The Initial Valuation For

Scotland County Health Department

as of December 31, 2019

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GRS Retirement Consulting

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February 14, 2020

Scotland County Health Department
Memphis, 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, 2019.

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 December 31, 2019. 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 Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

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.

Scotland County Health Department

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	4.80%	3.40%	0.20%	8.40%
L-3	General	6.10	4.80	0.30	11.20
LT-4(65)	General	5.50	4.00	0.20	9.70
LT-5(65)	General	6.60	5.30	0.30	12.20
L-7	General	7.40	6.20	0.30	13.90
LT-8(65)	General	7.70	6.50	0.30	14.50
L-12	General	8.70	7.60	0.40	16.70
LT-14(65)	General	8.80	7.80	0.40	17.00
L-6	General	9.90	9.20	0.50	19.60

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

Scotland County Health Department

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.00%	3.60%	0.20%	8.80%
L-3	General	6.30	5.00	0.30	11.60
LT-4(65)	General	5.70	4.30	0.20	10.20
LT-5(65)	General	6.80	5.50	0.30	12.60
L-7	General	7.60	6.60	0.30	14.50
LT-8(65)	General	8.00	6.80	0.30	15.10
L-12	General	9.00	8.00	0.40	17.40
LT-14(65)	General	9.10	8.20	0.40	17.70
L-6	General	10.30	9.50	0.50	20.30

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

Scotland County Health Department

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.10%	6.80%	0.20%	12.10%
L-3	General	6.40	8.30	0.30	15.00
LT-4(65)	General	5.80	7.50	0.20	13.50
LT-5(65)	General	6.90	8.80	0.30	16.00
L-7	General	7.70	9.80	0.30	17.80
LT-8(65)	General	8.00	10.10	0.30	18.40
L-12	General	9.00	11.20	0.40	20.60
LT-14(65)	General	9.10	11.40	0.40	20.90
L-6	General	10.30	12.70	0.50	23.50

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

Scotland County Health Department

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.30%	7.00%	0.20%	12.50%
L-3	General	6.60	8.50	0.30	15.40
LT-4(65)	General	6.00	7.70	0.20	13.90
LT-5(65)	General	7.10	9.10	0.30	16.50
L-7	General	8.00	10.10	0.30	18.40
LT-8(65)	General	8.30	10.40	0.30	19.00
L-12	General	9.30	11.60	0.40	21.30
LT-14(65)	General	9.40	11.80	0.40	21.60
L-6	General	10.60	13.10	0.50	24.20

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

Scotland County Health Department

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.30%	3.70%	0.20%	9.20%
L-3	General	6.70	5.10	0.30	12.10
LT-4(65)	General	6.50	4.70	0.20	11.40
LT-5(65)	General	7.60	5.90	0.30	13.80
L-7	General	8.10	6.60	0.30	15.00
LT-8(65)	General	8.70	7.10	0.30	16.10
L-12	General	9.50	8.10	0.40	18.00
LT-14(65)	General	9.80	8.40	0.40	18.60
L-6	General	10.90	9.70	0.50	21.10

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

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

Scotland County Health Department

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll: Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.50%	3.90%	0.20%	9.60%
L-3	General	6.90	5.40	0.30	12.60
LT-4(65)	General	6.70	4.90	0.20	11.80
LT-5(65)	General	7.90	6.10	0.30	14.30
L-7	General	8.40	6.90	0.30	15.60
LT-8(65)	General	9.00	7.40	0.30	16.70
L-12	General	9.80	8.50	0.40	18.70
LT-14(65)	General	10.10	8.80	0.40	19.30
L-6	General	11.20	10.10	0.50	21.80

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.

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

Scotland County Health Department

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.60%	7.10%	0.20%	12.90%
L-3	General	7.00	8.60	0.30	15.90
LT-4(65)	General	6.80	8.10	0.20	15.10
LT-5(65)	General	7.90	9.40	0.30	17.60
L-7	General	8.40	10.20	0.30	18.90
LT-8(65)	General	9.00	10.70	0.30	20.00
L-12	General	9.80	11.70	0.40	21.90
LT-14(65)	General	10.10	12.00	0.40	22.50
L-6	General	11.20	13.30	0.50	25.00

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

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

Scotland County Health Department

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

Rule of 80 Retirement Eligibility#

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.80%	7.30%	0.20%	13.30%
L-3	General	7.20	8.90	0.30	16.40
LT-4(65)	General	7.00	8.30	0.20	15.50
LT-5(65)	General	8.20	9.70	0.30	18.20
L-7	General	8.70	10.50	0.30	19.50
LT-8(65)	General	9.30	11.00	0.30	20.60
L-12	General	10.10	12.10	0.40	22.60
LT-14(65)	General	10.40	12.40	0.40	23.20
L-6	General	11.50	13.70	0.50	25.70

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

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

Scotland County Health Department

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 Year FAS	
Benefit Program	General
L-1	$ 19,235
L-3	25,647
LT-4(65)	22,212
LT-5(65)	27,937
L-7	31,829
LT-8(65)	33,203
L-12	38,241
LT-14(65)	38,928
L-6	44,882

3 Year FAS	
Benefit Program	General
L-1	$ 20,151
L-3	26,563
LT-4(65)	23,357
LT-5(65)	28,853
L-7	33,203
LT-8(65)	34,577
L-12	39,844
LT-14(65)	40,531
L-6	46,485

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	$ 27,708
L-3	34,348
LT-4(65)	30,914
LT-5(65)	36,638
L-7	40,760
LT-8(65)	42,134
L-12	47,172
LT-14(65)	47,859
L-6	53,812

3 Year FAS	
Benefit Program	General
L-1	$ 28,624
L-3	35,264
LT-4(65)	31,829
LT-5(65)	37,783
L-7	42,134
LT-8(65)	43,508
L-12	48,775
LT-14(65)	49,462
L-6	55,415

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.

