



The Initial Valuation For

Monroe City Ambulance District

as of December 31, 2018



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February 18, 2019

Monroe City Ambulance District
Monroe City, Missouri

Ladies and Gentlemen:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA



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.

Monroe City Ambulance District

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			Total Employer Contribution Rate
		Prior Service Cost *	Current Cost	Disability Cost	
L-1	General	3.80%	3.00%	0.20%	7.00%
L-3	General	4.80	4.30	0.30	9.40
LT-4(65)	General	4.00	3.60	0.20	7.80
LT-5(65)	General	5.00	4.80	0.30	10.10
L-7	General	5.80	5.80	0.30	11.90
LT-8(65)	General	5.90	6.10	0.30	12.30
L-12	General	6.70	7.30	0.40	14.40
LT-14(65)	General	6.80	7.30	0.40	14.50
L-6	General	7.70	8.70	0.50	16.90

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

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	3.90%	3.20%	0.20%	7.30%
L-3	General	4.90	4.60	0.30	9.80
LT-4(65)	General	4.20	3.80	0.20	8.20
LT-5(65)	General	5.20	5.10	0.30	10.60
L-7	General	6.00	6.10	0.30	12.40
LT-8(65)	General	6.10	6.40	0.30	12.80
L-12	General	7.00	7.50	0.40	14.90
LT-14(65)	General	7.10	7.70	0.40	15.20
L-6	General	8.00	9.00	0.50	17.50

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

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	4.00%	6.60%	0.20%	10.80%
L-3	General	5.00	8.00	0.30	13.30
LT-4(65)	General	4.30	7.20	0.20	11.70
LT-5(65)	General	5.20	8.50	0.30	14.00
L-7	General	6.00	9.50	0.30	15.80
LT-8(65)	General	6.10	9.80	0.30	16.20
L-12	General	7.00	10.90	0.40	18.30
LT-14(65)	General	7.00	11.00	0.40	18.40
L-6	General	8.00	12.30	0.50	20.80

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

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	4.10%	6.80%	0.20%	11.10%
L-3	General	5.10	8.30	0.30	13.70
LT-4(65)	General	4.40	7.50	0.20	12.10
LT-5(65)	General	5.40	8.80	0.30	14.50
L-7	General	6.20	9.80	0.30	16.30
LT-8(65)	General	6.30	10.10	0.30	16.70
L-12	General	7.20	11.20	0.40	18.80
LT-14(65)	General	7.30	11.40	0.40	19.10
L-6	General	8.20	12.70	0.50	21.40

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

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	3.90%	3.40%	0.20%	7.50%
L-3	General	4.90	4.90	0.30	10.10
LT-4(65)	General	4.20	4.60	0.20	9.00
LT-5(65)	General	5.20	5.70	0.30	11.20
L-7	General	5.90	6.40	0.30	12.60
LT-8(65)	General	6.10	7.00	0.30	13.40
L-12	General	6.90	7.90	0.40	15.20
LT-14(65)	General	7.00	8.20	0.40	15.60
L-6	General	7.90	9.60	0.50	18.00

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. 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.

Monroe City Ambulance District

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			Total Employer Contribution Rate
		Prior Service Cost *	Current Cost	Disability Cost	
L-1	General	4.00%	3.60%	0.20%	7.80%
L-3	General	5.10	5.20	0.30	10.60
LT-4(65)	General	4.40	4.80	0.20	9.40
LT-5(65)	General	5.40	6.10	0.30	11.80
L-7	General	6.10	6.70	0.30	13.10
LT-8(65)	General	6.30	7.30	0.30	13.90
L-12	General	7.20	8.30	0.40	15.90
LT-14(65)	General	7.30	8.60	0.40	16.30
L-6	General	8.20	9.90	0.50	18.60

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

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

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	4.10%	7.00%	0.20%	11.30%
L-3	General	5.10	8.60	0.30	14.00
LT-4(65)	General	4.50	8.20	0.20	12.90
LT-5(65)	General	5.40	9.40	0.30	15.10
L-7	General	6.10	10.10	0.30	16.50
LT-8(65)	General	6.30	10.70	0.30	17.30
L-12	General	7.10	11.60	0.40	19.10
LT-14(65)	General	7.20	11.90	0.40	19.50
L-6	General	8.20	13.20	0.50	21.90

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

* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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.

Monroe City Ambulance District

Employer Contribution Rates (Non-Contributory Plan - 3 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	4.20%	7.30%	0.20%	11.70%
L-3	General	5.30	8.90	0.30	14.50
LT-4(65)	General	4.60	8.50	0.20	13.30
LT-5(65)	General	5.60	9.80	0.30	15.70
L-7	General	6.30	10.40	0.30	17.00
LT-8(65)	General	6.50	11.00	0.30	17.80
L-12	General	7.40	12.00	0.40	19.80
LT-14(65)	General	7.50	12.30	0.40	20.20
L-6	General	8.40	13.60	0.50	22.50

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. 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.

