



Table of Contents

Page
Actuary's Certification Letter1
Alternate Plans Available
Employer Contribution Rates
Regular Eligibility: Contributory Plan4
Non-Contributory Plan6
Rule of 80 Eligibility: Contributory Plan8
Non-Contributory Plan10
Employer Contribution Dollars
Appendix I
Unfunded Actuarial Accrued Liability15
Appendix II
Summary of Financial Assumptions
Appendix III
Summary of LAGERS Provisions21
Appendix IV
Benefit Illustrations24
Appendix V
Age and Service Characteristics of Employees
Appendix VI
Risk Commentary 35





October 10, 2019

Wright City Fire Protection District Wright City, Missouri

Ladies and Gentlemen:

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

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

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

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

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

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

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 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 August 31, 2019. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilos



Alternate Plan Provisions Affecting Employer Contribution Rates

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

Contributory Plan. Under the contributory plan, each covered member contributes 4% of compensation to LAGERS. If an employee terminates before being eligible for an immediate benefit, the member's contributions, plus any interest credited to the member's individual account, are refunded upon request.

Non-Contributory Plan. Under the non-contributory plan, there is no individual employee contribution to the plan, no individual account maintained for each employee, and no refund paid to employees who terminate before being eligible for a benefit.

The law further provides for nine different benefit programs (benefit formula factors) and allows an employer to elect "rule of 80" eligibility for benefits. Under the rule of 80, employees are eligible for unreduced benefits at the earlier of (i) attainment of their minimum service retirement age or (ii) such time as their years of age plus years of LAGERS credited service equals 80.

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

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



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

Regular Retirement Eligibility

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.30%	4.00%	0.20%	7.50%
	Fire	4.00	4.80	0.60	9.40
L-3	General	4.20	5.80	0.30	10.30
	Fire	5.10	6.80	0.70	12.60
LT-4(65)	General	3.80	4.80	0.20	8.80
	Fire	5.30	7.00	0.60	12.90
LT-5(65)	General	4.60	6.20	0.30	11.10
	Fire	6.00	8.40	0.70	15.10
L-7	General	5.10	7.40	0.30	12.80
	Fire	6.10	8.70	0.80	15.60
LT-8(65)	General	5.40	7.70	0.30	13.40
	Fire	6.70	9.80	0.80	17.30
L-12	General	6.10	9.00	0.40	15.50
	Fire	7.10	10.80	0.90	18.80
LT-14(65)	General	6.20	9.20	0.40	15.80
	Fire	7.40	11.30	0.90	19.60
L-6	General	7.00	10.70	0.50	18.20
	Fire	8.20	12.60	1.00	21.80



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

Regular Retirement Eligibility

		Pe	rcents of Activ	e Member Pay	roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.40%	4.30%	0.20%	7.90%
	Fire	4.20	5.10	0.60	9.90
L-3	General	4.40	5.90	0.30	10.60
	Fire	5.20	7.20	0.70	13.10
LT-4(65)	General	3.90	5.00	0.20	9.10
	Fire	5.50	7.30	0.60	13.40
LT-5(65)	General	4.70	6.60	0.30	11.60
	Fire	6.20	8.80	0.70	15.70
L-7	General	5.30	7.70	0.30	13.30
	Fire	6.30	9.10	0.80	16.20
LT-8(65)	General	5.60	8.00	0.30	13.90
	Fire	7.00	10.20	0.80	18.00
L-12	General	6.30	9.40	0.40	16.10
	Fire	7.40	11.10	0.90	19.40
LT-14(65)	General	6.40	9.60	0.40	16.40
	Fire	7.70	11.70	0.90	20.30
L-6	General	7.20	11.20	0.50	18.90
	Fire	8.50	13.10	1.00	22.60



<u>Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)</u> (No member contributions)

Regular Retirement Eligibility

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.80%	7.40%	0.20%	11.40%
	Fire	4.10	8.60	0.60	13.30
L-3	General	4.80	9.10	0.30	14.20
	Fire	5.20	10.60	0.70	16.50
LT-4(65)	General	4.30	8.20	0.20	12.70
	Fire	5.40	10.80	0.60	16.80
LT-5(65)	General	5.10	9.60	0.30	15.00
	Fire	6.10	12.20	0.70	19.00
L-7	General	5.70	10.70	0.30	16.70
	Fire	6.20	12.50	0.80	19.50
LT-8(65)	General	5.90	11.10	0.30	17.30
	Fire	6.80	13.60	0.80	21.20
L-12	General	6.70	12.30	0.40	19.40
	Fire	7.30	14.50	0.90	22.70
LT-14(65)	General	6.80	12.50	0.40	19.70
	Fire	7.60	15.00	0.90	23.50
L-6	General	7.60	14.00	0.50	22.10
	Fire	8.30	16.40	1.00	25.70



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

Regular Retirement Eligibility

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.90%	7.70%	0.20%	11.80%
	Fire	4.30	8.90	0.60	13.80
L-3	General	4.90	9.30	0.30	14.50
	Fire	5.40	10.90	0.70	17.00
LT-4(65)	General	4.40	8.40	0.20	13.00
	Fire	5.60	11.10	0.60	17.30
LT-5(65)	General	5.30	9.90	0.30	15.50
	Fire	6.30	12.60	0.70	19.60
L-7	General	5.90	11.00	0.30	17.20
	Fire	6.40	12.90	0.80	20.10
LT-8(65)	General	6.10	11.40	0.30	17.80
	Fire	7.10	14.00	0.80	21.90
L-12	General	6.90	12.70	0.40	20.00
	Fire	7.50	14.90	0.90	23.30
LT-14(65)	General	7.00	12.90	0.40	20.30
	Fire	7.80	15.50	0.90	24.20
L-6	General	7.90	14.40	0.50	22.80
	Fire	8.60	16.90	1.00	26.50



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.30%	4.00%	0.20%	7.50%
	Fire	4.10	5.10	0.60	9.80
L-3	General	4.20	5.80	0.30	10.30
	Fire	5.20	6.90	0.70	12.80
LT-4(65)	General	3.80	4.80	0.20	8.80
	Fire	5.50	7.40	0.60	13.50
LT-5(65)	General	4.60	6.20	0.30	11.10
	Fire	6.20	8.80	0.70	15.70
L-7	General	5.10	7.40	0.30	12.80
	Fire	6.30	8.90	0.80	16.00
LT-8(65)	General	5.40	7.70	0.30	13.40
	Fire	7.00	10.10	0.80	17.90
L-12	General	6.10	9.00	0.40	15.50
	Fire	7.30	10.90	0.90	19.10
LT-14(65)	General	6.20	9.20	0.40	15.80
	Fire	7.70	11.50	0.90	20.10
L-6	General	7.00	10.70	0.50	18.20
	Fire	8.40	12.80	1.00	22.20

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



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

		Pe	rcents of Activ	e Member Pay	roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.40%	4.30%	0.20%	7.90%
	Fire	4.30	5.30	0.60	10.20
L-3	General	4.40	5.90	0.30	10.60
	Fire	5.40	7.30	0.70	13.40
LT-4(65)	General	3.90	5.00	0.20	9.10
	Fire	5.70	7.80	0.60	14.10
LT-5(65)	General	4.70	6.60	0.30	11.60
	Fire	6.50	9.10	0.70	16.30
L-7	General	5.30	7.70	0.30	13.30
	Fire	6.50	9.30	0.80	16.60
LT-8(65)	General	5.60	8.00	0.30	13.90
	Fire	7.20	10.50	0.80	18.50
L-12	General	6.30	9.40	0.40	16.10
	Fire	7.60	11.40	0.90	19.90
LT-14(65)	General	6.40	9.60	0.40	16.40
	Fire	7.90	12.10	0.90	20.90
L-6	General	7.20	11.20	0.50	18.90
	Fire	8.70	13.40	1.00	23.10

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- * Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



<u>Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)</u> (No member contributions)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.80%	7.40%	0.20%	11.40%
	Fire	4.30	8.80	0.60	13.70
L-3	General	4.80	9.10	0.30	14.20
	Fire	5.30	10.70	0.70	16.70
LT-4(65)	General	4.30	8.20	0.20	12.70
	Fire	5.70	11.10	0.60	17.40
LT-5(65)	General	5.10	9.60	0.30	15.00
	Fire	6.40	12.50	0.70	19.60
L-7	General	5.70	10.70	0.30	16.70
	Fire	6.40	12.70	0.80	19.90
LT-8(65)	General	5.90	11.10	0.30	17.30
	Fire	7.10	13.90	0.80	21.80
L-12	General	6.70	12.30	0.40	19.40
	Fire	7.40	14.70	0.90	23.00
LT-14(65)	General	6.80	12.50	0.40	19.70
	Fire	7.80	15.30	0.90	24.00
L-6	General	7.60	14.00	0.50	22.10
	Fire	8.50	16.60	1.00	26.10

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- * Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



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

		Pe	rcents of Activ	e Member Pay	roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.90%	7.70%	0.20%	11.80%
	Fire	4.40	9.10	0.60	14.10
L-3	General	4.90	9.30	0.30	14.50
	Fire	5.50	11.10	0.70	17.30
LT-4(65)	General	4.40	8.40	0.20	13.00
	Fire	5.90	11.50	0.60	18.00
LT-5(65)	General	5.30	9.90	0.30	15.50
	Fire	6.60	12.90	0.70	20.20
L-7	General	5.90	11.00	0.30	17.20
	Fire	6.60	13.10	0.80	20.50
LT-8(65)	General	6.10	11.40	0.30	17.80
	Fire	7.30	14.30	0.80	22.40
L-12	General	6.90	12.70	0.40	20.00
	Fire	7.70	15.20	0.90	23.80
LT-14(65)	General	7.00	12.90	0.40	20.30
	Fire	8.10	15.80	0.90	24.80
L-6	General	7.90	14.40	0.50	22.80
	Fire	8.80	17.20	1.00	27.00

- # 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.