Scotland County Health Department

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	$ 21,067
L-3	27,708
LT-4(65)	26,105
LT-5(65)	31,600
L-7	34,348
LT-8(65)	36,867
L-12	41,218
LT-14(65)	42,592
L-6	48,317

3 Year FAS	
Benefit Program	General
L-1	$ 21,983
L-3	28,853
LT-4(65)	27,021
LT-5(65)	32,745
L-7	35,722
LT-8(65)	38,241
L-12	42,821
LT-14(65)	44,195
L-6	49,920

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	$ 29,540
L-3	36,409
LT-4(65)	34,577
LT-5(65)	40,302
L-7	43,279
LT-8(65)	45,798
L-12	50,149
LT-14(65)	51,523
L-6	57,247

3 Year FAS	
Benefit Program	General
L-1	$ 30,456
L-3	37,554
LT-4(65)	35,493
LT-5(65)	41,676
L-7	44,653
LT-8(65)	47,172
L-12	51,752
LT-14(65)	53,125
L-6	58,850

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.

Scotland County Health Department

Employees and Payroll Included in the Valuation

	General
Number of Employees	6
Annual Payroll	$ 228,989

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

APPENDIX I

UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability (UAAL)

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

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 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:

Scotland County Health Department

Regular Retirement Eligibility

		Contributory		Non-Contributory	
Benefit Group	**Employee Group**	**UAAL (5 Year FAS)**	**UAAL (3 Year FAS)**	**UAAL (5 Year FAS)**	**UAAL (3 Year FAS)**
L-1	General	$ 194,317	$ 201,328	$ 206,844	$ 213,862
L-3	General	246,163	254,987	258,530	267,331
LT-4(65)	General	221,225	229,186	233,621	241,589
LT-5(65)	General	266,336	275,876	278,607	288,108
L-7	General	297,973	308,527	310,263	320,793
LT-8(65)	General	311,432	322,461	323,653	334,638
L-12	General	349,654	361,926	361,948	374,246
LT-14(65)	General	356,382	368,885	368,656	381,175
L-6	General	401,224	415,192	413,695	427,717

Scotland County Health Department

Unfunded Actuarial Accrued Liability (UAAL)

Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	$ 212,981	$ 220,753	$ 224,951	$ 232,715
L-3	General	269,285	278,989	281,180	290,870
LT-4(65)	General	262,572	272,076	274,327	283,867
LT-5(65)	General	306,443	317,470	318,210	329,201
L-7	General	325,523	337,167	337,430	349,055
LT-8(65)	General	350,310	362,823	362,123	374,615
L-12	General	381,662	395,198	393,640	407,253
LT-14(65)	General	394,051	408,023	405,993	420,025
L-6	General	437,715	453,129	449,904	465,437

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

1. The investment return rate used in making the valuations was 7.25% 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.

6. 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	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

Sample	Percent Increase in Individual's Pay 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	
Ages	Men	Women
55	3.00%	3.00%
56	3.00%	3.00%
57	3.00%	3.00%
58	3.00%	3.00%
59	3.00%	3.00%

Retirement		
Ages	Police	Fire
50	2.50%	2.50%
51	2.50%	2.50%
52	2.50%	2.50%
53	2.50%	2.50%
54	2.50%	2.50%

Normal Retirement

Retirement	General Members	
Ages	Men	Women
60	10%	10%
61	10	10
62	25	15
63	20	15
64	20	15
65	25	25
66	25	25
67	20	25
68	20	25
69	20	20
70	100	100

Retirement		
Ages	Police	Fire
55	10%	13%
56	10	13
57	10	13
58	10	13
59	10	13
60	10	15
61	10	15
62	25	20
63	20	20
64	20	20
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
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		

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri LocAl Government Employees Retirement System
Brief Summary of LAGERS
Benefits and Conditions Evaluated and/or Considered
as of February 28, 2019
(Section references are to RSMo)

Voluntary Retirement. Sections 70.645 & 70.600. A member may retire with an age & service allowance after both (i) completing 5 years of credited service, and (ii) attaining the minimum service retirement age.

The minimum service retirement age is age 60 for a general employee and age 55 for a police, public safety or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

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

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

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4(65) Benefit Program:	1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Program:	1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Program:	1.50% for life, plus 0.50% to age 65
LT-14(65) Benefit Program:	1.75% for life, plus 0.25% to age 65

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

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

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

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

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts For Sample Combinations of Service & Salary
(L-1 Benefit Program is Years of Credited Service times: 1.00% of FAS [1])

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3]	Estimated Social Security [2]	Estimated Monthly Total $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 525	$ 930	$1,455	97%
2,000	700	1,076	1,776	89%
2,500	875	1,223	2,098	84%
3,000	1,050	1,370	2,420	81%
3,500	1,225	1,516	2,741	78%
4,000	1,400	1,662	3,062	77%
25 Years of Service:				
$1,500	$ 375	$ 930	$1,305	87%
2,000	500	1,076	1,576	79%
2,500	625	1,223	1,848	74%
3,000	750	1,370	2,120	71%
3,500	875	1,516	2,391	68%
4,000	1,000	1,662	2,662	67%
15 Years of Service:				
$1,500	$225	$ 930	$1,155	77%
2,000	300	1,076	1,376	69%
2,500	375	1,223	1,598	64%
3,000	450	1,370	1,820	61%
3,500	525	1,516	2,041	58%
4,000	600	1,662	2,262	57%

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

2 "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3]	Estimated Social Security [2]	Estimated Monthly Total $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 656	$ 930	$1,586	106%
2,000	875	1,076	1,951	98%
2,500	1,094	1,223	2,317	93%
3,000	1,313	1,370	2,683	89%
3,500	1,531	1,516	3,047	87%
4,000	1,750	1,662	3,412	85%
25 Years of Service:				
$1,500	$ 469	$ 930	$1,399	93%
2,000	625	1,076	1,701	85%
2,500	781	1,223	2,004	80%
3,000	938	1,370	2,308	77%
3,500	1,094	1,516	2,610	75%
4,000	1,250	1,662	2,912	73%
15 Years of Service:				
$1,500	$281	$ 930	$1,211	81%
2,000	375	1,076	1,451	73%
2,500	469	1,223	1,692	68%
3,000	563	1,370	1,933	64%
3,500	656	1,516	2,172	62%
4,000	750	1,662	2,412	60%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3]	Estimated Social Security [2]	Estimated Monthly Total $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 788	$ 930	$1,718	115%
2,000	1,050	1,076	2,126	106%
2,500	1,313	1,223	2,536	101%
3,000	1,575	1,370	2,945	98%
3,500	1,838	1,516	3,354	96%
4,000	2,100	1,662	3,762	94%
25 Years of Service:				
$1,500	$ 563	$ 930	$1,493	100%
2,000	750	1,076	1,826	91%
2,500	938	1,223	2,161	86%
3,000	1,125	1,370	2,495	83%
3,500	1,313	1,516	2,829	81%
4,000	1,500	1,662	3,162	79%
15 Years of Service:				
$1,500	$338	$ 930	$1,268	85%
2,000	450	1,076	1,526	76%
2,500	563	1,223	1,786	71%
3,000	675	1,370	2,045	68%
3,500	788	1,516	2,304	66%
4,000	900	1,662	2,562	64%