Monroe City Ambulance District

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	\$ 14,514
L-3	19,491
LT-4(65)	16,173
LT-5(65)	20,942
L-7	24,674
LT-8(65)	25,504
L-12	29,858
LT-14(65)	30,065
L-6	35,041

3 Year FAS	
Benefit Program	General
L-1	\$ 15,136
L-3	20,320
LT-4(65)	17,002
LT-5(65)	21,979
L-7	25,711
LT-8(65)	26,540
L-12	30,895
LT-14(65)	31,517
L-6	36,286

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 22,393
L-3	27,577
LT-4(65)	24,259
LT-5(65)	29,028
L-7	32,761
LT-8(65)	33,590
L-12	37,944
LT-14(65)	38,152
L-6	43,128

3 Year FAS	
Benefit Program	General
L-1	\$ 23,015
L-3	28,406
LT-4(65)	25,089
LT-5(65)	30,065
L-7	33,797
LT-8(65)	34,627
L-12	38,981
LT-14(65)	39,603
L-6	44,372

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.

Monroe City Ambulance District

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	\$ 15,551
L-3	20,942
LT-4(65)	18,661
LT-5(65)	23,223
L-7	26,126
LT-8(65)	27,784
L-12	31,517
LT-14(65)	32,346
L-6	37,322

3 Year FAS	
Benefit Program	General
L-1	\$ 16,173
L-3	21,979
LT-4(65)	19,491
LT-5(65)	24,467
L-7	27,162
LT-8(65)	28,821
L-12	32,968
LT-14(65)	33,797
L-6	38,566

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 23,430
L-3	29,028
LT-4(65)	26,748
LT-5(65)	31,309
L-7	34,212
LT-8(65)	35,871
L-12	39,603
LT-14(65)	40,432
L-6	45,409

3 Year FAS	
Benefit Program	General
L-1	\$ 24,259
L-3	30,065
LT-4(65)	27,577
LT-5(65)	32,553
L-7	35,249
LT-8(65)	36,908
L-12	41,055
LT-14(65)	41,884
L-6	46,653

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.

Monroe City Ambulance District

Employees and Payroll Included in the Valuation

	General
Number of Employees	5
Annual Payroll	\$ 207,346

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:

Monroe City Ambulance District

Regular 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	\$ 137,517	\$ 142,603	\$ 145,475	\$ 150,492
L-3	General	174,101	180,345	181,839	188,083
LT-4(65)	General	147,617	153,051	155,507	160,863
LT-5(65)	General	181,671	188,175	189,371	195,879
L-7	General	210,383	217,817	218,211	225,707
LT-8(65)	General	215,421	223,049	223,232	230,916
L-12	General	246,483	255,118	254,614	263,342
LT-14(65)	General	249,019	257,736	257,126	265,923
L-6	General	282,578	292,385	290,991	300,940

Monroe City Ambulance District

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	\$ 140,991	\$ 146,209	\$ 148,908	\$ 154,040
L-3	General	178,441	184,811	186,133	192,544
LT-4(65)	General	154,738	160,422	162,577	168,185
LT-5(65)	General	188,731	195,491	196,382	203,145
L-7	General	215,538	223,197	223,349	231,053
LT-8(65)	General	222,406	230,304	230,197	238,110
L-12	General	252,473	261,340	260,585	269,565
LT-14(65)	General	255,911	264,887	264,011	273,103
L-6	General	289,369	299,511	297,815	308,063

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							
Sample Ages	Years of Service	General Members				Police		Fire	
		Men		Women		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 Ages	Percent Increase in Individual's Pay During Next Year	
	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 Ages	General Members		Retirement Ages	Police	Fire
	Men	Women			
55	3.00%	3.00%	50	2.50%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	2.50%

Normal Retirement

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

Schedule 2. (Continued)

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

Retirement Ages	General Members		Police	Fire
	Men	Women		
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, 2018

(Section references are to RSMo)

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

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

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

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

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4(65) Benefit Program:	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	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 889	\$1,414	94%
2,000	700	1,032	1,732	87%
2,500	875	1,175	2,050	82%
3,000	1,050	1,318	2,368	79%
3,500	1,225	1,462	2,687	77%
4,000	1,400	1,604	3,004	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 889	\$1,264	84%
2,000	500	1,032	1,532	77%
2,500	625	1,175	1,800	72%
3,000	750	1,318	2,068	69%
3,500	875	1,462	2,337	67%
4,000	1,000	1,604	2,604	65%
15 Years of Service:				
\$1,500	\$225	\$ 889	\$1,114	74%
2,000	300	1,032	1,332	67%
2,500	375	1,175	1,550	62%
3,000	450	1,318	1,768	59%
3,500	525	1,462	1,987	57%
4,000	600	1,604	2,204	55%

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 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

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

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

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

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

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

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 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

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 2018 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

