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November 13, 2018

Osage County SWCD Linn, 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).

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. Summary provisions of the law as well as benefit illustrations can be found in Appendices III and IV.

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was September 30, 2018. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

Mita Drazilor



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			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	0.70%	2.90%	0.20%	3.80%
L-3	General	0.90	4.20	0.30	5.40
LT-4(65)	General	0.70	3.60	0.20	4.50
LT-5(65)	General	0.90	4.70	0.30	5.90
L-7	General	1.10	5.60	0.30	7.00
LT-8(65)	General	1.10	5.90	0.30	7.30
L-12	General	1.30	6.90	0.40	8.60
LT-14(65)	General	1.30	7.10	0.40	8.80
L-6	General	1.50	8.30	0.50	10.30

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



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

		Pe	Percents of Active Member Payroll		
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	0.70%	3.10%	0.20%	4.00%
L-3	General	0.90	4.50	0.30	5.70
LT-4(65)	General	0.70	3.80	0.20	4.70
LT-5(65)	General	0.90	5.00	0.30	6.20
L-7	General	1.10	5.80	0.30	7.20
LT-8(65)	General	1.20	6.20	0.30	7.70
L-12	General	1.40	7.20	0.40	9.00
LT-14(65)	General	1.40	7.40	0.40	9.20
L-6	General	1.60	8.70	0.50	10.80

^{*} 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	0.90%	6.50%	0.20%	7.60%
L-3	General	1.10	7.80	0.30	9.20
LT-4(65)	General	0.90	7.10	0.20	8.20
LT-5(65)	General	1.10	8.30	0.30	9.70
L-7	General	1.30	9.20	0.30	10.80
LT-8(65)	General	1.30	9.60	0.30	11.20
L-12	General	1.50	10.60	0.40	12.50
LT-14(65)	General	1.50	10.80	0.40	12.70
L-6	General	1.70	12.00	0.50	14.20

^{*} 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	0.90%	6.70%	0.20%	7.80%
L-3	General	1.10	8.10	0.30	9.50
LT-4(65)	General	0.90	7.30	0.20	8.40
LT-5(65)	General	1.10	8.60	0.30	10.00
L-7	General	1.30	9.50	0.30	11.10
LT-8(65)	General	1.30	9.90	0.30	11.50
L-12	General	1.50	11.00	0.40	12.90
LT-14(65)	General	1.60	11.10	0.40	13.10
L-6	General	1.80	12.40	0.50	14.70

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



<u>Employer Contribution Rates (Contributory Plan - 5 Year FAS)</u> (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	0.70%	3.40%	0.20%	4.30%
L-3	General	0.90	4.80	0.30	6.00
LT-4(65)	General	0.80	4.60	0.20	5.60
LT-5(65)	General	1.00	5.70	0.30	7.00
L-7	General	1.20	6.20	0.30	7.70
LT-8(65)	General	1.20	6.80	0.30	8.30
L-12	General	1.40	7.70	0.40	9.50
LT-14(65)	General	1.40	8.00	0.40	9.80
L-6	General	1.60	9.20	0.50	11.30

- # 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.



<u>Employer Contribution Rates (Contributory Plan - 3 Year FAS)</u> (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	0.70%	3.60%	0.20%	4.50%
L-3	General	1.00	5.10	0.30	6.40
LT-4(65)	General	0.90	4.80	0.20	5.90
LT-5(65)	General	1.10	6.00	0.30	7.40
L-7	General	1.20	6.50	0.30	8.00
LT-8(65)	General	1.30	7.20	0.30	8.80
L-12	General	1.50	8.00	0.40	9.90
LT-14(65)	General	1.50	8.40	0.40	10.30
L-6	General	1.70	9.60	0.50	11.80

- # 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.



<u>Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)</u> (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	0.90%	6.90%	0.20%	8.00%
L-3	General	1.10	8.40	0.30	9.80
LT-4(65)	General	1.00	8.10	0.20	9.30
LT-5(65)	General	1.20	9.30	0.30	10.80
L-7	General	1.40	9.90	0.30	11.60
LT-8(65)	General	1.40	10.50	0.30	12.20
L-12	General	1.60	11.40	0.40	13.40
LT-14(65)	General	1.60	11.70	0.40	13.70
L-6	General	1.80	12.90	0.50	15.20

- # 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.