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

2 "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3]	Estimated Social Security [2]	Estimated Monthly Total $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 919	$ 930	$1,849	123%
2,000	1,225	1,076	2,301	115%
2,500	1,531	1,223	2,754	110%
3,000	1,838	1,370	3,208	107%
3,500	2,144	1,516	3,660	105%
4,000	2,450	1,662	4,112	103%
25 Years of Service:				
$1,500	$ 656	$ 930	$1,586	106%
2,000	875	1,076	1,951	98%
2,500	1,094	1,223	2,317	93%
3,000	1,313	1,370	2,683	89%
3,500	1,531	1,516	3,047	87%
4,000	1,750	1,662	3,412	85%
15 Years of Service:				
$1,500	$ 394	$ 930	$1,324	88%
2,000	525	1,076	1,601	80%
2,500	656	1,223	1,879	75%
3,000	788	1,370	2,158	72%
3,500	919	1,516	2,435	70%
4,000	1,050	1,662	2,712	68%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3]	Estimated Social Security [2]	Estimated Monthly Total $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$1,050	$ 930	$1,980	132%
2,000	1,400	1,076	2,476	124%
2,500	1,750	1,223	2,973	119%
3,000	2,100	1,370	3,470	116%
3,500	2,450	1,516	3,966	113%
4,000	2,800	1,662	4,462	112%
25 Years of Service:				
$1,500	$ 750	$ 930	$1,680	112%
2,000	1,000	1,076	2,076	104%
2,500	1,250	1,223	2,473	99%
3,000	1,500	1,370	2,870	96%
3,500	1,750	1,516	3,266	93%
4,000	2,000	1,662	3,662	92%
15 Years of Service:				
$1,500	$ 450	$ 930	$1,380	92%
2,000	600	1,076	1,676	84%
2,500	750	1,223	1,973	79%
3,000	900	1,370	2,270	76%
3,500	1,050	1,516	2,566	73%
4,000	1,200	1,662	2,862	72%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-4(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS [1] to age 65)
1.00% of FAS [1] at age 65)

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 525	$ 930	$1,050	$1,455	70%	97%
2,000	1,400	700	1,076	1,400	1,776	70%	89%
2,500	1,750	875	1,223	1,750	2,098	70%	84%
3,000	2,100	1,050	1,370	2,100	2,420	70%	81%
3,500	2,450	1,225	1,516	2,450	2,741	70%	78%
4,000	2,800	1,400	1,662	2,800	3,062	70%	77%
25 Years of Service:							
$1,500	$ 750	$ 375	$ 930	$ 750	$1,305	50%	87%
2,000	1,000	500	1,076	1,000	1,576	50%	79%
2,500	1,250	625	1,223	1,250	1,848	50%	74%
3,000	1,500	750	1,370	1,500	2,120	50%	71%
3,500	1,750	875	1,516	1,750	2,391	50%	68%
4,000	2,000	1,000	1,662	2,000	2,662	50%	67%
15 Years of Service:							
$1,500	$ 450	$225	$ 930	$ 450	$1,155	30%	77%
2,000	600	300	1,076	600	1,376	30%	69%
2,500	750	375	1,223	750	1,598	30%	64%
3,000	900	450	1,370	900	1,820	30%	61%
3,500	1,050	525	1,516	1,050	2,041	30%	58%
4,000	1,200	600	1,662	1,200	2,262	30%	57%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 656	$ 930	$1,050	$1,586	70%	106%
2,000	1,400	875	1,076	1,400	1,951	70%	98%
2,500	1,750	1,094	1,223	1,750	2,317	70%	93%
3,000	2,100	1,313	1,370	2,100	2,683	70%	89%
3,500	2,450	1,531	1,516	2,450	3,047	70%	87%
4,000	2,800	1,750	1,662	2,800	3,412	70%	85%
25 Years of Service:							
$1,500	$ 750	$ 469	$ 930	$ 750	$1,399	50%	93%
2,000	1,000	625	1,076	1,000	1,701	50%	85%
2,500	1,250	781	1,223	1,250	2,004	50%	80%
3,000	1,500	938	1,370	1,500	2,308	50%	77%
3,500	1,750	1,094	1,516	1,750	2,610	50%	75%
4,000	2,000	1,250	1,662	2,000	2,912	50%	73%
15 Years of Service:							
$1,500	$ 450	$281	$ 930	$ 450	$1,211	30%	81%
2,000	600	375	1,076	600	1,451	30%	73%
2,500	750	469	1,223	750	1,692	30%	68%
3,000	900	563	1,370	900	1,933	30%	64%
3,500	1,050	656	1,516	1,050	2,172	30%	62%
4,000	1,200	750	1,662	1,200	2,412	30%	60%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 788	$ 930	$1,050	$1,718	70%	115%
2,000	1,400	1,050	1,076	1,400	2,126	70%	106%
2,500	1,750	1,313	1,223	1,750	2,536	70%	101%
3,000	2,100	1,575	1,370	2,100	2,945	70%	98%
3,500	2,450	1,838	1,516	2,450	3,354	70%	96%
4,000	2,800	2,100	1,662	2,800	3,762	70%	94%
25 Years of Service:							
$1,500	$ 750	$ 563	$ 930	$ 750	$1,493	50%	100%
2,000	1,000	750	1,076	1,000	1,826	50%	91%
2,500	1,250	938	1,223	1,250	2,161	50%	86%
3,000	1,500	1,125	1,370	1,500	2,495	50%	83%
3,500	1,750	1,313	1,516	1,750	2,829	50%	81%
4,000	2,000	1,500	1,662	2,000	3,162	50%	79%
15 Years of Service:							
$1,500	$ 450	$338	$ 930	$ 450	$1,268	30%	85%
2,000	600	450	1,076	600	1,526	30%	76%
2,500	750	563	1,223	750	1,786	30%	71%
3,000	900	675	1,370	900	2,045	30%	68%
3,500	1,050	788	1,516	1,050	2,304	30%	66%
4,000	1,200	900	1,662	1,200	2,562	30%	64%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-14(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS [1] to age 65)
1.75% of FAS [1] at age 65)

