

# The City of Marshall

Supplemental Actuarial Valuation of Alternate LAGERS Benefits February 28, 2022



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**Benefit Illustrations** 

GRS



March 10, 2023

The City of Marshall Marshall, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of an actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, certain 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 changes in LAGERS benefits by a political subdivision (Sections 105.660 - 105.685 RSMo).

The contribution requirement for benefits likely to accrue as a result of the future service of your employees is described in this report as the normal cost rate plus the casualty rate. This contribution rate, expressed as a percent of active employee payroll, will depend on the benefit plan adopted.

The contribution requirement to pay for benefits likely to result from service rendered by your employees prior to the valuation date, the liability for which is not covered by present employer account balances, is described in this report as the prior service cost rate. The prior service cost rate is the rate of contribution designed to pay for any unfunded actuarial accrued liability.

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 for the benefit plan in effect. These contributions are mandatory.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix I 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. Annual actuarial valuation results for the political subdivision and information pertaining to those results may be found in the political subdivision's annual actuarial valuation report as of February 28, 2022.

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.

The computed contribution rates 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. Summary provisions of the law as well as benefit illustrations can be found in Appendices II and III.

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In accordance with 105.675 RSMo, 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 adopt an alternate benefit plan. 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. The statement of cost must also be provided to the Joint Committee on Public Employee Retirement. The statement can be mailed to the State Capitol, Room 219-A, Jefferson City, MO 65101 or e-mailed to JCPER@senate.mo.gov.

The valuation was based on the same data as was used in your February 28, 2022 annual actuarial valuation. If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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

Respectfully submitted, Gabriel, Roeder, Smith & Company

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Mita D. Drazilov, ASA, FCA, MAAA



## **Alternate Plan Provisions Affecting Employer Contribution Rates**

The law governing LAGERS provides for a member contribution rate of 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 that 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 II of this report.



## The City of Marshall Computed Employer Contribution Rates - General Employees As of February 28, 2022

Benefit	Plan Information	
Benefit Plans	Present Plan	Alternate Plan
# Benefit Program:	L-12	L-6
Final Average Salary:	5 years	5 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular
Actua	rial Information	
Employer Contribution	n Rates (as a percent o	f payroll)
	Present Plan	Alternate Plan
Normal Cost Rate	9.5%	10.8%
Casualty Rate	0.4	0.5
Prior Service Cost Rate <sup>1</sup>	<u>1.9</u>	<u>4.6</u>
Total Employer Contribution Rate	11.8%	15.9%
Increase in Employer Contribution Rate f	or	
Alternate Plan as a percent of payroll		4.1%
ncrease in Actuarial Accrued Liability <sup>1</sup>	\$2,541,728	

Employer contribution rates shown above are for the fiscal year beginning in 2023. If the alternate plan is adopted prior to the fiscal year beginning in 2023, 4.1% would be added to the employer contribution rate currently in effect.

- # Change in provisions from present plan.
- 1 The increase in the actuarial accrued liability due to adoption of the alternate plan was amortized over a 20 year period to compute the increase in the Prior Service Cost Rate.

If you have any questions, please call the LAGERS office at 1-800-447-4334.



