



The Initial Valuation For

Linn County E-911 Central Dispatch

as of April 30, 2020



Table of Contents

	Page
Actuary's Certification Letter	1
Alternate Plans Available	3
Employer Contribution Rates	
Regular Eligibility:	
Contributory Plan	4
Non-Contributory Plan	6
Rule of 80 Eligibility:	
Contributory Plan	8
Non-Contributory Plan	10
Employer Contribution Dollars	12
Appendix I	
Unfunded Actuarial Accrued Liability	15
Appendix II	
Summary of Financial Assumptions	17
Appendix III	
Summary of LAGERS Provisions	21
Appendix IV	
Benefit Illustrations.....	24
Appendix V	
Age and Service Characteristics of Employees	33
Appendix VI	
Risk Commentary.....	34



July 10, 2020

Linn County E-911 Central Dispatch
Marceline, Missouri

Ladies and Gentlemen:

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

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

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

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

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

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

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2019.

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

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was April 30, 2020. 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.

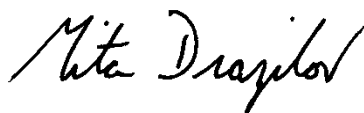
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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.

Linn County E-911 Central Dispatch

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Public Safety	0.30%	4.10%	0.40%	4.80%
L-3	Public Safety	0.40	5.70	0.50	6.60
LT-4(65)	Public Safety	0.40	5.50	0.40	6.30
LT-5(65)	Public Safety	0.40	6.70	0.50	7.60
L-7	Public Safety	0.50	7.20	0.60	8.30
LT-8(65)	Public Safety	0.50	8.00	0.60	9.10
L-12	Public Safety	0.60	8.80	0.70	10.10
LT-14(65)	Public Safety	0.60	9.20	0.70	10.50
L-6	Public Safety	0.70	10.50	0.80	12.00

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

Linn County E-911 Central Dispatch

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	Public Safety	0.30%	4.30%	0.40%	5.00%
L-3	Public Safety	0.40	5.90	0.50	6.80
LT-4(65)	Public Safety	0.40	5.80	0.40	6.60
LT-5(65)	Public Safety	0.50	7.10	0.50	8.10
L-7	Public Safety	0.50	7.60	0.60	8.70
LT-8(65)	Public Safety	0.50	8.30	0.60	9.40
L-12	Public Safety	0.60	9.30	0.70	10.60
LT-14(65)	Public Safety	0.60	9.70	0.70	11.00
L-6	Public Safety	0.70	11.00	0.80	12.50

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

Linn County E-911 Central Dispatch

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	Public Safety	0.40%	7.60%	0.40%	8.40%
L-3	Public Safety	0.50	9.30	0.50	10.30
LT-4(65)	Public Safety	0.50	9.00	0.40	9.90
LT-5(65)	Public Safety	0.50	10.40	0.50	11.40
L-7	Public Safety	0.60	11.00	0.60	12.20
LT-8(65)	Public Safety	0.60	11.70	0.60	12.90
L-12	Public Safety	0.70	12.60	0.70	14.00
LT-14(65)	Public Safety	0.70	13.00	0.70	14.40
L-6	Public Safety	0.80	14.30	0.80	15.90

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

Linn County E-911 Central Dispatch

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	Public Safety	0.40%	7.90%	0.40%	8.70%
L-3	Public Safety	0.50	9.60	0.50	10.60
LT-4(65)	Public Safety	0.50	9.30	0.40	10.20
LT-5(65)	Public Safety	0.60	10.70	0.50	11.80
L-7	Public Safety	0.60	11.30	0.60	12.50
LT-8(65)	Public Safety	0.60	12.10	0.60	13.30
L-12	Public Safety	0.70	13.10	0.70	14.50
LT-14(65)	Public Safety	0.70	13.50	0.70	14.90
L-6	Public Safety	0.80	14.80	0.80	16.40

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

Linn County E-911 Central Dispatch

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	Public Safety	0.30%	4.30%	0.40%	5.00%
L-3	Public Safety	0.40	6.00	0.50	6.90
LT-4(65)	Public Safety	0.40	6.10	0.40	6.90
LT-5(65)	Public Safety	0.50	7.30	0.50	8.30
L-7	Public Safety	0.50	7.60	0.60	8.70
LT-8(65)	Public Safety	0.50	8.50	0.60	9.60
L-12	Public Safety	0.60	9.30	0.70	10.60
LT-14(65)	Public Safety	0.60	9.70	0.70	11.00
L-6	Public Safety	0.70	11.00	0.80	12.50

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

Linn County E-911 Central Dispatch

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Public Safety	0.30%	4.60%	0.40%	5.30%
L-3	Public Safety	0.40	6.30	0.50	7.20
LT-4(65)	Public Safety	0.40	6.40	0.40	7.20
LT-5(65)	Public Safety	0.50	7.60	0.50	8.60
L-7	Public Safety	0.50	8.00	0.60	9.10
LT-8(65)	Public Safety	0.60	8.90	0.60	10.10
L-12	Public Safety	0.60	9.70	0.70	11.00
LT-14(65)	Public Safety	0.60	10.20	0.70	11.50
L-6	Public Safety	0.70	11.50	0.80	13.00