Final Average Salary (FAS) [1]	LAGERS BENEFIT [3] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 919	$ 930	$1,050	$1,849	70%	123%
2,000	1,400	1,225	1,076	1,400	2,301	70%	115%
2,500	1,750	1,531	1,223	1,750	2,754	70%	110%
3,000	2,100	1,838	1,370	2,100	3,208	70%	107%
3,500	2,450	2,144	1,516	2,450	3,660	70%	105%
4,000	2,800	2,450	1,662	2,800	4,112	70%	103%
25 Years of Service:							
$1,500	$ 750	$ 656	$ 930	$ 750	$1,586	50%	106%
2,000	1,000	875	1,076	1,000	1,951	50%	98%
2,500	1,250	1,094	1,223	1,250	2,317	50%	93%
3,000	1,500	1,313	1,370	1,500	2,683	50%	89%
3,500	1,750	1,531	1,516	1,750	3,047	50%	87%
4,000	2,000	1,750	1,662	2,000	3,412	50%	85%
15 Years of Service:							
$1,500	$ 450	$ 394	$ 930	$ 450	$1,324	30%	88%
2,000	600	525	1,076	600	1,601	30%	80%
2,500	750	656	1,223	750	1,879	30%	75%
3,000	900	788	1,370	900	2,158	30%	72%
3,500	1,050	919	1,516	1,050	2,435	30%	70%
4,000	1,200	1,050	1,662	1,200	2,712	30%	68%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Scotland County Health Department

December 31, 2019

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29	1							1	$ 38,358
30-34									
35-39	1							1	$ 43,493
40-44									
45-49		1						1	$ 7,262
50-54		1						1	$ 39,334
55-59		1				1		2	$ 100,542
60-64									
65-69									
70 & Over									
Totals	**2**	**3**				**1**		**6**	**$ 228,989**

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

Age: 45.8 years.

Benefit Service: 7.8 years.

Annual Pay: $38,165.

APPENDIX VI

RISK COMMENTARY

Risk Commentary

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

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

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

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

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

The computed contribution rates shown on pages 4 thru 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.

February 14, 2020 E-mail

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

Dear Bob:

Enclosed is the report of the December 31, 2019 Initial Actuarial Valuation of LAGERS benefits for the employees of

Scotland County Health Department

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

February 14, 2020

Scotland County Health Department
Memphis, 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 December 31, 2019 Initial Valuation for the Scotland County Health Department dated February 14, 2020.

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, 2019.

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 Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

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

Scotland County Health Department - General

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

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	8.4%	$19,235	$ 194,317	11.2%	$25,647	$ 246,163	9.7%	$22,212	$ 221,225
2020	236,431	8.4	19,860	196,979	11.2	26,480	249,535	9.7	22,934	224,256
2021	244,115	8.4	20,506	199,463	11.2	27,341	252,681	9.7	23,679	227,084
2022	252,049	8.4	21,172	201,743	11.2	28,229	255,570	9.7	24,449	229,680
2023	260,241	8.4	21,860	203,793	11.2	29,147	258,167	9.7	25,243	232,014
2024	268,699	8.4	22,571	205,583	11.2	30,094	260,434	9.7	26,064	234,052
2025	277,432	8.4	23,304	207,081	11.2	31,072	262,331	9.7	26,911	235,757
2026	286,449	8.4	24,062	208,251	11.2	32,082	263,814	9.7	27,786	237,089
2027	295,759	8.4	24,844	209,056	11.2	33,125	264,834	9.7	28,689	238,006
2028	305,371	8.4	25,651	209,455	11.2	34,202	265,340	9.7	29,621	238,460

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	12.2%	$27,937	$ 266,336	13.9%	$31,829	$ 297,973	14.5%	$33,203	$ 311,432
2020	236,431	12.2	28,845	269,985	13.9	32,864	302,055	14.5	34,282	315,699
2021	244,115	12.2	29,782	273,389	13.9	33,932	305,864	14.5	35,397	319,680
2022	252,049	12.2	30,750	276,515	13.9	35,035	309,361	14.5	36,547	323,335
2023	260,241	12.2	31,749	279,325	13.9	36,173	312,504	14.5	37,735	326,620
2024	268,699	12.2	32,781	281,778	13.9	37,349	315,249	14.5	38,961	329,488
2025	277,432	12.2	33,847	283,831	13.9	38,563	317,545	14.5	40,228	331,888
2026	286,449	12.2	34,947	285,435	13.9	39,816	319,340	14.5	41,535	333,764
2027	295,759	12.2	36,083	286,539	13.9	41,111	320,575	14.5	42,885	335,055
2028	305,371	12.2	37,255	287,086	13.9	42,447	321,187	14.5	44,279	335,695

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	16.7%	$38,241	$ 349,654	17.0%	$38,928	$ 356,382	19.6%	$44,882	$ 401,224
2020	236,431	16.7	39,484	354,444	17.0	40,193	361,264	19.6	46,340	406,721
2021	244,115	16.7	40,767	358,913	17.0	41,500	365,819	19.6	47,847	411,849
2022	252,049	16.7	42,092	363,016	17.0	42,848	370,001	19.6	49,402	416,558
2023	260,241	16.7	43,460	366,705	17.0	44,241	373,761	19.6	51,007	420,791
2024	268,699	16.7	44,873	369,926	17.0	45,679	377,044	19.6	52,665	424,487
2025	277,432	16.7	46,331	372,621	17.0	47,163	379,791	19.6	54,377	427,579
2026	286,449	16.7	47,837	374,727	17.0	48,696	381,937	19.6	56,144	429,996
2027	295,759	16.7	49,392	376,176	17.0	50,279	383,414	19.6	57,969	431,659
2028	305,371	16.7	50,997	376,894	17.0	51,913	384,146	19.6	59,853	432,483