# The City of Marshall Projected Estimated Employer Contribution Rates - General Employees As of February 28, 2022

			Present Plan	Alternate Plan Change Due to Proposed Provisions			Alternate Plan Change Due to Propo			
			d Employer	Estimated		d Employer	Estimated		d Employer	Estimated
Valuation	Estimated	Contr	ibution	Difference	Cont	ribution	Difference	Contr	ibution	Difference
Date	Projected	As a % of	Annual	Between	As a % of	Annual	Between	As a % of	Annual	Between
Feb. 28/29	Payroll	Payroll	Dollars	AAL and AVA	Payroll	Dollars	AAL and AVA	Payroll	Dollars	AAL and AVA
2022	\$6,964,396	11.8%	\$821,799	\$725,966	15.9%	\$1,107,339	\$3,267,694	4.1%	\$285,540	\$2,541,728
2023	7,155,917	12.0	858,710	638,770	16.1	1,152,103	3,163,925	4.1	293,393	2,525,155
2024	7,352,705	12.1	889,677	531,570	16.2	1,191,138	3,033,644	4.1	301,461	2,502,074
2025	7,554,904	12.2	921,698	402,819	16.3	1,231,449	2,874,700	4.1	309,751	2,471,881
2026	7,762,664	12.3	954,808	250,853	16.4	1,273,077	2,684,781	4.1	318,269	2,433,928
2027	7,976,137	12.4	989,041	73,880	16.5	1,316,063	2,461,397	4.1	327,022	2,387,517
2028	8,195,481	12.5	1,024,435	(130,026)	16.6	1,360,450	2,201,868	4.1	336,015	2,331,894
2029	8,420,857	12.6	1,061,028	(362,935)	16.7	1,406,283	1,903,318	4.1	345,255	2,266,253
2030	8,652,431	12.7	1,098,859	(627,074)	16.8	1,453,608	1,562,649	4.1	354,749	2,189,723
2031	8,890,373	10.6	942,380	(924,836)	14.7	1,306,885	1,176,532	4.1	364,505	2,101,368

AAL = Actuarial Accrued Liability

AVA = Actuarial Value of Assets

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) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.00% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2022, the actuarial value of assets is \$19,274,632; the estimated market value of assets is \$21,065,172; the actuarial accrued liability is \$20,000,598; and the funded ratio is 96.4%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2022, there is no difference between the capped and uncapped employer contribution rate.



## The City of Marshall Computed Employer Contribution Rates - Police Employees As of February 28, 2022

Benefit	Plan Information	
Benefit Plans	Present Plan	Alternate Plan
# Benefit Program:	L-12	L-6
Final Average Salary:	5 years	5 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular
Actuar	rial Information	
Employer Contributior	n Rates (as a percent o	f payroll)
	Present Plan	Alternate Plan
Normal Cost Rate	10.1%	11.5%
Casualty Rate	0.7	0.8
Prior Service Cost Rate <sup>1</sup>	<u>(4.7)</u>	<u>(2.7)</u>
Total Employer Contribution Rate	6.1%	9.6%
Increase in Employer Contribution Rate for	or	
Alternate Plan as a percent of payroll		3.5%
Increase in Actuarial Accrued Liability <sup>1</sup>	\$288,654	

Employer contribution rates shown above are for the fiscal year beginning in 2023. If the alternate plan is adopted prior to the fiscal year beginning in 2023, 3.5% would be added to the employer contribution rate currently in effect.

- # Change in provisions from present plan.
- 1 The increase in the actuarial accrued liability due to adoption of the alternate plan was amortized over a 20 year period to compute the increase in the Prior Service Cost Rate.

If you have any questions, please call the LAGERS office at 1-800-447-4334.



# The City of Marshall Projected Estimated Employer Contribution Rates - Police Employees As of February 28, 2022

			Present Plan	1	_	Alternate Pla	n	Change	Due to Propose	oposed Provisions	
Valuation	Estimated		l Employer ibution	Estimated Difference		d Employer ibution	Estimated Difference		l Employer ibution	Estimated Difference	
Date Feb. 28/29	Projected Payroll	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	
2022	\$1,070,799	6.1%	\$65,319	\$(637,315)	9.6%	\$102,797	\$(348,661)	3.5%	\$37,478	\$288,654	
2023	1,100,246	6.5	71,516	(630,339)	10.0	110,025	(343 <i>,</i> 567)	3.5	38,509	286,772	
2024	1,130,503	6.9	78,005	(625,916)	10.4	117,572	(341,765)	3.5	39,567	284,151	
2025	1,161,592	7.3	84,796	(624,204)	10.8	125,452	(343,482)	3.5	40,656	280,722	
2026	1,193,536	7.6	90,709	(625,375)	11.1	132,482	(348,963)	3.5	41,773	276,412	
2027	1,226,358	7.9	96,882	(629,615)	11.4	139,805	(358,474)	3.5	42,923	271,141	
2028	1,260,083	8.2	103,327	(637,122)	11.7	147,430	(372,298)	3.5	44,103	264,824	
2029	1,294,735	8.5	110,052	(648,113)	12.0	155,368	(390,744)	3.5	45,316	257,369	
2030	1,330,340	8.8	117,070	(662,821)	12.3	163,632	(414,143)	3.5	46,562	248,678	
2031	1,366,924	7.4	101,152	(681,497)	10.9	148,995	(442,853)	3.5	47,843	238,644	

