



Cass County

Supplemental Actuarial Valuation of Alternate
LAGERS Benefits
February 28, 2023



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April 2, 2024

Cass County
Harrisonville, 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, 2023. 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, 2023.

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.

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, 2023 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



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.

Cass County

Computed Employer Contribution Rates - General Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-7
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	9.5%
Casualty Rate	0.3	0.3
Prior Service Cost Rate ¹	<u>2.5</u>	<u>3.7</u>
Total Employer Contribution Rate	10.8%	13.5%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

2.7%

Increase in Actuarial Accrued Liability ¹

\$1,341,903

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 2.7% 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.

² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

* Remaining General subdepartments after Public Safety department split elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates - General Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2023	\$ 8,491,239	10.80%	\$ 917,054	\$ 1,279,541	13.50%	\$ 1,146,317	\$ 2,621,444	2.70%	\$ 229,263	\$ 1,341,903
2024	8,724,748	10.80%	942,273	1,145,611	13.50%	1,177,841	2,478,764	2.70%	235,568	1,333,153
2025	8,964,679	10.80%	968,185	996,161	13.50%	1,210,232	2,317,128	2.70%	242,047	1,320,967
2026	9,211,208	10.80%	994,810	829,936	13.50%	1,243,513	2,134,963	2.70%	248,703	1,305,027
2027	9,464,516	10.80%	1,022,168	645,584	13.50%	1,277,710	1,930,574	2.70%	255,542	1,284,990
2028	9,724,790	10.80%	1,050,277	441,661	13.50%	1,312,847	1,702,148	2.70%	262,570	1,260,487
2029	9,992,222	10.80%	1,079,160	216,610	13.50%	1,348,950	1,447,731	2.70%	269,790	1,231,121
2030	10,267,008	11.80%	1,211,507	(31,233)	14.50%	1,488,716	1,165,233	2.70%	277,209	1,196,466
2031	10,549,351	7.70%	812,300	(406,655)	10.40%	1,097,133	749,407	2.70%	284,833	1,156,062
2032	10,839,458	7.70%	834,638	(368,374)	10.40%	1,127,304	741,041	2.70%	292,666	1,109,415

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 28th 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, 2023, the actuarial value of assets is \$11,490,121; the estimated market value of assets is \$11,490,121; the actuarial accrued liability is \$12,769,662; and the funded ratio is 90.0%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates - Police Employees

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-7
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	9.6%
Casualty Rate	0.5	0.6
Prior Service Cost Rate ¹	<u>1.4</u>	<u>3.1</u>
Total Employer Contribution Rate	9.9%	13.3%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

3.4%
\$1,475,406

Increase in Actuarial Accrued Liability ¹

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 3.4% 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.

² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

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



Cass County

Projected Estimated Employer Contribution Rates - Police Employees

As of February 28, 2023

Valuation Date Feb. 28/29	Estimated Projected Payroll	Present Plan			Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$6,303,391	9.9%	\$624,036	\$678,811	13.3%	\$838,351	\$2,154,217	3.4%	\$214,315	\$1,475,406
2024	6,476,734	9.9	641,197	633,095	13.3	861,406	2,098,881	3.4	220,209	1,465,786
2025	6,654,844	9.9	658,830	581,616	13.3	885,094	2,034,004	3.4	226,264	1,452,388
2026	6,837,852	9.9	676,947	523,898	13.3	909,434	1,958,760	3.4	232,487	1,434,862
2027	7,025,893	9.9	695,563	459,435	13.3	934,444	1,872,266	3.4	238,881	1,412,831
2028	7,219,105	9.9	714,691	387,678	13.3	960,141	1,773,568	3.4	245,450	1,385,890
2029	7,417,630	9.9	734,345	308,039	13.3	986,545	1,661,642	3.4	252,200	1,353,603
2030	7,621,615	9.9	754,540	219,889	13.3	1,013,675	1,535,389	3.4	259,135	1,315,500
2031	7,831,209	9.3	728,302	122,552	12.7	994,564	1,393,628	3.4	266,262	1,271,076
2032	8,046,567	9.3	748,331	66,912	12.7	1,021,914	1,286,701	3.4	273,583	1,219,789

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 28th 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, 2023, the actuarial value of assets is \$13,127,743; the estimated market value of assets is \$13,127,743; the actuarial accrued liability is \$13,806,554; and the funded ratio is 95.1%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates – Public Safety Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-7
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.4%	10.0%
Casualty Rate	0.3	0.3
Prior Service Cost Rate ¹	<u>2.4</u>	<u>3.6</u>
Total Employer Contribution Rate	11.1%	13.9%
Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll		2.8%
Increase in Actuarial Accrued Liability ¹		\$107,726

