

as of July 31, 2018



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March 26, 2019

Macon County Soil & Water Conservation District Macon, Missouri

Ladies and Gentlemen:

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

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

The contribution requirement for benefits likely to accrue as a result of the future service of your employees is described on pages 4 thru 11 as the current cost plus the disability cost. This contribution rate, expressed as a percent of active employee payroll, will depend on the benefit program adopted.

The contribution requirement to pay for benefits likely to result from service rendered by your employees before you join LAGERS is described on pages 4 thru 11 as the prior service cost. The value established for prior service is called the unfunded actuarial accrued liability (these amounts are further described in Appendix I). The prior service cost is the rate of contribution designed to pay for the unfunded actuarial accrued liability over a period of not more than 30 years.

Section 70.730 of the Revised Statutes of Missouri requires participating employers to contribute the current cost, disability cost, and prior service cost (the total employer cost as shown on pages 4 thru 11). These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on pages 12 and 13 represent the dollar cost of each benefit program for a one year period based on the payroll reported for this actuarial valuation. In budgeting amounts for LAGERS contributions you should consider any changes in payroll which have been made since data was submitted for the valuation and any changes anticipated to be made before the end of the period for which you are preparing the budget.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2018.

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

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was July 31, 2018. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilos



Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for either a contributory plan or a non-contributory plan, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

Contributory Plan. Under the contributory plan, each covered member contributes 4% 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.

Non-Contributory Plan. Under the non-contributory 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.

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 72 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program which they feel best suits their particular situation.

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



Employer Contribution Rates (Contributory Plan - 5 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			
		Dui ou			Total
Benefit	Employee	Prior Service	Current	Disability	Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	1.50%	2.90%	0.20%	4.60%
L-3	General	2.00	4.20	0.30	6.50
LT-4(65)	General	1.70	3.50	0.20	5.40
LT-5(65)	General	2.10	4.60	0.30	7.00
L-7	General	2.40	5.40	0.30	8.10
LT-8(65)	General	2.50	5.70	0.30	8.50
L-12	General	2.90	6.70	0.40	10.00
LT-14(65)	General	2.90	6.80	0.40	10.10
L-6	General	3.40	7.90	0.50	11.80

^{*} Prior service credit was given for vesting purposes only.



Employer Contribution Rates (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.50%	3.10%	0.20%	4.80%
L-3	General	2.00	4.40	0.30	6.70
LT-4(65)	General	1.70	3.70	0.20	5.60
LT-5(65)	General	2.20	4.90	0.30	7.40
L-7	General	2.50	5.70	0.30	8.50
LT-8(65)	General	2.60	6.00	0.30	8.90
L-12	General	3.00	7.00	0.40	10.40
LT-14(65)	General	3.00	7.20	0.40	10.60
L-6	General	3.50	8.30	0.50	12.30

^{*} Prior service credit was given for vesting purposes only.



Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (No member contributions)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.70%	6.30%	0.20%	8.20%
L-3	General	2.10	7.70	0.30	10.10
LT-4(65)	General	1.90	7.00	0.20	9.10
LT-5(65)	General	2.30	8.10	0.30	10.70
L-7	General	2.60	9.00	0.30	11.90
LT-8(65)	General	2.70	9.30	0.30	12.30
L-12	General	3.00	10.40	0.40	13.80
LT-14(65)	General	3.00	10.50	0.40	13.90
L-6	General	3.40	11.70	0.50	15.60

^{*} Prior service credit was given for vesting purposes only.



<u>Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)</u> (No member contributions)

		Pe	Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate	
L-1	General	1.80%	6.50%	0.20%	8.50%	
L-3	General	2.20	7.90	0.30	10.40	
LT-4(65)	General	1.90	7.20	0.20	9.30	
LT-5(65)	General	2.30	8.40	0.30	11.00	
L-7	General	2.60	9.30	0.30	12.20	
LT-8(65)	General	2.70	9.60	0.30	12.60	
L-12	General	3.10	10.70	0.40	14.20	
LT-14(65)	General	3.10	10.90	0.40	14.40	
L-6	General	3.50	12.10	0.50	16.10	

^{*} Prior service credit was given for vesting purposes only.



Employer Contribution Rates (Contributory Plan - 5 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.30%	3.50%	0.20%	5.00%
L-3	General	1.60	4.80	0.30	6.70
LT-4(65)	General	1.60	4.70	0.20	6.50
LT-5(65)	General	1.90	5.80	0.30	8.00
L-7	General	2.00	6.20	0.30	8.50
LT-8(65)	General	2.20	6.90	0.30	9.40
L-12	General	2.40	7.60	0.40	10.40
LT-14(65)	General	2.50	8.00	0.40	10.90
L-6	General	2.80	9.00	0.50	12.30

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



Employer Contribution Rates (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.30%	3.70%	0.20%	5.20%
L-3	General	1.70	5.10	0.30	7.10
LT-4(65)	General	1.70	5.00	0.20	6.90
LT-5(65)	General	2.00	6.10	0.30	8.40
L-7	General	2.10	6.50	0.30	8.90
LT-8(65)	General	2.30	7.20	0.30	9.80
L-12	General	2.50	8.00	0.40	10.90
LT-14(65)	General	2.60	8.30	0.40	11.30
L-6	General	2.90	9.50	0.50	12.90

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



^{*} Prior service credit was given for vesting purposes only.

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (No member contributions)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.40%	6.90%	0.20%	8.50%
L-3	General	1.80	8.30	0.30	10.40
LT-4(65)	General	1.80	8.10	0.20	10.10
LT-5(65)	General	2.10	9.30	0.30	11.70
L-7	General	2.10	9.80	0.30	12.20
LT-8(65)	General	2.30	10.50	0.30	13.10
L-12	General	2.50	11.30	0.40	14.20
LT-14(65)	General	2.60	11.60	0.40	14.60
L-6	General	2.90	12.80	0.50	16.20

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



Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS) (No member contributions)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.50%	7.10%	0.20%	8.80%
L-3	General	1.80	8.60	0.30	10.70
LT-4(65)	General	1.80	8.40	0.20	10.40
LT-5(65)	General	2.10	9.60	0.30	12.00
L-7	General	2.20	10.20	0.30	12.70
LT-8(65)	General	2.40	10.80	0.30	13.50
L-12	General	2.60	11.70	0.40	14.70
LT-14(65)	General	2.70	12.00	0.40	15.10
L-6	General	2.90	13.20	0.50	16.60

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



Employer Contribution Dollars Regular Retirement Eligibility

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

Contributory Plan

5 Yea	5 Year FAS				
Benefit					
Program	General				
L-1	\$ 5,200				
L-3	7,348				
LT-4(65)	6,104				
LT-5(65)	7,913				
L-7	9,156				
LT-8(65)	9,608				
L-12	11,304				
LT-14(65)	11,417				
L-6	13,339				

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 5,426				
L-3	7,574				
LT-4(65)	6,330				
LT-5(65)	8,365				
L-7	9,608				
LT-8(65)	10,061				
L-12	11,756				
LT-14(65)	11,982				
L-6	13,904				

Non-Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 9,269			
L-3	11,417			
LT-4(65)	10,287			
LT-5(65)	12,095			
L-7	13,452			
LT-8(65)	13,904			
L-12	15,600			
LT-14(65)	15,713			
L-6	17,634			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 9,608			
L-3	11,756			
LT-4(65)	10,513			
LT-5(65)	12,435			
L-7	13,791			
LT-8(65)	14,243			
L-12	16,052			
LT-14(65)	16,278			
L-6	18,200			

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



Employer Contribution Dollars Rule of 80 Retirement Eligibility

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

Contributory Plan

5 Year FAS					
Benefit					
Program	General				
L-1	\$ 5,652				
L-3	7,574				
LT-4(65)	7,348				
LT-5(65)	9,043				
L-7	9,608				
LT-8(65)	10,626				
L-12	11,756				
LT-14(65)	12,321				
L-6	13,904				

