	151,712	21.6	17,537	171,942
2029	83,423	18.2	15,183	150,704	18.5	15,433	151,965	21.6	18,019	172,228
2030	85,717	18.2	15,600	150,689	18.5	15,858	151,950	21.6	18,515	172,211
2031	88,074	18.2	16,029	150,383	18.5	16,294	151,641	21.6	19,024	171,861

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	14.1%	$9,728	$ 80,836	17.4%	$12,005	$ 101,031	15.8%	$10,901	$ 86,438
2023	70,891	14.1	9,996	81,611	17.4	12,335	102,000	15.8	11,201	87,267
2024	72,841	14.1	10,271	82,306	17.4	12,674	102,869	15.8	11,509	88,011
2025	74,844	14.1	10,553	82,912	17.4	13,023	103,627	15.8	11,825	88,659
2026	76,902	14.1	10,843	83,419	17.4	13,381	104,260	15.8	12,151	89,201
2027	79,017	14.1	11,141	83,816	17.4	13,749	104,756	15.8	12,485	89,625
2028	81,190	14.1	11,448	84,091	17.4	14,127	105,099	15.8	12,828	89,919
2029	83,423	14.1	11,763	84,231	17.4	14,516	105,274	15.8	13,181	90,069
2030	85,717	14.1	12,086	84,223	17.4	14,915	105,264	15.8	13,543	90,060
2031	88,074	14.1	12,418	84,052	17.4	15,325	105,050	15.8	13,916	89,877

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	18.7%	$12,902	$ 105,236	20.7%	$14,282	$ 121,244	21.6%	$14,903	$ 124,046
2023	70,891	18.7	13,257	106,245	20.7	14,674	122,407	21.6	15,312	125,236
2024	72,841	18.7	13,621	107,150	20.7	15,078	123,450	21.6	15,734	126,303
2025	74,844	18.7	13,996	107,939	20.7	15,493	124,359	21.6	16,166	127,233
2026	76,902	18.7	14,381	108,599	20.7	15,919	125,119	21.6	16,611	128,011
2027	79,017	18.7	14,776	109,115	20.7	16,357	125,714	21.6	17,068	128,620
2028	81,190	18.7	15,183	109,473	20.7	16,806	126,126	21.6	17,537	129,041
2029	83,423	18.7	15,600	109,655	20.7	17,269	126,336	21.6	18,019	129,256
2030	85,717	18.7	16,029	109,644	20.7	17,743	126,324	21.6	18,515	129,244
2031	88,074	18.7	16,470	109,421	20.7	18,231	126,067	21.6	19,024	128,982

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	24.1%	$16,628	$ 141,458	24.5%	$16,904	$ 142,863	27.4%	$18,904	$ 161,665
2023	70,891	24.1	17,085	142,815	24.5	17,368	144,233	27.4	19,424	163,216
2024	72,841	24.1	17,555	144,032	24.5	17,846	145,462	27.4	19,958	164,607
2025	74,844	24.1	18,037	145,093	24.5	18,337	146,533	27.4	20,507	165,819
2026	76,902	24.1	18,533	145,980	24.5	18,841	147,429	27.4	21,071	166,833
2027	79,017	24.1	19,043	146,674	24.5	19,359	148,130	27.4	21,651	167,626
2028	81,190	24.1	19,567	147,155	24.5	19,892	148,615	27.4	22,246	168,175
2029	83,423	24.1	20,105	147,400	24.5	20,439	148,863	27.4	22,858	168,455
2030	85,717	24.1	20,658	147,386	24.5	21,001	148,849	27.4	23,486	168,439
2031	88,074	24.1	21,226	147,087	24.5	21,578	148,547	27.4	24,132	168,097