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 2.8% 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.
- 2 All service earned prior to April 1, 2011 is covered under the L-6 benefit program.
- * Public Safety department after split from the General Department elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates – Public Safety Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$ 685,969	11.10%	\$ 76,143	\$ 153,655	13.90%	\$ 95,350	\$ 261,381	2.80%	\$ 19,207	\$ 107,726
2024	704,833	11.10%	78,236	147,469	13.90%	97,972	254,493	2.80%	19,736	107,024
2025	724,216	11.10%	80,388	140,385	13.90%	100,666	246,431	2.80%	20,278	106,046
2026	744,132	11.10%	82,599	132,327	13.90%	103,434	237,093	2.80%	20,835	104,766
2027	764,596	11.10%	84,870	123,211	13.90%	106,279	226,368	2.80%	21,409	103,157
2028	785,622	11.10%	87,204	112,954	13.90%	109,201	214,144	2.80%	21,997	101,190
2029	807,227	11.10%	89,602	101,458	13.90%	112,205	200,291	2.80%	22,603	98,833
2030	829,426	11.60%	96,213	88,623	14.40%	119,437	184,674	2.80%	23,224	96,051
2031	852,235	9.50%	80,962	69,668	12.30%	104,825	162,475	2.80%	23,863	92,807
2032	875,671	9.50%	83,189	67,754	12.30%	107,708	156,816	2.80%	24,519	89,062

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 28th 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, 2023, the actuarial value of assets is \$474,235; the estimated market value of assets is \$474,235; the actuarial accrued liability is \$627,891; and the funded ratio is 75.5%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates - General Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-12
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	11.0%
Casualty Rate	0.3	0.4
Prior Service Cost Rate ¹	<u>2.5</u>	<u>4.8</u>
Total Employer Contribution Rate	10.8%	16.2%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

5.4%

Increase in Actuarial Accrued Liability ¹

\$2,683,715

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 5.4% 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.

² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

* Remaining General subdepartments after Public Safety department split elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates - General Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2023	\$ 8,491,239	10.80%	\$ 917,054	\$ 1,279,541	16.20%	\$ 1,375,581	\$ 3,963,256	5.40%	\$ 458,527	\$ 2,683,715
2024	8,724,748	10.80%	942,273	1,145,611	16.20%	1,413,409	3,811,828	5.40%	471,136	2,666,217
2025	8,964,679	10.80%	968,185	996,161	16.20%	1,452,278	3,638,007	5.40%	484,093	2,641,846
2026	9,211,208	10.80%	994,810	829,936	16.20%	1,492,216	3,439,903	5.40%	497,406	2,609,967
2027	9,464,516	10.80%	1,022,168	645,584	16.20%	1,533,252	3,215,478	5.40%	511,084	2,569,894
2028	9,724,790	10.80%	1,050,277	441,661	16.20%	1,575,416	2,962,551	5.40%	525,139	2,520,890
2029	9,992,222	10.80%	1,079,160	216,610	16.20%	1,618,740	2,678,771	5.40%	539,580	2,462,161
2030	10,267,008	11.80%	1,211,507	(31,233)	17.20%	1,765,925	2,361,620	5.40%	554,418	2,392,853
2031	10,549,351	7.70%	812,300	(406,655)	13.10%	1,381,965	1,905,392	5.40%	569,665	2,312,047
2032	10,839,458	7.70%	834,638	(368,374)	13.10%	1,419,969	1,850,383	5.40%	585,331	2,218,757

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 28th 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, 2023, the actuarial value of assets is \$11,490,121; the estimated market value of assets is \$11,490,121; the actuarial accrued liability is \$17,769,662; and the funded ratio is 90.0%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates - Police Employees

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-12
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	11.1%
Casualty Rate	0.5	0.7
Prior Service Cost Rate ¹	<u>1.4</u>	<u>4.9</u>
Total Employer Contribution Rate	9.9%	16.7%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

6.8%
\$2,950,826

Increase in Actuarial Accrued Liability ¹

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 6.8% 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.

² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

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



Cass County

Projected Estimated Employer Contribution Rates - Police Employees

As of February 28, 2023

Valuation Date Feb. 28/29	Estimated Projected Payroll	Present Plan			Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$6,303,391	9.9%	\$624,036	\$678,811	16.7%	\$1,052,666	\$3,629,637	6.8%	\$428,630	\$2,950,826
2024	6,476,734	9.9	641,197	633,095	16.7	1,081,615	3,564,681	6.8	440,418	2,931,586
2025	6,654,844	9.9	658,830	581,616	16.7	1,111,359	3,486,406	6.8	452,529	2,904,790
2026	6,837,852	9.9	676,947	523,898	16.7	1,141,921	3,393,635	6.8	464,974	2,869,737
2027	7,025,893	9.9	695,563	459,435	16.7	1,173,324	3,285,111	6.8	477,761	2,825,676
2028	7,219,105	9.9	714,691	387,678	16.7	1,205,591	3,159,472	6.8	490,900	2,771,794
2029	7,417,630	9.9	734,345	308,039	16.7	1,238,744	3,015,258	6.8	504,399	2,707,219
2030	7,621,615	9.9	754,540	219,889	16.7	1,272,810	2,850,902	6.8	518,270	2,631,013
2031	7,831,209	9.3	728,302	122,552	16.1	1,260,825	2,664,716	6.8	532,523	2,542,164
2032	8,046,567	9.3	748,331	66,912	16.1	1,295,497	2,506,501	6.8	547,166	2,439,589

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 28th 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, 2023, the actuarial value of assets is \$13,127,743; the estimated market value of assets is \$13,127,743; the actuarial accrued liability is \$13,806,554; and the funded ratio is 95.1%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates – Public Safety Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-12
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.4%	11.3%
Casualty Rate	0.3	0.4
Prior Service Cost Rate ¹	<u>2.4</u>	<u>4.7</u>
Total Employer Contribution Rate	11.1%	16.7%
Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll		5.6%
Increase in Actuarial Accrued Liability ¹		\$215,574

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 5.6% 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.

2 All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

* Public Safety department after split from the General Department elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates – Public Safety Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$ 685,969	11.10%	\$ 76,143	\$ 153,655	16.70%	\$ 114,557	\$ 369,229	5.60%	\$ 38,414	\$ 215,574
2024	704,833	11.10%	78,236	147,469	16.70%	117,707	361,637	5.60%	39,471	214,168
2025	724,216	11.10%	80,388	140,385	16.70%	120,944	352,595	5.60%	40,556	212,210
2026	744,132	11.10%	82,599	132,327	16.70%	124,270	341,976	5.60%	41,671	209,649
2027	764,596	11.10%	84,870	123,211	16.70%	127,688	329,641	5.60%	42,818	206,430
2028	785,622	11.10%	87,204	112,954	16.70%	131,199	315,448	5.60%	43,995	202,494
2029	807,227	11.10%	89,602	101,458	16.70%	134,807	299,234	5.60%	45,205	197,776
2030	829,426	11.60%	96,213	88,623	17.20%	142,661	280,832	5.60%	46,448	192,209
2031	852,235	9.50%	80,962	69,668	15.10%	128,687	255,386	5.60%	47,725	185,718
2032	875,671	9.50%	83,189	67,754	15.10%	132,226	245,978	5.60%	49,037	178,224

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 28th 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, 2023, the actuarial value of assets is \$474,235; the estimated market value of assets is \$474,235; the actuarial accrued liability is \$627,891; and the funded ratio is 75.5%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates - General Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-6
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	12.6%
Casualty Rate	0.3	0.5
Prior Service Cost Rate ¹	<u>2.5</u>	<u>6.0</u>
Total Employer Contribution Rate	10.8%	19.1%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

8.3%

Increase in Actuarial Accrued Liability ¹

\$4,025,495

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 8.3% 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.

² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

* Remaining General subdepartments after Public Safety department split elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates - General Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$ 8,491,239	10.80%	\$ 917,054	\$ 1,279,541	19.10%	\$ 1,621,827	\$ 5,305,036	8.30%	\$ 704,773	\$ 4,025,495
2024	8,724,748	10.80%	942,273	1,145,611	19.10%	1,666,427	5,144,859	8.30%	724,154	3,999,248
2025	8,964,679	10.80%	968,185	996,161	19.10%	1,712,254	4,958,854	8.30%	744,069	3,962,693
2026	9,211,208	10.80%	994,810	829,936	19.10%	1,759,341	4,744,811	8.30%	764,531	3,914,875
2027	9,464,516	10.80%	1,022,168	645,584	19.10%	1,807,723	4,500,350	8.30%	785,555	3,854,766
2028	9,724,790	10.80%	1,050,277	441,661	19.10%	1,857,435	4,222,922	8.30%	807,158	3,781,261
2029	9,992,222	10.80%	1,079,160	216,610	19.10%	1,908,514	3,909,779	8.30%	829,354	3,693,169
2030	10,267,008	11.80%	1,211,507	(31,233)	20.10%	2,063,669	3,557,976	8.30%	852,162	3,589,209
2031	10,549,351	7.70%	812,300	(406,655)	16.00%	1,687,896	3,061,348	8.30%	875,596	3,468,003
2032	10,839,458	7.70%	834,638	(368,374)	16.00%	1,734,313	2,959,696	8.30%	899,675	3,328,070