<u>Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)</u> (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	0.90%	7.10%	0.20%	8.20%
L-3	General	1.20	8.70	0.30	10.20
LT-4(65)	General	1.10	8.30	0.20	9.60
LT-5(65)	General	1.30	9.60	0.30	11.20
L-7	General	1.40	10.20	0.30	11.90
LT-8(65)	General	1.50	10.80	0.30	12.60
L-12	General	1.60	11.80	0.40	13.80
LT-14(65)	General	1.70	12.10	0.40	14.20
L-6	General	1.90	13.30	0.50	15.70

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- * 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	\$ 4,029				
L-3	5,725				
LT-4(65)	4,771				
LT-5(65)	6,255				
L-7	7,421				
LT-8(65)	7,739				
L-12	9,118				
LT-14(65)	9,330				
L-6	10,920				

3 Yea	r FAS
Benefit	
Program	General
L-1	\$ 4,241
L-3	6,043
LT-4(65)	4,983
LT-5(65)	6,573
L-7	7,633
LT-8(65)	8,163
L-12	9,542
LT-14(65)	9,754
L-6	11,450

Non-Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 8,057			
L-3	9,754			
LT-4(65)	8,693			
LT-5(65)	10,284			
L-7	11,450			
LT-8(65)	11,874			
L-12	13,252			
LT-14(65)	13,464			
L-6	15,055			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 8,269				
L-3	10,072				
LT-4(65)	8,906				
LT-5(65)	10,602				
L-7	11,768				
LT-8(65)	12,192				
L-12	13,676				
LT-14(65)	13,888				
L-6	15,585				

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	\$ 4,559				
L-3	6,361				
LT-4(65)	5,937				
LT-5(65)	7,421				
L-7	8,163				
LT-8(65)	8,799				
L-12	10,072				
LT-14(65)	10,390				
L-6	11,980				

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 4,771				
L-3	6,785				
LT-4(65)	6,255				
LT-5(65)	7,845				
L-7	8,481				
LT-8(65)	9,330				
L-12	10,496				
LT-14(65)	10,920				
L-6	12,510				

Non-Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 8,481			
L-3	10,390			
LT-4(65)	9,860			
LT-5(65)	11,450			
L-7	12,298			
LT-8(65)	12,934			
L-12	14,206			
LT-14(65)	14,524			
L-6	16,115			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 8,693				
L-3	10,814				
LT-4(65)	10,178				
LT-5(65)	11,874				
L-7	12,616				
LT-8(65)	13,358				
L-12	14,630				
LT-14(65)	15,055				
L-6	16,645				

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	\$ 106,018

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:

Osage County SWCD

		Contril	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 12,146	\$ 12,710	\$ 15,913	\$ 16,463
L-3	General	16,266	16,969	19,907	20,570
LT-4(65)	General	13,098	13,713	16,888	17,444
LT-5(65)	General	17,003	17,704	20,615	21,313
L-7	General	20,345	21,177	23,890	24,685
LT-8(65)	General	20,848	21,689	24,367	25,169
L-12	General	24,391	25,387	27,849	28,786
LT-14(65)	General	24,639	25,630	28,104	29,046
L-6	General	28,485	29,564	31,842	32,919



Unfunded Actuarial Accrued Liability (UAAL)

		Contril	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 13,139	\$ 13,753	\$ 16,868	\$ 17,438
L-3	General	17,489	18,222	21,085	21,783
LT-4(65)	General	15,436	16,136	19,160	19,815
LT-5(65)	General	19,212	20,005	22,802	23,573
L-7	General	21,800	22,685	25,306	26,133
LT-8(65)	General	22,948	23,882	26,431	27,316
L-12	General	26,097	27,123	29,523	30,522
LT-14(65)	General	26,651	27,732	30,099	31,107
L-6	General	30,398	31,579	33,737	34,868





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		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

Retirement _	General Members		Retirement		
Ages	Men	Women	Ages	Police	Fire
55	3.00%	3.00%	50	2.50%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	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 67	25 25 20	25 25 25	60 61 62	10 10 25	15 15 20
67 68				25	
69	20 20	25 20	63 64	20	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 Members			
Ages	Men	Women	Police	Fire
Ages	IVICII	Women	1 Once	1110
50	15%	15%	25%	25%
51	15	15	25	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	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

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	y 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.

³ 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		ated	
Average	LAGERS	Social	Monthly	/ 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			
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			ated
Average	LAGERS	Social	Monthly	y 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)

Final	LAG	ERS	Estimated	Estim	ated	Pero	ent
Average	BENI	EFIT ³	Social	Month	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	e:						
\$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	e:						
\$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	2,000	1,000	1,604	2,000	2,604	50%	65%
15 Years of Service	e:						
\$1,500	\$ 450	\$225	\$ 889	\$ 450	\$1,114	30%	74%
2,000	600	300	1,032	600	1,332	30%	67%
2,500	750	375	1,175	750	1,550	30%	62%
3,000	900	450	1,318	900	1,768	30%	59%
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%

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)

Final	LAG	ERS	Estimated	Estim	ated	Perc	ent
Average	BEN	EFIT 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	2:						
\$1,500	\$1,050	\$ 656	\$ 889	\$1,050	\$1,545	70%	103%
2,000	1,400	875	1,032	1,400	1,907	70%	95%
2,500	1,750	1,094	1,175	1,750	2,269	70%	91%
3,000	2,100	1,313	1,318	2,100	2,631	70%	88%
3,500	2,450	1,531	1,462	2,450	2,993	70%	86%
4,000	2,800	1,750	1,604	2,800	3,354	70%	84%
25 Years of Service	2:						
\$1,500	\$ 750	\$ 469	\$ 889	\$ 750	\$1,358	50%	91%
2,000	1,000	625	1,032	1,000	1,657	50%	83%
2,500	1,250	781	1,175	1,250	1,956	50%	78%
3,000	1,500	938	1,318	1,500	2,256	50%	75%
3,500	1,750	1,094	1,462	1,750	2,556	50%	73%
4,000	2,000	1,250	1,604	2,000	2,854	50%	71%
15 Years of Service	2:						
\$1,500	\$ 450	\$281	\$ 889	\$ 450	\$1,170	30%	78%
2,000	600	375	1,032	600	1,407	30%	70%
2,500	750	469	1,175	750	1,644	30%	66%
3,000	900	563	1,318	900	1,881	30%	63%
3,500	1,050	656	1,462	1,050	2,118	30%	61%
4,000	1,200	750	1,604	1,200	2,354	30%	59%