AAL = Actuarial Accrued Liability

AVA = Actuarial Value of Assets

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) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.00% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2022, the actuarial value of assets is \$3,390,459; the estimated market value of assets is \$3,705,420; the actuarial accrued liability is \$2,753,144; and the funded ratio is 123.1%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2022, there is no difference between the capped and uncapped employer contribution rate.



## The City of Marshall Computed Employer Contribution Rates - Fire Employees As of February 28, 2022

Benefit	Plan Information					
Benefit Plans	Present Plan	Alternate Plan				
# Benefit Program:	L-12	L-6				
Final Average Salary:	5 years	5 years				
Member Contribution Rate:	0%	0%				
Retirement Eligibility:	Regular	Regular				
Actua	rial Information					
Employer Contribution Rates (as a percent of payroll)						
Employer Contribution	n Rates (as a percent o	f payroll)				
Employer Contribution	n Rates (as a percent or <u>Present Plan</u>	f payroll) <u>Alternate Plan</u>				
Employer Contribution						
	Present Plan	Alternate Plan				
Normal Cost Rate	Present Plan 12.9%	Alternate Plan 14.6%				
Normal Cost Rate Casualty Rate	<u>Present Plan</u> 12.9% 0.9	Alternate Plan 14.6% 1.0				
Normal Cost Rate Casualty Rate Prior Service Cost Rate <sup>1</sup>	Present Plan 12.9% 0.9 ( <u>4.8)</u> 9.0%	<u>Alternate Plan</u> 14.6% 1.0 <u>(1.7)</u>				

Increase in Actuarial Accrued Liability<sup>1</sup>

Employer contribution rates shown above are for the fiscal year beginning in 2023. If the alternate plan is adopted prior to the fiscal year beginning in 2023, 4.9% would be added to the employer contribution rate currently in effect.

\$456,795

- # Change in provisions from present plan.
- 1 The increase in the actuarial accrued liability due to adoption of the alternate plan was amortized over a 20 year period to compute the increase in the Prior Service Cost Rate.

If you have any questions, please call the LAGERS office at 1-800-447-4334.



# The City of Marshall Projected Estimated Employer Contribution Rates - Fire Employees As of February 28, 2022

			Present Plan	1		Alternate Pla	n	Change	d Provisions	
Mahuatian	Fatimated		d Employer	Estimated		d Employer	Estimated		d Employer	Estimated
Valuation Date	Estimated Projected	As a % of	ibution Annual	Difference Between	As a % of	ibution Annual	Difference Between	As a % of	ibution Annual	Difference Between
Feb. 28/29	Payroll	Payroll	Dollars	AAL and AVA	Payroll	Dollars	AAL and AVA	Payroll	Dollars	AAL and AVA
2022	\$1,075,551	9.0%	\$96,800	\$(690,462)	13.9%	\$149,502	\$(233,667)	4.9%	\$52,702	\$456,795
2023	1,105,129	9.5	104,987	(685,201)	14.4	159,139	(231,384)	4.9	54,152	453,817
2024	1,135,520	9.9	112,416	(683,460)	14.8	168,057	(233,792)	4.9	55,641	449,668
2025	1,166,747	10.3	120,175	(685,470)	15.2	177,346	(241,228)	4.9	57,171	444,242
2026	1,198,833	10.7	128,275	(691,475)	15.6	187,018	(254,054)	4.9	58,743	437,421
2027	1,231,801	11.1	136,730	(701,743)	16.0	197,088	(272,663)	4.9	60,358	429,080
2028	1,265,676	11.5	145,553	(716,562)	16.4	207,571	(297,478)	4.9	62,018	419,084
2029	1,300,482	11.8	153,457	(736,242)	16.7	217,180	(328,955)	4.9	63,723	407,287
2030	1,336,245	12.1	161,686	(761,117)	17.0	227,162	(367,584)	4.9	65,476	393,533
2031	1,372,992	10.3	141,418	(791,548)	15.2	208,695	(413,894)	4.9	67,277	377,654