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 28th 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, 2023, the actuarial value of assets is \$11,490,121; the estimated market value of assets is \$11,490,121; the actuarial accrued liability is \$12,769,662; and the funded ratio is 90.0%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates - Police Employees

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-6
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.0%	12.6%
Casualty Rate	0.5	0.8
Prior Service Cost Rate ¹	<u>1.4</u>	<u>6.6</u>
Total Employer Contribution Rate	9.9%	20.0%

Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll

10.1%
\$4,426,239

Increase in Actuarial Accrued Liability ¹

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 10.1% 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.
- ² All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

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



Cass County

Projected Estimated Employer Contribution Rates - Police Employees

As of February 28, 2023

Valuation Date Feb. 28/29	Estimated Projected Payroll	Present Plan			Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		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
2023	\$6,303,391	9.9%	\$624,036	\$678,811	20.0%	\$1,260,678	\$5,105,050	10.1%	\$636,642	\$4,426,239
2024	6,476,734	9.9	641,197	633,095	20.0	1,295,347	5,030,474	10.1	654,150	4,397,379
2025	6,654,844	9.9	658,830	581,616	20.0	1,330,969	4,938,800	10.1	672,139	4,357,184
2026	6,837,852	9.9	676,947	523,898	20.0	1,367,570	4,828,504	10.1	690,623	4,304,606
2027	7,025,893	9.9	695,563	459,435	20.0	1,405,179	4,697,948	10.1	709,616	4,238,513
2028	7,219,105	9.9	714,691	387,678	20.0	1,443,821	4,545,369	10.1	729,130	4,157,691
2029	7,417,630	9.9	734,345	308,039	20.0	1,483,526	4,368,868	10.1	749,181	4,060,829
2030	7,621,615	9.9	754,540	219,889	20.0	1,524,323	4,166,408	10.1	769,783	3,946,519
2031	7,831,209	9.3	728,302	122,552	19.4	1,519,255	3,935,799	10.1	790,953	3,813,247
2032	8,046,567	9.3	748,331	66,912	19.4	1,561,034	3,726,296	10.1	812,703	3,659,384

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 28th 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, 2023, the actuarial value of assets is \$13,127,743; the estimated market value of assets is \$13,127,743; the actuarial accrued liability is \$13,806,554; and the funded ratio is 95.1%. 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, 2023, there is no difference between the capped and uncapped employer contribution rate.



Cass County

Computed Employer Contribution Rates – Public Safety Employees*

As of February 28, 2023

Benefit Plan Information

<u>Benefit Plans</u>	<u>Present Plan</u>	<u>Alternate Plan</u>
# Benefit Program ² :	L-3	L-6
Final Average Salary:	3 years	3 years
Member Contribution Rate:	0%	0%
Retirement Eligibility:	Regular	Regular

Actuarial Information

Employer Contribution Rates (as a percent of payroll)

	<u>Present Plan*</u>	<u>Alternate Plan</u>
Normal Cost Rate	8.4%	13.2%
Casualty Rate	0.3	0.5
Prior Service Cost Rate ¹	<u>2.4</u>	<u>5.9</u>
Total Employer Contribution Rate	11.1%	19.6%
Increase in Employer Contribution Rate for Alternate Plan as a percent of payroll		8.5%
Increase in Actuarial Accrued Liability ¹		\$323,329

Employer contribution rates shown above are for the fiscal year beginning in 2024. If the alternate plan is adopted prior to the fiscal year beginning in 2024, 8.5% 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.

2 All service earned prior to April 1, 2011 is covered under the L-6 benefit program.

* Public Safety department after split from the General Department elected July, 2023. See letter dated July 25, 2023.