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

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	Estim	ated	Percent		
Average	BENI	EFIT 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	2:							
\$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	e:							
\$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	e:							
\$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

Osage County SWCD

September 30, 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	1							1	\$ 32,136					
30-34														
35-39	1							1	\$ 37,461					
40-44														
45-49														
50-54														
55-59				1				1	\$ 36,421					
60-64														
65-69														
70 & Over														
Totals	2			1				3	\$ 106,018					

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

Age: 39.8 years.

Benefit Service: 0.0 years. Annual Pay: \$35,339.





November 13, 2018 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 September 30, 2018 Initial Actuarial Valuation of LAGERS benefits for the employees of

Osage County SWCD

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drajilor

MDD:wp



November 13, 2018

Osage County SWCD Linn, 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 September 30, 2018 Initial Valuation for the Osage County SWCD dated November 13, 2018.

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 Draylov 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 Program			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	ployer Unfunded		Estimated Employer		Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	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	\$ 106,018	3.8%	\$4,029	\$ 12,146	5.4%	\$5,725	\$ 16,266	4.5%	\$4,771	\$ 13,098
2019	109,464	3.8	4,160	12,312	5.4	5,911	16,489	4.5	4,926	13,277
2020	113,022	3.8	4,295	12,467	5.4	6,103	16,697	4.5	5,086	13,444
2021	116,695	3.8	4,434	12,610	5.4	6,302	16,888	4.5	5,251	13,598
2022	120,488	3.8	4,579	12,738	5.4	6,506	17,060	4.5	5,422	13,736
2023	124,404	3.8	4,727	12,850	5.4	6,718	17,210	4.5	5,598	13,857
2024	128,447	3.8	4,881	12,944	5.4	6,936	17,335	4.5	5,780	13,958
2025	132,622	3.8	5,040	13,017	5.4	7,162	17,433	4.5	5,968	14,037
2026	136,932	3.8	5,203	13,067	5.4	7,394	17,500	4.5	6,162	14,091
2027	141,382	3.8	5,373	13,092	5.4	7,635	17,533	4.5	6,362	14,118

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated	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	\$ 106,018	5.9%	\$6,255	\$ 17,003	7.0%	\$7,421	\$ 20,345	7.3%	\$7,739	\$ 20,848	
2019	109,464	5.9	6,458	17,236	7.0	7,662	20,624	7.3	7,991	21,134	
2020	113,022	5.9	6,668	17,453	7.0	7,912	20,884	7.3	8,251	21,400	
2021	116,695	5.9	6,885	17,653	7.0	8,169	21,123	7.3	8,519	21,645	
2022	120,488	5.9	7,109	17,832	7.0	8,434	21,338	7.3	8,796	21,865	
2023	124,404	5.9	7,340	17,989	7.0	8,708	21,525	7.3	9,081	22,057	
2024	128,447	5.9	7,578	18,120	7.0	8,991	21,682	7.3	9,377	22,218	
2025	132,622	5.9	7,825	18,222	7.0	9,284	21,805	7.3	9,681	22,344	
2026	136,932	5.9	8,079	18,292	7.0	9,585	21,889	7.3	9,996	22,430	
2027	141.382	5.9	8.342	18.327	7.0	9.897	21.931	7.3	10.321	22.473	

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded
	Estimated	mated Contribution		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	\$ 106,018	8.6%	\$9,118	\$ 24,391	8.8%	\$9,330	\$ 24,639	10.3%	\$10,920	\$ 28,485
2019	109,464	8.6	9,414	24,725	8.8	9,633	24,977	10.3	11,275	28,875
2020	113,022	8.6	9,720	25,037	8.8	9,946	25,292	10.3	11,641	29,239
2021	116,695	8.6	10,036	25,323	8.8	10,269	25,581	10.3	12,020	29,573
2022	120,488	8.6	10,362	25,580	8.8	10,603	25,841	10.3	12,410	29,873
2023	124,404	8.6	10,699	25,805	8.8	10,948	26,068	10.3	12,814	30,135
2024	128,447	8.6	11,046	25,993	8.8	11,303	26,258	10.3	13,230	30,355
2025	132,622	8.6	11,405	26,140	8.8	11,671	26,406	10.3	13,660	30,527
2026	136,932	8.6	11,776	26,241	8.8	12,050	26,508	10.3	14,104	30,645
2027	141,382	8.6	12,159	26,291	8.8	12,442	26,559	10.3	14,562	30,704