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

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

Linn County E-911 Central Dispatch

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	Public Safety	0.40%	7.80%	0.40%	8.60%
L-3	Public Safety	0.50	9.60	0.50	10.60
LT-4(65)	Public Safety	0.50	9.60	0.40	10.50
LT-5(65)	Public Safety	0.60	10.90	0.50	12.00
L-7	Public Safety	0.60	11.30	0.60	12.50
LT-8(65)	Public Safety	0.60	12.20	0.60	13.40
L-12	Public Safety	0.70	13.10	0.70	14.50
LT-14(65)	Public Safety	0.70	13.50	0.70	14.90
L-6	Public Safety	0.80	14.80	0.80	16.40

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

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

Linn County E-911 Central Dispatch

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	Public Safety	0.40%	8.10%	0.40%	8.90%
L-3	Public Safety	0.50	9.90	0.50	10.90
LT-4(65)	Public Safety	0.50	10.00	0.40	10.90
LT-5(65)	Public Safety	0.60	11.30	0.50	12.40
L-7	Public Safety	0.60	11.70	0.60	12.90
LT-8(65)	Public Safety	0.70	12.60	0.60	13.90
L-12	Public Safety	0.70	13.50	0.70	14.90
LT-14(65)	Public Safety	0.70	14.00	0.70	15.40
L-6	Public Safety	0.80	15.30	0.80	16.90

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

Linn County E-911 Central Dispatch

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	Public Safety
L-1	\$ 13,182
L-3	18,125
LT-4(65)	17,301
LT-5(65)	20,871
L-7	22,794
LT-8(65)	24,991
L-12	27,737
LT-14(65)	28,836
L-6	32,955

3 Year FAS	
Benefit Program	Public Safety
L-1	\$ 13,731
L-3	18,674
LT-4(65)	18,125
LT-5(65)	22,245
L-7	23,892
LT-8(65)	25,815
L-12	29,110
LT-14(65)	30,209
L-6	34,328

Non-Contributory Plan

5 Year FAS	
Benefit Program	Public Safety
L-1	\$ 23,068
L-3	28,286
LT-4(65)	27,188
LT-5(65)	31,307
L-7	33,504
LT-8(65)	35,426
L-12	38,447
LT-14(65)	39,546
L-6	43,665

3 Year FAS	
Benefit Program	Public Safety
L-1	\$ 23,892
L-3	29,110
LT-4(65)	28,012
LT-5(65)	32,406
L-7	34,328
LT-8(65)	36,525
L-12	39,820
LT-14(65)	40,919
L-6	45,038

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.

Linn County E-911 Central Dispatch

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	Public Safety
L-1	\$ 13,731
L-3	18,949
LT-4(65)	18,949
LT-5(65)	22,794
L-7	23,892
LT-8(65)	26,364
L-12	29,110
LT-14(65)	30,209
L-6	34,328

3 Year FAS	
Benefit Program	Public Safety
L-1	\$ 14,555
L-3	19,773
LT-4(65)	19,773
LT-5(65)	23,618
L-7	24,991
LT-8(65)	27,737
L-12	30,209
LT-14(65)	31,582
L-6	35,701

Non-Contributory Plan

5 Year FAS	
Benefit Program	Public Safety
L-1	\$ 23,618
L-3	29,110
LT-4(65)	28,836
LT-5(65)	32,955
L-7	34,328
LT-8(65)	36,800
L-12	39,820
LT-14(65)	40,919
L-6	45,038

3 Year FAS	
Benefit Program	Public Safety
L-1	\$ 24,442
L-3	29,934
LT-4(65)	29,934
LT-5(65)	34,053
L-7	35,426
LT-8(65)	38,173
L-12	40,919
LT-14(65)	42,292
L-6	46,411

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.

Linn County E-911 Central Dispatch

Employees and Payroll Included in the Valuation

	Public Safety
Number of Employees	10
Annual Payroll	\$ 274,624

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:

Linn County E-911 Central Dispatch

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	Public Safety	\$ 14,055	\$ 14,708	\$ 18,541	\$ 19,186
L-3	Public Safety	18,644	19,521	23,173	24,019
LT-4(65)	Public Safety	18,016	18,820	22,504	23,267
LT-5(65)	Public Safety	21,649	22,623	26,132	27,100
L-7	Public Safety	23,235	24,191	27,814	28,817
LT-8(65)	Public Safety	25,220	26,260	29,765	30,880
L-12	Public Safety	27,684	28,821	32,425	33,631
LT-14(65)	Public Safety	28,663	29,859	33,425	34,653
L-6	Public Safety	32,089	33,404	37,013	38,389

Linn County E-911 Central Dispatch

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	Public Safety	\$ 14,646	\$ 15,356	\$ 19,103	\$ 19,847
L-3	Public Safety	19,391	20,312	23,901	24,775
LT-4(65)	Public Safety	19,510	20,409	23,992	24,886
LT-5(65)	Public Safety	23,051	24,091	27,561	28,560
L-7	Public Safety	24,149	25,144	28,679	29,738
LT-8(65)	Public Safety	26,577	27,643	31,107	32,262
L-12	Public Safety	28,685	29,876	33,433	34,681
LT-14(65)	Public Safety	29,909	31,165	34,669	35,947
L-6	Public Safety	33,279	34,616	38,250	39,601

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.
9. Police assumptions were used for the Public Safety employee group.