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	12.2%	$8,417	$ 80,836	15.5%	$10,694	$ 101,031	13.9%	$9,590	$ 86,438
2023	70,891	12.2	8,649	81,611	15.5	10,988	102,000	13.9	9,854	87,267
2024	72,841	12.2	8,887	82,306	15.5	11,290	102,869	13.9	10,125	88,011
2025	74,844	12.2	9,131	82,912	15.5	11,601	103,627	13.9	10,403	88,659
2026	76,902	12.2	9,382	83,419	15.5	11,920	104,260	13.9	10,689	89,201
2027	79,017	12.2	9,640	83,816	15.5	12,248	104,756	13.9	10,983	89,625
2028	81,190	12.2	9,905	84,091	15.5	12,584	105,099	13.9	11,285	89,919
2029	83,423	12.2	10,178	84,231	15.5	12,931	105,274	13.9	11,596	90,069
2030	85,717	12.2	10,457	84,223	15.5	13,286	105,264	13.9	11,915	90,060
2031	88,074	12.2	10,745	84,052	15.5	13,651	105,050	13.9	12,242	89,877

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	16.8%	$11,591	$ 105,236	18.8%	$12,971	$ 121,244	19.7%	$13,592	$ 124,046
2023	70,891	16.8	11,910	106,245	18.8	13,328	122,407	19.7	13,966	125,236
2024	72,841	16.8	12,237	107,150	18.8	13,694	123,450	19.7	14,350	126,303
2025	74,844	16.8	12,574	107,939	18.8	14,071	124,359	19.7	14,744	127,233
2026	76,902	16.8	12,920	108,599	18.8	14,458	125,119	19.7	15,150	128,011
2027	79,017	16.8	13,275	109,115	18.8	14,855	125,714	19.7	15,566	128,620
2028	81,190	16.8	13,640	109,473	18.8	15,264	126,126	19.7	15,994	129,041
2029	83,423	16.8	14,015	109,655	18.8	15,684	126,336	19.7	16,434	129,256
2030	85,717	16.8	14,400	109,644	18.8	16,115	126,324	19.7	16,886	129,244
2031	88,074	16.8	14,796	109,421	18.8	16,558	126,067	19.7	17,351	128,982

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	22.2%	$15,317	$ 141,458	22.6%	$15,593	$ 142,863	25.5%	$17,593	$ 161,665
2023	70,891	22.2	15,738	142,815	22.6	16,021	144,233	25.5	18,077	163,216
2024	72,841	22.2	16,171	144,032	22.6	16,462	145,462	25.5	18,574	164,607
2025	74,844	22.2	16,615	145,093	22.6	16,915	146,533	25.5	19,085	165,819
2026	76,902	22.2	17,072	145,980	22.6	17,380	147,429	25.5	19,610	166,833
2027	79,017	22.2	17,542	146,674	22.6	17,858	148,130	25.5	20,149	167,626
2028	81,190	22.2	18,024	147,155	22.6	18,349	148,615	25.5	20,703	168,175
2029	83,423	22.2	18,520	147,400	22.6	18,854	148,863	25.5	21,273	168,455
2030	85,717	22.2	19,029	147,386	22.6	19,372	148,849	25.5	21,858	168,439
2031	88,074	22.2	19,552	147,087	22.6	19,905	148,547	25.5	22,459	168,097

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 28^{th} 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 Keytesville - 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: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability
2022	$ 68,994	10.3%	$7,106	$ 80,836	13.6%	$9,383	$ 101,031	12.0%	$8,279	$ 86,438
2023	70,891	10.3	7,302	81,611	13.6	9,641	102,000	12.0	8,507	87,267
2024	72,841	10.3	7,503	82,306	13.6	9,906	102,869	12.0	8,741	88,011
2025	74,844	10.3	7,709	82,912	13.6	10,179	103,627	12.0	8,981	88,659
2026	76,902	10.3	7,921	83,419	13.6	10,459	104,260	12.0	9,228	89,201
2027	79,017	10.3	8,139	83,816	13.6	10,746	104,756	12.0	9,482	89,625
2028	81,190	10.3	8,363	84,091	13.6	11,042	105,099	12.0	9,743	89,919
2029	83,423	10.3	8,593	84,231	13.6	11,346	105,274	12.0	10,011	90,069
2030	85,717	10.3	8,829	84,223	13.6	11,658	105,264	12.0	10,286	90,060
2031	88,074	10.3	9,072	84,052	13.6	11,978	105,050	12.0	10,569	89,877