- 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-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program			
		Estimated	ed Employer Unfunded		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	
	Estimated	Contri	ibution	Actuarial	Contribution		Actuarial	Contribution		Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	of Payroll Dollars		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2018	\$ 106,018	4.0%	\$4,241	\$ 12,710	5.7%	\$6,043	\$ 16,969	4.7%	\$4,983	\$ 13,713	
2019	109,464	4.0	4,379	12,884	5.7	6,239	17,201	4.7	5,145	13,901	
2020	113,022	4.0	4,521	13,046	5.7	6,442	17,418	4.7	5,312	14,076	
2021	116,695	4.0	4,668	13,195	5.7	6,652	17,617	4.7	5,485	14,237	
2022	120,488	4.0	4,820	13,329	5.7	6,868	17,796	4.7	5,663	14,382	
2023	124,404	4.0	4,976	13,446	5.7	7,091	17,952	4.7	5,847	14,508	
2024	128,447	4.0	5,138	13,544	5.7	7,321	18,083	4.7	6,037	14,614	
2025	132,622	4.0	5,305	13,621	5.7	7,559	18,185	4.7	6,233	14,697	
2026	136,932	4.0	5,477	13,674	5.7	7,805	18,255	4.7	6,436	14,754	
2027	141,382	4.0	5,655	13,700	5.7	8,059	18,290	4.7	6,645	14,782	

			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	\$ 106,018	6.2%	\$6,573	\$ 17,704	7.2%	\$7,633	\$ 21,177	7.7%	\$8,163	\$ 21,689	
2019	109,464	6.2	6,787	17,947	7.2	7,881	21,467	7.7	8,429	21,986	
2020	113,022	6.2	7,007	18,173	7.2	8,138	21,738	7.7	8,703	22,263	
2021	116,695	6.2	7,235	18,381	7.2	8,402	21,987	7.7	8,986	22,518	
2022	120,488	6.2	7,470	18,568	7.2	8,675	22,210	7.7	9,278	22,747	
2023	124,404	6.2	7,713	18,731	7.2	8,957	22,405	7.7	9,579	22,947	
2024	128,447	6.2	7,964	18,867	7.2	9,248	22,568	7.7	9,890	23,114	
2025	132,622	6.2	8,223	18,974	7.2	9,549	22,696	7.7	10,212	23,245	
2026	136,932	6.2	8,490	19,047	7.2	9,859	22,784	7.7	10,544	23,335	
2027	141,382	6.2	8,766	19,083	7.2	10,180	22,828	7.7	10,886	23,380	

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	·		l Employer	Unfunded		d Employer	Unfunded		d Employer	Unfunded
	Estimated		ibution	Actuarial	Contribution		Actuarial		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	\$ 106,018	9.0%	\$9,542	\$ 25,387	9.2%	\$9,754	\$ 25,630	10.8%	\$11,450	\$ 29,564
2019	109,464	9.0	9,852	25,735	9.2	10,071	25,981	10.8	11,822	29,969
2020	113,022	9.0	10,172	26,060	9.2	10,398	26,309	10.8	12,206	30,347
2021	116,695	9.0	10,503	26,358	9.2	10,736	26,610	10.8	12,603	30,694
2022	120,488	9.0	10,844	26,626	9.2	11,085	26,880	10.8	13,013	31,006
2023	124,404	9.0	11,196	26,860	9.2	11,445	27,116	10.8	13,436	31,278
2024	128,447	9.0	11,560	27,056	9.2	11,817	27,314	10.8	13,872	31,506
2025	132,622	9.0	11,936	27,209	9.2	12,201	27,468	10.8	14,323	31,684
2026	136,932	9.0	12,324	27,314	9.2	12,598	27,574	10.8	14,789	31,807
2027	141,382	9.0	12,724	27,366	9.2	13,007	27,627	10.8	15,269	31,868

- 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			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	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	\$ 106,018	7.6%	\$8,057	\$ 15,913	9.2%	\$9,754	\$ 19,907	8.2%	\$8,693	\$ 16,888
2019	109,464	7.6	8,319	16,131	9.2	10,071	20,180	8.2	8,976	17,119
2020	113,022	7.6	8,590	16,334	9.2	10,398	20,434	8.2	9,268	17,335
2021	116,695	7.6	8,869	16,521	9.2	10,736	20,668	8.2	9,569	17,533
2022	120,488	7.6	9,157	16,689	9.2	11,085	20,878	8.2	9,880	17,711
2023	124,404	7.6	9,455	16,836	9.2	11,445	21,061	8.2	10,201	17,867
2024	128,447	7.6	9,762	16,959	9.2	11,817	21,214	8.2	10,533	17,997
2025	132,622	7.6	10,079	17,055	9.2	12,201	21,334	8.2	10,875	18,099
2026	136,932	7.6	10,407	17,121	9.2	12,598	21,416	8.2	11,228	18,169
2027	141,382	7.6	10,745	17,154	9.2	13,007	21,457	8.2	11,593	18,204