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

3 Year FAS				
Benefit				
Program	General	Fire		
L-1	\$ 3,081	\$ 38,322		
L-3	4,134	50,709		
LT-4(65)	3,549	51,870		
LT-5(65)	4,524	60,773		
L-7	5,187	62,708		
LT-8(65)	5,421	69,676		
L-12	6,279	75,095		
LT-14(65)	6,396	78,579		
L-6	7,371	87,482		

Non-Contributory Plan

	3 Year FAS				
Benefit					
Program	General	Fire			
L-1	\$ 4,602	\$ 53,418			
L-3	5,655	65,805			
LT-4(65)	5,070	66,966			
LT-5(65)	6,045	75,869			
L-7	6,708	77,805			
LT-8(65)	6,942	84,772			
L-12	7,800	90,192			
LT-14(65)	7,917	93,676			
L-6	8,892	102,579			

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



Employer Contribution Dollars Rule of 80 Retirement Eligibility

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

Contributory Plan

3 Year FAS				
Benefit				
Program	General	Fire		
L-1	\$ 3,081	\$ 39,483		
L-3	4,134	51,870		
LT-4(65)	3,549	54,580		
LT-5(65)	4,524	63,096		
L-7	5,187	64,257		
LT-8(65)	5,421	71,611		
L-12	6,279	77,031		
LT-14(65)	6,396	80,902		
L-6	7,371	89,418		

Non-Contributory Plan

	3 Year FAS					
Benefit						
Program	General	Fire				
L-1	\$ 4,602	\$ 54,580				
L-3	5,655	66,966				
LT-4(65)	5,070	69,676				
LT-5(65)	6,045	78,192				
L-7	6,708	79,353				
LT-8(65)	6,942	86,708				
L-12	7,800	92,127				
LT-14(65)	7,917	95,998				
L-6	8,892	104,514				

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



Employees and Payroll Included in the Valuation

	General	Fire
Number of Employees	1	10
Annual Payroll	\$ 39,000	\$ 387,089

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





UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability (UAAL)

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

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

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

Wright City Fire Protection District

Regular Retirement Eligibility

		Contri	butory	Non-Contributory		
Benefit	Employee	UAAL	UAAL	UAAL	UAAL	
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)	
L-1	General	\$ 22,693	\$ 23,559	\$ 26,148	\$ 27,052	
	Fire	273,824	283,813	282,638	292,562	
L-3	General	29,008	30,081	32,699	33,811	
	Fire	344,833	357,213	353,353	365,709	
LT-4(65)	General	25,832	26,814	29,278	30,278	
	Fire	359,530	372,549	367,950	380,943	
LT-5(65)	General	31,359	32,514	35,029	36,222	
	Fire	409,063	423,758	417,341	431,992	
L-7	General	35,324	36,618	39,236	40,590	
	Fire	415,581	430,408	424,071	438,893	
LT-8(65)	General	36,888	38,242	40,806	42,198	
	Fire	458,364	474,796	466,707	483,074	
L-12	General	41,642	43,148	45,786	47,341	
	Fire	486,242	503,543	494,710	512,033	
LT-14(65)	General	42,420	43,959	46,565	48,155	
	Fire	507,632	525,710	516,068	534,128	
L-6	General	47,955	49,682	52,306	54,112	
	Fire	556,874	576,652	565,384	585,186	



Unfunded Actuarial Accrued Liability (UAAL)

		Contri	butory	Non-Contributory		
Benefit	Employee	UAAL	UAAL	UAAL	UAAL	
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)	
L-1	General	\$ 22,693	\$ 23,559	\$ 26,148	\$ 27,052	
	Fire	281,131	291,430	289,910	300,177	
L-3	General	29,008	30,081	32,699	33,811	
	Fire	353,890	366,718	362,451	375,256	
LT-4(65)	General	25,832	26,814	29,278	30,278	
	Fire	377,396	391,167	385,790	399,521	
LT-5(65)	General	31,359	32,514	35,029	36,222	
	Fire	426,049	441,495	434,354	449,744	
L-7	General	35,324	36,618	39,236	40,590	
	Fire	426,412	441,727	434,942	450,285	
LT-8(65)	General	36,888	38,242	40,806	42,198	
	Fire	474,524	491,612	482,866	499,935	
L-12	General	41,642	43,148	45,786	47,341	
	Fire	498,892	516,765	507,421	525,345	
LT-14(65)	General	42,420	43,959	46,565	48,155	
	Fire	522,918	541,684	531,400	550,199	
L-6	General	47,955	49,682	52,306	54,112	
	Fire	571,280	591,774	579,906	600,404	





SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

- 1. The investment return rate used in making the valuations was 7.25% per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. The price inflation rate used in making the valuations was 2.50% and the wage inflation rate used in making the valuations was 3.25%. The investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.00%. Adopted 2011 and 2016.
- 2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The pre-retirement mortality tables used were the RP-2014 employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. For both the post-retirement and pre-retirement tables, the base year for males was then established to be 2017. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to the above described tables. Adopted 2016.
- 3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2016.
- 4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2016.
- 5. Post-retirement cost of living allowances are assumed to be 2.50% per year. Adopted 2016.
- Total active member payroll is assumed to increase a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2016.
- 7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
- 8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.



Schedule 1.

Separations From Active Employment (Not Including Death-In-Service) Before Age & Service Retirement and Individual Pay Increase Assumptions

Percent of Active Members Separating Within Next Year

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

Percent Increase in Individual's Pay

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



Schedule 2.

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

Early Retirement

Retirement _	General	Members	Retirement		
Ages	Men	Women	Ages	Police	Fire
55	3.00%	3.00%	50	2.50%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	2.50%

Normal Retirement

Retirement	General	Members	Retirement		
Ages	Men	Women	Ages	Police	Fire
60	10%	10%	55	10%	13%
61	10	10	56	10	13
62	25	15	57	10	13
63	20	15	58	10	13
64	20	15	59	10	13
65	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	General	Members		
Ages	Men	Women	Police	Fire
50	15%	15%	25%	25%
51	15	15	25	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	30	15	30	45
63	30	15	30	45
64	30	20	30	45
65	30	25	100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		





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 or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

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

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

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

LT-4(65) Benefit Program:

LT-5(65) Benefit Program:

LT-8(65) Benefit Program:

1.00% for life, plus 1.00% to age 65

1.25% for life, plus 0.75% to age 65

LT-14(65) Benefit Program:

1.50% for life, plus 0.50% to age 65

LT-14(65) Benefit Program:

1.75% for life, plus 0.25% to age 65

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

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

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

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



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

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

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

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

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

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

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

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

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



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

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

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

If a member leaves LAGERS-covered employment before an allowance is payable, the accumulated contributions are refunded to the member. If the member dies, his accumulated contributions are refunded to a designated beneficiary.

The law governing LAGERS also has a provision for the adoption of a non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the non-contributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 2 years. Under the non-contributory provisions there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

Employer Contributions. Section 70.730. Each employer contributes the remainder amounts necessary to finance the employees' participation in LAGERS. Contributions to LAGERS are determined based upon level-percent-of-payroll principles, so that contribution rates do not have to increase over decades of time.





BENEFIT ILLUSTRATIONS

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthly	/ Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 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%

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

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



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

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

Final	Estimated		Estimated		
Average	LAGERS	Social	Monthly	/ Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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.

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



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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthly	/ Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 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%

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

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



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

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

Final		Estimated	Estimated		
Average	LAGERS	Social	Social Monthly Total		
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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%	

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

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



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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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.

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



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

Missouri LAGERS

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

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

1.00% of FAS ¹ at age 65)

Final	LAG	ERS	Estimated	Estim	nated	Pero	ent
Average	BENI	EFIT ³	Social	Month	ly Total	of F	AS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Service	2 :						
\$1,500	\$1,050	\$ 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	e:						
\$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	e :						
\$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.

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



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

Missouri LAGERS

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

(LT-5(65) Benefit Program is Years of Credited Service times: 2.00% of FAS ¹ to age 65)

1.25% of FAS ¹ at age 65)

Final	LAG	ERS	Estimated	Estim	nated	Perc	ent
Average	BENI	EFIT ³	Social	Month	y Total	of F	AS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Service	e:						
\$1,500	\$1,050	\$ 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	2:						
\$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	e :						
\$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.

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



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

Missouri LAGERS

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

(LT-8(65) Benefit Program is Years of Credited Service times: 2.00% of FAS ¹ to age 65)

1.50% of FAS ¹ at age 65)

Final	LAGERS		Estimated	Estimated		Percent		
Average	BENI	EFIT ³	Social	Month	y Total	of F	AS	
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65	
35 Years of Service	:							
\$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.

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



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

Missouri LAGERS

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

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

1.75% of FAS ¹ at age 65)

Final	LAGERS		Estimated	Estimated		Percent		
Average	BENI	EFIT ³	Social	Monthl	y Total	of F	AS	
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65	
35 Years of Service	2:							
\$1,500	\$1,050	\$ 919	\$ 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	e:							
\$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	e:							
\$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.

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



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



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

August 31, 2019

By Attained Age and Years of Service

		Yea	ars of Se	rvice to \	/aluatio		Totals		
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49		1						1	\$ 39,000
50-54									
55-59									
60-64									
65-69									
70 & Over									
Totals		1						1	\$ 39,000

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

Age: 47.9 years.