AAL = Actuarial Accrued Liability

AVA = Actuarial Value of Assets

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) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.00% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2022, the actuarial value of assets is \$3,896,375; the estimated market value of assets is \$4,258,333; the actuarial accrued liability is \$3,205,913; and the funded ratio is 121.5%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2022, there is no difference between the capped and uncapped employer contribution rate.



**APPENDIX** I

**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.



### Schedule 1.

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

					Percent of Ac	tive Membe	rs		
			Separating Within Next Year						
		G	eneral/Public S	Safety Mem	bers				
Sample	Years of	Ν	/len	Wo	omen	Po	olice	I	ire
Ages	Service	Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawa
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

_		During Next Tear		
Sample	General/			
Ages	Public Safety	Police	Fire	
25			7 4 5 0/	
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	
60	3.45	3.45	2.75	
65	3.15	3.15	2.75	



### Schedule 2.

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

Retirement	General Members		Retirement	Police/	
Ages	Men	Women	Ages	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%

## **Early Retirement**

#### **Normal Retirement**

Retirement	General	Members	Retirement	Police/	
Ages	Men	Women	Ages	Public Safety	Fire
60	100/	100/		110/	120/
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%
50	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 II** 

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-9 Benefit Program:	1.60% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4 Benefit Program:	1.00% for life, plus 1.00% to age 62
LT-5 Benefit Program:	1.25% for life, plus 0.75% to age 62
LT-8 Benefit Program:	1.50% for life, plus 0.50% to age 62
LT-4(65) Benefit Prograr	n: 1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Prograr	n: 1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Prograr	n: 1.50% for life, plus 0.50% to age 65
LT-10(65) Benefit Progra	am: 1.60% for life, plus 0.40% to age 65
LT-14(65) Benefit Progra	am: 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 otherwise 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 III** 

**BENEFIT ILLUSTRATIONS** 

## Missouri LAGERS Illustrations of Age and Service Allowance Amounts

### For Sample Combinations of Service & Salary (L-1 Benefit Program is Years of Credited Service times: 1.00% of FAS<sup>1</sup>)

Final		Estimated	Estim	ated
Average	LAGERS	Social	Monthl	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



# Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(L-3 Benefit Program is Years of Credited Service times: 1.25% of FAS<sup>1</sup>)

Final		Estimated	Estim	ated
Average	LAGERS	Social	Monthl	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(L-7 Benefit Program is Years of Credited Service times: 1.50% of FAS<sup>1</sup>)

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthl	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(L-9 Benefit Program is Years of Credited Service

times: 1.60% of FAS  $^{\rm 1}$  )