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
		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, 2019

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) Subject to the maximum in (b), the redetermined amount is the amount 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	\$ 930	\$1,455	97%
2,000	700	1,076	1,776	89%
2,500	875	1,223	2,098	84%
3,000	1,050	1,370	2,420	81%
3,500	1,225	1,516	2,741	78%
4,000	1,400	1,662	3,062	77%
25 Years of Service:				
\$1,500	\$ 375	\$ 930	\$1,305	87%
2,000	500	1,076	1,576	79%
2,500	625	1,223	1,848	74%
3,000	750	1,370	2,120	71%
3,500	875	1,516	2,391	68%
4,000	1,000	1,662	2,662	67%
15 Years of Service:				
\$1,500	\$225	\$ 930	\$1,155	77%
2,000	300	1,076	1,376	69%
2,500	375	1,223	1,598	64%
3,000	450	1,370	1,820	61%
3,500	525	1,516	2,041	58%
4,000	600	1,662	2,262	57%

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Linn County E-911 Central Dispatch

April 30, 2020

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	3							3	\$ 76,440
25-29	2							2	\$ 66,520
30-34	1							1	\$ 28,080
35-39									
40-44	1							1	\$ 28,704
45-49	2							2	\$ 48,880
50-54	1							1	\$ 26,000
55-59									
60-64									
65-69									
70 & Over									
Totals	10							10	\$ 274,624

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

Age: 33.9 years.

Benefit Service: 0.8 years.

Annual Pay: \$27,462.

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.



July 10, 2020 E-mail

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

Dear Bob:

Enclosed is the report of the April 30, 2020 Initial Actuarial Valuation of LAGERS benefits for the employees of

Linn County E-911 Central Dispatch

Sincerely,

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

July 10, 2020

Linn County E-911 Central Dispatch
Marceline, Missouri

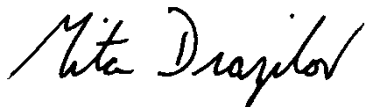
Ladies and Gentlemen:

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 April 30, 2020 Initial Valuation for the Linn County E-911 Central Dispatch dated July 10, 2020.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2019.

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

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA

Linn County E-911 Central Dispatch - Public Safety

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
2020	\$ 274,624	4.8%	\$13,182	\$ 14,055	6.6%	\$18,125	\$ 18,644	6.3%	\$17,301	\$ 18,016
2021	283,549	4.8	13,610	14,248	6.6	18,714	18,899	6.3	17,864	18,263
2022	292,764	4.8	14,053	14,428	6.6	19,322	19,137	6.3	18,444	18,493
2023	302,279	4.8	14,509	14,593	6.6	19,950	19,356	6.3	19,044	18,704
2024	312,103	4.8	14,981	14,741	6.6	20,599	19,553	6.3	19,662	18,894
2025	322,246	4.8	15,468	14,870	6.6	21,268	19,725	6.3	20,301	19,060
2026	332,719	4.8	15,971	14,978	6.6	21,959	19,869	6.3	20,961	19,199
2027	343,532	4.8	16,490	15,063	6.6	22,673	19,981	6.3	21,643	19,308
2028	354,697	4.8	17,025	15,121	6.6	23,410	20,058	6.3	22,346	19,383
2029	366,225	4.8	17,579	15,150	6.6	24,171	20,096	6.3	23,072	19,420

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
2020	\$ 274,624	7.6%	\$20,871	\$ 21,649	8.3%	\$22,794	\$ 23,235	9.1%	\$24,991	\$ 25,220
2021	283,549	7.6	21,550	21,946	8.3	23,535	23,553	9.1	25,803	25,566
2022	292,764	7.6	22,250	22,223	8.3	24,299	23,850	9.1	26,642	25,888
2023	302,279	7.6	22,973	22,477	8.3	25,089	24,123	9.1	27,507	26,184
2024	312,103	7.6	23,720	22,705	8.3	25,905	24,368	9.1	28,401	26,450
2025	322,246	7.6	24,491	22,904	8.3	26,746	24,582	9.1	29,324	26,682
2026	332,719	7.6	25,287	23,071	8.3	27,616	24,761	9.1	30,277	26,876
2027	343,532	7.6	26,108	23,201	8.3	28,513	24,901	9.1	31,261	27,028
2028	354,697	7.6	26,957	23,291	8.3	29,440	24,997	9.1	32,277	27,133
2029	366,225	7.6	27,833	23,335	8.3	30,397	25,045	9.1	33,326	27,185