3 Year FAS						
Benefit						
Program	General					
L-1	\$ 5,878					
L-3	8,026					
LT-4(65)	7,800					
LT-5(65)	9,495					
L-7	10,061					
LT-8(65)	11,078					
L-12	12,321					
LT-14(65)	12,774					
L-6	14,582					

Non-Contributory Plan

5 Year FAS					
Benefit					
Program	General				
L-1	\$ 9,608				
L-3	11,756				
LT-4(65)	11,417				
LT-5(65)	13,226				
L-7	13,791				
LT-8(65)	14,808				
L-12	16,052				
LT-14(65)	16,504				
L-6	18,313				

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 9,948			
L-3	12,095			
LT-4(65)	11,756			
LT-5(65)	13,565			
L-7	14,356			
LT-8(65)	15,261			
L-12	16,617			
LT-14(65)	17,069			
L-6	18,765			

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



Employees and Payroll Included in the Valuation

	General
Number of Employees	3
Annual Payroll	\$ 113,041

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





UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability (UAAL)

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

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 11 as the "Prior Service Cost" are designed to pay for the applicable unfunded actuarial accrued liability. This procedure will allow your political subdivision to retire the unfunded actuarial accrued liability in an orderly fashion over a period of years without the need for an immediate large payment upon joining the System.

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

Macon County Soil & Water Conservation District

		Contril	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS) (3 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 29,597	\$ 30,822	\$ 34,060	\$ 35,091
L-3	General	39,050	40,559	42,574	43,863
LT-4(65)	General	33,206	34,580	37,645	38,821
LT-5(65)	General	41,763	43,375	45,268	46,649
L-7	General	48,416	50,206	51,096	52,640
LT-8(65)	General	50,222	52,074	52,899	54,502
L-12	General	57,702	59,772	59,588	61,420
LT-14(65)	General	58,616	60,708	60,489	62,337
L-6	General	66,971	69,322	68,107	70,189



Unfunded Actuarial Accrued Liability (UAAL)

		Contri	butory	Non-Con	tributory
Benefit	Employee	UAAL	UAAL	UAAL	UAAL
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)
L-1	General	\$ 25,075	\$ 26,101	\$ 28,435	\$ 29,328
L-3	General	32,813	34,098	35,519	36,657
LT-4(65)	General	32,203	33,484	35,525	36,666
LT-5(65)	General	38,155	39,635	40,843	42,166
L-7	General	40,504	42,007	42,628	43,986
LT-8(65)	General	44,059	45,693	46,174	47,656
L-12	General	48,088	49,840	49,727	51,327
LT-14(65)	General	49,871	51,679	51,502	53,162
L-6	General	55,654	57,662	56,842	58,662





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 7.25% 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 2.50% and the wage inflation rate used in making the valuations was 3.25%. The investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.00%. Adopted 2011 and 2016.
- 2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The pre-retirement mortality tables used were the RP-2014 employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. For both the post-retirement and pre-retirement tables, the base year for males was then established to be 2017. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to the above described tables. Adopted 2016.
- 3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2016.
- 4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2016.
- 5. Post-retirement cost of living allowances are assumed to be 2.50% per year. Adopted 2016.
- Total active member payroll is assumed to increase 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 2016.
- 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

		General Members							
Sample	Years of	N	Men Women Police		Women		olice	Fire	
Ages	Service	Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawal
All	0		19.00%		22.00%		18.00%		10.00%
	1		17.00		20.00		17.00		8.00
	2		15.00		17.00		16.00		7.00
	3		13.00		14.00		13.00		6.00
	4		11.00		13.00		12.00		6.00
25	5 & Over	0.09%	7.30	0.02%	10.80	0.10%	9.80	0.06%	5.00
30		0.12	6.50	0.03	8.90	0.11	7.80	0.10	4.00
35		0.15	5.00	0.06	7.40	0.16	6.10	0.23	2.80
40		0.21	3.70	0.10	5.70	0.22	4.40	0.35	2.20
45		0.30	3.00	0.16	4.20	0.34	3.20	0.56	1.80
50		0.44	2.40	0.24	3.30	0.53	1.80	0.85	1.00
55		0.68	1.80	0.34	2.50	0.88	1.00	1.31	0.50
60		1.02	1.00	0.48	1.20		0.00		0.00
65			0.00		0.00		0.00		0.00

Percent Increase in Individual's Pay

Sample	During Next Year				
Ages	General & Police	Fire			
25	6.55%	7.15%			
30	5.75	6.05			
35	5.25	5.15			
40	4.75	4.45			
45	4.25	4.15			
50	3.85	3.85			
55	3.65	3.65			
60	3.55	3.25			
65	3.25	3.25			



Schedule 2.

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

Early Retirement

General Members		Retirement		
Men	Women	Ages	Police	Fire
3.00%	3.00%	50	2.50%	2.50%
3.00%	3.00%	51	2.50%	2.50%
3.00%	3.00%	52	2.50%	2.50%
3.00%	3.00%	53	2.50%	2.50%
3.00%	3.00%	54	2.50%	2.50%
	Men 3.00% 3.00% 3.00% 3.00%	Men Women 3.00% 3.00% 3.00% 3.00% 3.00% 3.00% 3.00% 3.00%	Men Women Ages 3.00% 3.00% 50 3.00% 3.00% 51 3.00% 3.00% 52 3.00% 3.00% 53	Men Women Ages Police 3.00% 3.00% 50 2.50% 3.00% 3.00% 51 2.50% 3.00% 3.00% 52 2.50% 3.00% 3.00% 53 2.50%

Normal Retirement

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



Schedule 2. (Continued)

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

Retirement	General	General Members			
Ages	Men	Women	Police	Fire	
50	15%	15%	25%	25%	
51	15	15	25	20	
52	15	15	15	20	
53	15 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	30	15	30	45	
63	30	15	30	45	
64	30	20	30	45	
65	30	25	100	100	
66	30	25			
67	30	25			
68	30	25			
69	30	25			
70	100	100			





SUMMARY OF LAGERS PROVISIONS

Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS Benefits and Conditions Evaluated and/or Considered

Benefits and Conditions Evaluated and/or Considered as of February 28, 2018 (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 or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

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

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

L-1 Benefit Program: 1.00% for life
L-3 Benefit Program: 1.25% for life
L-7 Benefit Program: 1.50% for life
L-12 Benefit Program: 1.75% for life
L-6 Benefit Program: 2.00% for life

LT-4(65) Benefit Program:

LT-5(65) Benefit Program:

LT-8(65) Benefit Program:

1.00% for life, plus 1.00% to age 65

1.25% for life, plus 0.75% to age 65

LT-14(65) Benefit Program:

1.50% for life, plus 0.50% to age 65

LT-14(65) Benefit Program:

1.75% for life, plus 0.25% to age 65

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

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

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

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



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

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

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

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

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

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

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

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

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



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

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

Member Contributions. Sections 70.690 & 70.705. Each member contributes 4% of compensation beginning after completion of sufficient employment for 6 months of credited service.

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 non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the non-contributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 2 years. Under the non-contributory provisions 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.





BENEFIT ILLUSTRATIONS

(L-1 Benefit Program is Years of Credited Service times: 1.00% of FAS 1)

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 889	\$1,414	94%
2,000	700	1,032	1,732	87%
2,500	875	1,175	2,050	82%
3,000	1,050	1,318	2,368	79%
3,500	1,225	1,462	2,687	77%
4,000	1,400	1,604	3,004	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 889	\$1,264	84%
2,000	500	1,032	1,532	77%
2,500	625	1,175	1,800	72%
3,000	750	1,318	2,068	69%
3,500	875	1,462	2,337	67%
4,000	1,000	1,604	2,604	65%
15 Years of Service:				
\$1,500	\$225	\$ 889	\$1,114	74%
2,000	300	1,032	1,332	67%
2,500	375	1,175	1,550	62%
3,000	450	1,318	1,768	59%
3,500	525	1,462	1,987	57%
4,000	600	1,604	2,204	55%

[&]quot;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.