Final	Estimated Estimated		ated	
Average	LAGERS	Social	Monthl	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service	:			
\$1,500	\$ 840	\$ 936	\$1,776	118%
2,000	1,120	1,073	2,193	110%
2,500	1,400	1,208	2,608	104%
3,000	1,680	1,343	3,023	101%
3,500	1,960	1,480	3,440	98%
4,000	2,240	1,614	3,854	96%
25 Years of Service	:			
\$1,500	\$ 600	\$ 936	\$1,536	102%
2,000	800	1,073	1,873	94%
2,500	1,000	1,208	2,208	88%
3,000	1,200	1,343	2,543	85%
3,500	1,400	1,480	2,880	82%
4,000	1,600	1,614	3,214	80%
15 Years of Service	:			
\$1,500	\$360	\$ 936	\$1,296	86%
2,000	480	1,073	1,553	78%
2,500	600	1,208	1,808	72%
3,000	720	1,343	2,063	69%
3,500	840	1,480	2,320	66%
4,000	960	1,614	2,574	64%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(L-12 Benefit Program is Years of Credited Service times: 1.75% of FAS<sup>1</sup>)

Final		Estimated	Estimated		
Average	LAGERS	Social	Monthl	y Total	
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 919	\$ 936	\$1 <i>,</i> 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 <i>,</i> 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%	

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(L-6 Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup>)

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthl	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



## Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(L-11 Benefit Program is Years of Credited Service

	Estimated	Estimated	
LAGERS	Social	Monthl	y Total
BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
\$1,313		\$1,313	88%
1,750		1,750	88%
2,188		2,188	88%
2,625		2,625	88%
3,063		3,063	88%
3,500		3,500	88%
\$ 938		\$ 938	63%
1,250		1,250	63%
1,563		1,563	63%
1,875		1,875	63%
2,188		2,188	63%
2,500		2,500	63%
\$ 563		\$ 563	38%
750		750	38%
938		938	38%
1,125		1,125	38%
1,313		1,313	38%
1,500		1,500	38%
	BENEFIT <sup>3</sup> \$1,313 1,750 2,188 2,625 3,063 3,500 \$ 938 1,250 1,563 1,875 2,188 2,500 \$ 563 750 938 1,125 1,313	LAGERS Social Security 2 Security	LAGERS BENEFIT <sup>3</sup> Social Security <sup>2</sup> Monthl   \$1,313 \$1,313 \$   \$1,313 \$1,313 1,750   2,188 2,188 2,188   2,625 2,625 3,063   3,500 3,500 3,500   \$ 938 \$ 938 1,250   1,563 1,563 1,563   1,875 1,875 2,188   2,500 2,500 2,500   \$ 563 \$ 563 750   938 938 1,125   1,125 1,125 1,125   1,313 1,313 1,313

times: 2.50% of FAS  $^1$  )

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-4(62) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 62) 1.00% of FAS<sup>1</sup> at age 62)

Final Average		iers Iefit <sup>3</sup>			nated Ily Total	Percent of FAS	
Salary (FAS) <sup>1</sup>	To 62	At 62	Security <sup>2</sup>	To 62	At 62	To 62	At 62
35 Years of Servi		At 02	occurry	10 02		10 02	A 02
\$1,500	\$1,050	\$ 525	\$ 735	\$1,050	\$1,260	70%	84%
2,000	1,400	700	. 842	1,400	1,542	70%	77%
2,500	1,750	875	948	1,750	1,823	70%	73%
3,000	2,100	1,050	1,053	2,100	2,103	70%	70%
3,500	2,450	1,225	1,160	2,450	2,385	70%	68%
4,000	2,800	1,400	1,265	2,800	2,665	70%	67%
25 Years of Servi	ce:						
\$1,500	\$ 750	\$ 375	\$ 735	\$ 750	\$1,110	50%	74%
2,000	1,000	500	842	1,000	1,342	50%	67%
2,500	1,250	625	948	1,250	1,573	50%	63%
3,000	1,500	750	1,053	1,500	1,803	50%	60%
3,500	1,750	875	1,160	1,750	2,035	50%	58%
4,000	2,000	1,000	1,265	2,000	2,265	50%	57%
15 Years of Servi	ce:						
\$1,500	\$ 450	\$225	\$ 735	\$ 450	\$ 960	30%	64%
2,000	600	300	842	600	1,142	30%	57%
2,500	750	375	948	750	1,323	30%	53%
3,000	900	450	1,053	900	1,503	30%	50%
3,500	1,050	525	1,160	1,050	1,685	30%	48%
4,000	1,200	600	1,265	1,200	1,865	30%	47%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2022 - it does not include any amounts which might be payable to an eligible spouse or children.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary (LT-4(65) Benefit Program is Years of Credited Service

times: 2.00% of FAS<sup>1</sup> to age 65)