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

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

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		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 889	\$1,050	\$1,414	70%	94%
2,000	1,400	700	1,032	1,400	1,732	70%	87%
2,500	1,750	875	1,175	1,750	2,050	70%	82%
3,000	2,100	1,050	1,318	2,100	2,368	70%	79%
3,500	2,450	1,225	1,462	2,450	2,687	70%	77%
4,000	2,800	1,400	1,604	2,800	3,004	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 889	\$ 750	\$1,264	50%	84%
2,000	1,000	500	1,032	1,000	1,532	50%	77%
2,500	1,250	625	1,175	1,250	1,800	50%	72%
3,000	1,500	750	1,318	1,500	2,068	50%	69%
3,500	1,750	875	1,462	1,750	2,337	50%	67%
4,000	2,000	1,000	1,604	2,000	2,604	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 889	\$ 450	\$1,114	30%	74%
2,000	600	300	1,032	600	1,332	30%	67%
2,500	750	375	1,175	750	1,550	30%	62%
3,000	900	450	1,318	900	1,768	30%	59%
3,500	1,050	525	1,462	1,050	1,987	30%	57%
4,000	1,200	600	1,604	1,200	2,204	30%	55%

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

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

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 889	\$1,050	\$1,545	70%	103%
2,000	1,400	875	1,032	1,400	1,907	70%	95%
2,500	1,750	1,094	1,175	1,750	2,269	70%	91%
3,000	2,100	1,313	1,318	2,100	2,631	70%	88%
3,500	2,450	1,531	1,462	2,450	2,993	70%	86%
4,000	2,800	1,750	1,604	2,800	3,354	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 889	\$ 750	\$1,358	50%	91%
2,000	1,000	625	1,032	1,000	1,657	50%	83%
2,500	1,250	781	1,175	1,250	1,956	50%	78%
3,000	1,500	938	1,318	1,500	2,256	50%	75%
3,500	1,750	1,094	1,462	1,750	2,556	50%	73%
4,000	2,000	1,250	1,604	2,000	2,854	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 889	\$ 450	\$1,170	30%	78%
2,000	600	375	1,032	600	1,407	30%	70%
2,500	750	469	1,175	750	1,644	30%	66%
3,000	900	563	1,318	900	1,881	30%	63%
3,500	1,050	656	1,462	1,050	2,118	30%	61%
4,000	1,200	750	1,604	1,200	2,354	30%	59%

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

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

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

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

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

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

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

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

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

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

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Monroe City Ambulance District

December 31, 2018

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									
30-34	1							1	\$ 59,133
35-39	2							2	\$ 70,776
40-44	1							1	\$ 43,587
45-49									
50-54									
55-59									
60-64						1		1	\$ 33,850
65-69									
70 & Over									
Totals	4					1		5	\$ 207,346

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

Age: 41.3 years.

Benefit Service: 7.5 years.

Annual Pay: \$41,469.

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 18, 2019 E-mail

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

Dear Bob:

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

Monroe City Ambulance District

Sincerely,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive style with a large initial "M".

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

February 18, 2019

Monroe City Ambulance District
Monroe City, Missouri

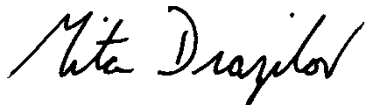
Ladies and Gentlemen:

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, 2018 Initial Valuation for the Monroe City Ambulance District dated February 18, 2019.

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

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

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA

Monroe City Ambulance District - General

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	7.0%	\$14,514	\$ 137,517	9.4%	\$19,491	\$ 174,101	7.8%	\$16,173	\$ 147,617
2019	214,085	7.0	14,986	139,401	9.4	20,124	176,486	7.8	16,699	149,639
2020	221,043	7.0	15,473	141,159	9.4	20,778	178,711	7.8	17,241	151,526
2021	228,227	7.0	15,976	142,773	9.4	21,453	180,754	7.8	17,802	153,258
2022	235,644	7.0	16,495	144,224	9.4	22,151	182,591	7.8	18,380	154,815
2023	243,302	7.0	17,031	145,491	9.4	22,870	184,195	7.8	18,978	156,175
2024	251,209	7.0	17,585	146,551	9.4	23,614	185,537	7.8	19,594	157,313
2025	259,373	7.0	18,156	147,379	9.4	24,381	186,586	7.8	20,231	158,202
2026	267,803	7.0	18,746	147,949	9.4	25,173	187,308	7.8	20,889	158,814
2027	276,507	7.0	19,355	148,232	9.4	25,992	187,666	7.8	21,568	159,117

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	10.1%	\$20,942	\$ 181,671	11.9%	\$24,674	\$ 210,383	12.3%	\$25,504	\$ 215,421
2019	214,085	10.1	21,623	184,160	11.9	25,476	213,265	12.3	26,332	218,372
2020	221,043	10.1	22,325	186,482	11.9	26,304	215,954	12.3	27,188	221,126
2021	228,227	10.1	23,051	188,614	11.9	27,159	218,423	12.3	28,072	223,654
2022	235,644	10.1	23,800	190,530	11.9	28,042	220,642	12.3	28,984	225,927
2023	243,302	10.1	24,574	192,203	11.9	28,953	222,580	12.3	29,926	227,911
2024	251,209	10.1	25,372	193,603	11.9	29,894	224,201	12.3	30,899	229,571
2025	259,373	10.1	26,197	194,697	11.9	30,865	225,468	12.3	31,903	230,868
2026	267,803	10.1	27,048	195,450	11.9	31,869	226,340	12.3	32,940	231,761
2027	276,507	10.1	27,927	195,823	11.9	32,904	226,772	12.3	34,010	232,204