	Estimated		LT-5(65) Benefit Program			7 Benefit Pro	gram	LT-8(65) Benefit Program		
			Estimated Employer Contribution		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	\$ 106,018	9.7%	\$10,284	\$ 20,615	10.8%	\$11,450	\$ 23,890	11.2%	\$11,874	\$ 24,367
2019	109,464	9.7	10,618	20,897	10.8	11,822	24,217	11.2	12,260	24,701
2020	113,022	9.7	10,963	21,160	10.8	12,206	24,522	11.2	12,658	25,012
2021	116,695	9.7	11,319	21,402	10.8	12,603	24,802	11.2	13,070	25,298
2022	120,488	9.7	11,687	21,619	10.8	13,013	25,054	11.2	13,495	25,555
2023	124,404	9.7	12,067	21,809	10.8	13,436	25,274	11.2	13,933	25,779
2024	128,447	9.7	12,459	21,968	10.8	13,872	25,458	11.2	14,386	25,967
2025	132,622	9.7	12,864	22,092	10.8	14,323	25,602	11.2	14,854	26,114
2026	136,932	9.7	13,282	22,177	10.8	14,789	25,701	11.2	15,336	26,215
2027	141.382	9.7	13.714	22.219	10.8	15.269	25.750	11.2	15.835	26.265

		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		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	\$ 106,018	12.5%	\$13,252	\$ 27,849	12.7%	\$13,464	\$ 28,104	14.2%	\$15,055	\$ 31,842
2019	109,464	12.5	13,683	28,231	12.7	13,902	28,489	14.2	15,544	32,278
2020	113,022	12.5	14,128	28,587	12.7	14,354	28,848	14.2	16,049	32,685
2021	116,695	12.5	14,587	28,914	12.7	14,820	29,178	14.2	16,571	33,059
2022	120,488	12.5	15,061	29,208	12.7	15,302	29,474	14.2	17,109	33,395
2023	124,404	12.5	15,551	29,465	12.7	15,799	29,733	14.2	17,665	33,688
2024	128,447	12.5	16,056	29,680	12.7	16,313	29,950	14.2	18,239	33,933
2025	132,622	12.5	16,578	29,848	12.7	16,843	30,119	14.2	18,832	34,125
2026	136,932	12.5	17,117	29,963	12.7	17,390	30,235	14.2	19,444	34,257
2027	141,382	12.5	17,673	30,020	12.7	17,956	30,293	14.2	20,076	34,322

- 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 Program			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	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	\$ 106,018	7.8%	\$8,269	\$ 16,463	9.5%	\$10,072	\$ 20,570	8.4%	\$8,906	\$ 17,444
2019	109,464	7.8	8,538	16,689	9.5	10,399	20,852	8.4	9,195	17,683
2020	113,022	7.8	8,816	16,899	9.5	10,737	21,115	8.4	9,494	17,906
2021	116,695	7.8	9,102	17,092	9.5	11,086	21,356	8.4	9,802	18,111
2022	120,488	7.8	9,398	17,266	9.5	11,446	21,573	8.4	10,121	18,295
2023	124,404	7.8	9,704	17,418	9.5	11,818	21,762	8.4	10,450	18,456
2024	128,447	7.8	10,019	17,545	9.5	12,202	21,921	8.4	10,790	18,590
2025	132,622	7.8	10,345	17,644	9.5	12,599	22,045	8.4	11,140	18,695
2026	136,932	7.8	10,681	17,712	9.5	13,009	22,130	8.4	11,502	18,767
2027	141,382	7.8	11,028	17,746	9.5	13,431	22,172	8.4	11,876	18,803

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		ed Employer Unfunded tribution 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	\$ 106,018	10.0%	\$10,602	\$ 21,313	11.1%	\$11,768	\$ 24,685	11.5%	\$12,192	\$ 25,169
2019	109,464	10.0	10,946	21,605	11.1	12,151	25,023	11.5	12,588	25,514
2020	113,022	10.0	11,302	21,877	11.1	12,545	25,339	11.5	12,998	25,836
2021	116,695	10.0	11,670	22,127	11.1	12,953	25,629	11.5	13,420	26,131
2022	120,488	10.0	12,049	22,352	11.1	13,374	25,889	11.5	13,856	26,397
2023	124,404	10.0	12,440	22,548	11.1	13,809	26,116	11.5	14,306	26,629
2024	128,447	10.0	12,845	22,712	11.1	14,258	26,306	11.5	14,771	26,823
2025	132,622	10.0	13,262	22,840	11.1	14,721	26,455	11.5	15,252	26,975
2026	136,932	10.0	13,693	22,928	11.1	15,199	26,557	11.5	15,747	27,079
2027	141.382	10.0	14.138	22.972	11.1	15.693	26.608	11.5	16.259	27.131