Benefit Service: 5.5 years. Annual Pay: \$39,000.



August 31, 2019

By Attained Age and Years of Service

		Yea	ars of Se	rvice to \		Totals			
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20									
20-24									
25-29									
30-34	1	1						2	\$ 62,042
35-39	3							3	\$ 88,200
40-44	1		2					3	\$ 132,210
45-49		1						1	\$ 39,637
50-54			1					1	\$ 65,000
55-59									
60-64									
65-69									
70 & Over									
Totals	5	2	3					10	\$ 387,089

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

Age: 39.7 years.

Benefit Service: 6.6 years. Annual Pay: \$38,709.





RISK COMMENTARY

Risk Commentary

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

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

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

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

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

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



Risk Commentary (Concluded)

PLAN MATURITY MEASURES

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

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

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

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

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

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

DURATION OF ACTUARIAL ACCRUED LIABILITY

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

ADDITIONAL RISK ASSESSMENT

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





October 10, 2019 E-mail

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

Dear Bob:

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

Wright City Fire Protection District

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



October 10, 2019

Wright City Fire Protection District Wright City, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the August 31, 2019 Initial Valuation for the Wright City Fire Protection District dated October 10, 2019.

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

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

Regular Retirement Eligibility

		L-1 Benefit Program			L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contribution		Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	7.5%	\$2,925	\$ 22,693	10.3%	\$4,017	\$ 29,008	8.8%	\$3,432	\$ 25,832
2020	40,268	7.5	3,020	23,004	10.3	4,148	29,405	8.8	3,544	26,186
2021	41,577	7.5	3,118	23,294	10.3	4,282	29,776	8.8	3,659	26,516
2022	42,928	7.5	3,220	23,560	10.3	4,422	30,116	8.8	3,778	26,819
2023	44,323	7.5	3,324	23,799	10.3	4,565	30,422	8.8	3,900	27,092
2024	45,763	7.5	3,432	24,008	10.3	4,714	30,689	8.8	4,027	27,330
2025	47,250	7.5	3,544	24,183	10.3	4,867	30,913	8.8	4,158	27,529
2026	48,786	7.5	3,659	24,320	10.3	5,025	31,088	8.8	4,293	27,685
2027	50,372	7.5	3,778	24,414	10.3	5,188	31,208	8.8	4,433	27,792
2028	52,009	7.5	3,901	24,461	10.3	5,357	31,268	8.8	4,577	27,845

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 39,000	11.1%	\$4,329	\$ 31,359	12.8%	\$4,992	\$ 35,324	13.4%	\$5,226	\$ 36,888
2020	40,268	11.1	4,470	31,789	12.8	5,154	35,808	13.4	5,396	37,393
2021	41,577	11.1	4,615	32,190	12.8	5,322	36,260	13.4	5,571	37,865
2022	42,928	11.1	4,765	32,558	12.8	5,495	36,675	13.4	5,752	38,298
2023	44,323	11.1	4,920	32,889	12.8	5,673	37,048	13.4	5,939	38,687
2024	45,763	11.1	5,080	33,178	12.8	5,858	37,373	13.4	6,132	39,027
2025	47,250	11.1	5,245	33,420	12.8	6,048	37,645	13.4	6,332	39,311
2026	48,786	11.1	5,415	33,609	12.8	6,245	37,858	13.4	6,537	39,533
2027	50,372	11.1	5,591	33,739	12.8	6,448	38,004	13.4	6,750	39,686
2028	52,009	11.1	5.773	33.803	12.8	6.657	38.077	13.4	6.969	39.762

			L-12 Benefit Program			1(65) Benefit F	Program	L-6 Benefit Program		
	Fatimata d	Estimated Employer Contribution		Unfunded		l Employer	Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial		ibution	Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 39,000	15.5%	\$6,045	\$ 41,642	15.8%	\$6,162	\$ 42,420	18.2%	\$7,098	\$ 47,955
2020	40,268	15.5	6,242	42,212	15.8	6,362	43,001	18.2	7,329	48,612
2021	41,577	15.5	6,444	42,744	15.8	6,569	43,543	18.2	7,567	49,225
2022	42,928	15.5	6,654	43,233	15.8	6,783	44,041	18.2	7,813	49,788
2023	44,323	15.5	6,870	43,672	15.8	7,003	44,488	18.2	8,067	50,294
2024	45,763	15.5	7,093	44,056	15.8	7,231	44,879	18.2	8,329	50,736
2025	47,250	15.5	7,324	44,377	15.8	7,466	45,206	18.2	8,600	51,106
2026	48,786	15.5	7,562	44,628	15.8	7,708	45,461	18.2	8,879	51,395
2027	50,372	15.5	7,808	44,801	15.8	7,959	45,637	18.2	9,168	51,594
2028	52,009	15.5	8,061	44,887	15.8	8,217	45,724	18.2	9,466	51,693

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



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

Regular Retirement Eligibility

		L-1 Benefit Program			L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated Employer Contribution		Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial			Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	7.9%	\$3,081	\$ 23,559	10.6%	\$4,134	\$ 30,081	9.1%	\$3,549	\$ 26,814
2020	40,268	7.9	3,181	23,882	10.6	4,268	30,493	9.1	3,664	27,181
2021	41,577	7.9	3,285	24,183	10.6	4,407	30,877	9.1	3,784	27,524
2022	42,928	7.9	3,391	24,459	10.6	4,550	31,230	9.1	3,906	27,839
2023	44,323	7.9	3,502	24,708	10.6	4,698	31,547	9.1	4,033	28,122
2024	45,763	7.9	3,615	24,925	10.6	4,851	31,824	9.1	4,164	28,369
2025	47,250	7.9	3,733	25,107	10.6	5,009	32,056	9.1	4,300	28,576
2026	48,786	7.9	3,854	25,249	10.6	5,171	32,237	9.1	4,440	28,738
2027	50,372	7.9	3,979	25,347	10.6	5,339	32,362	9.1	4,584	28,849
2028	52,009	7.9	4,109	25,395	10.6	5,513	32,424	9.1	4,733	28,904

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Year	Year Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2019	\$ 39,000	11.6%	\$4,524	\$ 32,514	13.3%	\$5,187	\$ 36,618	13.9%	\$5,421	\$ 38,242	
2020	40,268	11.6	4,671	32,959	13.3	5,356	37,120	13.9	5,597	38,766	
2021	41,577	11.6	4,823	33,375	13.3	5,530	37,588	13.9	5,779	39,255	
2022	42,928	11.6	4,980	33,757	13.3	5,709	38,018	13.9	5,967	39,704	
2023	44,323	11.6	5,141	34,100	13.3	5,895	38,404	13.9	6,161	40,107	
2024	45,763	11.6	5,309	34,399	13.3	6,086	38,741	13.9	6,361	40,459	
2025	47,250	11.6	5,481	34,650	13.3	6,284	39,023	13.9	6,568	40,754	
2026	48,786	11.6	5,659	34,846	13.3	6,489	39,244	13.9	6,781	40,984	
2027	50,372	11.6	5,843	34,981	13.3	6,699	39,396	13.9	7,002	41,142	
2028	52.009	11.6	6.033	35.048	13.3	6.917	39.471	13.9	7.229	41.221	

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	• •		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 39,000	16.1%	\$6,279	\$ 43,148	16.4%	\$6,396	\$ 43,959	18.9%	\$7,371	\$ 49,682
2020	40,268	16.1	6,483	43,739	16.4	6,604	44,561	18.9	7,611	50,363
2021	41,577	16.1	6,694	44,291	16.4	6,819	45,123	18.9	7,858	50,998
2022	42,928	16.1	6,911	44,797	16.4	7,040	45,639	18.9	8,113	51,581
2023	44,323	16.1	7,136	45,252	16.4	7,269	46,103	18.9	8,377	52,105
2024	45,763	16.1	7,368	45,649	16.4	7,505	46,508	18.9	8,649	52,563
2025	47,250	16.1	7,607	45,982	16.4	7,749	46,847	18.9	8,930	52,946
2026	48,786	16.1	7,855	46,242	16.4	8,001	47,112	18.9	9,221	53,245
2027	50,372	16.1	8,110	46,421	16.4	8,261	47,294	18.9	9,520	53,451
2028	52,009	16.1	8,373	46,510	16.4	8,529	47,384	18.9	9,830	53,553

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



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

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contribution		Actuarial	Contri	Contribution	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	11.4%	\$4,446	\$ 26,148	14.2%	\$5,538	\$ 32,699	12.7%	\$4,953	\$ 29,278
2020	40,268	11.4	4,591	26,506	14.2	5,718	33,147	12.7	5,114	29,679
2021	41,577	11.4	4,740	26,840	14.2	5,904	33,565	12.7	5,280	30,053
2022	42,928	11.4	4,894	27,147	14.2	6,096	33,949	12.7	5,452	30,397
2023	44,323	11.4	5,053	27,423	14.2	6,294	34,294	12.7	5,629	30,706
2024	45,763	11.4	5,217	27,664	14.2	6,498	34,595	12.7	5,812	30,976
2025	47,250	11.4	5,387	27,866	14.2	6,710	34,847	12.7	6,001	31,202
2026	48,786	11.4	5,562	28,023	14.2	6,928	35,044	12.7	6,196	31,378
2027	50,372	11.4	5,742	28,131	14.2	7,153	35,180	12.7	6,397	31,499
2028	52,009	11.4	5,929	28,185	14.2	7,385	35,247	12.7	6,605	31,559