Notes regarding the above projections:

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 28^{th} have not been incorporated in the above results.
5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Scotland County Health Department - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2019	$ 228,989	8.8%	$20,151	$ 201,328	11.6%	$26,563	$ 254,987	10.2%	$23,357	$ 229,186
2020	236,431	8.8	20,806	204,086	11.6	27,426	258,480	10.2	24,116	232,326
2021	244,115	8.8	21,482	206,659	11.6	28,317	261,739	10.2	24,900	235,255
2022	252,049	8.8	22,180	209,022	11.6	29,238	264,731	10.2	25,709	237,945
2023	260,241	8.8	22,901	211,146	11.6	30,188	267,421	10.2	26,545	240,363
2024	268,699	8.8	23,646	213,000	11.6	31,169	269,770	10.2	27,407	242,474
2025	277,432	8.8	24,414	214,552	11.6	32,182	271,735	10.2	28,298	244,240
2026	286,449	8.8	25,208	215,765	11.6	33,228	273,271	10.2	29,218	245,620
2027	295,759	8.8	26,027	216,599	11.6	34,308	274,328	10.2	30,167	246,570
2028	305,371	8.8	26,873	217,013	11.6	35,423	274,852	10.2	31,148	247,041

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2019	$ 228,989	12.6%	$28,853	$ 275,876	14.5%	$33,203	$ 308,527	15.1%	$34,577	$ 322,461
2020	236,431	12.6	29,790	279,655	14.5	34,282	312,754	15.1	35,701	326,879
2021	244,115	12.6	30,758	283,181	14.5	35,397	316,698	15.1	36,861	331,001
2022	252,049	12.6	31,758	286,419	14.5	36,547	320,319	15.1	38,059	334,785
2023	260,241	12.6	32,790	289,329	14.5	37,735	323,574	15.1	39,296	338,187
2024	268,699	12.6	33,856	291,870	14.5	38,961	326,416	15.1	40,574	341,157
2025	277,432	12.6	34,956	293,996	14.5	40,228	328,794	15.1	41,892	343,642
2026	286,449	12.6	36,093	295,658	14.5	41,535	330,652	15.1	43,254	345,584
2027	295,759	12.6	37,266	296,801	14.5	42,885	331,931	15.1	44,660	346,920
2028	305,371	12.6	38,477	297,368	14.5	44,279	332,565	15.1	46,111	347,582

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2019	$ 228,989	17.4%	$39,844	$ 361,926	17.7%	$40,531	$ 368,885	20.3%	$46,485	$ 415,192
2020	236,431	17.4	41,139	366,884	17.7	41,848	373,939	20.3	47,995	420,880
2021	244,115	17.4	42,476	371,510	17.7	43,208	378,654	20.3	49,555	426,187
2022	252,049	17.4	43,857	375,757	17.7	44,613	382,983	20.3	51,166	431,060
2023	260,241	17.4	45,282	379,575	17.7	46,063	386,874	20.3	52,829	435,440
2024	268,699	17.4	46,754	382,909	17.7	47,560	390,272	20.3	54,546	439,264
2025	277,432	17.4	48,273	385,698	17.7	49,105	393,115	20.3	56,319	442,464
2026	286,449	17.4	49,842	387,878	17.7	50,701	395,337	20.3	58,149	444,965
2027	295,759	17.4	51,462	389,378	17.7	52,349	396,866	20.3	60,039	446,686
2028	305,371	17.4	53,135	390,122	17.7	54,051	397,624	20.3	61,990	447,539

Notes regarding the above projections:

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 28^{th} have not been incorporated in the above results.
5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Scotland County Health Department - General

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Estimated 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
2019	$ 228,989	12.1%	$27,708	$ 206,844	15.0%	$34,348	$ 258,530	13.5%	$30,914	$ 233,621
2020	236,431	12.1	28,608	209,678	15.0	35,465	262,072	13.5	31,918	236,822
2021	244,115	12.1	29,538	212,322	15.0	36,617	265,377	13.5	32,956	239,808
2022	252,049	12.1	30,498	214,749	15.0	37,807	268,411	13.5	34,027	242,550
2023	260,241	12.1	31,489	216,931	15.0	39,036	271,138	13.5	35,133	245,015
2024	268,699	12.1	32,513	218,836	15.0	40,305	273,519	13.5	36,274	247,167
2025	277,432	12.1	33,569	220,430	15.0	41,615	275,511	13.5	37,453	248,967
2026	286,449	12.1	34,660	221,676	15.0	42,967	277,068	13.5	38,671	250,374
2027	295,759	12.1	35,787	222,533	15.0	44,364	278,139	13.5	39,927	251,342
2028	305,371	12.1	36,950	222,958	15.0	45,806	278,670	13.5	41,225	251,822

		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	Estimated 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
2019	$ 228,989	16.0%	$36,638	$ 278,607	17.8%	$40,760	$ 310,263	18.4%	$42,134	$ 323,653
2020	236,431	16.0	37,829	282,424	17.8	42,085	314,514	18.4	43,503	328,087
2021	244,115	16.0	39,058	285,985	17.8	43,452	318,480	18.4	44,917	332,224
2022	252,049	16.0	40,328	289,255	17.8	44,865	322,121	18.4	46,377	336,022
2023	260,241	16.0	41,639	292,194	17.8	46,323	325,394	18.4	47,884	339,436
2024	268,699	16.0	42,992	294,760	17.8	47,828	328,252	18.4	49,441	342,417
2025	277,432	16.0	44,389	296,907	17.8	49,383	330,643	18.4	51,047	344,911
2026	286,449	16.0	45,832	298,585	17.8	50,988	332,512	18.4	52,707	346,860
2027	295,759	16.0	47,321	299,740	17.8	52,645	333,798	18.4	54,420	348,201
2028	305,371	16.0	48,859	300,312	17.8	54,356	334,435	18.4	56,188	348,866