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability
2022	$ 68,994	14.9%	$10,280	$ 105,236	16.9%	$11,660	$ 121,244	17.8%	$12,281	$ 124,046
2023	70,891	14.9	10,563	106,245	16.9	11,981	122,407	17.8	12,619	125,236
2024	72,841	14.9	10,853	107,150	16.9	12,310	123,450	17.8	12,966	126,303
2025	74,844	14.9	11,152	107,939	16.9	12,649	124,359	17.8	13,322	127,233
2026	76,902	14.9	11,458	108,599	16.9	12,996	125,119	17.8	13,689	128,011
2027	79,017	14.9	11,774	109,115	16.9	13,354	125,714	17.8	14,065	128,620
2028	81,190	14.9	12,097	109,473	16.9	13,721	126,126	17.8	14,452	129,041
2029	83,423	14.9	12,430	109,655	16.9	14,098	126,336	17.8	14,849	129,256
2030	85,717	14.9	12,772	109,644	16.9	14,486	126,324	17.8	15,258	129,244
2031	88,074	14.9	13,123	109,421	16.9	14,885	126,067	17.8	15,677	128,982

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability	Estimated Employer Contribution: As a % of Payroll	Estimated Employer Contribution: Annual Dollars	Unfunded Actuarial Accrued Liability
2022	$ 68,994	20.3%	$14,006	$ 141,458	20.7%	$14,282	$ 142,863	23.6%	$16,283	$ 161,665
2023	70,891	20.3	14,391	142,815	20.7	14,674	144,233	23.6	16,730	163,216
2024	72,841	20.3	14,787	144,032	20.7	15,078	145,462	23.6	17,190	164,607
2025	74,844	20.3	15,193	145,093	20.7	15,493	146,533	23.6	17,663	165,819
2026	76,902	20.3	15,611	145,980	20.7	15,919	147,429	23.6	18,149	166,833
2027	79,017	20.3	16,040	146,674	20.7	16,357	148,130	23.6	18,648	167,626
2028	81,190	20.3	16,482	147,155	20.7	16,806	148,615	23.6	19,161	168,175
2029	83,423	20.3	16,935	147,400	20.7	17,269	148,863	23.6	19,688	168,455
2030	85,717	20.3	17,401	147,386	20.7	17,743	148,849	23.6	20,229	168,439
2031	88,074	20.3	17,879	147,087	20.7	18,231	148,547	23.6	20,785	168,097

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	8.4%	$5,795	$ 80,836	11.7%	$8,072	$ 101,031	10.1%	$6,968	$ 86,438
2023	70,891	8.4	5,955	81,611	11.7	8,294	102,000	10.1	7,160	87,267
2024	72,841	8.4	6,119	82,306	11.7	8,522	102,869	10.1	7,357	88,011
2025	74,844	8.4	6,287	82,912	11.7	8,757	103,627	10.1	7,559	88,659
2026	76,902	8.4	6,460	83,419	11.7	8,998	104,260	10.1	7,767	89,201
2027	79,017	8.4	6,637	83,816	11.7	9,245	104,756	10.1	7,981	89,625
2028	81,190	8.4	6,820	84,091	11.7	9,499	105,099	10.1	8,200	89,919
2029	83,423	8.4	7,008	84,231	11.7	9,760	105,274	10.1	8,426	90,069
2030	85,717	8.4	7,200	84,223	11.7	10,029	105,264	10.1	8,657	90,060
2031	88,074	8.4	7,398	84,052	11.7	10,305	105,050	10.1	8,895	89,877