1.00% of FAS <sup>1</sup> at age 65)

Final	LAG	iERS	Estimated	Estir	nated	Perc	ent
Average	BEN	EFIT <sup>3</sup>	Social	Month	ly Total	of I	AS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Servio	ce:						
\$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 Servio	ce:						
\$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 Servio	ce:						
\$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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-5(62) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 62) 1.25% of FAS<sup>1</sup> at age 62)

Final	LAGERS BENEFIT <sup>3</sup>		Estimated		Estimated		cent
Average	-		Social		ly Total	of	
Salary (FAS) <sup>1</sup>	To 62	At 62	Security <sup>2</sup>	To 62	At 62	To 62	At 62
35 Years of Servio	ce:						
\$1,500	\$1,050	\$ 656	\$ 735	\$1,050	\$1,391	70%	93%
2,000	1,400	875	842	1,400	1,717	70%	86%
2,500	1,750	1,094	948	1,750	2,042	70%	82%
3,000	2,100	1,313	1,053	2,100	2,366	70%	79%
3,500	2,450	1,531	1,160	2,450	2,691	70%	77%
4,000	2,800	1,750	1,265	2,800	3,015	70%	75%
25 Years of Servio	ce:						
\$1,500	\$ 750	\$ 469	\$ 735	\$ 750	\$1,204	50%	80%
2,000	1,000	625	842	1,000	1,467	50%	73%
2,500	1,250	781	948	1,250	1,729	50%	69%
3,000	1,500	938	1,053	1,500	1,991	50%	66%
3,500	1,750	1,094	1,160	1,750	2,254	50%	64%
4,000	2,000	1,250	1,265	2,000	2,515	50%	63%
15 Years of Servio	ce:						
\$1,500	\$ 450	\$281	\$ 735	\$ 450	\$1,016	30%	68%
2,000	600	375	842	600	1,217	30%	61%
2,500	750	469	948	750	1,417	30%	57%
3,000	900	563	1,053	900	1,616	30%	54%
3,500	1,050	656	1,160	1,050	1,816	30%	52%
4,000	1,200	750	1,265	1,200	2,015	30%	50%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2022 - it does not include any amounts which might be payable to an eligible spouse or children.



Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(LT-5(65) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 65) 1.25% of FAS<sup>1</sup> at age 65)

Final	LAGERS BENEFIT <sup>3</sup>		Estimated Social	Estimated Monthly Total		Percent of FAS	
Average							
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Servio	ce:						
\$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 Servio	ce:						
\$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 Servio	ce:						
\$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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-8(62) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 62) 1.50% of FAS<sup>1</sup> at age 62)