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution			Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 39,000	15.0%	\$5,850	\$ 35,029	16.7%	\$6,513	\$ 39,236	17.3%	\$6,747	\$ 40,806
2020	40,268	15.0	6,040	35,509	16.7	6,725	39,774	17.3	6,966	41,365
2021	41,577	15.0	6,237	35,957	16.7	6,943	40,276	17.3	7,193	41,887
2022	42,928	15.0	6,439	36,368	16.7	7,169	40,736	17.3	7,427	42,366
2023	44,323	15.0	6,648	36,738	16.7	7,402	41,150	17.3	7,668	42,796
2024	45,763	15.0	6,864	37,061	16.7	7,642	41,511	17.3	7,917	43,172
2025	47,250	15.0	7,088	37,331	16.7	7,891	41,813	17.3	8,174	43,486
2026	48,786	15.0	7,318	37,542	16.7	8,147	42,049	17.3	8,440	43,732
2027	50,372	15.0	7,556	37,687	16.7	8,412	42,212	17.3	8,714	43,901
2028	52,009	15.0	7.801	37.759	16.7	8.686	42.293	17.3	8.998	43.985

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		ed Employer Un ribution Ad Annual A	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll		Accrued Liability
2019	\$ 39,000	19.4%	\$7,566	\$ 45,786	19.7%	\$7,683	\$ 46,565	22.1%	\$8,619	\$ 52,306
2020	40,268	19.4	7,812	46,413	19.7	7,933	47,203	22.1	8,899	53,023
2021	41,577	19.4	8,066	46,998	19.7	8,191	47,798	22.1	9,189	53,692
2022	42,928	19.4	8,328	47,535	19.7	8,457	48,344	22.1	9,487	54,306
2023	44,323	19.4	8,599	48,018	19.7	8,732	48,835	22.1	9,795	54,858
2024	45,763	19.4	8,878	48,440	19.7	9,015	49,264	22.1	10,114	55,340
2025	47,250	19.4	9,167	48,793	19.7	9,308	49,623	22.1	10,442	55,743
2026	48,786	19.4	9,464	49,069	19.7	9,611	49,903	22.1	10,782	56,058
2027	50,372	19.4	9,772	49,259	19.7	9,923	50,096	22.1	11,132	56,275
2028	52,009	19.4	10,090	49,353	19.7	10,246	50,192	22.1	11,494	56,382

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



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

(0% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	11.8%	\$4,602	\$ 27,052	14.5%	\$5,655	\$ 33,811	13.0%	\$5,070	\$ 30,278
2020	40,268	11.8	4,752	27,423	14.5	5,839	34,274	13.0	5,235	30,693
2021	41,577	11.8	4,906	27,769	14.5	6,029	34,706	13.0	5,405	31,080
2022	42,928	11.8	5,066	28,086	14.5	6,225	35,103	13.0	5,581	31,435
2023	44,323	11.8	5,230	28,371	14.5	6,427	35,460	13.0	5,762	31,754
2024	45,763	11.8	5,400	28,620	14.5	6,636	35,771	13.0	5,949	32,033
2025	47,250	11.8	5,576	28,828	14.5	6,851	36,032	13.0	6,143	32,266
2026	48,786	11.8	5,757	28,991	14.5	7,074	36,236	13.0	6,342	32,448
2027	50,372	11.8	5,944	29,103	14.5	7,304	36,376	13.0	6,548	32,573
2028	52,009	11.8	6,137	29,159	14.5	7,541	36,445	13.0	6,761	32,635

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		Unfun Column Co	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll		Accrued Liability	
2019	\$ 39,000	15.5%	\$6,045	\$ 36,222	17.2%	\$6,708	\$ 40,590	17.8%		\$ 42,198	
2020	40,268	15.5	6,242	36,718	17.2	6,926	41,146	17.8	7,168	42,776	
2021	41,577	15.5	6,444	37,181	17.2	7,151	41,665	17.8	7,401	43,315	
2022	42,928	15.5	6,654	37,606	17.2	7,384	42,141	17.8	7,641	43,810	
2023	44,323	15.5	6,870	37,988	17.2	7,624	42,569	17.8	7,889	44,255	
2024	45,763	15.5	7,093	38,322	17.2	7,871	42,943	17.8	8,146	44,644	
2025	47,250	15.5	7,324	38,601	17.2	8,127	43,256	17.8	8,411	44,969	
2026	48,786	15.5	7,562	38,819	17.2	8,391	43,500	17.8	8,684	45,223	
2027	50,372	15.5	7,808	38,969	17.2	8,664	43,668	17.8	8,966	45,398	
2028	52,009	15.5	8.061	39.043	17.2	8.946	43.751	17.8	9.258	45.485	

		L-12 Benefit Program			LT-14	4(65) Benefit F	Program	L-6 Benefit Program		
	Estimated		Estimated Employer Contribution			l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 39,000	20.0%	\$7,800	\$ 47,341	20.3%	\$7,917	\$ 48,155	22.8%	\$8,892	\$ 54,112
2020	40,268	20.0	8,054	47,990	20.3	8,174	48,815	22.8	9,181	54,853
2021	41,577	20.0	8,315	48,595	20.3	8,440	49,431	22.8	9,480	55,545
2022	42,928	20.0	8,586	49,151	20.3	8,714	49,996	22.8	9,788	56,180
2023	44,323	20.0	8,865	49,650	20.3	8,998	50,504	22.8	10,106	56,751
2024	45,763	20.0	9,153	50,086	20.3	9,290	50,948	22.8	10,434	57,249
2025	47,250	20.0	9,450	50,451	20.3	9,592	51,319	22.8	10,773	57,666
2026	48,786	20.0	9,757	50,736	20.3	9,904	51,609	22.8	11,123	57,992
2027	50,372	20.0	10,074	50,932	20.3	10,226	51,809	22.8	11,485	58,216
2028	52,009	20.0	10,402	51,029	20.3	10,558	51,908	22.8	11,858	58,327

- 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.
- 1) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	ibution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	7.5%	\$2,925	\$ 22,693	10.3%	\$4,017	\$ 29,008	8.8%	\$3,432	\$ 25,832
2020	40,268	7.5	3,020	23,004	10.3	4,148	29,405	8.8	3,544	26,186
2021	41,577	7.5	3,118	23,294	10.3	4,282	29,776	8.8	3,659	26,516
2022	42,928	7.5	3,220	23,560	10.3	4,422	30,116	8.8	3,778	26,819
2023	44,323	7.5	3,324	23,799	10.3	4,565	30,422	8.8	3,900	27,092
2024	45,763	7.5	3,432	24,008	10.3	4,714	30,689	8.8	4,027	27,330
2025	47,250	7.5	3,544	24,183	10.3	4,867	30,913	8.8	4,158	27,529
2026	48,786	7.5	3,659	24,320	10.3	5,025	31,088	8.8	4,293	27,685
2027	50,372	7.5	3,778	24,414	10.3	5,188	31,208	8.8	4,433	27,792
2028	52,009	7.5	3,901	24,461	10.3	5,357	31,268	8.8	4,577	27,845

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		ed Employer United Excitors Annual Annual	Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2019	\$ 39,000	11.1%	\$4,329	\$ 31,359	12.8%	\$4,992	\$ 35,324	13.4%	\$5,226	\$ 36,888	
2020	40,268	11.1	4,470	31,789	12.8	5,154	35,808	13.4	5,396	37,393	
2021	41,577	11.1	4,615	32,190	12.8	5,322	36,260	13.4	5,571	37,865	
2022	42,928	11.1	4,765	32,558	12.8	5,495	36,675	13.4	5,752	38,298	
2023	44,323	11.1	4,920	32,889	12.8	5,673	37,048	13.4	5,939	38,687	
2024	45,763	11.1	5,080	33,178	12.8	5,858	37,373	13.4	6,132	39,027	
2025	47,250	11.1	5,245	33,420	12.8	6,048	37,645	13.4	6,332	39,311	
2026	48,786	11.1	5,415	33,609	12.8	6,245	37,858	13.4	6,537	39,533	
2027	50,372	11.1	5,591	33,739	12.8	6,448	38,004	13.4	6,750	39,686	
2028	52,009	11.1	5.773	33.803	12.8	6.657	38.077	13.4	6.969	39.762	

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated			Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		ed Employer U tribution A	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll		Accrued Liability
2019	\$ 39,000	15.5%	\$6,045	\$ 41,642	15.8%	\$6,162	\$ 42,420	18.2%	\$7,098	\$ 47,955
2020	40,268	15.5	6,242	42,212	15.8	6,362	43,001	18.2	7,329	48,612
2021	41,577	15.5	6,444	42,744	15.8	6,569	43,543	18.2	7,567	49,225
2022	42,928	15.5	6,654	43,233	15.8	6,783	44,041	18.2	7,813	49,788
2023	44,323	15.5	6,870	43,672	15.8	7,003	44,488	18.2	8,067	50,294
2024	45,763	15.5	7,093	44,056	15.8	7,231	44,879	18.2	8,329	50,736
2025	47,250	15.5	7,324	44,377	15.8	7,466	45,206	18.2	8,600	51,106
2026	48,786	15.5	7,562	44,628	15.8	7,708	45,461	18.2	8,879	51,395
2027	50,372	15.5	7,808	44,801	15.8	7,959	45,637	18.2	9,168	51,594
2028	52,009	15.5	8,061	44,887	15.8	8,217	45,724	18.2	9,466	51,693