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
2020	\$ 274,624	10.1%	\$27,737	\$ 27,684	10.5%	\$28,836	\$ 28,663	12.0%	\$32,955	\$ 32,089
2021	283,549	10.1	28,638	28,063	10.5	29,773	29,056	12.0	34,026	32,529
2022	292,764	10.1	29,569	28,417	10.5	30,740	29,422	12.0	35,132	32,939
2023	302,279	10.1	30,530	28,742	10.5	31,739	29,758	12.0	36,273	33,316
2024	312,103	10.1	31,522	29,034	10.5	32,771	30,060	12.0	37,452	33,655
2025	322,246	10.1	32,547	29,289	10.5	33,836	30,324	12.0	38,670	33,951
2026	332,719	10.1	33,605	29,502	10.5	34,935	30,545	12.0	39,926	34,198
2027	343,532	10.1	34,697	29,669	10.5	36,071	30,718	12.0	41,224	34,391
2028	354,697	10.1	35,824	29,784	10.5	37,243	30,837	12.0	42,564	34,524
2029	366,225	10.1	36,989	29,841	10.5	38,454	30,896	12.0	43,947	34,590

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.

Linn County E-911 Central Dispatch - Public Safety

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	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
2020	\$ 274,624	5.0%	\$13,731	\$ 14,708	6.8%	\$18,674	\$ 19,521	6.6%	\$18,125	\$ 18,820
2021	283,549	5.0	14,177	14,909	6.8	19,281	19,788	6.6	18,714	19,078
2022	292,764	5.0	14,638	15,097	6.8	19,908	20,038	6.6	19,322	19,319
2023	302,279	5.0	15,114	15,270	6.8	20,555	20,267	6.6	19,950	19,540
2024	312,103	5.0	15,605	15,425	6.8	21,223	20,473	6.6	20,599	19,739
2025	322,246	5.0	16,112	15,560	6.8	21,913	20,653	6.6	21,268	19,912
2026	332,719	5.0	16,636	15,673	6.8	22,625	20,803	6.6	21,959	20,057
2027	343,532	5.0	17,177	15,762	6.8	23,360	20,921	6.6	22,673	20,170
2028	354,697	5.0	17,735	15,823	6.8	24,119	21,002	6.6	23,410	20,248
2029	366,225	5.0	18,311	15,853	6.8	24,903	21,042	6.6	24,171	20,287

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
2020	\$ 274,624	8.1%	\$22,245	\$ 22,623	8.7%	\$23,892	\$ 24,191	9.4%	\$25,815	\$ 26,260
2021	283,549	8.1	22,967	22,933	8.7	24,669	24,522	9.4	26,654	26,620
2022	292,764	8.1	23,714	23,222	8.7	25,470	24,831	9.4	27,520	26,956
2023	302,279	8.1	24,485	23,487	8.7	26,298	25,115	9.4	28,414	27,264
2024	312,103	8.1	25,280	23,726	8.7	27,153	25,370	9.4	29,338	27,541
2025	322,246	8.1	26,102	23,934	8.7	28,035	25,593	9.4	30,291	27,783
2026	332,719	8.1	26,950	24,108	8.7	28,947	25,779	9.4	31,276	27,985
2027	343,532	8.1	27,826	24,244	8.7	29,887	25,925	9.4	32,292	28,143
2028	354,697	8.1	28,730	24,338	8.7	30,859	26,025	9.4	33,342	28,252
2029	366,225	8.1	29,664	24,384	8.7	31,862	26,075	9.4	34,425	28,306

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
2020	\$ 274,624	10.6%	\$29,110	\$ 28,821	11.0%	\$30,209	\$ 29,859	12.5%	\$34,328	\$ 33,404
2021	283,549	10.6	30,056	29,216	11.0	31,190	30,268	12.5	35,444	33,862
2022	292,764	10.6	31,033	29,584	11.0	32,204	30,650	12.5	36,596	34,289
2023	302,279	10.6	32,042	29,922	11.0	33,251	31,000	12.5	37,785	34,681
2024	312,103	10.6	33,083	30,226	11.0	34,331	31,315	12.5	39,013	35,033
2025	322,246	10.6	34,158	30,491	11.0	35,447	31,590	12.5	40,281	35,341
2026	332,719	10.6	35,268	30,713	11.0	36,599	31,820	12.5	41,590	35,598
2027	343,532	10.6	36,414	30,887	11.0	37,789	32,000	12.5	42,942	35,799
2028	354,697	10.6	37,598	31,006	11.0	39,017	32,124	12.5	44,337	35,937
2029	366,225	10.6	38,820	31,065	11.0	40,285	32,185	12.5	45,778	36,006

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.