		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	Estimated 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
2019	$ 228,989	20.6%	$47,172	$ 361,948	20.9%	$47,859	$ 368,656	23.5%	$53,812	$ 413,695
2020	236,431	20.6	48,705	366,907	20.9	49,414	373,707	23.5	55,561	419,363
2021	244,115	20.6	50,288	371,533	20.9	51,020	378,419	23.5	57,367	424,651
2022	252,049	20.6	51,922	375,781	20.9	52,678	382,745	23.5	59,232	429,506
2023	260,241	20.6	53,610	379,599	20.9	54,390	386,634	23.5	61,157	433,870
2024	268,699	20.6	55,352	382,933	20.9	56,158	390,030	23.5	63,144	437,680
2025	277,432	20.6	57,151	385,722	20.9	57,983	392,871	23.5	65,197	440,868
2026	286,449	20.6	59,008	387,902	20.9	59,868	395,091	23.5	67,316	443,360
2027	295,759	20.6	60,926	389,402	20.9	61,814	396,619	23.5	69,503	445,074
2028	305,371	20.6	62,906	390,146	20.9	63,823	397,376	23.5	71,762	445,924

Notes regarding the above projections:

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.

Scotland County Health Department - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2019	$ 228,989	12.5%	$28,624	$ 213,862	15.4%	$35,264	$ 267,331	13.9%	$31,829	$ 241,589
2020	236,431	12.5	29,554	216,792	15.4	36,410	270,993	13.9	32,864	244,899
2021	244,115	12.5	30,514	219,526	15.4	37,594	274,410	13.9	33,932	247,987
2022	252,049	12.5	31,506	222,036	15.4	38,816	277,547	13.9	35,035	250,822
2023	260,241	12.5	32,530	224,292	15.4	40,077	280,367	13.9	36,173	253,371
2024	268,699	12.5	33,587	226,262	15.4	41,380	282,829	13.9	37,349	255,596
2025	277,432	12.5	34,679	227,910	15.4	42,725	284,889	13.9	38,563	257,458
2026	286,449	12.5	35,806	229,198	15.4	44,113	286,499	13.9	39,816	258,913
2027	295,759	12.5	36,970	230,084	15.4	45,547	287,607	13.9	41,111	259,914
2028	305,371	12.5	38,171	230,523	15.4	47,027	288,156	13.9	42,447	260,410

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2019	$ 228,989	16.5%	$37,783	$ 288,108	18.4%	$42,134	$ 320,793	19.0%	$43,508	$ 334,638
2020	236,431	16.5	39,011	292,055	18.4	43,503	325,188	19.0	44,922	339,222
2021	244,115	16.5	40,279	295,738	18.4	44,917	329,288	19.0	46,382	343,499
2022	252,049	16.5	41,588	299,119	18.4	46,377	333,053	19.0	47,889	347,426
2023	260,241	16.5	42,940	302,158	18.4	47,884	336,437	19.0	49,446	350,956
2024	268,699	16.5	44,335	304,812	18.4	49,441	339,392	19.0	51,053	354,038
2025	277,432	16.5	45,776	307,032	18.4	51,047	341,864	19.0	52,712	356,617
2026	286,449	16.5	47,264	308,767	18.4	52,707	343,796	19.0	54,425	358,632
2027	295,759	16.5	48,800	309,961	18.4	54,420	345,125	19.0	56,194	360,019
2028	305,371	16.5	50,386	310,553	18.4	56,188	345,784	19.0	58,020	360,706

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2019	$ 228,989	21.3%	$48,775	$ 374,246	21.6%	$49,462	$ 381,175	24.2%	$55,415	$ 427,717
2020	236,431	21.3	50,360	379,373	21.6	51,069	386,397	24.2	57,216	433,577
2021	244,115	21.3	51,996	384,157	21.6	52,729	391,269	24.2	59,076	439,044
2022	252,049	21.3	53,686	388,549	21.6	54,443	395,742	24.2	60,996	444,064
2023	260,241	21.3	55,431	392,497	21.6	56,212	399,763	24.2	62,978	448,576
2024	268,699	21.3	57,233	395,944	21.6	58,039	403,274	24.2	65,025	452,516
2025	277,432	21.3	59,093	398,828	21.6	59,925	406,212	24.2	67,139	455,812
2026	286,449	21.3	61,014	401,082	21.6	61,873	408,508	24.2	69,321	458,388
2027	295,759	21.3	62,997	402,633	21.6	63,884	410,088	24.2	71,574	460,161
2028	305,371	21.3	65,044	403,402	21.6	65,960	410,871	24.2	73,900	461,040

Notes regarding the above projections:

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.

Scotland County Health Department - General

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	9.2%	$21,067	$ 212,981	12.1%	$27,708	$ 269,285	11.4%	$26,105	$ 262,572
2020	236,431	9.2	21,752	215,899	12.1	28,608	272,974	11.4	26,953	266,169
2021	244,115	9.2	22,459	218,621	12.1	29,538	276,416	11.4	27,829	269,525
2022	252,049	9.2	23,189	221,120	12.1	30,498	279,576	11.4	28,734	272,606
2023	260,241	9.2	23,942	223,367	12.1	31,489	282,417	11.4	29,667	275,376
2024	268,699	9.2	24,720	225,329	12.1	32,513	284,897	11.4	30,632	277,794
2025	277,432	9.2	25,524	226,970	12.1	33,569	286,972	11.4	31,627	279,818
2026	286,449	9.2	26,353	228,253	12.1	34,660	288,594	11.4	32,655	281,399
2027	295,759	9.2	27,210	229,136	12.1	35,787	289,710	11.4	33,717	282,487
2028	305,371	9.2	28,094	229,574	12.1	36,950	290,263	11.4	34,812	283,026