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



[&]quot;Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Final		Estimated	Estimated	
Average	LAGERS	Social Monthly Total		/ Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 889	\$1,545	103%
2,000	875	1,032	1,907	95%
2,500	1,094	1,175	2,269	91%
3,000	1,313	1,318	2,631	88%
3,500	1,531	1,462	2,993	86%
4,000	1,750	1,604	3,354	84%
25 Years of Service:				
\$1,500	\$ 469	\$ 889	\$1,358	91%
2,000	625	1,032	1,657	83%
2,500	781	1,175	1,956	78%
3,000	938	1,318	2,256	75%
3,500	1,094	1,462	2,556	73%
4,000	1,250	1,604	2,854	71%
15 Years of Service:				
\$1,500	\$281	\$ 889	\$1,170	78%
2,000	375	1,032	1,407	70%
2,500	469	1,175	1,644	66%
3,000	563	1,318	1,881	63%
3,500	656	1,462	2,118	61%
4,000	750	1,604	2,354	59%

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Final		Estimated	Estimated		
Average	LAGERS	Social	Monthly Total		
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 788	\$ 889	\$1,677	112%	
2,000	1,050	1,032	2,082	104%	
2,500	1,313	1,175	2,488	100%	
3,000	1,575	1,318	2,893	96%	
3,500	1,838	1,462	3,300	94%	
4,000	2,100	1,604	3,704	93%	
25 Years of Service:					
\$1,500	\$ 563	\$ 889	\$1,452	97%	
2,000	750	1,032	1,782	89%	
2,500	938	1,175	2,113	85%	
3,000	1,125	1,318	2,443	81%	
3,500	1,313	1,462	2,775	79%	
4,000	1,500	1,604	3,104	78%	
15 Years of Service:					
\$1,500	\$338	\$ 889	\$1,227	82%	
2,000	450	1,032	1,482	74%	
2,500	563	1,175	1,738	70%	
3,000	675	1,318	1,993	66%	
3,500	788	1,462	2,250	64%	
4,000	900	1,604	2,504	63%	

[&]quot;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.

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Final	Estimated Estimated			ated	
Average	LAGERS	Social	Monthly Total		
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 919	\$ 889	\$1,808	121%	
2,000	1,225	1,032	2,257	113%	
2,500	1,531	1,175	2,706	108%	
3,000	1,838	1,318	3,156	105%	
3,500	2,144	1,462	3,606	103%	
4,000	2,450	1,604	4,054	101%	
25 Years of Service:					
\$1,500	\$ 656	\$ 889	\$1,545	103%	
2,000	875	1,032	1,907	95%	
2,500	1,094	1,175	2,269	91%	
3,000	1,313	1,318	2,631	88%	
3,500	1,531	1,462	2,993	86%	
4,000	1,750	1,604	3,354	84%	
15 Years of Service:					
\$1,500	\$ 394	\$ 889	\$1,283	86%	
2,000	525	1,032	1,557	78%	
2,500	656	1,175	1,831	73%	
3,000	788	1,318	2,106	70%	
3,500	919	1,462	2,381	68%	
4,000	1,050	1,604	2,654	66%	

[&]quot;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.

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Final		Estimated	Estimated	
Average	LAGERS	Social Monthly Total		/ Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 889	\$1,939	129%
2,000	1,400	1,032	2,432	122%
2,500	1,750	1,175	2,925	117%
3,000	2,100	1,318	3,418	114%
3,500	2,450	1,462	3,912	112%
4,000	2,800	1,604	4,404	110%
25 Years of Service:				
\$1,500	\$ 750	\$ 889	\$1,639	109%
2,000	1,000	1,032	2,032	102%
2,500	1,250	1,175	2,425	97%
3,000	1,500	1,318	2,818	94%
3,500	1,750	1,462	3,212	92%
4,000	2,000	1,604	3,604	90%
15 Years of Service:				
\$1,500	\$ 450	\$ 889	\$1,339	89%
2,000	600	1,032	1,632	82%
2,500	750	1,175	1,925	77%
3,000	900	1,318	2,218	74%
3,500	1,050	1,462	2,512	72%
4,000	1,200	1,604	2,804	70%

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

(LT-4(65) Benefit Program is Years of Credited Service times: 2.00% of FAS ¹ to age 65) 1.00% of FAS ¹ at age 65)

Average Salary (FAS)¹ BENEFIT³ Social Security² Monthly Total of FAS 35 Years of Service: 51,500 \$1,050 \$ 525 \$ 889 \$1,050 \$1,414 70% 94% 2,000 1,400 700 1,032 1,400 1,732 70% 87% 2,500 1,750 875 1,175 1,750 2,050 70% 82% 3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 3,500 2,450 1,225 1,462 2,450 2,687 70% 77% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$\$\$\$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72%	Final	LAG	ERS	Estimated	Estim	nated	Perc	ent
\$1,500 \$1,050 \$ 525 \$ 889 \$1,050 \$1,414 70% 94% 2,000 1,400 700 1,032 1,400 1,732 70% 87% 2,500 1,750 875 1,175 1,750 2,050 70% 82% 3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	Average	BENI	EFIT ³	Social	Month	y Total	of F	AS
\$1,500 \$1,050 \$525 \$889 \$1,050 \$1,414 70% 94% 2,000 1,400 700 1,032 1,400 1,732 70% 87% 2,500 1,750 875 1,175 1,750 2,050 70% 82% 3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 3,500 2,450 1,225 1,462 2,450 2,687 70% 77% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$750 \$375 \$889 \$750 \$1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
2,000 1,400 700 1,032 1,400 1,732 70% 87% 2,500 1,750 875 1,175 1,750 2,050 70% 82% 3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 3,500 2,450 1,225 1,462 2,450 2,687 70% 75% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	35 Years of Service	e:						
2,500 1,750 875 1,175 1,750 2,050 70% 82% 3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 3,500 2,450 1,225 1,462 2,450 2,687 70% 77% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	\$1,500	\$1,050	\$ 525	\$ 889	\$1,050	\$1,414	70%	94%
3,000 2,100 1,050 1,318 2,100 2,368 70% 79% 3,500 2,450 1,225 1,462 2,450 2,687 70% 77% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	2,000	1,400	700	1,032	1,400	1,732	70%	87%
3,500 2,450 1,225 1,462 2,450 2,687 70% 77% 4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	2,500	1,750	875	1,175	1,750	2,050	70%	82%
4,000 2,800 1,400 1,604 2,800 3,004 70% 75% 25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	3,000	2,100	1,050	1,318	2,100	2,368	70%	79%
25 Years of Service: \$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	3,500	2,450	1,225	1,462	2,450	2,687	70%	77%
\$1,500 \$ 750 \$ 375 \$ 889 \$ 750 \$ 1,264 50% 84% 2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	4,000	2,800	1,400	1,604	2,800	3,004	70%	75%
2,000 1,000 500 1,032 1,000 1,532 50% 77% 2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	25 Years of Service	e:						
2,500 1,250 625 1,175 1,250 1,800 50% 72% 3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	\$1,500	\$ 750	\$ 375	\$ 889	\$ 750	\$1,264	50%	84%
3,000 1,500 750 1,318 1,500 2,068 50% 69% 3,500 1,750 875 1,462 1,750 2,337 50% 67%	2,000	1,000	500	1,032	1,000	1,532	50%	77%
3,500 1,750 875 1,462 1,750 2,337 50% 67%	2,500	1,250	625	1,175	1,250	1,800	50%	72%
	3,000	1,500	750	1,318	1,500	2,068	50%	69%
4,000 2,000 1,000 1,604 2,000 2,604 E09/ SE9/	3,500	1,750	875	1,462	1,750	2,337	50%	67%
4,000 2,000 1,000 1,004 2,000 2,004 50% 65%	4,000	2,000	1,000	1,604	2,000	2,604	50%	65%
15 Years of Service:	15 Years of Service	e:						
\$1,500 \$ 450 \$225 \$ 889 \$ 450 \$1,114 30% 74%	\$1,500	\$ 450	\$225	\$ 889	\$ 450	\$1,114	30%	74%
2,000 600 300 1,032 600 1,332 30% 67%	2,000	600	300	1,032	600	1,332	30%	67%
2,500 750 375 1,175 750 1,550 30% 62%	2,500	750	375	1,175	750	1,550	30%	62%
3,000 900 450 1,318 900 1,768 30% 59%	3,000	900	450	1,318	900	1,768	30%	59%
3,500 1,050 525 1,462 1,050 1,987 30% 57%	3,500	1,050	525	1,462	1,050	1,987	30%	57%
4,000 1,200 600 1,604 1,200 2,204 30% 55%	4,000	1,200	600	1,604	1,200	2,204	30%	55%