Linn County E-911 Central Dispatch - Public Safety

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 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	
2020	\$ 274,624	8.4%	\$23,068	\$ 18,541	10.3%	\$28,286	\$ 23,173	9.9%	\$27,188	\$ 22,504
2021	283,549	8.4	23,818	18,795	10.3	29,206	23,490	9.9	28,071	22,812
2022	292,764	8.4	24,592	19,032	10.3	30,155	23,786	9.9	28,984	23,100
2023	302,279	8.4	25,391	19,250	10.3	31,135	24,058	9.9	29,926	23,364
2024	312,103	8.4	26,217	19,446	10.3	32,147	24,302	9.9	30,898	23,601
2025	322,246	8.4	27,069	19,617	10.3	33,191	24,515	9.9	31,902	23,808
2026	332,719	8.4	27,948	19,760	10.3	34,270	24,694	9.9	32,939	23,981
2027	343,532	8.4	28,857	19,872	10.3	35,384	24,834	9.9	34,010	24,117
2028	354,697	8.4	29,795	19,949	10.3	36,534	24,930	9.9	35,115	24,210
2029	366,225	8.4	30,763	19,987	10.3	37,721	24,978	9.9	36,256	24,256

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	
2020	\$ 274,624	11.4%	\$31,307	\$ 26,132	12.2%	\$33,504	\$ 27,814	12.9%	\$35,426	\$ 29,765
2021	283,549	11.4	32,325	26,490	12.2	34,593	28,195	12.9	36,578	30,173
2022	292,764	11.4	33,375	26,824	12.2	35,717	28,551	12.9	37,767	30,553
2023	302,279	11.4	34,460	27,131	12.2	36,878	28,877	12.9	38,994	30,902
2024	312,103	11.4	35,580	27,407	12.2	38,077	29,170	12.9	40,261	31,216
2025	322,246	11.4	36,736	27,648	12.2	39,314	29,426	12.9	41,570	31,490
2026	332,719	11.4	37,930	27,849	12.2	40,592	29,640	12.9	42,921	31,719
2027	343,532	11.4	39,163	28,006	12.2	41,911	29,808	12.9	44,316	31,898
2028	354,697	11.4	40,435	28,114	12.2	43,273	29,923	12.9	45,756	32,021
2029	366,225	11.4	41,750	28,168	12.2	44,679	29,980	12.9	47,243	32,082

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	
2020	\$ 274,624	14.0%	\$38,447	\$ 32,425	14.4%	\$39,546	\$ 33,425	15.9%	\$43,665	\$ 37,013
2021	283,549	14.0	39,697	32,869	14.4	40,831	33,883	15.9	45,084	37,520
2022	292,764	14.0	40,987	33,283	14.4	42,158	34,310	15.9	46,549	37,993
2023	302,279	14.0	42,319	33,664	14.4	43,528	34,702	15.9	48,062	38,427
2024	312,103	14.0	43,694	34,006	14.4	44,943	35,055	15.9	49,624	38,817
2025	322,246	14.0	45,114	34,305	14.4	46,403	35,363	15.9	51,237	39,158
2026	332,719	14.0	46,581	34,555	14.4	47,912	35,621	15.9	52,902	39,443
2027	343,532	14.0	48,094	34,750	14.4	49,469	35,822	15.9	54,622	39,666
2028	354,697	14.0	49,658	34,884	14.4	51,076	35,961	15.9	56,397	39,819
2029	366,225	14.0	51,272	34,951	14.4	52,736	36,030	15.9	58,230	39,895

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.

Linn County E-911 Central Dispatch - Public Safety

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 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	
2020	\$ 274,624	8.7%	\$23,892	\$ 19,186	10.6%	\$29,110	\$ 24,019	10.2%	\$28,012	\$ 23,267
2021	283,549	8.7	24,669	19,449	10.6	30,056	24,348	10.2	28,922	23,586
2022	292,764	8.7	25,470	19,694	10.6	31,033	24,655	10.2	29,862	23,883
2023	302,279	8.7	26,298	19,919	10.6	32,042	24,937	10.2	30,832	24,156
2024	312,103	8.7	27,153	20,121	10.6	33,083	25,190	10.2	31,835	24,401
2025	322,246	8.7	28,035	20,298	10.6	34,158	25,411	10.2	32,869	24,615
2026	332,719	8.7	28,947	20,446	10.6	35,268	25,596	10.2	33,937	24,794
2027	343,532	8.7	29,887	20,562	10.6	36,414	25,741	10.2	35,040	24,934
2028	354,697	8.7	30,859	20,642	10.6	37,598	25,841	10.2	36,179	25,030
2029	366,225	8.7	31,862	20,681	10.6	38,820	25,890	10.2	37,355	25,078

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	
2020	\$ 274,624	11.8%	\$32,406	\$ 27,100	12.5%	\$34,328	\$ 28,817	13.3%	\$36,525	\$ 30,880
2021	283,549	11.8	33,459	27,471	12.5	35,444	29,212	13.3	37,712	31,303
2022	292,764	11.8	34,546	27,817	12.5	36,596	29,580	13.3	38,938	31,698
2023	302,279	11.8	35,669	28,135	12.5	37,785	29,918	13.3	40,203	32,060
2024	312,103	11.8	36,828	28,421	12.5	39,013	30,222	13.3	41,510	32,386
2025	322,246	11.8	38,025	28,671	12.5	40,281	30,487	13.3	42,859	32,670
2026	332,719	11.8	39,261	28,880	12.5	41,590	30,709	13.3	44,252	32,908
2027	343,532	11.8	40,537	29,043	12.5	42,942	30,883	13.3	45,690	33,094
2028	354,697	11.8	41,854	29,155	12.5	44,337	31,002	13.3	47,175	33,222
2029	366,225	11.8	43,215	29,211	12.5	45,778	31,061	13.3	48,708	33,285