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	14.4%	\$29,858	\$ 246,483	14.5%	\$30,065	\$ 249,019	16.9%	\$35,041	\$ 282,578
2019	214,085	14.4	30,828	249,860	14.5	31,042	252,431	16.9	36,180	286,449
2020	221,043	14.4	31,830	253,011	14.5	32,051	255,614	16.9	37,356	290,061
2021	228,227	14.4	32,865	255,904	14.5	33,093	258,536	16.9	38,570	293,377
2022	235,644	14.4	33,933	258,504	14.5	34,168	261,163	16.9	39,824	296,358
2023	243,302	14.4	35,035	260,774	14.5	35,279	263,457	16.9	41,118	298,961
2024	251,209	14.4	36,174	262,674	14.5	36,425	265,376	16.9	42,454	301,139
2025	259,373	14.4	37,350	264,159	14.5	37,609	266,876	16.9	43,834	302,841
2026	267,803	14.4	38,564	265,181	14.5	38,831	267,908	16.9	45,259	304,012
2027	276,507	14.4	39,817	265,687	14.5	40,094	268,420	16.9	46,730	304,593

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.

Monroe City Ambulance District - 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			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
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2018	\$ 207,346	7.3%	\$15,136	\$ 142,603	9.8%	\$20,320	\$ 180,345	8.2%	\$17,002	\$ 153,051
2019	214,085	7.3	15,628	144,557	9.8	20,980	182,816	8.2	17,555	155,148
2020	221,043	7.3	16,136	146,380	9.8	21,662	185,121	8.2	18,126	157,104
2021	228,227	7.3	16,661	148,054	9.8	22,366	187,237	8.2	18,715	158,900
2022	235,644	7.3	17,202	149,558	9.8	23,093	189,139	8.2	19,323	160,515
2023	243,302	7.3	17,761	150,871	9.8	23,844	190,800	8.2	19,951	161,925
2024	251,209	7.3	18,338	151,970	9.8	24,618	192,190	8.2	20,599	163,105
2025	259,373	7.3	18,934	152,829	9.8	25,419	193,276	8.2	21,269	164,027
2026	267,803	7.3	19,550	153,420	9.8	26,245	194,023	8.2	21,960	164,661
2027	276,507	7.3	20,185	153,713	9.8	27,098	194,393	8.2	22,674	164,975

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2018	\$ 207,346	10.6%	\$21,979	\$ 188,175	12.4%	\$25,711	\$ 217,817	12.8%	\$26,540	\$ 223,049
2019	214,085	10.6	22,693	190,753	12.4	26,547	220,801	12.8	27,403	226,105
2020	221,043	10.6	23,431	193,158	12.4	27,409	223,585	12.8	28,294	228,956
2021	228,227	10.6	24,192	195,366	12.4	28,300	226,141	12.8	29,213	231,574
2022	235,644	10.6	24,978	197,351	12.4	29,220	228,439	12.8	30,162	233,927
2023	243,302	10.6	25,790	199,084	12.4	30,169	230,445	12.8	31,143	235,981
2024	251,209	10.6	26,628	200,534	12.4	31,150	232,124	12.8	32,155	237,700
2025	259,373	10.6	27,494	201,667	12.4	32,162	233,436	12.8	33,200	239,043
2026	267,803	10.6	28,387	202,447	12.4	33,208	234,339	12.8	34,279	239,967
2027	276,507	10.6	29,310	202,834	12.4	34,287	234,786	12.8	35,393	240,425

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2018	\$ 207,346	14.9%	\$30,895	\$ 255,118	15.2%	\$31,517	\$ 257,736	17.5%	\$36,286	\$ 292,385
2019	214,085	14.9	31,899	258,613	15.2	32,541	261,267	17.5	37,465	296,391
2020	221,043	14.9	32,935	261,874	15.2	33,599	264,561	17.5	38,683	300,128
2021	228,227	14.9	34,006	264,868	15.2	34,691	267,586	17.5	39,940	303,559
2022	235,644	14.9	35,111	267,559	15.2	35,818	270,305	17.5	41,238	306,643
2023	243,302	14.9	36,252	269,909	15.2	36,982	272,679	17.5	42,578	309,336
2024	251,209	14.9	37,430	271,875	15.2	38,184	274,665	17.5	43,962	311,589
2025	259,373	14.9	38,647	273,412	15.2	39,425	276,217	17.5	45,390	313,350
2026	267,803	14.9	39,903	274,469	15.2	40,706	277,285	17.5	46,866	314,562
2027	276,507	14.9	41,200	274,993	15.2	42,029	277,814	17.5	48,389	315,163

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.