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram
	Estimated		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	\$ 106,018	12.9%	\$13,676	\$ 28,786	13.1%	\$13,888	\$ 29,046	14.7%	\$15,585	\$ 32,919
2019	109,464	12.9	14,121	29,180	13.1	14,340	29,444	14.7	16,091	33,370
2020	113,022	12.9	14,580	29,548	13.1	14,806	29,815	14.7	16,614	33,791
2021	116,695	12.9	15,054	29,886	13.1	15,287	30,156	14.7	17,154	34,177
2022	120,488	12.9	15,543	30,190	13.1	15,784	30,462	14.7	17,712	34,524
2023	124,404	12.9	16,048	30,455	13.1	16,297	30,730	14.7	18,287	34,827
2024	128,447	12.9	16,570	30,677	13.1	16,827	30,954	14.7	18,882	35,081
2025	132,622	12.9	17,108	30,850	13.1	17,373	31,129	14.7	19,495	35,279
2026	136,932	12.9	17,664	30,969	13.1	17,938	31,249	14.7	20,129	35,415
2027	141,382	12.9	18,238	31,028	13.1	18,521	31,309	14.7	20,783	35,483

- 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	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	d Employer Uribution A	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	\$ 106,018	4.3%	\$4,559	\$ 13,139	6.0%	\$6,361	\$ 17,489	5.6%	\$5,937	\$ 15,436
2019	109,464	4.3	4,707	13,319	6.0	6,568	17,729	5.6	6,130	15,647
2020	113,022	4.3	4,860	13,487	6.0	6,781	17,953	5.6	6,329	15,844
2021	116,695	4.3	5,018	13,641	6.0	7,002	18,158	5.6	6,535	16,025
2022	120,488	4.3	5,181	13,780	6.0	7,229	18,343	5.6	6,747	16,188
2023	124,404	4.3	5,349	13,901	6.0	7,464	18,504	5.6	6,967	16,330
2024	128,447	4.3	5,523	14,002	6.0	7,707	18,639	5.6	7,193	16,449
2025	132,622	4.3	5,703	14,081	6.0	7,957	18,744	5.6	7,427	16,542
2026	136,932	4.3	5,888	14,135	6.0	8,216	18,816	5.6	7,668	16,606
2027	141,382	4.3	6,079	14,162	6.0	8,483	18,852	5.6	7,917	16,638

		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	\$ 106,018	7.0%	\$7,421	\$ 19,212	7.7%	\$8,163	\$ 21,800	8.3%	\$8,799	\$ 22,948
2019	109,464	7.0	7,662	19,475	7.7	8,429	22,099	8.3	9,086	23,262
2020	113,022	7.0	7,912	19,721	7.7	8,703	22,378	8.3	9,381	23,555
2021	116,695	7.0	8,169	19,946	7.7	8,986	22,634	8.3	9,686	23,824
2022	120,488	7.0	8,434	20,149	7.7	9,278	22,864	8.3	10,001	24,066
2023	124,404	7.0	8,708	20,326	7.7	9,579	23,065	8.3	10,326	24,277
2024	128,447	7.0	8,991	20,474	7.7	9,890	23,233	8.3	10,661	24,454
2025	132,622	7.0	9,284	20,590	7.7	10,212	23,364	8.3	11,008	24,592
2026	136,932	7.0	9,585	20,670	7.7	10,544	23,454	8.3	11,365	24,687
2027	141.382	7.0	9.897	20.709	7.7	10.886	23.499	8.3	11.735	24.734

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	-6 Benefit Pro	gram
			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	\$ 106,018	9.5%	\$10,072	\$ 26,097	9.8%	\$10,390	\$ 26,651	11.3%	\$11,980	\$ 30,398
2019	109,464	9.5	10,399	26,455	9.8	10,727	27,016	11.3	12,369	30,814
2020	113,022	9.5	10,737	26,789	9.8	11,076	27,357	11.3	12,771	31,203
2021	116,695	9.5	11,086	27,095	9.8	11,436	27,670	11.3	13,187	31,560
2022	120,488	9.5	11,446	27,370	9.8	11,808	27,951	11.3	13,615	31,881
2023	124,404	9.5	11,818	27,610	9.8	12,192	28,196	11.3	14,058	32,161
2024	128,447	9.5	12,202	27,811	9.8	12,588	28,401	11.3	14,515	32,395
2025	132,622	9.5	12,599	27,968	9.8	12,997	28,562	11.3	14,986	32,578
2026	136,932	9.5	13,009	28,076	9.8	13,419	28,672	11.3	15,473	32,704
2027	141,382	9.5	13,431	28,130	9.8	13,855	28,727	11.3	15,976	32,766

- 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)