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



Cass County

Projected Estimated Employer Contribution Rates – Public Safety Employees

As of February 28, 2023

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2023	\$ 685,969	11.10%	\$ 76,143	\$ 153,655	19.60%	\$ 134,450	\$ 476,984	8.50%	\$ 58,307	\$ 323,329
2024	704,833	11.10%	78,236	147,469	19.60%	138,147	468,690	8.50%	59,911	321,221
2025	724,216	11.10%	80,388	140,385	19.60%	141,946	458,670	8.50%	61,558	318,285
2026	744,132	11.10%	82,599	132,327	19.60%	145,850	446,771	8.50%	63,251	314,444
2027	764,596	11.10%	84,870	123,211	19.60%	149,861	432,827	8.50%	64,991	309,616
2028	785,622	11.10%	87,204	112,954	19.60%	153,982	416,666	8.50%	66,778	303,712
2029	807,227	11.10%	89,602	101,458	19.60%	158,216	398,094	8.50%	68,614	296,636
2030	829,426	11.60%	96,213	88,623	20.10%	166,715	376,909	8.50%	70,502	288,286
2031	852,235	9.50%	80,962	69,668	18.00%	153,402	348,219	8.50%	72,440	278,551
2032	875,671	9.50%	83,189	67,754	18.00%	157,621	335,066	8.50%	74,432	267,312

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 28th 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, 2023, the actuarial value of assets is \$474,235; the estimated market value of assets is \$474,235; the actuarial accrued liability is \$627,891; and the funded ratio is 75.5%. 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, 2023, 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 Active Members Separating Within Next Year							
Sample Ages	Years of Service	General/Public Safety Members				Police		Fire	
		Men		Women		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
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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Concluded)

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

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

APPENDIX 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, 2023

(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 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-10(65) Benefit Program:	1.60% for life, plus 0.40% 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 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 ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 1,003	\$1,528	102%
2,000	700	1,145	1,845	92%
2,500	875	1,285	2,160	86%
3,000	1,050	1,426	2,476	83%
3,500	1,225	1,567	2,792	80%
4,000	1,400	1,707	3,107	78%
25 Years of Service:				
\$1,500	\$ 375	\$ 1,003	\$1,378	92%
2,000	500	1,145	1,645	82%
2,500	625	1,285	1,910	76%
3,000	750	1,426	2,176	73%
3,500	875	1,567	2,442	70%
4,000	1,000	1,707	2,707	68%
15 Years of Service:				
\$1,500	\$225	\$ 1,003	\$1,228	82%
2,000	300	1,145	1,445	72%
2,500	375	1,285	1,660	66%
3,000	450	1,426	1,876	63%
3,500	525	1,567	2,092	60%
4,000	600	1,707	2,307	58%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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



Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 1,003	\$1,659	111%
2,000	875	1,145	2,020	101%
2,500	1,094	1,285	2,379	95%
3,000	1,313	1,426	2,739	91%
3,500	1,531	1,567	3,098	89%
4,000	1,750	1,707	3,457	86%
25 Years of Service:				
\$1,500	\$ 469	\$ 1,003	\$1,472	98%
2,000	625	1,145	1,770	89%
2,500	781	1,285	2,066	83%
3,000	938	1,426	2,364	79%
3,500	1,094	1,567	2,661	76%
4,000	1,250	1,707	2,957	74%
15 Years of Service:				
\$1,500	\$281	\$ 1,003	\$1,284	86%
2,000	375	1,145	1,520	76%
2,500	469	1,285	1,754	70%
3,000	563	1,426	1,989	66%
3,500	656	1,567	2,223	64%
4,000	750	1,707	2,457	61%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 1,003	\$1,791	119%
2,000	1,050	1,145	2,195	110%
2,500	1,313	1,285	2,598	104%
3,000	1,575	1,426	3,001	100%
3,500	1,838	1,567	3,405	97%
4,000	2,100	1,707	3,807	95%
25 Years of Service:				
\$1,500	\$ 563	\$ 1,003	\$1,566	104%
2,000	750	1,145	1,895	95%
2,500	938	1,285	2,223	89%
3,000	1,125	1,426	2,551	85%
3,500	1,313	1,567	2,880	82%
4,000	1,500	1,707	3,207	80%
15 Years of Service:				
\$1,500	\$338	\$ 1,003	\$1,341	89%
2,000	450	1,145	1,595	80%
2,500	563	1,285	1,848	74%
3,000	675	1,426	2,101	70%
3,500	788	1,567	2,355	67%
4,000	900	1,707	2,607	65%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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-9 Benefit Program is Years of Credited Service times: 1.60% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 840	\$ 1,003	\$1,843	123%
2,000	1,120	1,145	2,265	113%
2,500	1,400	1,285	2,685	107%
3,000	1,680	1,426	3,106	104%
3,500	1,960	1,567	3,527	101%
4,000	2,240	1,707	3,947	99%
25 Years of Service:				
\$1,500	\$ 600	\$ 1,003	\$1,603	107%
2,000	800	1,145	1,945	97%
2,500	1,000	1,285	2,285	91%
3,000	1,200	1,426	2,626	88%
3,500	1,400	1,567	2,967	85%
4,000	1,600	1,707	3,307	83%
15 Years of Service:				
\$1,500	\$360	\$ 1,003	\$1,363	91%
2,000	480	1,145	1,625	81%
2,500	600	1,285	1,885	75%
3,000	720	1,426	2,146	72%
3,500	840	1,567	2,407	69%
4,000	960	1,707	2,667	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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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