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	13.0%	$8,969	$ 105,236	15.0%	$10,349	$ 121,244	15.9%	$10,970	$ 124,046
2023	70,891	13.0	9,216	106,245	15.0	10,634	122,407	15.9	11,272	125,236
2024	72,841	13.0	9,469	107,150	15.0	10,926	123,450	15.9	11,582	126,303
2025	74,844	13.0	9,730	107,939	15.0	11,227	124,359	15.9	11,900	127,233
2026	76,902	13.0	9,997	108,599	15.0	11,535	125,119	15.9	12,227	128,011
2027	79,017	13.0	10,272	109,115	15.0	11,853	125,714	15.9	12,564	128,620
2028	81,190	13.0	10,555	109,473	15.0	12,179	126,126	15.9	12,909	129,041
2029	83,423	13.0	10,845	109,655	15.0	12,513	126,336	15.9	13,264	129,256
2030	85,717	13.0	11,143	109,644	15.0	12,858	126,324	15.9	13,629	129,244
2031	88,074	13.0	11,450	109,421	15.0	13,211	126,067	15.9	14,004	128,982

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	18.4%	$12,695	$ 141,458	18.8%	$12,971	$ 142,863	21.7%	$14,972	$ 161,665
2023	70,891	18.4	13,044	142,815	18.8	13,328	144,233	21.7	15,383	163,216
2024	72,841	18.4	13,403	144,032	18.8	13,694	145,462	21.7	15,806	164,607
2025	74,844	18.4	13,771	145,093	18.8	14,071	146,533	21.7	16,241	165,819
2026	76,902	18.4	14,150	145,980	18.8	14,458	147,429	21.7	16,688	166,833
2027	79,017	18.4	14,539	146,674	18.8	14,855	148,130	21.7	17,147	167,626
2028	81,190	18.4	14,939	147,155	18.8	15,264	148,615	21.7	17,618	168,175
2029	83,423	18.4	15,350	147,400	18.8	15,684	148,863	21.7	18,103	168,455
2030	85,717	18.4	15,772	147,386	18.8	16,115	148,849	21.7	18,601	168,439
2031	88,074	18.4	16,206	147,087	18.8	16,558	148,547	21.7	19,112	168,097

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	14.6%	$10,073	$ 83,413	18.0%	$12,419	$ 104,280	16.2%	$11,177	$ 89,203
2023	70,891	14.6	10,350	84,213	18.0	12,760	105,280	16.2	11,484	90,059
2024	72,841	14.6	10,635	84,931	18.0	13,111	106,177	16.2	11,800	90,826
2025	74,844	14.6	10,927	85,556	18.0	13,472	106,959	16.2	12,125	91,495
2026	76,902	14.6	11,228	86,079	18.0	13,842	107,613	16.2	12,458	92,054
2027	79,017	14.6	11,536	86,488	18.0	14,223	108,125	16.2	12,801	92,492
2028	81,190	14.6	11,854	86,771	18.0	14,614	108,479	16.2	13,153	92,795
2029	83,423	14.6	12,180	86,916	18.0	15,016	108,660	16.2	13,515	92,950
2030	85,717	14.6	12,515	86,908	18.0	15,429	108,650	16.2	13,886	92,941
2031	88,074	14.6	12,859	86,732	18.0	15,853	108,429	16.2	14,268	92,752

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	19.3%	$13,316	$ 108,622	21.4%	$14,765	$ 125,145	22.2%	$15,317	$ 128,039
2023	70,891	19.3	13,682	109,664	21.4	15,171	126,345	22.2	15,738	129,267
2024	72,841	19.3	14,058	110,598	21.4	15,588	127,422	22.2	16,171	130,369
2025	74,844	19.3	14,445	111,412	21.4	16,017	128,360	22.2	16,615	131,329
2026	76,902	19.3	14,842	112,093	21.4	16,457	129,145	22.2	17,072	132,132
2027	79,017	19.3	15,250	112,626	21.4	16,910	129,759	22.2	17,542	132,760
2028	81,190	19.3	15,670	112,995	21.4	17,375	130,184	22.2	18,024	133,195
2029	83,423	19.3	16,101	113,183	21.4	17,853	130,401	22.2	18,520	133,417
2030	85,717	19.3	16,543	113,172	21.4	18,343	130,388	22.2	19,029	133,404
2031	88,074	19.3	16,998	112,942	21.4	18,848	130,123	22.2	19,552	133,133