Monroe City Ambulance District - General

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

(0% member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	10.8%	\$22,393	\$ 145,475	13.3%	\$27,577	\$ 181,839	11.7%	\$24,259	\$ 155,507
2019	214,085	10.8	23,121	147,468	13.3	28,473	184,330	11.7	25,048	157,637
2020	221,043	10.8	23,873	149,327	13.3	29,399	186,654	11.7	25,862	159,625
2021	228,227	10.8	24,649	151,034	13.3	30,354	188,788	11.7	26,703	161,450
2022	235,644	10.8	25,450	152,569	13.3	31,341	190,706	11.7	27,570	163,090
2023	243,302	10.8	26,277	153,909	13.3	32,359	192,381	11.7	28,466	164,522
2024	251,209	10.8	27,131	155,030	13.3	33,411	193,782	11.7	29,391	165,720
2025	259,373	10.8	28,012	155,906	13.3	34,497	194,877	11.7	30,347	166,657
2026	267,803	10.8	28,923	156,509	13.3	35,618	195,631	11.7	31,333	167,301
2027	276,507	10.8	29,863	156,808	13.3	36,775	196,005	11.7	32,351	167,620

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	14.0%	\$29,028	\$ 189,371	15.8%	\$32,761	\$ 218,211	16.2%	\$33,590	\$ 223,232
2019	214,085	14.0	29,972	191,965	15.8	33,825	221,200	16.2	34,682	226,290
2020	221,043	14.0	30,946	194,386	15.8	34,925	223,989	16.2	35,809	229,143
2021	228,227	14.0	31,952	196,608	15.8	36,060	226,550	16.2	36,973	231,763
2022	235,644	14.0	32,990	198,606	15.8	37,232	228,852	16.2	38,174	234,118
2023	243,302	14.0	34,062	200,350	15.8	38,442	230,862	16.2	39,415	236,174
2024	251,209	14.0	35,169	201,809	15.8	39,691	232,544	16.2	40,696	237,894
2025	259,373	14.0	36,312	202,950	15.8	40,981	233,858	16.2	42,018	239,238
2026	267,803	14.0	37,492	203,735	15.8	42,313	234,762	16.2	43,384	240,163
2027	276,507	14.0	38,711	204,124	15.8	43,688	235,210	16.2	44,794	240,622

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	18.3%	\$37,944	\$ 254,614	18.4%	\$38,152	\$ 257,126	20.8%	\$43,128	\$ 290,991
2019	214,085	18.3	39,178	258,102	18.4	39,392	260,649	20.8	44,530	294,978
2020	221,043	18.3	40,451	261,357	18.4	40,672	263,936	20.8	45,977	298,697
2021	228,227	18.3	41,766	264,345	18.4	41,994	266,954	20.8	47,471	302,112
2022	235,644	18.3	43,123	267,031	18.4	43,358	269,666	20.8	49,014	305,182
2023	243,302	18.3	44,524	269,376	18.4	44,768	272,034	20.8	50,607	307,862
2024	251,209	18.3	45,971	271,338	18.4	46,222	274,016	20.8	52,251	310,105
2025	259,373	18.3	47,465	272,872	18.4	47,725	275,565	20.8	53,950	311,858
2026	267,803	18.3	49,008	273,927	18.4	49,276	276,631	20.8	55,703	313,064
2027	276,507	18.3	50,601	274,450	18.4	50,877	277,159	20.8	57,513	313,662

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.

Monroe City Ambulance District - 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			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	11.1%	\$23,015	\$ 150,492	13.7%	\$28,406	\$ 188,083	12.1%	\$25,089	\$ 160,863
2019	214,085	11.1	23,763	152,554	13.7	29,330	190,660	12.1	25,904	163,067
2020	221,043	11.1	24,536	154,478	13.7	30,283	193,064	12.1	26,746	165,123
2021	228,227	11.1	25,333	156,244	13.7	31,267	195,271	12.1	27,615	167,011
2022	235,644	11.1	26,156	157,832	13.7	32,283	197,255	12.1	28,513	168,708
2023	243,302	11.1	27,007	159,218	13.7	33,332	198,987	12.1	29,440	170,190
2024	251,209	11.1	27,884	160,378	13.7	34,416	200,436	12.1	30,396	171,430
2025	259,373	11.1	28,790	161,284	13.7	35,534	201,569	12.1	31,384	172,399
2026	267,803	11.1	29,726	161,908	13.7	36,689	202,348	12.1	32,404	173,066
2027	276,507	11.1	30,692	162,217	13.7	37,881	202,734	12.1	33,457	173,396

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	14.5%	\$30,065	\$ 195,879	16.3%	\$33,797	\$ 225,707	16.7%	\$34,627	\$ 230,916
2019	214,085	14.5	31,042	198,563	16.3	34,896	228,799	16.7	35,752	234,080
2020	221,043	14.5	32,051	201,067	16.3	36,030	231,684	16.7	36,914	237,032
2021	228,227	14.5	33,093	203,366	16.3	37,201	234,333	16.7	38,114	239,742
2022	235,644	14.5	34,168	205,432	16.3	38,410	236,714	16.7	39,353	242,178
2023	243,302	14.5	35,279	207,236	16.3	39,658	238,793	16.7	40,631	244,305
2024	251,209	14.5	36,425	208,746	16.3	40,947	240,532	16.7	41,952	246,085
2025	259,373	14.5	37,609	209,926	16.3	42,278	241,891	16.7	43,315	247,476
2026	267,803	14.5	38,831	210,738	16.3	43,652	242,826	16.7	44,723	248,433
2027	276,507	14.5	40,094	211,140	16.3	45,071	243,290	16.7	46,177	248,907