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		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	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	\$ 106,018	4.5%	\$4,771	\$ 13,753	6.4%	\$6,785	\$ 18,222	5.9%	\$6,255	\$ 16,136
2019	109,464	4.5	4,926	13,941	6.4	7,006	18,472	5.9	6,458	16,357
2020	113,022	4.5	5,086	14,117	6.4	7,233	18,705	5.9	6,668	16,563
2021	116,695	4.5	5,251	14,278	6.4	7,468	18,919	5.9	6,885	16,752
2022	120,488	4.5	5,422	14,423	6.4	7,711	19,111	5.9	7,109	16,922
2023	124,404	4.5	5,598	14,550	6.4	7,962	19,279	5.9	7,340	17,071
2024	128,447	4.5	5,780	14,656	6.4	8,221	19,419	5.9	7,578	17,195
2025	132,622	4.5	5,968	14,739	6.4	8,488	19,529	5.9	7,825	17,292
2026	136,932	4.5	6,162	14,796	6.4	8,764	19,605	5.9	8,079	17,359
2027	141,382	4.5	6,362	14,824	6.4	9,048	19,642	5.9	8,342	17,392

		LT-5	(65) Benefit P	rogram	L-	7 Benefit Pro	gram	LT-8	(65) Benefit P	rogram
	Estimated		l 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	\$ 106,018	7.4%	\$7,845	\$ 20,005	8.0%	\$8,481	\$ 22,685	8.8%	\$9,330	\$ 23,882
2019	109,464	7.4	8,100	20,279	8.0	8,757	22,996	8.8	9,633	24,209
2020	113,022	7.4	8,364	20,535	8.0	9,042	23,286	8.8	9,946	24,514
2021	116,695	7.4	8,635	20,770	8.0	9,336	23,552	8.8	10,269	24,794
2022	120,488	7.4	8,916	20,981	8.0	9,639	23,791	8.8	10,603	25,046
2023	124,404	7.4	9,206	21,165	8.0	9,952	24,000	8.8	10,948	25,266
2024	128,447	7.4	9,505	21,319	8.0	10,276	24,175	8.8	11,303	25,450
2025	132,622	7.4	9,814	21,439	8.0	10,610	24,312	8.8	11,671	25,594
2026	136,932	7.4	10,133	21,522	8.0	10,955	24,406	8.8	12,050	25,693
2027	141.382	7.4	10.462	21.563	8.0	11.311	24.453	8.8	12.442	25.742

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated		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	\$ 106,018	9.9%	\$10,496	\$ 27,123	10.3%	\$10,920	\$ 27,732	11.8%	\$12,510	\$ 31,579
2019	109,464	9.9	10,837	27,495	10.3	11,275	28,112	11.8	12,917	32,012
2020	113,022	9.9	11,189	27,842	10.3	11,641	28,466	11.8	13,337	32,416
2021	116,695	9.9	11,553	28,160	10.3	12,020	28,791	11.8	13,770	32,787
2022	120,488	9.9	11,928	28,446	10.3	12,410	29,084	11.8	14,218	33,120
2023	124,404	9.9	12,316	28,696	10.3	12,814	29,339	11.8	14,680	33,411
2024	128,447	9.9	12,716	28,905	10.3	13,230	29,553	11.8	15,157	33,654
2025	132,622	9.9	13,130	29,068	10.3	13,660	29,720	11.8	15,649	33,844
2026	136,932	9.9	13,556	29,180	10.3	14,104	29,835	11.8	16,158	33,975
2027	141,382	9.9	13,997	29,236	10.3	14,562	29,892	11.8	16,683	34,040

- 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 Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	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	\$ 106,018	8.0%	\$8,481	\$ 16,868	9.8%	\$10,390	\$ 21,085	9.3%	\$9,860	\$ 19,160
2019	109,464	8.0	8,757	17,099	9.8	10,727	21,374	9.3	10,180	19,422
2020	113,022	8.0	9,042	17,315	9.8	11,076	21,644	9.3	10,511	19,667
2021	116,695	8.0	9,336	17,513	9.8	11,436	21,891	9.3	10,853	19,892
2022	120,488	8.0	9,639	17,691	9.8	11,808	22,113	9.3	11,205	20,094
2023	124,404	8.0	9,952	17,846	9.8	12,192	22,307	9.3	11,570	20,270
2024	128,447	8.0	10,276	17,976	9.8	12,588	22,469	9.3	11,946	20,418
2025	132,622	8.0	10,610	18,078	9.8	12,997	22,596	9.3	12,334	20,533
2026	136,932	8.0	10,955	18,148	9.8	13,419	22,683	9.3	12,735	20,612
2027	141,382	8.0	11,311	18,183	9.8	13,855	22,726	9.3	13,149	20,651

		LT-5(65) Benef		rogram	L	7 Benefit Pro	gram	LT-8	LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Actuarial		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		
Valuation Projected Year 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	\$ 106,018	10.8%	\$11,450	\$ 22,802	11.6%	\$12,298	\$ 25,306	12.2%	\$12,934	\$ 26,431		
2019	109,464	10.8	11,822	23,114	11.6	12,698	25,653	12.2	13,355	26,793		
2020	113,022	10.8	12,206	23,405	11.6	13,111	25,976	12.2	13,789	27,131		
2021	116,695	10.8	12,603	23,673	11.6	13,537	26,273	12.2	14,237	27,441		
2022	120,488	10.8	13,013	23,914	11.6	13,977	26,540	12.2	14,700	27,720		
2023	124,404	10.8	13,436	24,124	11.6	14,431	26,773	12.2	15,177	27,963		
2024	128,447	10.8	13,872	24,300	11.6	14,900	26,968	12.2	15,671	28,167		
2025	132,622	10.8	14,323	24,437	11.6	15,384	27,120	12.2	16,180	28,326		
2026	136,932	10.8	14,789	24,531	11.6	15,884	27,225	12.2	16,706	28,436		
2027	141.382	10.8	15.269	24.578	11.6	16.400	27.277	12.2	17.249	28.490		