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	24.9%	$17,180	$ 145,989	25.3%	$17,455	$ 147,436	28.3%	$19,525	$ 166,846
2023	70,891	24.9	17,652	147,389	25.3	17,935	148,850	28.3	20,062	168,446
2024	72,841	24.9	18,137	148,645	25.3	18,429	150,118	28.3	20,614	169,881
2025	74,844	24.9	18,636	149,740	25.3	18,936	151,224	28.3	21,181	171,132
2026	76,902	24.9	19,149	150,655	25.3	19,456	152,148	28.3	21,763	172,178
2027	79,017	24.9	19,675	151,371	25.3	19,991	152,871	28.3	22,362	172,997
2028	81,190	24.9	20,216	151,867	25.3	20,541	153,372	28.3	22,977	173,564
2029	83,423	24.9	20,772	152,120	25.3	21,106	153,628	28.3	23,609	173,853
2030	85,717	24.9	21,344	152,105	25.3	21,686	153,613	28.3	24,258	173,836
2031	88,074	24.9	21,930	151,796	25.3	22,283	153,301	28.3	24,925	173,483

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 Keytesville - General

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	12.7%	$8,762	$ 83,413	16.1%	$11,108	$ 104,280	14.3%	$9,866	$ 89,203
2023	70,891	12.7	9,003	84,213	16.1	11,413	105,280	14.3	10,137	90,059
2024	72,841	12.7	9,251	84,931	16.1	11,727	106,177	14.3	10,416	90,826
2025	74,844	12.7	9,505	85,556	16.1	12,050	106,959	14.3	10,703	91,495
2026	76,902	12.7	9,767	86,079	16.1	12,381	107,613	14.3	10,997	92,054
2027	79,017	12.7	10,035	86,488	16.1	12,722	108,125	14.3	11,299	92,492
2028	81,190	12.7	10,311	86,771	16.1	13,072	108,479	14.3	11,610	92,795
2029	83,423	12.7	10,595	86,916	16.1	13,431	108,660	14.3	11,929	92,950
2030	85,717	12.7	10,886	86,908	16.1	13,800	108,650	14.3	12,258	92,941
2031	88,074	12.7	11,185	86,732	16.1	14,180	108,429	14.3	12,595	92,752

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	17.4%	$12,005	$ 108,622	19.5%	$13,454	$ 125,145	20.3%	$14,006	$ 128,039
2023	70,891	17.4	12,335	109,664	19.5	13,824	126,345	20.3	14,391	129,267
2024	72,841	17.4	12,674	110,598	19.5	14,204	127,422	20.3	14,787	130,369
2025	74,844	17.4	13,023	111,412	19.5	14,595	128,360	20.3	15,193	131,329
2026	76,902	17.4	13,381	112,093	19.5	14,996	129,145	20.3	15,611	132,132
2027	79,017	17.4	13,749	112,626	19.5	15,408	129,759	20.3	16,040	132,760
2028	81,190	17.4	14,127	112,995	19.5	15,832	130,184	20.3	16,482	133,195
2029	83,423	17.4	14,516	113,183	19.5	16,267	130,401	20.3	16,935	133,417
2030	85,717	17.4	14,915	113,172	19.5	16,715	130,388	20.3	17,401	133,404
2031	88,074	17.4	15,325	112,942	19.5	17,174	130,123	20.3	17,879	133,133