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	13.8%	$31,600	$ 306,443	15.0%	$34,348	$ 325,523	16.1%	$36,867	$ 350,310
2020	236,431	13.8	32,627	310,641	15.0	35,465	329,983	16.1	38,065	355,109
2021	244,115	13.8	33,688	314,558	15.0	36,617	334,144	16.1	39,303	359,587
2022	252,049	13.8	34,783	318,154	15.0	37,807	337,964	16.1	40,580	363,698
2023	260,241	13.8	35,913	321,387	15.0	39,036	341,398	16.1	41,899	367,394
2024	268,699	13.8	37,080	324,210	15.0	40,305	344,396	16.1	43,261	370,621
2025	277,432	13.8	38,286	326,572	15.0	41,615	346,905	16.1	44,667	373,321
2026	286,449	13.8	39,530	328,418	15.0	42,967	348,866	16.1	46,118	375,431
2027	295,759	13.8	40,815	329,688	15.0	44,364	350,215	16.1	47,617	376,883
2028	305,371	13.8	42,141	330,318	15.0	45,806	350,884	16.1	49,165	377,603

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	18.0%	$41,218	$ 381,662	18.6%	$42,592	$ 394,051	21.1%	$48,317	$ 437,715
2020	236,431	18.0	42,558	386,891	18.6	43,976	399,449	21.1	49,887	443,712
2021	244,115	18.0	43,941	391,769	18.6	45,405	404,486	21.1	51,508	449,307
2022	252,049	18.0	45,369	396,248	18.6	46,881	409,110	21.1	53,182	454,444
2023	260,241	18.0	46,843	400,274	18.6	48,405	413,267	21.1	54,911	459,062
2024	268,699	18.0	48,366	403,789	18.6	49,978	416,896	21.1	56,695	463,094
2025	277,432	18.0	49,938	406,730	18.6	51,602	419,933	21.1	58,538	466,467
2026	286,449	18.0	51,561	409,029	18.6	53,280	422,306	21.1	60,441	469,103
2027	295,759	18.0	53,237	410,611	18.6	55,011	423,939	21.1	62,405	470,917
2028	305,371	18.0	54,967	411,395	18.6	56,799	424,749	21.1	64,433	471,816

Notes regarding the above projections:

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.

Scotland County Health Department - General

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	9.6%	$21,983	$ 220,753	12.6%	$28,853	$ 278,989	11.8%	$27,021	$ 272,076
2020	236,431	9.6	22,697	223,777	12.6	29,790	282,811	11.8	27,899	275,803
2021	244,115	9.6	23,435	226,599	12.6	30,758	286,377	11.8	28,806	279,281
2022	252,049	9.6	24,197	229,190	12.6	31,758	289,651	11.8	29,742	282,474
2023	260,241	9.6	24,983	231,519	12.6	32,790	292,594	11.8	30,708	285,344
2024	268,699	9.6	25,795	233,552	12.6	33,856	295,164	11.8	31,706	287,850
2025	277,432	9.6	26,633	235,253	12.6	34,956	297,314	11.8	32,737	289,947
2026	286,449	9.6	27,499	236,583	12.6	36,093	298,994	11.8	33,801	291,586
2027	295,759	9.6	28,393	237,498	12.6	37,266	300,150	11.8	34,900	292,714
2028	305,371	9.6	29,316	237,951	12.6	38,477	300,723	11.8	36,034	293,273

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	14.3%	$32,745	$ 317,470	15.6%	$35,722	$ 337,167	16.7%	$38,241	$ 362,823
2020	236,431	14.3	33,810	321,819	15.6	36,883	341,786	16.7	39,484	367,794
2021	244,115	14.3	34,908	325,877	15.6	38,082	346,096	16.7	40,767	372,432
2022	252,049	14.3	36,043	329,603	15.6	39,320	350,053	16.7	42,092	376,690
2023	260,241	14.3	37,214	332,952	15.6	40,598	353,610	16.7	43,460	380,518
2024	268,699	14.3	38,424	335,876	15.6	41,917	356,716	16.7	44,873	383,860
2025	277,432	14.3	39,673	338,323	15.6	43,279	359,314	16.7	46,331	386,656
2026	286,449	14.3	40,962	340,235	15.6	44,686	361,345	16.7	47,837	388,841
2027	295,759	14.3	42,294	341,551	15.6	46,138	362,742	16.7	49,392	390,345
2028	305,371	14.3	43,668	342,203	15.6	47,638	363,435	16.7	50,997	391,090

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	18.7%	$42,821	$ 395,198	19.3%	$44,195	$ 408,023	21.8%	$49,920	$ 453,129
2020	236,431	18.7	44,213	400,612	19.3	45,631	413,613	21.8	51,542	459,337
2021	244,115	18.7	45,650	405,663	19.3	47,114	418,828	21.8	53,217	465,129
2022	252,049	18.7	47,133	410,301	19.3	48,645	423,616	21.8	54,947	470,447
2023	260,241	18.7	48,665	414,470	19.3	50,227	427,920	21.8	56,733	475,227
2024	268,699	18.7	50,247	418,110	19.3	51,859	431,678	21.8	58,576	479,401
2025	277,432	18.7	51,880	421,156	19.3	53,544	434,822	21.8	60,480	482,893
2026	286,449	18.7	53,566	423,536	19.3	55,285	437,279	21.8	62,446	485,622
2027	295,759	18.7	55,307	425,174	19.3	57,081	438,970	21.8	64,475	487,500
2028	305,371	18.7	57,104	425,986	19.3	58,937	439,808	21.8	66,571	488,431

Notes regarding the above projections:

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.