Final	LAGERS BENEFIT <sup>3</sup>		Estimated Social	Estimated Monthly Total		Percent of FAS	
Average							
Salary (FAS) <sup>1</sup>	To 62	At 62	Security <sup>2</sup>	To 62	At 62	To 62	At 62
35 Years of Servio	ce:						
\$1,500	\$1,050	\$ 788	\$ 735	\$1,050	\$1,523	70%	102%
2,000	1,400	1,050	842	1,400	1,892	70%	95%
2,500	1,750	1,313	948	1,750	2,261	70%	90%
3,000	2,100	1,575	1,053	2,100	2,628	70%	88%
3,500	2,450	1,838	1,160	2,450	2,998	70%	86%
4,000	2,800	2,100	1,265	2,800	3,365	70%	84%
25 Years of Servi	ce:						
\$1,500	\$ 750	\$ 563	\$ 735	\$ 750	\$1,298	50%	87%
2,000	1,000	750	842	1,000	1,592	50%	80%
2,500	1,250	938	948	1,250	1,886	50%	75%
3,000	1,500	1,125	1,053	1,500	2,178	50%	73%
3,500	1,750	1,313	1,160	1,750	2,473	50%	71%
4,000	2,000	1,500	1,265	2,000	2,765	50%	69%
15 Years of Servi	ce:						
\$1,500	\$ 450	\$338	\$ 735	\$ 450	\$1,073	30%	72%
2,000	600	450	842	600	1,292	30%	65%
2,500	750	563	948	750	1,511	30%	60%
3,000	900	675	1,053	900	1,728	30%	58%
3,500	1,050	788	1,160	1,050	1,948	30%	56%
4,000	1,200	900	1,265	1,200	2,165	30%	54%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2022 - it does not include any amounts which might be payable to an eligible spouse or children.



Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary

(LT-8(65) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 65) 1.50% of FAS<sup>1</sup> at age 65)

Final Average	LAGERS BENEFIT <sup>3</sup>		Estimated Social	Estimated Monthly Total		Percent of FAS	
Salary (FAS) <sup>1</sup>	 To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Servi			·				
\$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 Servi	ce:						
\$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 Servi	ce:						
\$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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-10(65) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 65) 1.60% of FAS<sup>1</sup> at age 65)

Final	LAGERS BENEFIT <sup>3</sup>		Estimated Social	Estimated Monthly Total		Percent	
Average						of FAS	
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Servi	ce:						
\$1,500	\$1,050	\$ 840	\$ 936	\$1,050	\$1,776	70%	118%
2,000	1,400	1,120	1,073	1,400	2,193	70%	110%
2,500	1,750	1,400	1,208	1,750	2,608	70%	104%
3,000	2,100	1,680	1,343	2,100	3,023	70%	101%
3,500	2,450	1,960	1,480	2,450	3,440	70%	98%
4,000	2,800	2,240	1,614	2,800	3,854	70%	96%
25 Years of Servi	ce:						
\$1,500	\$750	\$ 600	\$ 936	\$ 750	\$1,536	50%	102%
2,000	1,000	800	1,073	1,000	1,873	50%	94%
2,500	1,250	1,000	1,208	1,250	2,208	50%	88%
3,000	1,500	1,200	1,343	1,500	2,543	50%	85%
3,500	1,750	1,400	1,480	1,750	2,880	50%	82%
4,000	2,000	1,600	1,614	2,000	3,214	50%	80%
15 Years of Servi	ce:						
\$1,500	\$ 450	\$360	\$ 936	\$ 450	\$1,296	30%	86%
2,000	600	480	1,073	600	1,553	30%	78%
2,500	750	600	1,208	750	1,808	30%	72%
3,000	900	720	1,343	900	2,063	30%	69%
3,500	1,050	840	1,480	1,050	2,320	30%	66%
4,000	1,200	960	1,614	1,200	2,574	30%	64%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.



Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-14(65) Benefit Program is Years of Credited Service times: 2.00% of FAS<sup>1</sup> to age 65)

1.75% of FAS <sup>1</sup> at age 65)

Final	LAGERS BENEFIT <sup>3</sup>		Estimated Social	Estimated Monthly Total		Percent of FAS	
Average							
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Servio	ce:						
\$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 Servio	ce:						
\$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 Servio	ce:						
\$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%

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

<sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit 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.





March 10, 2023 E-mail

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

Dear Mr. Betts:

Enclosed is the report of the February 28, 2022 Supplemental Actuarial Valuation of LAGERS benefits for the employees of:

The City of Marshall

Sincerely, Gabriel, Roeder, Smith & Company

Mita Drazilor

Mita D. Drazilov, ASA, FCA, MAAA

MDD:rmg Enclosure