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	23.0%	$15,869	$ 145,989	23.4%	$16,145	$ 147,436	26.4%	$18,214	$ 166,846
2023	70,891	23.0	16,305	147,389	23.4	16,588	148,850	26.4	18,715	168,446
2024	72,841	23.0	16,753	148,645	23.4	17,045	150,118	26.4	19,230	169,881
2025	74,844	23.0	17,214	149,740	23.4	17,513	151,224	26.4	19,759	171,132
2026	76,902	23.0	17,687	150,655	23.4	17,995	152,148	26.4	20,302	172,178
2027	79,017	23.0	18,174	151,371	23.4	18,490	152,871	26.4	20,860	172,997
2028	81,190	23.0	18,674	151,867	23.4	18,998	153,372	26.4	21,434	173,564
2029	83,423	23.0	19,187	152,120	23.4	19,521	153,628	26.4	22,024	173,853
2030	85,717	23.0	19,715	152,105	23.4	20,058	153,613	26.4	22,629	173,836
2031	88,074	23.0	20,257	151,796	23.4	20,609	153,301	26.4	23,252	173,483

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	10.8%	$7,451	$ 83,413	14.2%	$9,797	$ 104,280	12.4%	$8,555	$ 89,203
2023	70,891	10.8	7,656	84,213	14.2	10,067	105,280	12.4	8,790	90,059
2024	72,841	10.8	7,867	84,931	14.2	10,343	106,177	12.4	9,032	90,826
2025	74,844	10.8	8,083	85,556	14.2	10,628	106,959	12.4	9,281	91,495
2026	76,902	10.8	8,305	86,079	14.2	10,920	107,613	12.4	9,536	92,054
2027	79,017	10.8	8,534	86,488	14.2	11,220	108,125	12.4	9,798	92,492
2028	81,190	10.8	8,769	86,771	14.2	11,529	108,479	12.4	10,068	92,795
2029	83,423	10.8	9,010	86,916	14.2	11,846	108,660	12.4	10,344	92,950
2030	85,717	10.8	9,257	86,908	14.2	12,172	108,650	12.4	10,629	92,941
2031	88,074	10.8	9,512	86,732	14.2	12,507	108,429	12.4	10,921	92,752

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	15.5%	$10,694	$ 108,622	17.6%	$12,143	$ 125,145	18.4%	$12,695	$ 128,039
2023	70,891	15.5	10,988	109,664	17.6	12,477	126,345	18.4	13,044	129,267
2024	72,841	15.5	11,290	110,598	17.6	12,820	127,422	18.4	13,403	130,369
2025	74,844	15.5	11,601	111,412	17.6	13,173	128,360	18.4	13,771	131,329
2026	76,902	15.5	11,920	112,093	17.6	13,535	129,145	18.4	14,150	132,132
2027	79,017	15.5	12,248	112,626	17.6	13,907	129,759	18.4	14,539	132,760
2028	81,190	15.5	12,584	112,995	17.6	14,289	130,184	18.4	14,939	133,195
2029	83,423	15.5	12,931	113,183	17.6	14,682	130,401	18.4	15,350	133,417
2030	85,717	15.5	13,286	113,172	17.6	15,086	130,388	18.4	15,772	133,404
2031	88,074	15.5	13,651	112,942	17.6	15,501	130,123	18.4	16,206	133,133

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2022	$ 68,994	21.1%	$14,558	$ 145,989	21.5%	$14,834	$ 147,436	24.5%	$16,904	$ 166,846
2023	70,891	21.1	14,958	147,389	21.5	15,242	148,850	24.5	17,368	168,446
2024	72,841	21.1	15,369	148,645	21.5	15,661	150,118	24.5	17,846	169,881
2025	74,844	21.1	15,792	149,740	21.5	16,091	151,224	24.5	18,337	171,132
2026	76,902	21.1	16,226	150,655	21.5	16,534	152,148	24.5	18,841	172,178
2027	79,017	21.1	16,673	151,371	21.5	16,989	152,871	24.5	19,359	172,997
2028	81,190	21.1	17,131	151,867	21.5	17,456	153,372	24.5	19,892	173,564
2029	83,423	21.1	17,602	152,120	21.5	17,936	153,628	24.5	20,439	173,853
2030	85,717	21.1	18,086	152,105	21.5	18,429	153,613	24.5	21,001	173,836
2031	88,074	21.1	18,584	151,796	21.5	18,936	153,301	24.5	21,578	173,483