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



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

Rule of 80 Retirement Eligibility

	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	7.9%	\$3,081	\$ 23,559	10.6%	\$4,134	\$ 30,081	9.1%	\$3,549	\$ 26,814
2020	40,268	7.9	3,181	23,882	10.6	4,268	30,493	9.1	3,664	27,181
2021	41,577	7.9	3,285	24,183	10.6	4,407	30,877	9.1	3,784	27,524
2022	42,928	7.9	3,391	24,459	10.6	4,550	31,230	9.1	3,906	27,839
2023	44,323	7.9	3,502	24,708	10.6	4,698	31,547	9.1	4,033	28,122
2024	45,763	7.9	3,615	24,925	10.6	4,851	31,824	9.1	4,164	28,369
2025	47,250	7.9	3,733	25,107	10.6	5,009	32,056	9.1	4,300	28,576
2026	48,786	7.9	3,854	25,249	10.6	5,171	32,237	9.1	4,440	28,738
2027	50,372	7.9	3,979	25,347	10.6	5,339	32,362	9.1	4,584	28,849
2028	52,009	7.9	4,109	25,395	10.6	5,513	32,424	9.1	4,733	28,904

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		Estimated Employer Contribution			Estimated Employer Unfund Contribution Actual			d Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2019	\$ 39,000	11.6%	\$4,524	\$ 32,514	13.3%	\$5,187	\$ 36,618	13.9%	\$5,421	\$ 38,242	
2020	40,268	11.6	4,671	32,959	13.3	5,356	37,120	13.9	5,597	38,766	
2021	41,577	11.6	4,823	33,375	13.3	5,530	37,588	13.9	5,779	39,255	
2022	42,928	11.6	4,980	33,757	13.3	5,709	38,018	13.9	5,967	39,704	
2023	44,323	11.6	5,141	34,100	13.3	5,895	38,404	13.9	6,161	40,107	
2024	45,763	11.6	5,309	34,399	13.3	6,086	38,741	13.9	6,361	40,459	
2025	47,250	11.6	5,481	34,650	13.3	6,284	39,023	13.9	6,568	40,754	
2026	48,786	11.6	5,659	34,846	13.3	6,489	39,244	13.9	6,781	40,984	
2027	50,372	11.6	5,843	34,981	13.3	6,699	39,396	13.9	7,002	41,142	
2028	52.009	11.6	6.033	35.048	13.3	6.917	39.471	13.9	7.229	41.221	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
			l Employer	Unfunded		d Employer	Unfunded		d Employer	Unfunded
	Estimated		ibution	Actuarial		ibution	Actuarial		ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 39,000	16.1%	\$6,279	\$ 43,148	16.4%	\$6,396	\$ 43,959	18.9%	\$7,371	\$ 49,682
2020	40,268	16.1	6,483	43,739	16.4	6,604	44,561	18.9	7,611	50,363
2021	41,577	16.1	6,694	44,291	16.4	6,819	45,123	18.9	7,858	50,998
2022	42,928	16.1	6,911	44,797	16.4	7,040	45,639	18.9	8,113	51,581
2023	44,323	16.1	7,136	45,252	16.4	7,269	46,103	18.9	8,377	52,105
2024	45,763	16.1	7,368	45,649	16.4	7,505	46,508	18.9	8,649	52,563
2025	47,250	16.1	7,607	45,982	16.4	7,749	46,847	18.9	8,930	52,946
2026	48,786	16.1	7,855	46,242	16.4	8,001	47,112	18.9	9,221	53,245
2027	50,372	16.1	8,110	46,421	16.4	8,261	47,294	18.9	9,520	53,451
2028	52,009	16.1	8,373	46,510	16.4	8,529	47,384	18.9	9,830	53,553

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



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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	11.4%	\$4,446	\$ 26,148	14.2%	\$5,538	\$ 32,699	12.7%	\$4,953	\$ 29,278
2020	40,268	11.4	4,591	26,506	14.2	5,718	33,147	12.7	5,114	29,679
2021	41,577	11.4	4,740	26,840	14.2	5,904	33,565	12.7	5,280	30,053
2022	42,928	11.4	4,894	27,147	14.2	6,096	33,949	12.7	5,452	30,397
2023	44,323	11.4	5,053	27,423	14.2	6,294	34,294	12.7	5,629	30,706
2024	45,763	11.4	5,217	27,664	14.2	6,498	34,595	12.7	5,812	30,976
2025	47,250	11.4	5,387	27,866	14.2	6,710	34,847	12.7	6,001	31,202
2026	48,786	11.4	5,562	28,023	14.2	6,928	35,044	12.7	6,196	31,378
2027	50,372	11.4	5,742	28,131	14.2	7,153	35,180	12.7	6,397	31,499
2028	52,009	11.4	5,929	28,185	14.2	7,385	35,247	12.7	6,605	31,559

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		Estimated Employer Contribution			d Employer ibution	Unfunded Actuarial	
Valuation Projected Year Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability		
2019	\$ 39,000	15.0%	\$5,850	\$ 35,029	16.7%	\$6,513	\$ 39,236	17.3%	\$6,747	\$ 40,806	
2020	40,268	15.0	6,040	35,509	16.7	6,725	39,774	17.3	6,966	41,365	
2021	41,577	15.0	6,237	35,957	16.7	6,943	40,276	17.3	7,193	41,887	
2022	42,928	15.0	6,439	36,368	16.7	7,169	40,736	17.3	7,427	42,366	
2023	44,323	15.0	6,648	36,738	16.7	7,402	41,150	17.3	7,668	42,796	
2024	45,763	15.0	6,864	37,061	16.7	7,642	41,511	17.3	7,917	43,172	
2025	47,250	15.0	7,088	37,331	16.7	7,891	41,813	17.3	8,174	43,486	
2026	48,786	15.0	7,318	37,542	16.7	8,147	42,049	17.3	8,440	43,732	
2027	50,372	15.0	7,556	37,687	16.7	8,412	42,212	17.3	8,714	43,901	
2028	52.009	15.0	7.801	37.759	16.7	8.686	42.293	17.3	8.998	43.985	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 39,000	19.4%	\$7,566	\$ 45,786	19.7%	\$7,683	\$ 46,565	22.1%	\$8,619	\$ 52,306
2020	40,268	19.4	7,812	46,413	19.7	7,933	47,203	22.1	8,899	53,023
2021	41,577	19.4	8,066	46,998	19.7	8,191	47,798	22.1	9,189	53,692
2022	42,928	19.4	8,328	47,535	19.7	8,457	48,344	22.1	9,487	54,306
2023	44,323	19.4	8,599	48,018	19.7	8,732	48,835	22.1	9,795	54,858
2024	45,763	19.4	8,878	48,440	19.7	9,015	49,264	22.1	10,114	55,340
2025	47,250	19.4	9,167	48,793	19.7	9,308	49,623	22.1	10,442	55,743
2026	48,786	19.4	9,464	49,069	19.7	9,611	49,903	22.1	10,782	56,058
2027	50,372	19.4	9,772	49,259	19.7	9,923	50,096	22.1	11,132	56,275
2028	52,009	19.4	10,090	49,353	19.7	10,246	50,192	22.1	11,494	56,382

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



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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 39,000	11.8%	\$4,602	\$ 27,052	14.5%	\$5,655	\$ 33,811	13.0%	\$5,070	\$ 30,278
2020	40,268	11.8	4,752	27,423	14.5	5,839	34,274	13.0	5,235	30,693
2021	41,577	11.8	4,906	27,769	14.5	6,029	34,706	13.0	5,405	31,080
2022	42,928	11.8	5,066	28,086	14.5	6,225	35,103	13.0	5,581	31,435
2023	44,323	11.8	5,230	28,371	14.5	6,427	35,460	13.0	5,762	31,754
2024	45,763	11.8	5,400	28,620	14.5	6,636	35,771	13.0	5,949	32,033
2025	47,250	11.8	5,576	28,828	14.5	6,851	36,032	13.0	6,143	32,266
2026	48,786	11.8	5,757	28,991	14.5	7,074	36,236	13.0	6,342	32,448
2027	50,372	11.8	5,944	29,103	14.5	7,304	36,376	13.0	6,548	32,573
2028	52,009	11.8	6,137	29,159	14.5	7,541	36,445	13.0	6,761	32,635

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		Estimated Employer Contribution	
Valuation Year	Year Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 39,000	15.5%	\$6,045	\$ 36,222	17.2%	\$6,708	\$ 40,590	17.8%	\$6,942	\$ 42,198
2020	40,268	15.5	6,242	36,718	17.2	6,926	41,146	17.8	7,168	42,776
2021	41,577	15.5	6,444	37,181	17.2	7,151	41,665	17.8	7,401	43,315
2022	42,928	15.5	6,654	37,606	17.2	7,384	42,141	17.8	7,641	43,810
2023	44,323	15.5	6,870	37,988	17.2	7,624	42,569	17.8	7,889	44,255
2024	45,763	15.5	7,093	38,322	17.2	7,871	42,943	17.8	8,146	44,644
2025	47,250	15.5	7,324	38,601	17.2	8,127	43,256	17.8	8,411	44,969
2026	48,786	15.5	7,562	38,819	17.2	8,391	43,500	17.8	8,684	45,223
2027	50,372	15.5	7,808	38,969	17.2	8,664	43,668	17.8	8,966	45,398
2028	52.009	15.5	8.061	39.043	17.2	8.946	43.751	17.8	9.258	45.485