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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)

LAG	ERS	Estimated	Estim	nated	Pero	ent
BENI	EFIT ³	Social	Month	ly Total	of F	AS
To 65	At 65	Security ²	To 65	At 65	To 65	At 65
e:						
\$1,050	\$ 656	\$ 889	\$1,050	\$1,545	70%	103%
1,400	875	1,032	1,400	1,907	70%	95%
1,750	1,094	1,175	1,750	2,269	70%	91%
2,100	1,313	1,318	2,100	2,631	70%	88%
2,450	1,531	1,462	2,450	2,993	70%	86%
2,800	1,750	1,604	2,800	3,354	70%	84%
2:						
\$ 750	\$ 469	\$ 889	\$ 750	\$1,358	50%	91%
1,000	625	1,032	1,000	1,657	50%	83%
1,250	781	1,175	1,250	1,956	50%	78%
1,500	938	1,318	1,500	2,256	50%	75%
1,750	1,094	1,462	1,750	2,556	50%	73%
2,000	1,250	1,604	2,000	2,854	50%	71%
2:						
\$ 450	\$281	\$ 889	\$ 450	\$1,170	30%	78%
600	375	1,032	600	1,407	30%	70%
750	469	1,175	750	1,644	30%	66%
900	563	1,318	900	1,881	30%	63%
1,050	656	1,462	1,050	2,118	30%	61%
1,200	750	1,604	1,200	2,354	30%	59%
	\$1,050 1,400 1,750 2,100 2,450 2,800 2: \$ 750 1,000 1,250 1,500 1,750 2,000 2: \$ 450 600 750 900 1,050	\$1,050 \$ 656 1,400 875 1,750 1,094 2,100 1,313 2,450 1,531 2,800 1,750 E: \$ 750 \$ 469 1,000 625 1,250 781 1,500 938 1,750 1,094 2,000 1,250 E: \$ 450 \$281 600 375 750 469 900 563 1,050 656	BENEFIT 3 Social Security 2 S1,050 \$ 656 \$ 889 1,400 875 1,032 1,750 1,094 1,175 2,100 1,313 1,318 2,450 1,531 1,462 2,800 1,750 1,604 STS \$ 889 1,000 625 1,032 1,250 781 1,175 1,500 938 1,318 1,750 1,094 1,462 2,000 1,250 1,604 STS \$ 450 \$ 281 \$ 889 600 375 1,032 750 469 1,175 900 563 1,318 1,050 656 1,462	BENEFIT ³ Social Security ² Month To 65 1,050 \$ 656 \$ 889 \$1,050 1,400 875 1,032 1,400 1,750 1,094 1,175 1,750 2,100 1,313 1,318 2,100 2,450 1,531 1,462 2,450 2,800 1,750 1,604 2,800 2: \$ 750 \$ 469 \$ 889 \$ 750 1,000 625 1,032 1,000 1,250 781 1,175 1,250 1,500 938 1,318 1,500 1,750 1,094 1,462 1,750 2,000 1,250 1,604 2,000 2: \$ 450 \$ 889 \$ 450 600 375 1,032 600 750 469 1,175 750 900 563 1,318 900 1,050 656 1,462 1,050	BENEFIT 3 Social Monthly Total To 65 At 65 Security 2 To 65 At 65 \$1,050 \$ 656 \$ 889 \$1,050 \$1,545 1,400 875 1,032 1,400 1,907 1,750 1,094 1,175 1,750 2,269 2,100 1,313 1,318 2,100 2,631 2,450 1,531 1,462 2,450 2,993 2,800 1,750 1,604 2,800 3,354 \$ 750 \$ 469 \$ 889 \$ 750 \$1,358 1,000 625 1,032 1,000 1,657 1,250 781 1,175 1,250 1,956 1,500 938 1,318 1,500 2,256 1,750 1,094 1,462 1,750 2,556 2,000 1,250 1,604 2,000 2,854 \$ 450 \$281 \$ 889 \$ 450 \$1,170	BENEFIT 3 Social To 65 Monthly Total of Fourty To 65 To 65 At 65 Security To 65 At 65 To 65 \$1,050 \$ 656 \$ 889 \$1,050 \$1,545 70% 1,400 875 1,032 1,400 1,907 70% 1,750 1,094 1,175 1,750 2,269 70% 2,100 1,313 1,318 2,100 2,631 70% 2,450 1,531 1,462 2,450 2,993 70% 2,800 1,750 1,604 2,800 3,354 70% 1,000 625 1,032 1,000 1,657 50% 1,250 781 1,175 1,250 1,956 50% 1,500 938 1,318 1,500 2,256 50% 1,750 1,094 1,462 1,750 2,556 50% 2,000 1,250 1,604 2,000 2,854 50% \$450 \$281

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.

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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	LAGERS		Estimated	Estimated		Percent	
Average	BENI	FIT ³	Social	Monthl	y Total	of F	AS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Service	:						
\$1,500	\$1,050	\$ 788	\$ 889	\$1,050	\$1,677	70%	112%
2,000	1,400	1,050	1,032	1,400	2,082	70%	104%
2,500	1,750	1,313	1,175	1,750	2,488	70%	100%
3,000	2,100	1,575	1,318	2,100	2,893	70%	96%
3,500	2,450	1,838	1,462	2,450	3,300	70%	94%
4,000	2,800	2,100	1,604	2,800	3,704	70%	93%
25 Years of Service	:						
\$1,500	\$ 750	\$ 563	\$ 889	\$ 750	\$1,452	50%	97%
2,000	1,000	750	1,032	1,000	1,782	50%	89%
2,500	1,250	938	1,175	1,250	2,113	50%	85%
3,000	1,500	1,125	1,318	1,500	2,443	50%	81%
3,500	1,750	1,313	1,462	1,750	2,775	50%	79%
4,000	2,000	1,500	1,604	2,000	3,104	50%	78%
15 Years of Service	:						
\$1,500	\$ 450	\$338	\$ 889	\$ 450	\$1,227	30%	82%
2,000	600	450	1,032	600	1,482	30%	74%
2,500	750	563	1,175	750	1,738	30%	70%
3,000	900	675	1,318	900	1,993	30%	66%
3,500	1,050	788	1,462	1,050	2,250	30%	64%
4,000	1,200	900	1,604	1,200	2,504	30%	63%

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

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

1.75% of FAS ¹ at age 65)