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 Keytesville - General

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

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	8.9%	$6,140	$ 83,413	12.3%	$8,486	$ 104,280	10.5%	$7,244	$ 89,203
2023	70,891	8.9	6,309	84,213	12.3	8,720	105,280	10.5	7,444	90,059
2024	72,841	8.9	6,483	84,931	12.3	8,959	106,177	10.5	7,648	90,826
2025	74,844	8.9	6,661	85,556	12.3	9,206	106,959	10.5	7,859	91,495
2026	76,902	8.9	6,844	86,079	12.3	9,459	107,613	10.5	8,075	92,054
2027	79,017	8.9	7,033	86,488	12.3	9,719	108,125	10.5	8,297	92,492
2028	81,190	8.9	7,226	86,771	12.3	9,986	108,479	10.5	8,525	92,795
2029	83,423	8.9	7,425	86,916	12.3	10,261	108,660	10.5	8,759	92,950
2030	85,717	8.9	7,629	86,908	12.3	10,543	108,650	10.5	9,000	92,941
2031	88,074	8.9	7,839	86,732	12.3	10,833	108,429	10.5	9,248	92,752

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	13.6%	$9,383	$ 108,622	15.7%	$10,832	$ 125,145	16.5%	$11,384	$ 128,039
2023	70,891	13.6	9,641	109,664	15.7	11,130	126,345	16.5	11,697	129,267
2024	72,841	13.6	9,906	110,598	15.7	11,436	127,422	16.5	12,019	130,369
2025	74,844	13.6	10,179	111,412	15.7	11,751	128,360	16.5	12,349	131,329
2026	76,902	13.6	10,459	112,093	15.7	12,074	129,145	16.5	12,689	132,132
2027	79,017	13.6	10,746	112,626	15.7	12,406	129,759	16.5	13,038	132,760
2028	81,190	13.6	11,042	112,995	15.7	12,747	130,184	16.5	13,396	133,195
2029	83,423	13.6	11,346	113,183	15.7	13,097	130,401	16.5	13,765	133,417
2030	85,717	13.6	11,658	113,172	15.7	13,458	130,388	16.5	14,143	133,404
2031	88,074	13.6	11,978	112,942	15.7	13,828	130,123	16.5	14,532	133,133

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	$ 68,994	19.2%	$13,247	$ 145,989	19.6%	$13,523	$ 147,436	22.6%	$15,593	$ 166,846
2023	70,891	19.2	13,611	147,389	19.6	13,895	148,850	22.6	16,021	168,446
2024	72,841	19.2	13,985	148,645	19.6	14,277	150,118	22.6	16,462	169,881
2025	74,844	19.2	14,370	149,740	19.6	14,669	151,224	22.6	16,915	171,132
2026	76,902	19.2	14,765	150,655	19.6	15,073	152,148	22.6	17,380	172,178
2027	79,017	19.2	15,171	151,371	19.6	15,487	152,871	22.6	17,858	172,997
2028	81,190	19.2	15,588	151,867	19.6	15,913	153,372	22.6	18,349	173,564
2029	83,423	19.2	16,017	152,120	19.6	16,351	153,628	22.6	18,854	173,853
2030	85,717	19.2	16,458	152,105	19.6	16,801	153,613	22.6	19,372	173,836
2031	88,074	19.2	16,910	151,796	19.6	17,263	153,301	22.6	19,905	173,483

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.