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated			Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 39,000	20.0%	\$7,800	\$ 47,341	20.3%	\$7,917	\$ 48,155	22.8%	\$8,892	\$ 54,112
2020	40,268	20.0	8,054	47,990	20.3	8,174	48,815	22.8	9,181	54,853
2021	41,577	20.0	8,315	48,595	20.3	8,440	49,431	22.8	9,480	55,545
2022	42,928	20.0	8,586	49,151	20.3	8,714	49,996	22.8	9,788	56,180
2023	44,323	20.0	8,865	49,650	20.3	8,998	50,504	22.8	10,106	56,751
2024	45,763	20.0	9,153	50,086	20.3	9,290	50,948	22.8	10,434	57,249
2025	47,250	20.0	9,450	50,451	20.3	9,592	51,319	22.8	10,773	57,666
2026	48,786	20.0	9,757	50,736	20.3	9,904	51,609	22.8	11,123	57,992
2027	50,372	20.0	10,074	50,932	20.3	10,226	51,809	22.8	11,485	58,216
2028	52,009	20.0	10,402	51,029	20.3	10,558	51,908	22.8	11,858	58,327

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



Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	bution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	9.4%	\$36,386	\$ 273,824	12.6%	\$48,773	\$ 344,833	12.9%	\$49,934	\$ 359,530
2020	399,669	9.4	37,569	277,575	12.6	50,358	349,557	12.9	51,557	364,456
2021	412,658	9.4	38,790	281,075	12.6	51,995	353,965	12.9	53,233	369,052
2022	426,069	9.4	40,050	284,289	12.6	53,685	358,012	12.9	54,963	373,271
2023	439,916	9.4	41,352	287,178	12.6	55,429	361,650	12.9	56,749	377,064
2024	454,213	9.4	42,696	289,700	12.6	57,231	364,826	12.9	58,593	380,376
2025	468,975	9.4	44,084	291,810	12.6	59,091	367,484	12.9	60,498	383,147
2026	484,217	9.4	45,516	293,459	12.6	61,011	369,561	12.9	62,464	385,312
2027	499,954	9.4	46,996	294,594	12.6	62,994	370,990	12.9	64,494	386,802
2028	516,203	9.4	48,523	295,157	12.6	65,042	371,698	12.9	66,590	387,541

		LT-5(65) Benefit Program	rogram	L-	-7 Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	15.1%	\$58,450	\$ 409,063	15.6%	\$60,386	\$ 415,581	17.3%	\$66,966	\$ 458,364
2020	399,669	15.1	60,350	414,667	15.6	62,348	421,274	17.3	69,143	464,644
2021	412,658	15.1	62,311	419,896	15.6	64,375	426,586	17.3	71,390	470,503
2022	426,069	15.1	64,336	424,697	15.6	66,467	431,463	17.3	73,710	475,882
2023	439,916	15.1	66,427	429,012	15.6	68,627	435,847	17.3	76,105	480,717
2024	454,213	15.1	68,586	432,780	15.6	70,857	439,675	17.3	78,579	484,939
2025	468,975	15.1	70,815	435,933	15.6	73,160	442,878	17.3	81,133	488,471
2026	484,217	15.1	73,117	438,397	15.6	75,538	445,381	17.3	83,770	491,232
2027	499,954	15.1	75,493	440,092	15.6	77,993	447,103	17.3	86,492	493,132
2028	516.203	15.1	77.947	440.932	15.6	80.528	447.957	17.3	89.303	494.074

		L-12 Benefit Program			LT-14	1(65) Benefit I	Program	L-6 Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	18.8%	\$72,773	\$ 486,242	19.6%	\$75,869	\$ 507,632	21.8%	\$84,385	\$ 556,874
2020	399,669	18.8	75,138	492,903	19.6	78,335	514,586	21.8	87,128	564,503
2021	412,658	18.8	77,580	499,118	19.6	80,881	521,075	21.8	89,959	571,621
2022	426,069	18.8	80,101	504,824	19.6	83,510	527,032	21.8	92,883	578,156
2023	439,916	18.8	82,704	509,953	19.6	86,224	532,387	21.8	95,902	584,031
2024	454,213	18.8	85,392	514,432	19.6	89,026	537,063	21.8	99,018	589,160
2025	468,975	18.8	88,167	518,179	19.6	91,919	540,975	21.8	102,237	593,452
2026	484,217	18.8	91,033	521,108	19.6	94,907	544,032	21.8	105,559	596,806
2027	499,954	18.8	93,991	523,123	19.6	97,991	546,136	21.8	108,990	599,114
2028	516,203	18.8	97,046	524,122	19.6	101,176	547,179	21.8	112,532	600,258

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



Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	9.9%	\$38,322	\$ 283,813	13.1%	\$50,709	\$ 357,213	13.4%	\$51,870	\$ 372,549
2020	399,669	9.9	39,567	287,701	13.1	52,357	362,107	13.4	53,556	377,653
2021	412,658	9.9	40,853	291,329	13.1	54,058	366,673	13.4	55,296	382,415
2022	426,069	9.9	42,181	294,660	13.1	55,815	370,865	13.4	57,093	386,787
2023	439,916	9.9	43,552	297,654	13.1	57,629	374,633	13.4	58,949	390,717
2024	454,213	9.9	44,967	300,268	13.1	59,502	377,923	13.4	60,865	394,148
2025	468,975	9.9	46,429	302,455	13.1	61,436	380,676	13.4	62,843	397,019
2026	484,217	9.9	47,937	304,164	13.1	63,432	382,827	13.4	64,885	399,263
2027	499,954	9.9	49,495	305,340	13.1	65,494	384,307	13.4	66,994	400,807
2028	516,203	9.9	51,104	305,923	13.1	67,623	385,041	13.4	69,171	401,572

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	15.7%	\$60,773	\$ 423,758	16.2%	\$62,708	\$ 430,408	18.0%	\$69,676	\$ 474,796
2020	399,669	15.7	62,748	429,563	16.2	64,746	436,305	18.0	71,940	481,301
2021	412,658	15.7	64,787	434,980	16.2	66,851	441,807	18.0	74,278	487,370
2022	426,069	15.7	66,893	439,953	16.2	69,023	446,858	18.0	76,692	492,942
2023	439,916	15.7	69,067	444,423	16.2	71,266	451,398	18.0	79,185	497,951
2024	454,213	15.7	71,311	448,326	16.2	73,583	455,362	18.0	81,758	502,324
2025	468,975	15.7	73,629	451,592	16.2	75,974	458,679	18.0	84,416	505,983
2026	484,217	15.7	76,022	454,144	16.2	78,443	461,271	18.0	87,159	508,843
2027	499,954	15.7	78,493	455,900	16.2	80,993	463,055	18.0	89,992	510,811
2028	516,203	15.7	81,044	456,771	16.2	83,625	463,939	18.0	92,917	511,786

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated		stimated Employer Unfunded Contribution Actuarial			d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	19.4%	\$75,095	\$ 503,543	20.3%	\$78,579	\$ 525,710	22.6%	\$87,482	\$ 576,652
2020	399,669	19.4	77,536	510,441	20.3	81,133	532,912	22.6	90,325	584,552
2021	412,658	19.4	80,056	516,877	20.3	83,770	539,632	22.6	93,261	591,923
2022	426,069	19.4	82,657	522,786	20.3	86,492	545,802	22.6	96,292	598,690
2023	439,916	19.4	85,344	528,098	20.3	89,303	551,348	22.6	99,421	604,773
2024	454,213	19.4	88,117	532,736	20.3	92,205	556,190	22.6	102,652	610,084
2025	468,975	19.4	90,981	536,617	20.3	95,202	560,241	22.6	105,988	614,528
2026	484,217	19.4	93,938	539,650	20.3	98,296	563,407	22.6	109,433	618,001
2027	499,954	19.4	96,991	541,737	20.3	101,491	565,586	22.6	112,990	620,391
2028	516,203	19.4	100,143	542,771	20.3	104,789	566,666	22.6	116,662	621,576

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



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

(0% member contributions are additional)

Regular Retirement Eligibility

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	bution	Actuarial	Contr	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	13.3%	\$51,483	\$ 282,638	16.5%	\$63,870	\$ 353,353	16.8%	\$65,031	\$ 367,950
2020	399,669	13.3	53,156	286,510	16.5	65,945	358,194	16.8	67,144	372,991
2021	412,658	13.3	54,884	290,123	16.5	68,089	362,711	16.8	69,327	377,694
2022	426,069	13.3	56,667	293,440	16.5	70,301	366,858	16.8	71,580	382,012
2023	439,916	13.3	58,509	296,422	16.5	72,586	370,586	16.8	73,906	385,894
2024	454,213	13.3	60,410	299,025	16.5	74,945	373,841	16.8	76,308	389,283
2025	468,975	13.3	62,374	301,203	16.5	77,381	376,564	16.8	78,788	392,119
2026	484,217	13.3	64,401	302,905	16.5	79,896	378,692	16.8	81,348	394,335
2027	499,954	13.3	66,494	304,076	16.5	82,492	380,156	16.8	83,992	395,860
2028	516,203	13.3	68,655	304,657	16.5	85,173	380,882	16.8	86,722	396,616

		LT-5	(65) Benefit P	rogram	L-	-7 Benefit Pro	gram	LT-8	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	19.0%	\$73,547	\$ 417,341	19.5%	\$75,482	\$ 424,071	21.2%	\$82,063	\$ 466,707
2020	399,669	19.0	75,937	423,059	19.5	77,935	429,881	21.2	84,730	473,101
2021	412,658	19.0	78,405	428,394	19.5	80,468	435,302	21.2	87,483	479,067
2022	426,069	19.0	80,953	433,292	19.5	83,083	440,279	21.2	90,327	484,544
2023	439,916	19.0	83,584	437,695	19.5	85,784	444,753	21.2	93,262	489,467
2024	454,213	19.0	86,300	441,539	19.5	88,572	448,659	21.2	96,293	493,766
2025	468,975	19.0	89,105	444,755	19.5	91,450	451,927	21.2	99,423	497,363
2026	484,217	19.0	92,001	447,269	19.5	94,422	454,481	21.2	102,654	500,174
2027	499,954	19.0	94,991	448,999	19.5	97,491	456,238	21.2	105,990	502,108
2028	516.203	19.0	98.079	449.856	19.5	100.660	457.109	21.2	109.435	503.067