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	18.8%	\$38,981	\$ 263,342	19.1%	\$39,603	\$ 265,923	21.4%	\$44,372	\$ 300,940
2019	214,085	18.8	40,248	266,950	19.1	40,890	269,566	21.4	45,814	305,063
2020	221,043	18.8	41,556	270,316	19.1	42,219	272,965	21.4	47,303	308,910
2021	228,227	18.8	42,907	273,407	19.1	43,591	276,086	21.4	48,841	312,442
2022	235,644	18.8	44,301	276,185	19.1	45,008	278,891	21.4	50,428	315,617
2023	243,302	18.8	45,741	278,611	19.1	46,471	281,340	21.4	52,067	318,389
2024	251,209	18.8	47,227	280,640	19.1	47,981	283,389	21.4	53,759	320,708
2025	259,373	18.8	48,762	282,226	19.1	49,540	284,991	21.4	55,506	322,521
2026	267,803	18.8	50,347	283,317	19.1	51,150	286,093	21.4	57,310	323,768
2027	276,507	18.8	51,983	283,858	19.1	52,813	286,639	21.4	59,172	324,386

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.

Monroe City Ambulance District - General

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	7.5%	\$15,551	\$ 140,991	10.1%	\$20,942	\$ 178,441	9.0%	\$18,661	\$ 154,738
2019	214,085	7.5	16,056	142,923	10.1	21,623	180,886	9.0	19,268	156,858
2020	221,043	7.5	16,578	144,725	10.1	22,325	183,167	9.0	19,894	158,836
2021	228,227	7.5	17,117	146,380	10.1	23,051	185,261	9.0	20,540	160,652
2022	235,644	7.5	17,673	147,867	10.1	23,800	187,143	9.0	21,208	162,284
2023	243,302	7.5	18,248	149,166	10.1	24,574	188,787	9.0	21,897	163,709
2024	251,209	7.5	18,841	150,253	10.1	25,372	190,162	9.0	22,609	164,902
2025	259,373	7.5	19,453	151,102	10.1	26,197	191,237	9.0	23,344	165,834
2026	267,803	7.5	20,085	151,686	10.1	27,048	191,977	9.0	24,102	166,475
2027	276,507	7.5	20,738	151,976	10.1	27,927	192,344	9.0	24,886	166,793

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	11.2%	\$23,223	\$ 188,731	12.6%	\$26,126	\$ 215,538	13.4%	\$27,784	\$ 222,406
2019	214,085	11.2	23,978	191,317	12.6	26,975	218,491	13.4	28,687	225,453
2020	221,043	11.2	24,757	193,729	12.6	27,851	221,246	13.4	29,620	228,296
2021	228,227	11.2	25,561	195,944	12.6	28,757	223,775	13.4	30,582	230,906
2022	235,644	11.2	26,392	197,935	12.6	29,691	226,049	13.4	31,576	233,252
2023	243,302	11.2	27,250	199,673	12.6	30,656	228,034	13.4	32,602	235,301
2024	251,209	11.2	28,135	201,127	12.6	31,652	229,695	13.4	33,662	237,015
2025	259,373	11.2	29,050	202,264	12.6	32,681	230,993	13.4	34,756	238,355
2026	267,803	11.2	29,994	203,046	12.6	33,743	231,886	13.4	35,886	239,277
2027	276,507	11.2	30,969	203,434	12.6	34,840	232,329	13.4	37,052	239,734

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	15.2%	\$31,517	\$ 252,473	15.6%	\$32,346	\$ 255,911	18.0%	\$37,322	\$ 289,369
2019	214,085	15.2	32,541	255,932	15.6	33,397	259,417	18.0	38,535	293,333
2020	221,043	15.2	33,599	259,159	15.6	34,483	262,688	18.0	39,788	297,032
2021	228,227	15.2	34,691	262,122	15.6	35,603	265,691	18.0	41,081	300,428
2022	235,644	15.2	35,818	264,785	15.6	36,760	268,391	18.0	42,416	303,481
2023	243,302	15.2	36,982	267,110	15.6	37,955	270,748	18.0	43,794	306,146
2024	251,209	15.2	38,184	269,056	15.6	39,189	272,720	18.0	45,218	308,376
2025	259,373	15.2	39,425	270,577	15.6	40,462	274,261	18.0	46,687	310,119
2026	267,803	15.2	40,706	271,623	15.6	41,777	275,322	18.0	48,205	311,318
2027	276,507	15.2	42,029	272,142	15.6	43,135	275,848	18.0	49,771	311,912

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.