Final	LAGERS		Estimated	Estimated		Percent		
Average	BENI	EFIT ³	Social	Monthl	y Total	of FAS		
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65	
35 Years of Service	:							
\$1,500	\$1,050	\$ 919	\$ 889	\$1,050	\$1,808	70%	121%	
2,000	1,400	1,225	1,032	1,400	2,257	70%	113%	
2,500	1,750	1,531	1,175	1,750	2,706	70%	108%	
3,000	2,100	1,838	1,318	2,100	3,156	70%	105%	
3,500	2,450	2,144	1,462	2,450	3,606	70%	103%	
4,000	2,800	2,450	1,604	2,800	4,054	70%	101%	
25 Years of Service	:							
\$1,500	\$ 750	\$ 656	\$ 889	\$ 750	\$1,545	50%	103%	
2,000	1,000	875	1,032	1,000	1,907	50%	95%	
2,500	1,250	1,094	1,175	1,250	2,269	50%	91%	
3,000	1,500	1,313	1,318	1,500	2,631	50%	88%	
3,500	1,750	1,531	1,462	1,750	2,993	50%	86%	
4,000	2,000	1,750	1,604	2,000	3,354	50%	84%	
15 Years of Service	:							
\$1,500	\$ 450	\$ 394	\$ 889	\$ 450	\$1,283	30%	86%	
2,000	600	525	1,032	600	1,557	30%	78%	
2,500	750	656	1,175	750	1,831	30%	73%	
3,000	900	788	1,318	900	2,106	30%	70%	
3,500	1,050	919	1,462	1,050	2,381	30%	68%	
4,000	1,200	1,050	1,604	1,200	2,654	30%	66%	

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2018 - it does not include any amounts which might be payable to an eligible spouse or children.



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

July 31, 2018

By Attained Age and Years of Service

		Years of Service to Valuation Date Totals													
Attained									Valuation						
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll						
Under 20															
20-24															
25-29															
30-34															
35-39															
40-44															
45-49				1				1	\$ 45,219						
50-54							1	1	\$ 26,014						
55-59															
60-64															
65-69				1				1	\$ 41,808						
70 & Over															
Totals		2 1 3 \$113,041													

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

Age: 54.2 years.

Benefit Service: 0.0 years. Annual Pay: \$37,680.





RISK COMMENTARY

Risk Commentary

The determination of the accrued liability and the actuarially determined contribution (i.e., total employer contribution rate) requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- Investment Risk actual investment returns may differ from the expected returns;
- 2. **Asset/Liability Mismatch Risk** changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- 3. **Contribution Risk** actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
- 4. **Salary and Payroll Risk** actual salaries and total payroll may differ from expected, resulting in actual future accrued liability, contributions and contribution rates differing from expected;
- 5. **Longevity Risk** members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- 6. **Other Demographic Risks** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rates shown on pages 4 thru 11 may be considered as a minimum contribution rate for the selected benefit provisions that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



Risk Commentary (Concluded)

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures are described below.

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

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





March 26, 2019 E-mail

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

Dear Bob:

Enclosed is the report of the July 31, 2018 Initial Actuarial Valuation of LAGERS benefits for the employees of

Macon County Soil & Water Conservation District

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



March 26, 2019

Macon County Soil & Water Conservation District Macon, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the July 31, 2018 Initial Valuation for the Macon County Soil & Water Conservation District dated March 26, 2019.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2018.

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

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contri	Contribution	
Valuation	Valuation Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	4.6%	\$5,200	\$ 29,597	6.5%	\$7,348	\$ 39,050	5.4%	\$6,104	\$ 33,206
2019	116,715	4.6	5,369	30,002	6.5	7,586	39,585	5.4	6,303	33,661
2020	120,508	4.6	5,543	30,380	6.5	7,833	40,084	5.4	6,507	34,085
2021	124,425	4.6	5,724	30,727	6.5	8,088	40,542	5.4	6,719	34,475
2022	128,469	4.6	5,910	31,039	6.5	8,350	40,954	5.4	6,937	34,825
2023	132,644	4.6	6,102	31,312	6.5	8,622	41,314	5.4	7,163	35,131
2024	136,955	4.6	6,300	31,540	6.5	8,902	41,615	5.4	7,396	35,387
2025	141,406	4.6	6,505	31,718	6.5	9,191	41,850	5.4	7,636	35,587
2026	146,002	4.6	6,716	31,841	6.5	9,490	42,012	5.4	7,884	35,725
2027	150,747	4.6	6,934	31,902	6.5	9,799	42,092	5.4	8,140	35,793

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated		Estimated Employer d Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 113,041	7.0%	\$7,913	\$ 41,763	8.1%	\$9,156	\$ 48,416	8.5%	\$9,608	\$ 50,222	
2019	116,715	7.0	8,170	42,335	8.1	9,454	49,079	8.5	9,921	50,910	
2020	120,508	7.0	8,436	42,869	8.1	9,761	49,698	8.5	10,243	51,552	
2021	124,425	7.0	8,710	43,359	8.1	10,078	50,266	8.5	10,576	52,141	
2022	128,469	7.0	8,993	43,800	8.1	10,406	50,777	8.5	10,920	52,671	
2023	132,644	7.0	9,285	44,185	8.1	10,744	51,223	8.5	11,275	53,134	
2024	136,955	7.0	9,587	44,507	8.1	11,093	51,596	8.5	11,641	53,521	
2025	141,406	7.0	9,898	44,759	8.1	11,454	51,888	8.5	12,020	53,823	
2026	146,002	7.0	10,220	44,932	8.1	11,826	52,089	8.5	12,410	54,031	
2027	150.747	7.0	10.552	45.018	8.1	12.211	52.188	8.5	12.813	54.134	

		L-12 Benefit Program			LT-14	1(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	10.0%	\$11,304	\$ 57,702	10.1%	\$11,417	\$ 58,616	11.8%	\$13,339	\$ 66,971
2019	116,715	10.0	11,672	58,493	10.1	11,788	59,419	11.8	13,772	67,888
2020	120,508	10.0	12,051	59,231	10.1	12,171	60,168	11.8	14,220	68,744
2021	124,425	10.0	12,443	59,908	10.1	12,567	60,856	11.8	14,682	69,530
2022	128,469	10.0	12,847	60,517	10.1	12,975	61,474	11.8	15,159	70,236
2023	132,644	10.0	13,264	61,048	10.1	13,397	62,014	11.8	15,652	70,853
2024	136,955	10.0	13,696	61,493	10.1	13,832	62,466	11.8	16,161	71,369
2025	141,406	10.0	14,141	61,841	10.1	14,282	62,819	11.8	16,686	71,772
2026	146,002	10.0	14,600	62,080	10.1	14,746	63,062	11.8	17,228	72,050
2027	150,747	10.0	15,075	62,199	10.1	15,225	63,182	11.8	17,788	72,188

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

Regular Retirement Eligibility

		L-	L-1 Benefit Program			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	Contribution		Contribution		Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	4.8%	\$5,426	\$ 30,822	6.7%	\$7,574	\$ 40,559	5.6%	\$6,330	\$ 34,580
2019	116,715	4.8	5,602	31,244	6.7	7,820	41,115	5.6	6,536	35,054
2020	120,508	4.8	5,784	31,638	6.7	8,074	41,633	5.6	6,748	35,496
2021	124,425	4.8	5,972	32,000	6.7	8,336	42,109	5.6	6,968	35,902
2022	128,469	4.8	6,167	32,325	6.7	8,607	42,537	5.6	7,194	36,267
2023	132,644	4.8	6,367	32,609	6.7	8,887	42,911	5.6	7,428	36,586
2024	136,955	4.8	6,574	32,847	6.7	9,176	43,224	5.6	7,669	36,853
2025	141,406	4.8	6,787	33,033	6.7	9,474	43,468	5.6	7,919	37,061
2026	146,002	4.8	7,008	33,161	6.7	9,782	43,636	5.6	8,176	37,204
2027	150,747	4.8	7,236	33,224	6.7	10,100	43,719	5.6	8,442	37,275