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	
2020	\$ 274,624	14.5%	\$39,820	\$ 33,631	14.9%	\$40,919	\$ 34,653	16.4%	\$45,038	\$ 38,389
2021	283,549	14.5	41,115	34,092	14.9	42,249	35,128	16.4	46,502	38,915
2022	292,764	14.5	42,451	34,522	14.9	43,622	35,571	16.4	48,013	39,406
2023	302,279	14.5	43,830	34,917	14.9	45,040	35,978	16.4	49,574	39,857
2024	312,103	14.5	45,255	35,272	14.9	46,503	36,344	16.4	51,185	40,262
2025	322,246	14.5	46,726	35,582	14.9	48,015	36,663	16.4	52,848	40,616
2026	332,719	14.5	48,244	35,841	14.9	49,575	36,930	16.4	54,566	40,912
2027	343,532	14.5	49,812	36,044	14.9	51,186	37,139	16.4	56,339	41,143
2028	354,697	14.5	51,431	36,183	14.9	52,850	37,283	16.4	58,170	41,302
2029	366,225	14.5	53,103	36,252	14.9	54,568	37,354	16.4	60,061	41,381

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.

Linn County E-911 Central Dispatch - Public Safety

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
2020	\$ 274,624	5.0%	\$13,731	\$ 14,646	6.9%	\$18,949	\$ 19,391	6.9%	\$18,949	\$ 19,510
2021	283,549	5.0	14,177	14,847	6.9	19,565	19,657	6.9	19,565	19,777
2022	292,764	5.0	14,638	15,034	6.9	20,201	19,905	6.9	20,201	20,026
2023	302,279	5.0	15,114	15,206	6.9	20,857	20,133	6.9	20,857	20,255
2024	312,103	5.0	15,605	15,361	6.9	21,535	20,338	6.9	21,535	20,461
2025	322,246	5.0	16,112	15,496	6.9	22,235	20,517	6.9	22,235	20,641
2026	332,719	5.0	16,636	15,609	6.9	22,958	20,666	6.9	22,958	20,791
2027	343,532	5.0	17,177	15,697	6.9	23,704	20,783	6.9	23,704	20,909
2028	354,697	5.0	17,735	15,758	6.9	24,474	20,863	6.9	24,474	20,990
2029	366,225	5.0	18,311	15,788	6.9	25,270	20,903	6.9	25,270	21,030

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
2020	\$ 274,624	8.3%	\$22,794	\$ 23,051	8.7%	\$23,892	\$ 24,149	9.6%	\$26,364	\$ 26,577
2021	283,549	8.3	23,535	23,367	8.7	24,669	24,480	9.6	27,221	26,941
2022	292,764	8.3	24,299	23,662	8.7	25,470	24,789	9.6	28,105	27,281
2023	302,279	8.3	25,089	23,933	8.7	26,298	25,072	9.6	29,019	27,593
2024	312,103	8.3	25,905	24,176	8.7	27,153	25,327	9.6	29,962	27,873
2025	322,246	8.3	26,746	24,388	8.7	28,035	25,549	9.6	30,936	28,118
2026	332,719	8.3	27,616	24,566	8.7	28,947	25,735	9.6	31,941	28,323
2027	343,532	8.3	28,513	24,705	8.7	29,887	25,880	9.6	32,979	28,483
2028	354,697	8.3	29,440	24,801	8.7	30,859	25,980	9.6	34,051	28,593
2029	366,225	8.3	30,397	24,848	8.7	31,862	26,030	9.6	35,158	28,648

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
2020	\$ 274,624	10.6%	\$29,110	\$ 28,685	11.0%	\$30,209	\$ 29,909	12.5%	\$34,328	\$ 33,279
2021	283,549	10.6	30,056	29,078	11.0	31,190	30,319	12.5	35,444	33,735
2022	292,764	10.6	31,033	29,445	11.0	32,204	30,701	12.5	36,596	34,160
2023	302,279	10.6	32,042	29,782	11.0	33,251	31,052	12.5	37,785	34,551
2024	312,103	10.6	33,083	30,085	11.0	34,331	31,368	12.5	39,013	34,902
2025	322,246	10.6	34,158	30,349	11.0	35,447	31,643	12.5	40,281	35,209
2026	332,719	10.6	35,268	30,570	11.0	36,599	31,873	12.5	41,590	35,465
2027	343,532	10.6	36,414	30,743	11.0	37,789	32,053	12.5	42,942	35,665
2028	354,697	10.6	37,598	30,862	11.0	39,017	32,177	12.5	44,337	35,803
2029	366,225	10.6	38,820	30,921	11.0	40,285	32,238	12.5	45,778	35,871

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.