Monroe City Ambulance District - General

Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	7.8%	\$16,173	\$ 146,209	10.6%	\$21,979	\$ 184,811	9.4%	\$19,491	\$ 160,422
2019	214,085	7.8	16,699	148,212	10.6	22,693	187,343	9.4	20,124	162,620
2020	221,043	7.8	17,241	150,081	10.6	23,431	189,705	9.4	20,778	164,671
2021	228,227	7.8	17,802	151,797	10.6	24,192	191,874	9.4	21,453	166,554
2022	235,644	7.8	18,380	153,339	10.6	24,978	193,824	9.4	22,151	168,246
2023	243,302	7.8	18,978	154,686	10.6	25,790	195,526	9.4	22,870	169,724
2024	251,209	7.8	19,594	155,813	10.6	26,628	196,950	9.4	23,614	170,960
2025	259,373	7.8	20,231	156,694	10.6	27,494	198,063	9.4	24,381	171,926
2026	267,803	7.8	20,889	157,300	10.6	28,387	198,829	9.4	25,173	172,591
2027	276,507	7.8	21,568	157,600	10.6	29,310	199,209	9.4	25,992	172,921

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	11.8%	\$24,467	\$ 195,491	13.1%	\$27,162	\$ 223,197	13.9%	\$28,821	\$ 230,304
2019	214,085	11.8	25,262	198,169	13.1	28,045	226,255	13.9	29,758	233,459
2020	221,043	11.8	26,083	200,668	13.1	28,957	229,108	13.9	30,725	236,403
2021	228,227	11.8	26,931	202,962	13.1	29,898	231,727	13.9	31,724	239,106
2022	235,644	11.8	27,806	205,024	13.1	30,869	234,082	13.9	32,755	241,536
2023	243,302	11.8	28,710	206,825	13.1	31,873	236,138	13.9	33,819	243,657
2024	251,209	11.8	29,643	208,332	13.1	32,908	237,858	13.9	34,918	245,432
2025	259,373	11.8	30,606	209,509	13.1	33,978	239,202	13.9	36,053	246,819
2026	267,803	11.8	31,601	210,319	13.1	35,082	240,127	13.9	37,225	247,773
2027	276,507	11.8	32,628	210,721	13.1	36,222	240,586	13.9	38,434	248,246

Valuation Year	Estimated Projected Payroll	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
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 207,346	15.9%	\$32,968	\$ 261,340	16.3%	\$33,797	\$ 264,887	18.6%	\$38,566	\$ 299,511
2019	214,085	15.9	34,040	264,920	16.3	34,896	268,516	18.6	39,820	303,614
2020	221,043	15.9	35,146	268,260	16.3	36,030	271,902	18.6	41,114	307,442
2021	228,227	15.9	36,288	271,327	16.3	37,201	275,011	18.6	42,450	310,957
2022	235,644	15.9	37,467	274,084	16.3	38,410	277,805	18.6	43,830	314,117
2023	243,302	15.9	38,685	276,491	16.3	39,658	280,245	18.6	45,254	316,876
2024	251,209	15.9	39,942	278,505	16.3	40,947	282,286	18.6	46,725	319,184
2025	259,373	15.9	41,240	280,079	16.3	42,278	283,881	18.6	48,243	320,988
2026	267,803	15.9	42,581	281,162	16.3	43,652	284,979	18.6	49,811	322,229
2027	276,507	15.9	43,965	281,699	16.3	45,071	285,523	18.6	51,430	322,844

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.

Monroe City Ambulance District - General

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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	11.3%	\$23,430	\$ 148,908	14.0%	\$29,028	\$ 186,133	12.9%	\$26,748	\$ 162,577
2019	214,085	11.3	24,192	150,948	14.0	29,972	188,683	12.9	27,617	164,804
2020	221,043	11.3	24,978	152,851	14.0	30,946	191,062	12.9	28,515	166,882
2021	228,227	11.3	25,790	154,599	14.0	31,952	193,246	12.9	29,441	168,790
2022	235,644	11.3	26,628	156,170	14.0	32,990	195,210	12.9	30,398	170,505
2023	243,302	11.3	27,493	157,542	14.0	34,062	196,924	12.9	31,386	172,002
2024	251,209	11.3	28,387	158,690	14.0	35,169	198,358	12.9	32,406	173,255
2025	259,373	11.3	29,309	159,587	14.0	36,312	199,479	12.9	33,459	174,234
2026	267,803	11.3	30,262	160,204	14.0	37,492	200,250	12.9	34,547	174,908
2027	276,507	11.3	31,245	160,510	14.0	38,711	200,632	12.9	35,669	175,242

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	15.1%	\$31,309	\$ 196,382	16.5%	\$34,212	\$ 223,349	17.3%	\$35,871	\$ 230,197
2019	214,085	15.1	32,327	199,072	16.5	35,324	226,409	17.3	37,037	233,351
2020	221,043	15.1	33,377	201,582	16.5	36,472	229,264	17.3	38,240	236,293
2021	228,227	15.1	34,462	203,887	16.5	37,657	231,885	17.3	39,483	238,995
2022	235,644	15.1	35,582	205,959	16.5	38,881	234,241	17.3	40,766	241,423
2023	243,302	15.1	36,739	207,768	16.5	40,145	236,298	17.3	42,091	243,543
2024	251,209	15.1	37,933	209,281	16.5	41,449	238,019	17.3	43,459	245,317
2025	259,373	15.1	39,165	210,464	16.5	42,797	239,364	17.3	44,872	246,703
2026	267,803	15.1	40,438	211,278	16.5	44,187	240,290	17.3	46,330	247,657
2027	276,507	15.1	41,753	211,681	16.5	45,624	240,749	17.3	47,836	248,130