			L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2019	\$ 387,089	22.7%	\$87,869	\$ 494,710	23.5%	\$90,966	\$ 516,068	25.7%	\$99,482	\$ 565,384	
2020	399,669	22.7	90,725	501,487	23.5	93,922	523,138	25.7	102,715	573,130	
2021	412,658	22.7	93,673	507,810	23.5	96,975	529,734	25.7	106,053	580,357	
2022	426,069	22.7	96,718	513,616	23.5	100,126	535,790	25.7	109,500	586,992	
2023	439,916	22.7	99,861	518,835	23.5	103,380	541,234	25.7	113,058	592,956	
2024	454,213	22.7	103,106	523,392	23.5	106,740	545,987	25.7	116,733	598,164	
2025	468,975	22.7	106,457	527,205	23.5	110,209	549,964	25.7	120,527	602,521	
2026	484,217	22.7	109,917	530,185	23.5	113,791	553,072	25.7	124,444	605,926	
2027	499,954	22.7	113,490	532,235	23.5	117,489	555,211	25.7	128,488	608,269	
2028	516,203	22.7	117,178	533,251	23.5	121,308	556,271	25.7	132,664	609,430	

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



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

(0% member contributions are additional)

Regular Retirement Eligibility

	L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4(65) Benefit Program			
	Estimated				Unfunded Estimated Employer Actuarial Contribution		Unfunded Actuarial		l Employer bution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	13.8%	\$53,418	\$ 292,562	17.0%	\$65,805	\$ 365,709	17.3%	\$66,966	\$ 380,943
2020	399,669	13.8	55,154	296,570	17.0	67,944	370,719	17.3	69,143	386,162
2021	412,658	13.8	56,947	300,310	17.0	70,152	375,394	17.3	71,390	391,031
2022	426,069	13.8	58,798	303,743	17.0	72,432	379,686	17.3	73,710	395,502
2023	439,916	13.8	60,708	306,829	17.0	74,786	383,544	17.3	76,105	399,521
2024	454,213	13.8	62,681	309,524	17.0	77,216	386,912	17.3	78,579	403,030
2025	468,975	13.8	64,719	311,779	17.0	79,726	389,730	17.3	81,133	405,966
2026	484,217	13.8	66,822	313,541	17.0	82,317	391,933	17.3	83,770	408,260
2027	499,954	13.8	68,994	314,753	17.0	84,992	393,449	17.3	86,492	409,839
2028	516,203	13.8	71,236	315,354	17.0	87,755	394,200	17.3	89,303	410,622

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated	d Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	d Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	19.6%	\$75,869	\$ 431,992	20.1%	\$77,805	\$ 438,893	21.9%	\$84,772	\$ 483,074
2020	399,669	19.6	78,335	437,910	20.1	80,333	444,906	21.9	87,528	489,692
2021	412,658	19.6	80,881	443,432	20.1	82,944	450,516	21.9	90,372	495,867
2022	426,069	19.6	83,510	448,502	20.1	85,640	455,667	21.9	93,309	501,536
2023	439,916	19.6	86,224	453,059	20.1	88,423	460,297	21.9	96,342	506,632
2024	454,213	19.6	89,026	457,038	20.1	91,297	464,339	21.9	99,473	511,081
2025	468,975	19.6	91,919	460,367	20.1	94,264	467,721	21.9	102,706	514,804
2026	484,217	19.6	94,907	462,969	20.1	97,328	470,364	21.9	106,044	517,714
2027	499,954	19.6	97,991	464,759	20.1	100,491	472,183	21.9	109,490	519,716
2028	516,203	19.6	101,176	465,646	20.1	103,757	473,085	21.9	113,048	520,708

		L-:	12 Benefit Pro	gram	LT-14(65) Benefit Program			L-6 Benefit Program		
			d Employer	Unfunded		d Employer	Unfunded		d Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	23.3%	\$90,192	\$ 512,033	24.2%	\$93,676	\$ 534,128	26.5%	\$102,579	\$ 585,186
2020	399,669	23.3	93,123	519,048	24.2	96,720	541,445	26.5	105,912	593,203
2021	412,658	23.3	96,149	525,593	24.2	99,863	548,272	26.5	109,354	600,683
2022	426,069	23.3	99,274	531,602	24.2	103,109	554,540	26.5	112,908	607,551
2023	439,916	23.3	102,500	537,004	24.2	106,460	560,175	26.5	116,578	613,724
2024	454,213	23.3	105,832	541,720	24.2	109,920	565,095	26.5	120,366	619,114
2025	468,975	23.3	109,271	545,666	24.2	113,492	569,211	26.5	124,278	623,624
2026	484,217	23.3	112,823	548,750	24.2	117,181	572,428	26.5	128,318	627,149
2027	499,954	23.3	116,489	550,872	24.2	120,989	574,642	26.5	132,488	629,574
2028	516,203	23.3	120,275	551,924	24.2	124,921	575,739	26.5	136,794	630,776

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



Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	bution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	9.8%	\$37,935	\$ 281,131	12.8%	\$49,547	\$ 353,890	13.5%	\$52,257	\$ 377,396
2020	399,669	9.8	39,168	284,982	12.8	51,158	358,738	13.5	53,955	382,566
2021	412,658	9.8	40,440	288,575	12.8	52,820	363,261	13.5	55,709	387,390
2022	426,069	9.8	41,755	291,874	12.8	54,537	367,414	13.5	57,519	391,819
2023	439,916	9.8	43,112	294,840	12.8	56,309	371,147	13.5	59,389	395,800
2024	454,213	9.8	44,513	297,429	12.8	58,139	374,407	13.5	61,319	399,276
2025	468,975	9.8	45,960	299,596	12.8	60,029	377,134	13.5	63,312	402,184
2026	484,217	9.8	47,453	301,289	12.8	61,980	379,265	13.5	65,369	404,457
2027	499,954	9.8	48,995	302,454	12.8	63,994	380,732	13.5	67,494	406,021
2028	516,203	9.8	50,588	303,032	12.8	66,074	381,459	13.5	69,687	406,796

		LT-5	(65) Benefit P	rogram	ogram L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated	d Employer	Unfunded	Estimate	d Employer	Unfunded	Estimated	d Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	15.7%	\$60,773	\$ 426,049	15.9%	\$61,547	\$ 426,412	17.9%	\$69,289	\$ 474,524
2020	399,669	15.7	62,748	431,886	15.9	63,547	432,254	17.9	71,541	481,025
2021	412,658	15.7	64,787	437,332	15.9	65,613	437,704	17.9	73,866	487,090
2022	426,069	15.7	66,893	442,332	15.9	67,745	442,708	17.9	76,266	492,659
2023	439,916	15.7	69,067	446,826	15.9	69,947	447,206	17.9	78,745	497,665
2024	454,213	15.7	71,311	450,750	15.9	72,220	451,134	17.9	81,304	502,036
2025	468,975	15.7	73,629	454,033	15.9	74,567	454,420	17.9	83,947	505,693
2026	484,217	15.7	76,022	456,599	15.9	76,991	456,988	17.9	86,675	508,551
2027	499,954	15.7	78,493	458,365	15.9	79,493	458,755	17.9	89,492	510,518
2028	516.203	15.7	81.044	459.240	15.9	82.076	459,631	17.9	92,400	511.493

		L-:	12 Benefit Pro	ogram	LT-14	1(65) Benefit I	Program	L-	6 Benefit Pro	gram
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	19.1%	\$73,934	\$ 498,892	20.1%	\$77,805	\$ 522,918	22.2%	\$85,934	\$ 571,280
2020	399,669	19.1	76,337	505,727	20.1	80,333	530,082	22.2	88,727	579,106
2021	412,658	19.1	78,818	512,104	20.1	82,944	536,766	22.2	91,610	586,408
2022	426,069	19.1	81,379	517,959	20.1	85,640	542,903	22.2	94,587	593,112
2023	439,916	19.1	84,024	523,222	20.1	88,423	548,419	22.2	97,661	599,139
2024	454,213	19.1	86,755	527,817	20.1	91,297	553,235	22.2	100,835	604,401
2025	468,975	19.1	89,574	531,662	20.1	94,264	557,265	22.2	104,112	608,804
2026	484,217	19.1	92,485	534,667	20.1	97,328	560,414	22.2	107,496	612,245
2027	499,954	19.1	95,491	536,735	20.1	100,491	562,581	22.2	110,990	614,613
2028	516,203	19.1	98,595	537,760	20.1	103,757	563,655	22.2	114,597	615,787

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



Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

	L-	L-1 Benefit Program			3 Benefit Pro	gram	LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	10.2%	\$39,483	\$ 291,430	13.4%	\$51,870	\$ 366,718	14.1%	\$54,580	\$ 391,167
2020	399,669	10.2	40,766	295,423	13.4	53,556	371,742	14.1	56,353	396,526
2021	412,658	10.2	42,091	299,148	13.4	55,296	376,429	14.1	58,185	401,526
2022	426,069	10.2	43,459	302,568	13.4	57,093	380,733	14.1	60,076	406,117
2023	439,916	10.2	44,871	305,642	13.4	58,949	384,602	14.1	62,028	410,244
2024	454,213	10.2	46,330	308,326	13.4	60,865	387,980	14.1	64,044	413,847
2025	468,975	10.2	47,835	310,572	13.4	62,843	390,806	14.1	66,125	416,862
2026	484,217	10.2	49,390	312,327	13.4	64,885	393,015	14.1	68,275	419,218
2027	499,954	10.2	50,995	313,535	13.4	66,994	394,535	14.1	70,494	420,839
2028	516,203	10.2	52,653	314,134	13.4	69,171	395,288	14.1	72,785	421,643