Linn County E-911 Central Dispatch - Public Safety

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
2020	\$ 274,624	5.3%	\$14,555	\$ 15,356	7.2%	\$19,773	\$ 20,312	7.2%	\$19,773	\$ 20,409
2021	283,549	5.3	15,028	15,566	7.2	20,416	20,590	7.2	20,416	20,689
2022	292,764	5.3	15,516	15,762	7.2	21,079	20,850	7.2	21,079	20,950
2023	302,279	5.3	16,021	15,942	7.2	21,764	21,088	7.2	21,764	21,190
2024	312,103	5.3	16,541	16,104	7.2	22,471	21,302	7.2	22,471	21,405
2025	322,246	5.3	17,079	16,245	7.2	23,202	21,489	7.2	23,202	21,593
2026	332,719	5.3	17,634	16,363	7.2	23,956	21,646	7.2	23,956	21,750
2027	343,532	5.3	18,207	16,455	7.2	24,734	21,768	7.2	24,734	21,873
2028	354,697	5.3	18,799	16,519	7.2	25,538	21,852	7.2	25,538	21,958
2029	366,225	5.3	19,410	16,551	7.2	26,368	21,894	7.2	26,368	22,000

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
2020	\$ 274,624	8.6%	\$23,618	\$ 24,091	9.1%	\$24,991	\$ 25,144	10.1%	\$27,737	\$ 27,643
2021	283,549	8.6	24,385	24,421	9.1	25,803	25,488	10.1	28,638	28,022
2022	292,764	8.6	25,178	24,729	9.1	26,642	25,809	10.1	29,569	28,375
2023	302,279	8.6	25,996	25,012	9.1	27,507	26,104	10.1	30,530	28,699
2024	312,103	8.6	26,841	25,266	9.1	28,401	26,369	10.1	31,522	28,991
2025	322,246	8.6	27,713	25,488	9.1	29,324	26,601	10.1	32,547	29,246
2026	332,719	8.6	28,614	25,674	9.1	30,277	26,795	10.1	33,605	29,459
2027	343,532	8.6	29,544	25,819	9.1	31,261	26,946	10.1	34,697	29,625
2028	354,697	8.6	30,504	25,919	9.1	32,277	27,050	10.1	35,824	29,740
2029	366,225	8.6	31,495	25,968	9.1	33,326	27,102	10.1	36,989	29,797

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
2020	\$ 274,624	11.0%	\$30,209	\$ 29,876	11.5%	\$31,582	\$ 31,165	13.0%	\$35,701	\$ 34,616
2021	283,549	11.0	31,190	30,285	11.5	32,608	31,592	13.0	36,861	35,090
2022	292,764	11.0	32,204	30,667	11.5	33,668	31,990	13.0	38,059	35,532
2023	302,279	11.0	33,251	31,018	11.5	34,762	32,356	13.0	39,296	35,938
2024	312,103	11.0	34,331	31,333	11.5	35,892	32,685	13.0	40,573	36,303
2025	322,246	11.0	35,447	31,608	11.5	37,058	32,972	13.0	41,892	36,622
2026	332,719	11.0	36,599	31,838	11.5	38,263	33,212	13.0	43,253	36,889
2027	343,532	11.0	37,789	32,018	11.5	39,506	33,400	13.0	44,659	37,097
2028	354,697	11.0	39,017	32,142	11.5	40,790	33,529	13.0	46,111	37,240
2029	366,225	11.0	40,285	32,203	11.5	42,116	33,593	13.0	47,609	37,311

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.

Linn County E-911 Central Dispatch - Public Safety

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
2020	\$ 274,624	8.6%	\$23,618	\$ 19,103	10.6%	\$29,110	\$ 23,901	10.5%	\$28,836	\$ 23,992
2021	283,549	8.6	24,385	19,365	10.6	30,056	24,228	10.5	29,773	24,321
2022	292,764	8.6	25,178	19,609	10.6	31,033	24,533	10.5	30,740	24,628
2023	302,279	8.6	25,996	19,833	10.6	32,042	24,813	10.5	31,739	24,910
2024	312,103	8.6	26,841	20,035	10.6	33,083	25,065	10.5	32,771	25,163
2025	322,246	8.6	27,713	20,211	10.6	34,158	25,285	10.5	33,836	25,384
2026	332,719	8.6	28,614	20,358	10.6	35,268	25,469	10.5	34,935	25,569
2027	343,532	8.6	29,544	20,473	10.6	36,414	25,613	10.5	36,071	25,714
2028	354,697	8.6	30,504	20,552	10.6	37,598	25,712	10.5	37,243	25,813
2029	366,225	8.6	31,495	20,591	10.6	38,820	25,761	10.5	38,454	25,862

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	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 274,624	12.0%	\$32,955	\$ 27,561	12.5%	\$34,328	\$ 28,491	13.4%	\$36,800	\$ 31,107
2021	283,549	12.0	34,026	27,939	12.5	35,444	28,881	13.4	37,996	31,533
2022	292,764	12.0	35,132	28,291	12.5	36,596	29,245	13.4	39,230	31,931
2023	302,279	12.0	36,273	28,614	12.5	37,785	29,579	13.4	40,505	32,296
2024	312,103	12.0	37,452	28,905	12.5	39,013	29,880	13.4	41,822	32,624
2025	322,246	12.0	38,670	29,159	12.5	40,281	30,142	13.4	43,181	32,911
2026	332,719	12.0	39,926	29,371	12.5	41,590	30,362	13.4	44,584	33,151
2027	343,532	12.0	41,224	29,537	12.5	42,942	30,534	13.4	46,033	33,338
2028	354,697	12.0	42,564	29,651	12.5	44,337	30,652	13.4	47,529	33,467
2029	366,225	12.0	43,947	29,708	12.5	45,778	30,711	13.4	49,074	33,531