			LT-5(65) Benefit Program			7 Benefit Pro	gram	LT-8(65) Benefit Program		
		Estimated Employer d Contribution		Unfunded		l Employer	Unfunded	Estimated Employer Contribution		Unfunded Actuarial
	Estimated			Actuarial		ibution	Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 113,041	7.4%	\$8,365	\$ 43,375	8.5%	\$9,608	\$ 50,206	8.9%	\$10,061	\$ 52,074
2019	116,715	7.4	8,637	43,969	8.5	9,921	50,894	8.9	10,388	52,787
2020	120,508	7.4	8,918	44,523	8.5	10,243	51,536	8.9	10,725	53,453
2021	124,425	7.4	9,207	45,032	8.5	10,576	52,125	8.9	11,074	54,064
2022	128,469	7.4	9,507	45,490	8.5	10,920	52,655	8.9	11,434	54,613
2023	132,644	7.4	9,816	45,890	8.5	11,275	53,117	8.9	11,805	55,093
2024	136,955	7.4	10,135	46,224	8.5	11,641	53,504	8.9	12,189	55,494
2025	141,406	7.4	10,464	46,485	8.5	12,020	53,806	8.9	12,585	55,808
2026	146,002	7.4	10,804	46,665	8.5	12,410	54,014	8.9	12,994	56,024
2027	150 747	7.4	11 155	46 754	8.5	12 813	54 117	8.9	13 416	56 131

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	10.4%	\$11,756	\$ 59,772	10.6%	\$11,982	\$ 60,708	12.3%	\$13,904	\$ 69,322
2019	116,715	10.4	12,138	60,591	10.6	12,372	61,540	12.3	14,356	70,272
2020	120,508	10.4	12,533	61,355	10.6	12,774	62,316	12.3	14,822	71,158
2021	124,425	10.4	12,940	62,056	10.6	13,189	63,028	12.3	15,304	71,972
2022	128,469	10.4	13,361	62,687	10.6	13,618	63,668	12.3	15,802	72,703
2023	132,644	10.4	13,795	63,238	10.6	14,060	64,227	12.3	16,315	73,342
2024	136,955	10.4	14,243	63,699	10.6	14,517	64,695	12.3	16,845	73,876
2025	141,406	10.4	14,706	64,059	10.6	14,989	65,061	12.3	17,393	74,294
2026	146,002	10.4	15,184	64,307	10.6	15,476	65,313	12.3	17,958	74,581
2027	150,747	10.4	15,678	64,430	10.6	15,979	65,438	12.3	18,542	74,723

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (0% member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	mployer Unfunded		Estimated Employer		Estimated	l Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	8.2%	\$9,269	\$ 34,060	10.1%	\$11,417	\$ 42,574	9.1%	\$10,287	\$ 37,645
2019	116,715	8.2	9,571	34,527	10.1	11,788	43,157	9.1	10,621	38,161
2020	120,508	8.2	9,882	34,962	10.1	12,171	43,701	9.1	10,966	38,642
2021	124,425	8.2	10,203	35,362	10.1	12,567	44,201	9.1	11,323	39,084
2022	128,469	8.2	10,534	35,721	10.1	12,975	44,650	9.1	11,691	39,481
2023	132,644	8.2	10,877	36,035	10.1	13,397	45,042	9.1	12,071	39,828
2024	136,955	8.2	11,230	36,297	10.1	13,832	45,370	9.1	12,463	40,118
2025	141,406	8.2	11,595	36,502	10.1	14,282	45,626	9.1	12,868	40,345
2026	146,002	8.2	11,972	36,643	10.1	14,746	45,802	9.1	13,286	40,501
2027	150,747	8.2	12,361	36,713	10.1	15,225	45,889	9.1	13,718	40,578

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 113,041	10.7%	\$12,095	\$ 45,268	11.9%	\$13,452	\$ 51,096	12.3%	\$13,904	\$ 52,899	
2019	116,715	10.7	12,489	45,888	11.9	13,889	51,796	12.3	14,356	53,624	
2020	120,508	10.7	12,894	46,467	11.9	14,340	52,449	12.3	14,822	54,300	
2021	124,425	10.7	13,313	46,998	11.9	14,807	53,049	12.3	15,304	54,921	
2022	128,469	10.7	13,746	47,476	11.9	15,288	53,588	12.3	15,802	55,479	
2023	132,644	10.7	14,193	47,893	11.9	15,785	54,059	12.3	16,315	55,966	
2024	136,955	10.7	14,654	48,242	11.9	16,298	54,453	12.3	16,845	56,374	
2025	141,406	10.7	15,130	48,515	11.9	16,827	54,761	12.3	17,393	56,693	
2026	146,002	10.7	15,622	48,703	11.9	17,374	54,973	12.3	17,958	56,912	
2027	150.747	10.7	16.130	48.796	11.9	17.939	55.078	12.3	18.542	57.021	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated		l Employer ibution	1 - 7 -	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	13.8%	\$15,600	\$ 59,588	13.9%	\$15,713	\$ 60,489	15.6%	\$17,634	\$ 68,107
2019	116,715	13.8	16,107	60,404	13.9	16,223	61,318	15.6	18,208	69,040
2020	120,508	13.8	16,630	61,166	13.9	16,751	62,091	15.6	18,799	69,911
2021	124,425	13.8	17,171	61,865	13.9	17,295	62,801	15.6	19,410	70,710
2022	128,469	13.8	17,729	62,494	13.9	17,857	63,439	15.6	20,041	71,428
2023	132,644	13.8	18,305	63,043	13.9	18,438	63,996	15.6	20,692	72,055
2024	136,955	13.8	18,900	63,502	13.9	19,037	64,462	15.6	21,365	72,580
2025	141,406	13.8	19,514	63,861	13.9	19,655	64,826	15.6	22,059	72,990
2026	146,002	13.8	20,148	64,108	13.9	20,294	65,077	15.6	22,776	73,272
2027	150,747	13.8	20,803	64,230	13.9	20,954	65,201	15.6	23,517	73,412

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS) (0% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	8.5%	\$9,608	\$ 35,091	10.4%	\$11,756	\$ 43,863	9.3%	\$10,513	\$ 38,821
2019	116,715	8.5	9,921	35,572	10.4	12,138	44,464	9.3	10,854	39,353
2020	120,508	8.5	10,243	36,021	10.4	12,533	45,025	9.3	11,207	39,849
2021	124,425	8.5	10,576	36,433	10.4	12,940	45,540	9.3	11,572	40,305
2022	128,469	8.5	10,920	36,803	10.4	13,361	46,003	9.3	11,948	40,715
2023	132,644	8.5	11,275	37,126	10.4	13,795	46,407	9.3	12,336	41,073
2024	136,955	8.5	11,641	37,396	10.4	14,243	46,745	9.3	12,737	41,372
2025	141,406	8.5	12,020	37,607	10.4	14,706	47,009	9.3	13,151	41,606
2026	146,002	8.5	12,410	37,752	10.4	15,184	47,191	9.3	13,578	41,767
2027	150,747	8.5	12,813	37,824	10.4	15,678	47,281	9.3	14,019	41,847

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 113,041	11.0%	\$12,435	\$ 46,649	12.2%	\$13,791	\$ 52,640	12.6%	\$14,243	\$ 54,502	
2019	116,715	11.0	12,839	47,288	12.2	14,239	53,361	12.6	14,706	55,249	
2020	120,508	11.0	13,256	47,884	12.2	14,702	54,034	12.6	15,184	55,946	
2021	124,425	11.0	13,687	48,431	12.2	15,180	54,652	12.6	15,678	56,586	
2022	128,469	11.0	14,132	48,923	12.2	15,673	55,207	12.6	16,187	57,161	
2023	132,644	11.0	14,591	49,353	12.2	16,183	55,692	12.6	16,713	57,663	
2024	136,955	11.0	15,065	49,713	12.2	16,709	56,098	12.6	17,256	58,083	
2025	141,406	11.0	15,555	49,994	12.2	17,252	56,415	12.6	17,817	58,411	
2026	146,002	11.0	16,060	50,187	12.2	17,812	56,633	12.6	18,396	58,637	
2027	150.747	11.0	16.582	50.283	12.2	18.391	56.741	12.6	18.994	58.749	