		L-:	12 Benefit Pro	ogram	LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated tion Projected		l 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	\$ 106,018	13.4%	\$14,206	\$ 29,523	13.7%	\$14,524	\$ 30,099	15.2%	\$16,115	\$ 33,737
2019	109,464	13.4	14,668	29,927	13.7	14,997	30,511	15.2	16,639	34,199
2020	113,022	13.4	15,145	30,304	13.7	15,484	30,896	15.2	17,179	34,630
2021	116,695	13.4	15,637	30,650	13.7	15,987	31,249	15.2	17,738	35,026
2022	120,488	13.4	16,145	30,961	13.7	16,507	31,567	15.2	18,314	35,382
2023	124,404	13.4	16,670	31,233	13.7	17,043	31,844	15.2	18,909	35,693
2024	128,447	13.4	17,212	31,461	13.7	17,597	32,076	15.2	19,524	35,953
2025	132,622	13.4	17,771	31,639	13.7	18,169	32,257	15.2	20,159	36,156
2026	136,932	13.4	18,349	31,761	13.7	18,760	32,382	15.2	20,814	36,296
2027	141,382	13.4	18,945	31,822	13.7	19,369	32,444	15.2	21,490	36,365

- 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)

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	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
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
2019	109,464	8.2	8,976	17,677	10.2	11,165	22,081	9.6	10,509	20,086
2020	113,022	8.2	9,268	17,900	10.2	11,528	22,359	9.6	10,850	20,339
2021	116,695	8.2	9,569	18,105	10.2	11,903	22,615	9.6	11,203	20,572
2022	120,488	8.2	9,880	18,289	10.2	12,290	22,845	9.6	11,567	20,781
2023	124,404	8.2	10,201	18,450	10.2	12,689	23,046	9.6	11,943	20,964
2024	128,447	8.2	10,533	18,584	10.2	13,102	23,214	9.6	12,331	21,117
2025	132,622	8.2	10,875	18,689	10.2	13,527	23,345	9.6	12,732	21,236
2026	136,932	8.2	11,228	18,761	10.2	13,967	23,435	9.6	13,145	21,318
2027	141,382	8.2	11,593	18,797	10.2	14,421	23,480	9.6	13,573	21,359

	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	\$ 106,018	11.2%	\$11,874	\$ 23,573	11.9%	\$12,616	\$ 26,133	12.6%	\$13,358	\$ 27,316
2019	109,464	11.2	12,260	23,896	11.9	13,026	26,491	12.6	13,792	27,690
2020	113,022	11.2	12,658	24,197	11.9	13,450	26,825	12.6	14,241	28,039
2021	116,695	11.2	13,070	24,474	11.9	13,887	27,132	12.6	14,704	28,360
2022	120,488	11.2	13,495	24,723	11.9	14,338	27,408	12.6	15,181	28,648
2023	124,404	11.2	13,933	24,940	11.9	14,804	27,649	12.6	15,675	28,900
2024	128,447	11.2	14,386	25,122	11.9	15,285	27,850	12.6	16,184	29,111
2025	132,622	11.2	14,854	25,264	11.9	15,782	28,007	12.6	16,710	29,276
2026	136,932	11.2	15,336	25,362	11.9	16,295	28,115	12.6	17,253	29,389
2027	141.382	11.2	15.835	25.410	11.9	16.824	28.169	12.6	17.814	29.445

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
Estimated		Contribution		Actuarial	Contribution		Actuarial	Contribution		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	\$ 106,018	13.8%	\$14,630	\$ 30,522	14.2%	\$15,055	\$ 31,107	15.7%	\$16,645	\$ 34,868
2019	109,464	13.8	15,106	30,940	14.2	15,544	31,533	15.7	17,186	35,346
2020	113,022	13.8	15,597	31,330	14.2	16,049	31,931	15.7	17,744	35,792
2021	116,695	13.8	16,104	31,688	14.2	16,571	32,296	15.7	18,321	36,201
2022	120,488	13.8	16,627	32,010	14.2	17,109	32,624	15.7	18,917	36,569
2023	124,404	13.8	17,168	32,291	14.2	17,665	32,911	15.7	19,531	36,890
2024	128,447	13.8	17,726	32,526	14.2	18,239	33,151	15.7	20,166	37,159
2025	132,622	13.8	18,302	32,710	14.2	18,832	33,338	15.7	20,822	37,369
2026	136,932	13.8	18,897	32,836	14.2	19,444	33,467	15.7	21,498	37,514
2027	141,382	13.8	19,511	32,899	14.2	20,076	33,531	15.7	22,197	37,586

- 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.