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	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 274,624	14.5%	\$39,820	\$ 33,433	14.9%	\$40,919	\$ 34,669	16.4%	\$45,038	\$ 38,250
2021	283,549	14.5	41,115	33,891	14.9	42,249	35,144	16.4	46,502	38,774
2022	292,764	14.5	42,451	34,318	14.9	43,622	35,587	16.4	48,013	39,263
2023	302,279	14.5	43,830	34,710	14.9	45,040	35,994	16.4	49,574	39,712
2024	312,103	14.5	45,255	35,063	14.9	46,503	36,360	16.4	51,185	40,116
2025	322,246	14.5	46,726	35,371	14.9	48,015	36,679	16.4	52,848	40,468
2026	332,719	14.5	48,244	35,629	14.9	49,575	36,946	16.4	54,566	40,763
2027	343,532	14.5	49,812	35,830	14.9	51,186	37,155	16.4	56,339	40,993
2028	354,697	14.5	51,431	35,969	14.9	52,850	37,299	16.4	58,170	41,152
2029	366,225	14.5	53,103	36,038	14.9	54,568	37,370	16.4	60,061	41,231

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.

Linn County E-911 Central Dispatch - Public Safety

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 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	
2020	\$ 274,624	8.9%	\$24,442	\$ 19,847	10.9%	\$29,934	\$ 24,775	10.9%	\$29,934	\$ 24,886
2021	283,549	8.9	25,236	20,119	10.9	30,907	25,114	10.9	30,907	25,227
2022	292,764	8.9	26,056	20,373	10.9	31,911	25,431	10.9	31,911	25,545
2023	302,279	8.9	26,903	20,606	10.9	32,948	25,722	10.9	32,948	25,837
2024	312,103	8.9	27,777	20,815	10.9	34,019	25,983	10.9	34,019	26,100
2025	322,246	8.9	28,680	20,998	10.9	35,125	26,211	10.9	35,125	26,329
2026	332,719	8.9	29,612	21,151	10.9	36,266	26,402	10.9	36,266	26,521
2027	343,532	8.9	30,574	21,271	10.9	37,445	26,551	10.9	37,445	26,671
2028	354,697	8.9	31,568	21,353	10.9	38,662	26,654	10.9	38,662	26,774
2029	366,225	8.9	32,594	21,394	10.9	39,919	26,705	10.9	39,919	26,825

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	
2020	\$ 274,624	12.4%	\$34,053	\$ 28,560	12.9%	\$35,426	\$ 29,738	13.9%	\$38,173	\$ 32,262
2021	283,549	12.4	35,160	28,951	12.9	36,578	30,145	13.9	39,413	32,704
2022	292,764	12.4	36,303	29,316	12.9	37,767	30,525	13.9	40,694	33,116
2023	302,279	12.4	37,483	29,651	12.9	38,994	30,874	13.9	42,017	33,495
2024	312,103	12.4	38,701	29,952	12.9	40,261	31,188	13.9	43,382	33,835
2025	322,246	12.4	39,959	30,215	12.9	41,570	31,462	13.9	44,792	34,132
2026	332,719	12.4	41,257	30,435	12.9	42,921	31,691	13.9	46,248	34,381
2027	343,532	12.4	42,598	30,607	12.9	44,316	31,870	13.9	47,751	34,575
2028	354,697	12.4	43,982	30,725	12.9	45,756	31,993	13.9	49,303	34,709
2029	366,225	12.4	45,412	30,784	12.9	47,243	32,054	13.9	50,905	34,775

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	
2020	\$ 274,624	14.9%	\$40,919	\$ 34,681	15.4%	\$42,292	\$ 35,947	16.9%	\$46,411	\$ 39,601
2021	283,549	14.9	42,249	35,156	15.4	43,667	36,439	16.9	47,920	40,144
2022	292,764	14.9	43,622	35,599	15.4	45,086	36,898	16.9	49,477	40,650
2023	302,279	14.9	45,040	36,006	15.4	46,551	37,320	16.9	51,085	41,115
2024	312,103	14.9	46,503	36,372	15.4	48,064	37,699	16.9	52,745	41,533
2025	322,246	14.9	48,015	36,691	15.4	49,626	38,030	16.9	54,460	41,898
2026	332,719	14.9	49,575	36,958	15.4	51,239	38,307	16.9	56,230	42,203
2027	343,532	14.9	51,186	37,167	15.4	52,904	38,523	16.9	58,057	42,442
2028	354,697	14.9	52,850	37,311	15.4	54,623	38,672	16.9	59,944	42,606
2029	366,225	14.9	54,568	37,382	15.4	56,399	38,746	16.9	61,892	42,687

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.
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