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	-6 Benefit Pro	gram
			l Employer	Unfunded		d Employer	Unfunded		d Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 113,041	14.2%	\$16,052	\$ 61,420	14.4%	\$16,278	\$ 62,337	16.1%	\$18,200	\$ 70,189
2019	116,715	14.2	16,574	62,261	14.4	16,807	63,191	16.1	18,791	71,151
2020	120,508	14.2	17,112	63,046	14.4	17,353	63,988	16.1	19,402	72,048
2021	124,425	14.2	17,668	63,767	14.4	17,917	64,720	16.1	20,032	72,872
2022	128,469	14.2	18,243	64,415	14.4	18,500	65,378	16.1	20,684	73,612
2023	132,644	14.2	18,835	64,981	14.4	19,101	65,952	16.1	21,356	74,258
2024	136,955	14.2	19,448	65,454	14.4	19,722	66,432	16.1	22,050	74,799
2025	141,406	14.2	20,080	65,824	14.4	20,362	66,807	16.1	22,766	75,222
2026	146,002	14.2	20,732	66,079	14.4	21,024	67,065	16.1	23,506	75,513
2027	150,747	14.2	21,406	66,205	14.4	21,708	67,193	16.1	24,270	75,657

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Contributory Plan - 5 Year FAS) (4% member contributions are additional)

Rule of 80 Retirement Eligibility

	L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	5.0%	\$5,652	\$ 25,075	6.7%	\$7 <i>,</i> 574	\$ 32,813	6.5%	\$7,348	\$ 32,203
2019	116,715	5.0	5,836	25,419	6.7	7,820	33,263	6.5	7,586	32,644
2020	120,508	5.0	6,025	25,740	6.7	8,074	33,682	6.5	7,833	33,056
2021	124,425	5.0	6,221	26,034	6.7	8,336	34,067	6.5	8,088	33,434
2022	128,469	5.0	6,423	26,299	6.7	8,607	34,413	6.5	8,350	33,774
2023	132,644	5.0	6,632	26,530	6.7	8,887	34,715	6.5	8,622	34,071
2024	136,955	5.0	6,848	26,723	6.7	9,176	34,968	6.5	8,902	34,319
2025	141,406	5.0	7,070	26,874	6.7	9,474	35,166	6.5	9,191	34,513
2026	146,002	5.0	7,300	26,978	6.7	9,782	35,302	6.5	9,490	34,646
2027	150,747	5.0	7,537	27,030	6.7	10,100	35,369	6.5	9,799	34,712

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	8.0%	\$9,043	\$ 38,155	8.5%	\$9,608	\$ 40,504	9.4%	\$10,626	\$ 44,059
2019	116,715	8.0	9,337	38,678	8.5	9,921	41,059	9.4	10,971	44,663
2020	120,508	8.0	9,641	39,166	8.5	10,243	41,577	9.4	11,328	45,226
2021	124,425	8.0	9,954	39,614	8.5	10,576	42,052	9.4	11,696	45,743
2022	128,469	8.0	10,278	40,017	8.5	10,920	42,479	9.4	12,076	46,208
2023	132,644	8.0	10,612	40,368	8.5	11,275	42,852	9.4	12,469	46,614
2024	136,955	8.0	10,956	40,662	8.5	11,641	43,164	9.4	12,874	46,954
2025	141,406	8.0	11,312	40,892	8.5	12,020	43,408	9.4	13,292	47,219
2026	146,002	8.0	11,680	41,050	8.5	12,410	43,576	9.4	13,724	47,402
2027	150.747	8.0	12.060	41.128	8.5	12.813	43.659	9.4	14.170	47 493

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram
			l Employer	Unfunded		d Employer	Unfunded		l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 113,041	10.4%	\$11,756	\$ 48,088	10.9%	\$12,321	\$ 49,871	12.3%	\$13,904	\$ 55,654
2019	116,715	10.4	12,138	48,747	10.9	12,722	50,554	12.3	14,356	56,416
2020	120,508	10.4	12,533	49,362	10.9	13,135	51,191	12.3	14,822	57,127
2021	124,425	10.4	12,940	49,926	10.9	13,562	51,776	12.3	15,304	57,780
2022	128,469	10.4	13,361	50,433	10.9	14,003	52,302	12.3	15,802	58,367
2023	132,644	10.4	13,795	50,876	10.9	14,458	52,761	12.3	16,315	58,880
2024	136,955	10.4	14,243	51,247	10.9	14,928	53,145	12.3	16,845	59,309
2025	141,406	10.4	14,706	51,537	10.9	15,413	53,445	12.3	17,393	59,644
2026	146,002	10.4	15,184	51,736	10.9	15,914	53,652	12.3	17,958	59,875
2027	150,747	10.4	15,678	51,835	10.9	16,431	53,754	12.3	18,542	59,989

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	5.2%	\$5,878	\$ 26,101	7.1%	\$8,026	\$ 34,098	6.9%	\$7,800	\$ 33,484
2019	116,715	5.2	6,069	26,459	7.1	8,287	34,565	6.9	8,053	33,943
2020	120,508	5.2	6,266	26,793	7.1	8,556	35,001	6.9	8,315	34,371
2021	124,425	5.2	6,470	27,099	7.1	8,834	35,401	6.9	8,585	34,764
2022	128,469	5.2	6,680	27,374	7.1	9,121	35,761	6.9	8,864	35,117
2023	132,644	5.2	6,897	27,614	7.1	9,418	36,075	6.9	9,152	35,425
2024	136,955	5.2	7,122	27,815	7.1	9,724	36,338	6.9	9,450	35,683
2025	141,406	5.2	7,353	27,972	7.1	10,040	36,543	6.9	9,757	35,885
2026	146,002	5.2	7,592	28,080	7.1	10,366	36,684	6.9	10,074	36,024
2027	150,747	5.2	7,839	28,134	7.1	10,703	36,754	6.9	10,402	36,093

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 113,041	8.4%	\$9,495	\$ 39,635	8.9%	\$10,061	\$ 42,007	9.8%	\$11,078	\$ 45,693	
2019	116,715	8.4	9,804	40,178	8.9	10,388	42,582	9.8	11,438	46,319	
2020	120,508	8.4	10,123	40,685	8.9	10,725	43,119	9.8	11,810	46,903	
2021	124,425	8.4	10,452	41,150	8.9	11,074	43,612	9.8	12,194	47,439	
2022	128,469	8.4	10,791	41,568	8.9	11,434	44,055	9.8	12,590	47,921	
2023	132,644	8.4	11,142	41,933	8.9	11,805	44,442	9.8	12,999	48,342	
2024	136,955	8.4	11,504	42,238	8.9	12,189	44,766	9.8	13,422	48,694	
2025	141,406	8.4	11,878	42,477	8.9	12,585	45,019	9.8	13,858	48,969	
2026	146,002	8.4	12,264	42,641	8.9	12,994	45,193	9.8	14,308	49,158	
2027	150.747	8.4	12.663	42.722	8.9	13.416	45.279	9.8	14.773	49.252	