Valuation Year	Estimated Projected Payroll	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
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	19.1%	\$39,603	\$ 260,585	19.5%	\$40,432	\$ 264,011	21.9%	\$45,409	\$ 297,815
2019	214,085	19.1	40,890	264,155	19.5	41,747	267,628	21.9	46,885	301,895
2020	221,043	19.1	42,219	267,486	19.5	43,103	271,003	21.9	48,408	305,702
2021	228,227	19.1	43,591	270,544	19.5	44,504	274,101	21.9	49,982	309,197
2022	235,644	19.1	45,008	273,293	19.5	45,951	276,886	21.9	51,606	312,339
2023	243,302	19.1	46,471	275,693	19.5	47,444	279,318	21.9	53,283	315,082
2024	251,209	19.1	47,981	277,701	19.5	48,986	281,353	21.9	55,015	317,377
2025	259,373	19.1	49,540	279,270	19.5	50,578	282,943	21.9	56,803	319,171
2026	267,803	19.1	51,150	280,350	19.5	52,222	284,037	21.9	58,649	320,405
2027	276,507	19.1	52,813	280,885	19.5	53,919	284,579	21.9	60,555	321,017

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.

Monroe City Ambulance District - General

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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	11.7%	\$24,259	\$ 154,040	14.5%	\$30,065	\$ 192,544	13.3%	\$27,577	\$ 168,185
2019	214,085	11.7	25,048	156,150	14.5	31,042	195,182	13.3	28,473	170,489
2020	221,043	11.7	25,862	158,119	14.5	32,051	197,643	13.3	29,399	172,639
2021	228,227	11.7	26,703	159,927	14.5	33,093	199,903	13.3	30,354	174,613
2022	235,644	11.7	27,570	161,552	14.5	34,168	201,934	13.3	31,341	176,387
2023	243,302	11.7	28,466	162,971	14.5	35,279	203,707	13.3	32,359	177,936
2024	251,209	11.7	29,391	164,158	14.5	36,425	205,191	13.3	33,411	179,232
2025	259,373	11.7	30,347	165,086	14.5	37,609	206,351	13.3	34,497	180,245
2026	267,803	11.7	31,333	165,724	14.5	38,831	207,149	13.3	35,618	180,942
2027	276,507	11.7	32,351	166,040	14.5	40,094	207,545	13.3	36,775	181,288

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	15.7%	\$32,553	\$ 203,145	17.0%	\$35,249	\$ 231,053	17.8%	\$36,908	\$ 238,110
2019	214,085	15.7	33,611	205,928	17.0	36,394	234,218	17.8	38,107	241,372
2020	221,043	15.7	34,704	208,525	17.0	37,577	237,171	17.8	39,346	244,416
2021	228,227	15.7	35,832	210,909	17.0	38,799	239,883	17.8	40,624	247,210
2022	235,644	15.7	36,996	213,052	17.0	40,059	242,320	17.8	41,945	249,722
2023	243,302	15.7	38,198	214,923	17.0	41,361	244,448	17.8	43,308	251,915
2024	251,209	15.7	39,440	216,489	17.0	42,706	246,229	17.8	44,715	253,750
2025	259,373	15.7	40,722	217,713	17.0	44,093	247,621	17.8	46,168	255,184
2026	267,803	15.7	42,045	218,555	17.0	45,527	248,579	17.8	47,669	256,171
2027	276,507	15.7	43,412	218,972	17.0	47,006	249,054	17.8	49,218	256,660

Valuation Year	Estimated Projected Payroll	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
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 207,346	19.8%	\$41,055	\$ 269,565	20.2%	\$41,884	\$ 273,103	22.5%	\$46,653	\$ 308,063
2019	214,085	19.8	42,389	273,258	20.2	43,245	276,844	22.5	48,169	312,283
2020	221,043	19.8	43,767	276,704	20.2	44,651	280,335	22.5	49,735	316,221
2021	228,227	19.8	45,189	279,868	20.2	46,102	283,540	22.5	51,351	319,836
2022	235,644	19.8	46,658	282,712	20.2	47,600	286,421	22.5	53,020	323,086
2023	243,302	19.8	48,174	285,195	20.2	49,147	288,936	22.5	54,743	325,923
2024	251,209	19.8	49,739	287,272	20.2	50,744	291,041	22.5	56,522	328,297
2025	259,373	19.8	51,356	288,896	20.2	52,393	292,686	22.5	58,359	330,152
2026	267,803	19.8	53,025	290,013	20.2	54,096	293,818	22.5	60,256	331,429
2027	276,507	19.8	54,748	290,567	20.2	55,854	294,379	22.5	62,214	332,062

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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