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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 1,003	\$1,922	128%
2,000	1,225	1,145	2,370	119%
2,500	1,531	1,285	2,816	113%
3,000	1,838	1,426	3,264	109%
3,500	2,144	1,567	3,711	106%
4,000	2,450	1,707	4,157	104%
25 Years of Service:				
\$1,500	\$ 656	\$ 1,003	\$1,659	111%
2,000	875	1,145	2,020	101%
2,500	1,094	1,285	2,379	95%
3,000	1,313	1,426	2,739	91%
3,500	1,531	1,567	3,098	89%
4,000	1,750	1,707	3,457	86%
15 Years of Service:				
\$1,500	\$ 394	\$ 1,003	\$1,397	93%
2,000	525	1,145	1,670	84%
2,500	656	1,285	1,941	78%
3,000	788	1,426	2,214	74%
3,500	919	1,567	2,486	71%
4,000	1,050	1,707	2,757	69%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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



Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 1,003	\$2,053	137%
2,000	1,400	1,145	2,545	127%
2,500	1,750	1,285	3,035	121%
3,000	2,100	1,426	3,526	118%
3,500	2,450	1,567	4,017	115%
4,000	2,800	1,707	4,507	113%
25 Years of Service:				
\$1,500	\$ 750	\$ 1,003	\$1,753	117%
2,000	1,000	1,145	2,145	107%
2,500	1,250	1,285	2,535	101%
3,000	1,500	1,426	2,926	98%
3,500	1,750	1,567	3,317	95%
4,000	2,000	1,707	3,707	93%
15 Years of Service:				
\$1,500	\$ 450	\$ 1,003	\$1,453	97%
2,000	600	1,145	1,745	87%
2,500	750	1,285	2,035	81%
3,000	900	1,426	2,326	78%
3,500	1,050	1,567	2,617	75%
4,000	1,200	1,707	2,907	73%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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-11 Benefit Program is Years of Credited Service
times: 2.50% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,313		\$1,313	88%
2,000	1,750		1,750	88%
2,500	2,188		2,188	88%
3,000	2,625		2,625	88%
3,500	3,063		3,063	88%
4,000	3,500		3,500	88%
25 Years of Service:				
\$1,500	\$ 938		\$ 938	63%
2,000	1,250		1,250	63%
2,500	1,563		1,563	63%
3,000	1,875		1,875	63%
3,500	2,188		2,188	63%
4,000	2,500		2,500	63%
15 Years of Service:				
\$1,500	\$ 563		\$ 563	38%
2,000	750		750	38%
2,500	938		938	38%
3,000	1,125		1,125	38%
3,500	1,313		1,313	38%
4,000	1,500		1,500	38%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 62)
1.00% of FAS ¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 782	\$1,050	\$1,307	70%	87%
2,000	1,400	700	893	1,400	1,593	70%	80%
2,500	1,750	875	1,001	1,750	1,876	70%	75%
3,000	2,100	1,050	1,110	2,100	2,160	70%	72%
3,500	2,450	1,225	1,219	2,450	2,444	70%	70%
4,000	2,800	1,400	1,328	2,800	2,728	70%	68%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 782	\$ 750	\$1,157	50%	77%
2,000	1,000	500	893	1,000	1,393	50%	70%
2,500	1,250	625	1,001	1,250	1,626	50%	65%
3,000	1,500	750	1,110	1,500	1,860	50%	62%
3,500	1,750	875	1,219	1,750	2,094	50%	60%
4,000	2,000	1,000	1,328	2,000	2,328	50%	58%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 782	\$ 450	\$ 1,007	30%	67%
2,000	600	300	893	600	1,193	30%	60%
2,500	750	375	1,001	750	1,376	30%	55%
3,000	900	450	1,110	900	1,560	30%	52%
3,500	1,050	525	1,219	1,050	1,744	30%	50%
4,000	1,200	600	1,328	1,200	1,928	30%	48%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2023 - 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 FAS¹ to age 65) 1.00% of FAS¹ 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	\$ 1,003	\$1,050	\$1,528	70%	102%
2,000	1,400	700	1,145	1,400	1,845	70%	92%
2,500	1,750	875	1,285	1,750	2,160	70%	86%
3,000	2,100	1,050	1,426	2,100	2,476	70%	83%
3,500	2,450	1,225	1,567	2,450	2,792	70%	80%
4,000	2,800	1,400	1,707	2,800	3,107	70%	78%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 1,003	\$ 750	\$1,378	50%	92%
2,000	1,000	500	1,145	1,000	1,645	50%	82%
2,500	1,250	625	1,285	1,250	1,910	50%	76%
3,000	1,500	750	1,426	1,500	2,176	50%	73%
3,500	1,750	875	1,567	1,750	2,442	50%	70%
4,000	2,000	1,000	1,707	2,000	2,707	50%	68%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 1,003	\$ 450	\$1,228	30%	82%
2,000	600	300	1,145	600	1,445	30%	72%
2,500	750	375	1,285	750	1,660	30%	66%
3,000	900	450	1,426	900	1,876	30%	63%
3,500	1,050	525	1,567	1,050	2,092	30%	60%
4,000	1,200	600	1,707	1,200	2,307	30%	58%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 62)
1.25% of FAS ¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 782	\$1,050	\$1,438	70%	96%
2,000	1,400	875	893	1,400	1,768	70%	88%
2,500	1,750	1,094	1,001	1,750	2,095	70%	84%
3,000	2,100	1,313	1,110	2,100	2,423	70%	81%
3,500	2,450	1,531	1,219	2,450	2,750	70%	79%
4,000	2,800	1,750	1,328	2,800	3,078	70%	77%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 782	\$ 750	\$1,251	50%	83%
2,000	1,000	625	893	1,000	1,518	50%	76%
2,500	1,250	781	1,001	1,250	1,782	50%	71%
3,000	1,500	938	1,110	1,500	2,048	50%	68%
3,500	1,750	1,094	1,219	1,750	2,313	50%	66%
4,000	2,000	1,250	1,328	2,000	2,578	50%	64%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 782	\$ 450	\$1,063	30%	71%
2,000	600	375	893	600	1,268	30%	63%
2,500	750	469	1,001	750	1,470	30%	59%
3,000	900	563	1,110	900	1,673	30%	56%
3,500	1,050	656	1,219	1,050	1,875	30%	54%
4,000	1,200	750	1,328	1,200	2,078	30%	52%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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



Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 1,003	\$1,050	\$1,659	70%	111%
2,000	1,400	875	1,145	1,400	2,020	70%	101%
2,500	1,750	1,094	1,285	1,750	2,379	70%	95%
3,000	2,100	1,313	1,426	2,100	2,739	70%	91%
3,500	2,450	1,531	1,567	2,450	3,098	70%	89%
4,000	2,800	1,750	1,707	2,800	3,457	70%	86%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 1,003	\$ 750	\$1,472	50%	98%
2,000	1,000	625	1,145	1,000	1,770	50%	89%
2,500	1,250	781	1,285	1,250	2,066	50%	83%
3,000	1,500	938	1,426	1,500	2,364	50%	79%
3,500	1,750	1,094	1,567	1,750	2,661	50%	76%
4,000	2,000	1,250	1,707	2,000	2,957	50%	74%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 1,003	\$ 450	\$1,284	30%	86%
2,000	600	375	1,145	600	1,520	30%	76%
2,500	750	469	1,285	750	1,754	30%	70%
3,000	900	563	1,426	900	1,989	30%	66%
3,500	1,050	656	1,567	1,050	2,223	30%	64%
4,000	1,200	750	1,707	1,200	2,457	30%	61%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 62)
1.50% of FAS ¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 782	\$1,050	\$1,570	70%	105%
2,000	1,400	1,050	893	1,400	1,943	70%	97%
2,500	1,750	1,313	1,001	1,750	2,314	70%	93%
3,000	2,100	1,575	1,110	2,100	2,685	70%	90%
3,500	2,450	1,838	1,219	2,450	3,057	70%	87%
4,000	2,800	2,100	1,328	2,800	3,428	70%	86%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 782	\$ 750	\$1,345	50%	90%
2,000	1,000	750	893	1,000	1,643	50%	82%
2,500	1,250	938	1,001	1,250	1,939	50%	78%
3,000	1,500	1,125	1,110	1,500	2,235	50%	75%
3,500	1,750	1,313	1,219	1,750	2,532	50%	72%
4,000	2,000	1,500	1,328	2,000	2,828	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 782	\$ 450	\$1,120	30%	75%
2,000	600	450	893	600	1,343	30%	67%
2,500	750	563	1,001	750	1,564	30%	63%
3,000	900	675	1,110	900	1,785	30%	60%
3,500	1,050	788	1,219	1,050	2,007	30%	57%
4,000	1,200	900	1,328	1,200	2,228	30%	56%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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



Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 1,003	\$1,050	\$1,791	70%	119%
2,000	1,400	1,050	1,145	1,400	2,195	70%	110%
2,500	1,750	1,313	1,285	1,750	2,598	70%	104%
3,000	2,100	1,575	1,426	2,100	3,001	70%	100%
3,500	2,450	1,838	1,567	2,450	3,405	70%	97%
4,000	2,800	2,100	1,707	2,800	3,807	70%	95%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 1,003	\$ 750	\$1,566	50%	104%
2,000	1,000	750	1,145	1,000	1,895	50%	95%
2,500	1,250	938	1,285	1,250	2,223	50%	89%
3,000	1,500	1,125	1,426	1,500	2,551	50%	85%
3,500	1,750	1,313	1,567	1,750	2,880	50%	82%
4,000	2,000	1,500	1,707	2,000	3,207	50%	80%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 1,003	\$ 450	\$1,341	30%	89%
2,000	600	450	1,145	600	1,595	30%	80%
2,500	750	563	1,285	750	1,848	30%	74%
3,000	900	675	1,426	900	2,101	30%	70%
3,500	1,050	788	1,567	1,050	2,355	30%	67%
4,000	1,200	900	1,707	1,200	2,607	30%	65%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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-10(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.60% 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	\$ 840	\$ 1,003	\$1,050	\$1,843	70%	123%
2,000	1,400	1,120	1,145	1,400	2,265	70%	113%
2,500	1,750	1,400	1,285	1,750	2,685	70%	107%
3,000	2,100	1,680	1,426	2,100	3,106	70%	104%
3,500	2,450	1,960	1,567	2,450	3,527	70%	101%
4,000	2,800	2,240	1,707	2,800	3,947	70%	99%
25 Years of Service:							
\$1,500	\$750	\$ 600	\$ 1,003	\$ 750	\$1,603	50%	107%
2,000	1,000	800	1,145	1,000	1,945	50%	97%
2,500	1,250	1,000	1,285	1,250	2,285	50%	91%
3,000	1,500	1,200	1,426	1,500	2,626	50%	88%
3,500	1,750	1,400	1,567	1,750	2,967	50%	85%
4,000	2,000	1,600	1,707	2,000	3,307	50%	83%
15 Years of Service:							
\$1,500	\$ 450	\$360	\$ 1,003	\$ 450	\$1,363	30%	91%
2,000	600	480	1,145	600	1,625	30%	81%
2,500	750	600	1,285	750	1,885	30%	75%
3,000	900	720	1,426	900	2,146	30%	72%
3,500	1,050	840	1,567	1,050	2,407	30%	69%
4,000	1,200	960	1,707	1,200	2,667	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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - it does not include any amounts which might be payable to an eligible spouse or children.

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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 FAS¹ to age 65)
1.75% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 1,003	\$1,050	\$1,922	70%	128%
2,000	1,400	1,225	1,145	1,400	2,370	70%	119%
2,500	1,750	1,531	1,285	1,750	2,816	70%	113%
3,000	2,100	1,838	1,426	2,100	3,264	70%	109%
3,500	2,450	2,144	1,567	2,450	3,711	70%	106%
4,000	2,800	2,450	1,707	2,800	4,157	70%	104%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 1,003	\$ 750	\$1,659	50%	111%
2,000	1,000	875	1,145	1,000	2,020	50%	101%
2,500	1,250	1,094	1,285	1,250	2,379	50%	95%
3,000	1,500	1,313	1,426	1,500	2,739	50%	91%
3,500	1,750	1,531	1,567	1,750	3,098	50%	89%
4,000	2,000	1,750	1,707	2,000	3,457	50%	86%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 1,003	\$ 450	\$1,397	30%	93%
2,000	600	525	1,145	600	1,670	30%	84%
2,500	750	656	1,285	750	1,941	30%	78%
3,000	900	788	1,426	900	2,214	30%	74%
3,500	1,050	919	1,567	1,050	2,486	30%	71%
4,000	1,200	1,050	1,707	1,200	2,757	30%	69%

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. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2023 - 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¢.



April 2, 2024 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, 2023 Supplemental Actuarial Valuation of LAGERS benefits for the employees of:

Cass County

Sincerely,
Gabriel, Roeder, Smith & Company

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:rmg
Enclosure