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram
	Estimated National Residence		Estimated Employer Contribution			d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	10.9%	\$12,321	\$ 49,840	11.3%	\$12,774	\$ 51,679	12.9%	\$14,582	\$ 57,662
2019	116,715	10.9	12,722	50,523	11.3	13,189	52,387	12.9	15,056	58,452
2020	120,508	10.9	13,135	51,160	11.3	13,617	53,048	12.9	15,546	59,189
2021	124,425	10.9	13,562	51,745	11.3	14,060	53,654	12.9	16,051	59,866
2022	128,469	10.9	14,003	52,271	11.3	14,517	54,199	12.9	16,573	60,474
2023	132,644	10.9	14,458	52,730	11.3	14,989	54,675	12.9	17,111	61,005
2024	136,955	10.9	14,928	53,114	11.3	15,476	55,073	12.9	17,667	61,449
2025	141,406	10.9	15,413	53,414	11.3	15,979	55,384	12.9	18,241	61,796
2026	146,002	10.9	15,914	53,621	11.3	16,498	55,598	12.9	18,834	62,035
2027	150,747	10.9	16,431	53,723	11.3	17,034	55,704	12.9	19,446	62,153

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	8.5%	\$9,608	\$ 28,435	10.4%	\$11,756	\$ 35,519	10.1%	\$11,417	\$ 35,525
2019	116,715	8.5	9,921	28,825	10.4	12,138	36,006	10.1	11,788	36,012
2020	120,508	8.5	10,243	29,188	10.4	12,533	36,460	10.1	12,171	36,466
2021	124,425	8.5	10,576	29,522	10.4	12,940	36,877	10.1	12,567	36,883
2022	128,469	8.5	10,920	29,822	10.4	13,361	37,252	10.1	12,975	37,258
2023	132,644	8.5	11,275	30,084	10.4	13,795	37,579	10.1	13,397	37,585
2024	136,955	8.5	11,641	30,303	10.4	14,243	37,853	10.1	13,832	37,859
2025	141,406	8.5	12,020	30,474	10.4	14,706	38,067	10.1	14,282	38,073
2026	146,002	8.5	12,410	30,592	10.4	15,184	38,214	10.1	14,746	38,220
2027	150,747	8.5	12,813	30,650	10.4	15,678	38,287	10.1	15,225	38,293

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual	Accrued Liability	As a % of Payroll	Annual	Accrued Liability	As a % of Payroll	Annual	Accrued Liability	
2018	\$ 113,041	11.7%	\$13,226	\$ 40,843	12.2%	\$13,791	\$ 42,628	13.1%	\$14,808	\$ 46,174	
2019	116,715	11.7	13,656	41,403	12.2	14,239	43,212	13.1	15,290	46,807	
2020	120,508	11.7	14,099	41,925	12.2	14,702	43,757	13.1	15,787	47,397	
2021	124,425	11.7	14,558	42,404	12.2	15,180	44,257	13.1	16,300	47,939	
2022	128,469	11.7	15,031	42,835	12.2	15,673	44,707	13.1	16,829	48,426	
2023	132,644	11.7	15,519	43,211	12.2	16,183	45,100	13.1	17,376	48,851	
2024	136,955	11.7	16,024	43,526	12.2	16,709	45,429	13.1	17,941	49,207	
2025	141,406	11.7	16,545	43,772	12.2	17,252	45,686	13.1	18,524	49,485	
2026	146,002	11.7	17,082	43,941	12.2	17,812	45,863	13.1	19,126	49,676	
2027	150 747	11 7	17 637	44 025	12.2	18 391	4 5 951	13.1	19 748	49 771	

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram	
	Estimated	mated Contribution		Estimated Employer Unfunded Contribution Actuarial			Estimated Employer Unfunded Contribution Actuarial		Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 113,041	14.2%	\$16,052	\$ 49,727	14.6%	\$16,504	\$ 51,502	16.2%	\$18,313	\$ 56,842	
2019	116,715	14.2	16,574	50,408	14.6	17,040	52,208	16.2	18,908	57,621	
2020	120,508	14.2	17,112	51,044	14.6	17,594	52,866	16.2	19,522	58,348	
2021	124,425	14.2	17,668	51,628	14.6	18,166	53,470	16.2	20,157	59,015	
2022	128,469	14.2	18,243	52,153	14.6	18,756	54,013	16.2	20,812	59,615	
2023	132,644	14.2	18,835	52,611	14.6	19,366	54,487	16.2	21,488	60,139	
2024	136,955	14.2	19,448	52,994	14.6	19,995	54,884	16.2	22,187	60,577	
2025	141,406	14.2	20,080	53,294	14.6	20,645	55,194	16.2	22,908	60,919	
2026	146,002	14.2	20,732	53,500	14.6	21,316	55,407	16.2	23,652	61,155	
2027	150,747	14.2	21,406	53,602	14.6	22,009	55,513	16.2	24,421	61,272	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Emplo		oyer Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated		Contribution		Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 113,041	8.8%	\$9,948	\$ 29,328	10.7%	\$12,095	\$ 36,657	10.4%	\$11,756	\$ 36,666
2019	116,715	8.8	10,271	29,730	10.7	12,489	37,159	10.4	12,138	37,168
2020	120,508	8.8	10,605	30,105	10.7	12,894	37,628	10.4	12,533	37,637
2021	124,425	8.8	10,949	30,449	10.7	13,313	38,058	10.4	12,940	38,067
2022	128,469	8.8	11,305	30,758	10.7	13,746	38,445	10.4	13,361	38,454
2023	132,644	8.8	11,673	31,028	10.7	14,193	38,783	10.4	13,795	38,792
2024	136,955	8.8	12,052	31,254	10.7	14,654	39,066	10.4	14,243	39,075
2025	141,406	8.8	12,444	31,431	10.7	15,130	39,287	10.4	14,706	39,296
2026	146,002	8.8	12,848	31,553	10.7	15,622	39,439	10.4	15,184	39,448
2027	150,747	8.8	13,266	31,613	10.7	16,130	39,514	10.4	15,678	39,523

	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	12.0%	\$13,565	\$ 42,166	12.7%	\$14,356	\$ 43,986	13.5%	\$15,261	\$ 47,656
2019	116,715	12.0	14,006	42,744	12.7	14,823	44,589	13.5	15,757	48,309
2020	120,508	12.0	14,461	43,283	12.7	15,305	45,151	13.5	16,269	48,918
2021	124,425	12.0	14,931	43,778	12.7	15,802	45,667	13.5	16,797	49,477
2022	128,469	12.0	15,416	44,223	12.7	16,316	46,131	13.5	17,343	49,980
2023	132,644	12.0	15,917	44,611	12.7	16,846	46,536	13.5	17,907	50,419
2024	136,955	12.0	16,435	44,936	12.7	17,393	46,875	13.5	18,489	50,786
2025	141,406	12.0	16,969	45,190	12.7	17,959	47,140	13.5	19,090	51,073
2026	146,002	12.0	17,520	45,365	12.7	18,542	47,322	13.5	19,710	51,271
2027	150.747	12.0	18.090	45.452	12.7	19.145	47.412	13.5	20.351	51.369

	Estimated	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 113,041	14.7%	\$16,617	\$ 51,327	15.1%	\$17,069	\$ 53,162	16.6%	\$18,765	\$ 58,662
2019	116,715	14.7	17,157	52,030	15.1	17,624	53,890	16.6	19,375	59,466
2020	120,508	14.7	17,715	52,686	15.1	18,197	54,570	16.6	20,004	60,216
2021	124,425	14.7	18,290	53,288	15.1	18,788	55,194	16.6	20,655	60,904
2022	128,469	14.7	18,885	53,829	15.1	19,399	55,755	16.6	21,326	61,523
2023	132,644	14.7	19,499	54,302	15.1	20,029	56,245	16.6	22,019	62,063
2024	136,955	14.7	20,132	54,698	15.1	20,680	56,655	16.6	22,735	62,515
2025	141,406	14.7	20,787	55,007	15.1	21,352	56,975	16.6	23,473	62,868
2026	146,002	14.7	21,462	55,220	15.1	22,046	57,195	16.6	24,236	63,111
2027	150,747	14.7	22,160	55,325	15.1	22,763	57,304	16.6	25,024	63,232

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