Scotland County Health Department - General

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 Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	12.9%	$29,540	$ 224,951	15.9%	$36,409	$ 281,180	15.1%	$34,577	$ 274,327
2020	236,431	12.9	30,500	228,033	15.9	37,593	285,032	15.1	35,701	278,085
2021	244,115	12.9	31,491	230,908	15.9	38,814	288,626	15.1	36,861	281,591
2022	252,049	12.9	32,514	233,548	15.9	40,076	291,926	15.1	38,059	284,810
2023	260,241	12.9	33,571	235,921	15.9	41,378	294,892	15.1	39,296	287,704
2024	268,699	12.9	34,662	237,993	15.9	42,723	297,482	15.1	40,574	290,231
2025	277,432	12.9	35,789	239,727	15.9	44,112	299,649	15.1	41,892	292,345
2026	286,449	12.9	36,952	241,082	15.9	45,545	301,343	15.1	43,254	293,997
2027	295,759	12.9	38,153	242,014	15.9	47,026	302,508	15.1	44,660	295,134
2028	305,371	12.9	39,393	242,476	15.9	48,554	303,086	15.1	46,111	295,698

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	17.6%	$40,302	$ 318,210	18.9%	$43,279	$ 337,430	20.0%	$45,798	$ 362,123
2020	236,431	17.6	41,612	322,569	18.9	44,685	342,053	20.0	47,286	367,084
2021	244,115	17.6	42,964	326,636	18.9	46,138	346,366	20.0	48,823	371,713
2022	252,049	17.6	44,361	330,370	18.9	47,637	350,326	20.0	50,410	375,963
2023	260,241	17.6	45,802	333,727	18.9	49,186	353,886	20.0	52,048	379,783
2024	268,699	17.6	47,291	336,658	18.9	50,784	356,994	20.0	53,740	383,118
2025	277,432	17.6	48,828	339,110	18.9	52,435	359,594	20.0	55,486	385,909
2026	286,449	17.6	50,415	341,027	18.9	54,139	361,626	20.0	57,290	388,090
2027	295,759	17.6	52,054	342,346	18.9	55,898	363,024	20.0	59,152	389,591
2028	305,371	17.6	53,745	343,000	18.9	57,715	363,717	20.0	61,074	390,335

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	$ 228,989	21.9%	$50,149	$ 393,640	22.5%	$51,523	$ 405,993	25.0%	$57,247	$ 449,904
2020	236,431	21.9	51,778	399,033	22.5	53,197	411,555	25.0	59,108	456,068
2021	244,115	21.9	53,461	404,065	22.5	54,926	416,744	25.0	61,029	461,819
2022	252,049	21.9	55,199	408,685	22.5	56,711	421,509	25.0	63,012	467,099
2023	260,241	21.9	56,993	412,838	22.5	58,554	425,792	25.0	65,060	471,845
2024	268,699	21.9	58,845	416,464	22.5	60,457	429,531	25.0	67,175	475,989
2025	277,432	21.9	60,758	419,498	22.5	62,422	432,660	25.0	69,358	479,456
2026	286,449	21.9	62,732	421,869	22.5	64,451	435,105	25.0	71,612	482,166
2027	295,759	21.9	64,771	423,500	22.5	66,546	436,788	25.0	73,940	484,031
2028	305,371	21.9	66,876	424,309	22.5	68,708	437,622	25.0	76,343	484,955

Notes regarding the above projections:

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.

Scotland County Health Department - General

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 Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	13.3%	$30,456	$ 232,715	16.4%	$37,554	$ 290,870	15.5%	$35,493	$ 283,867
2020	236,431	13.3	31,445	235,903	16.4	38,775	294,855	15.5	36,647	287,756
2021	244,115	13.3	32,467	238,878	16.4	40,035	298,573	15.5	37,838	291,384
2022	252,049	13.3	33,523	241,609	16.4	41,336	301,987	15.5	39,068	294,715
2023	260,241	13.3	34,612	244,064	16.4	42,680	305,055	15.5	40,337	297,710
2024	268,699	13.3	35,737	246,207	16.4	44,067	307,734	15.5	41,648	300,325
2025	277,432	13.3	36,898	248,000	16.4	45,499	309,976	15.5	43,002	302,513
2026	286,449	13.3	38,098	249,402	16.4	46,978	311,728	15.5	44,400	304,223
2027	295,759	13.3	39,336	250,366	16.4	48,504	312,933	15.5	45,843	305,399
2028	305,371	13.3	40,614	250,844	16.4	50,081	313,531	15.5	47,333	305,982

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	18.2%	$41,676	$ 329,201	19.5%	$44,653	$ 349,055	20.6%	$47,172	$ 374,615
2020	236,431	18.2	43,030	333,711	19.5	46,104	353,837	20.6	48,705	379,747
2021	244,115	18.2	44,429	337,919	19.5	47,602	358,299	20.6	50,288	384,535
2022	252,049	18.2	45,873	341,782	19.5	49,150	362,395	20.6	51,922	388,931
2023	260,241	18.2	47,364	345,255	19.5	50,747	366,077	20.6	53,610	392,883
2024	268,699	18.2	48,903	348,287	19.5	52,396	369,292	20.6	55,352	396,333
2025	277,432	18.2	50,493	350,824	19.5	54,099	371,982	20.6	57,151	399,220
2026	286,449	18.2	52,134	352,807	19.5	55,858	374,084	20.6	59,008	401,476
2027	295,759	18.2	53,828	354,171	19.5	57,673	375,531	20.6	60,926	403,029
2028	305,371	18.2	55,578	354,847	19.5	59,547	376,248	20.6	62,906	403,799

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2019	$ 228,989	22.6%	$51,752	$ 407,253	23.2%	$53,125	$ 420,025	25.7%	$58,850	$ 465,437
2020	236,431	22.6	53,433	412,832	23.2	54,852	425,779	25.7	60,763	471,813
2021	244,115	22.6	55,170	418,038	23.2	56,635	431,148	25.7	62,738	477,762
2022	252,049	22.6	56,963	422,817	23.2	58,475	436,077	25.7	64,777	483,224
2023	260,241	22.6	58,814	427,113	23.2	60,376	440,508	25.7	66,882	488,134
2024	268,699	22.6	60,726	430,864	23.2	62,338	444,377	25.7	69,056	492,421
2025	277,432	22.6	62,700	434,003	23.2	64,364	447,614	25.7	71,300	496,008
2026	286,449	22.6	64,737	436,456	23.2	66,456	450,144	25.7	73,617	498,811
2027	295,759	22.6	66,842	438,144	23.2	68,616	451,885	25.7	76,010	500,740
2028	305,371	22.6	69,014	438,981	23.2	70,846	452,748	25.7	78,480	501,696

Notes regarding the above projections:

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.
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