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	16.3%	\$63,096	\$ 441,495	16.6%	\$64,257	\$ 441,727	18.5%	\$71,611	\$ 491,612
2020	399,669	16.3	65,146	447,543	16.6	66,345	447,779	18.5	73,939	498,347
2021	412,658	16.3	67,263	453,186	16.6	68,501	453,425	18.5	76,342	504,631
2022	426,069	16.3	69,449	458,367	16.6	70,727	458,609	18.5	78,823	510,400
2023	439,916	16.3	71,706	463,024	16.6	73,026	463,269	18.5	81,384	515,586
2024	454,213	16.3	74,037	467,090	16.6	75,399	467,338	18.5	84,029	520,114
2025	468,975	16.3	76,443	470,492	16.6	77,850	470,742	18.5	86,760	523,903
2026	484,217	16.3	78,927	473,151	16.6	80,380	473,402	18.5	89,580	526,864
2027	499,954	16.3	81,493	474,981	16.6	82,992	475,233	18.5	92,491	528,901
2028	516.203	16.3	84.141	475.888	16.6	85.690	476.140	18.5	95.498	529.911

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	19.9%	\$77,031	\$ 516,765	20.9%	\$80,902	\$ 541,684	23.1%	\$89,418	\$ 591,774
2020	399,669	19.9	79,534	523,845	20.9	83,531	549,105	23.1	92,324	599,881
2021	412,658	19.9	82,119	530,450	20.9	86,246	556,029	23.1	95,324	607,445
2022	426,069	19.9	84,788	536,515	20.9	89,048	562,386	23.1	98,422	614,390
2023	439,916	19.9	87,543	541,966	20.9	91,942	568,100	23.1	101,621	620,633
2024	454,213	19.9	90,388	546,726	20.9	94,931	573,089	23.1	104,923	626,084
2025	468,975	19.9	93,326	550,709	20.9	98,016	577,264	23.1	108,333	630,645
2026	484,217	19.9	96,359	553,821	20.9	101,201	580,527	23.1	111,854	634,209
2027	499,954	19.9	99,491	555,963	20.9	104,490	582,772	23.1	115,489	636,662
2028	516,203	19.9	102,724	557,025	20.9	107,886	583,885	23.1	119,243	637,878

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



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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	13.7%	\$53,031	\$ 289,910	16.7%	\$64,644	\$ 362,451	17.4%	\$67,353	\$ 385,790
2020	399,669	13.7	54,755	293,882	16.7	66,745	367,417	17.4	69,542	391,075
2021	412,658	13.7	56,534	297,588	16.7	68,914	372,050	17.4	71,802	396,006
2022	426,069	13.7	58,371	300,990	16.7	71,154	376,304	17.4	74,136	400,534
2023	439,916	13.7	60,268	304,048	16.7	73,466	380,128	17.4	76,545	404,604
2024	454,213	13.7	62,227	306,718	16.7	75,854	383,466	17.4	79,033	408,157
2025	468,975	13.7	64,250	308,952	16.7	78,319	386,259	17.4	81,602	411,130
2026	484,217	13.7	66,338	310,698	16.7	80,864	388,442	17.4	84,254	413,454
2027	499,954	13.7	68,494	311,899	16.7	83,492	389,944	17.4	86,992	415,053
2028	516,203	13.7	70,720	312,495	16.7	86,206	390,689	17.4	89,819	415,846

		LT-5(65) Benefit Program		L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		ibution Act Annual Acc Dollars Lia	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll		Accrued Liability
2019	\$ 387,089	19.6%	\$75,869	\$ 434,354	19.8%	\$76,644	\$ 431,180	21.8%	\$84,385	\$ 482,866
2020	399,669	19.6	78,335	440,305	19.8	79,134	437,087	21.8	87,128	489,481
2021	412,658	19.6	80,881	445,857	19.8	81,706	442,598	21.8	89,959	495,653
2022	426,069	19.6	83,510	450,954	19.8	84,362	447,658	21.8	92,883	501,320
2023	439,916	19.6	86,224	455,536	19.8	87,103	452,207	21.8	95,902	506,414
2024	454,213	19.6	89,026	459,537	19.8	89,934	456,178	21.8	99,018	510,862
2025	468,975	19.6	91,919	462,884	19.8	92,857	459,501	21.8	102,237	514,583
2026	484,217	19.6	94,907	465,500	19.8	95,875	462,098	21.8	105,559	517,491
2027	499,954	19.6	97,991	467,300	19.8	98,991	463,885	21.8	108,990	519,492
2028	516.203	19.6	101.176	468.192	19.8	102.208	464.771	21.8	112.532	520.484

	L-:	L-12 Benefit Program			4(65) Benefit I	Program	L-6 Benefit Program			
	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	23.0%	\$89,030	\$ 507,421	24.0%	\$92,901	\$ 531,400	26.1%	\$101,030	\$ 579,906
2020	399,669	23.0	91,924	514,373	24.0	95,921	538,680	26.1	104,314	587,851
2021	412,658	23.0	94,911	520,859	24.0	99,038	545,472	26.1	107,704	595,263
2022	426,069	23.0	97,996	526,814	24.0	102,257	551,708	26.1	111,204	602,069
2023	439,916	23.0	101,181	532,167	24.0	105,580	557,314	26.1	114,818	608,187
2024	454,213	23.0	104,469	536,841	24.0	109,011	562,209	26.1	118,550	613,528
2025	468,975	23.0	107,864	540,752	24.0	112,554	566,304	26.1	122,402	617,997
2026	484,217	23.0	111,370	543,808	24.0	116,212	569,505	26.1	126,381	621,490
2027	499,954	23.0	114,989	545,911	24.0	119,989	571,707	26.1	130,488	623,893
2028	516,203	23.0	118,727	546,953	24.0	123,889	572,799	26.1	134,729	625,084

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



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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-	3 Benefit Pro	gram	LT-4(65) Benefit Program		
	Estimated Employer Unfunded		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded	
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 387,089	14.1%	\$54,580	\$ 300,177	17.3%	\$66,966	\$ 375,256	18.0%	\$69,676	\$ 399,521
2020	399,669	14.1	56,353	304,289	17.3	69,143	380,397	18.0	71,940	404,994
2021	412,658	14.1	58,185	308,126	17.3	71,390	385,194	18.0	74,278	410,101
2022	426,069	14.1	60,076	311,649	17.3	73,710	389,598	18.0	76,692	414,790
2023	439,916	14.1	62,028	314,816	17.3	76,105	393,557	18.0	79,185	419,005
2024	454,213	14.1	64,044	317,581	17.3	78,579	397,013	18.0	81,758	422,685
2025	468,975	14.1	66,125	319,894	17.3	81,133	399,905	18.0	84,416	425,764
2026	484,217	14.1	68,275	321,702	17.3	83,770	402,165	18.0	87,159	428,170
2027	499,954	14.1	70,494	322,946	17.3	86,492	403,720	18.0	89,992	429,826
2028	516,203	14.1	72,785	323,563	17.3	89,303	404,491	18.0	92,917	430,647

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2019	\$ 387,089	20.2%	\$78,192	\$ 449,744	20.5%	\$79,353	\$ 450,285	22.4%	\$86,708	\$ 499,935
2020	399,669	20.2	80,733	455,905	20.5	81,932	456,454	22.4	89,526	506,784
2021	412,658	20.2	83,357	461,654	20.5	84,595	462,210	22.4	92,435	513,174
2022	426,069	20.2	86,066	466,932	20.5	87,344	467,494	22.4	95,439	519,041
2023	439,916	20.2	88,863	471,676	20.5	90,183	472,244	22.4	98,541	524,315
2024	454,213	20.2	91,751	475,818	20.5	93,114	476,391	22.4	101,744	528,920
2025	468,975	20.2	94,733	479,284	20.5	96,140	479,861	22.4	105,050	532,773
2026	484,217	20.2	97,812	481,993	20.5	99,264	482,573	22.4	108,465	535,784
2027	499,954	20.2	100,991	483,857	20.5	102,491	484,439	22.4	111,990	537,856
2028	516,203	20.2	104,273	484,781	20.5	105,822	485,364	22.4	115,629	538,883

		L-12 Benefit Program			LT-1	4(65) Benefit I	Program	L-6 Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2019	\$ 387,089	23.8%	\$92,127	\$ 525,345	24.8%	\$95,998	\$ 550,199	27.0%	\$104,514	\$ 600,404
2020	399,669	23.8	95,121	532,542	24.8	99,118	557,737	27.0	107,911	608,629
2021	412,658	23.8	98,213	539,257	24.8	102,339	564,770	27.0	111,418	616,303
2022	426,069	23.8	101,404	545,422	24.8	105,665	571,227	27.0	115,039	623,349
2023	439,916	23.8	104,700	550,964	24.8	109,099	577,031	27.0	118,777	629,683
2024	454,213	23.8	108,103	555,803	24.8	112,645	582,099	27.0	122,638	635,213
2025	468,975	23.8	111,616	559,852	24.8	116,306	586,339	27.0	126,623	639,840
2026	484,217	23.8	115,244	563,016	24.8	120,086	589,653	27.0	130,739	643,456
2027	499,954	23.8	118,989	565,193	24.8	123,989	591,933	27.0	134,988	645,944
2028	516,203	23.8	122,856	566,272	24.8	128,018	593,063	27.0	139,375	647,177

- 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.
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- 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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