

as of July 31, 2018



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January 31, 2019

Mercer County Soil & Water Conservation District Princeton, Missouri

#### Ladies and Gentlemen:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

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)

		Pe	Percents of Active Member Payroll			
					Total	
Benefit	Employee	Prior Service	Current	Disability	Employer Contribution	
Program	Groups	Cost *	Cost	Cost	Rate	
L-1	General	0.90%	4.10%	0.20%	5.20%	
L-3	General	1.20	5.80	0.30	7.30	
LT-4(65)	General	1.00	4.90	0.20	6.10	
LT-5(65)	General	1.30	6.40	0.30	8.00	
L-7	General	1.60	7.40	0.30	9.30	
LT-8(65)	General	1.60	7.80	0.30	9.70	
L-12	General	1.90	9.00	0.40	11.30	
LT-14(65)	General	1.90	9.30	0.40	11.60	
L-6	General	2.20	10.70	0.50	13.40	

<sup>\*</sup> Prior service credit was given for vesting purposes only.



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

		Pe	Percents of Active Member Payroll		
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.00%	4.30%	0.20%	5.50%
L-3	General	1.30	6.00	0.30	7.60
LT-4(65)	General	1.10	5.20	0.20	6.50
LT-5(65)	General	1.40	6.60	0.30	8.30
L-7	General	1.60	7.70	0.30	9.60
LT-8(65)	General	1.70	8.20	0.30	10.20
L-12	General	1.90	9.50	0.40	11.80
LT-14(65)	General	1.90	9.70	0.40	12.00
L-6	General	2.20	11.30	0.50	14.00

<sup>\*</sup> Prior service credit was given for vesting purposes only.



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.10%	7.70%	0.20%	9.00%
L-3	General	1.40	9.50	0.30	11.20
LT-4(65)	General	1.20	8.60	0.20	10.00
LT-5(65)	General	1.50	10.10	0.30	11.90
L-7	General	1.70	11.20	0.30	13.20
LT-8(65)	General	1.70	11.60	0.30	13.60
L-12	General	1.90	12.90	0.40	15.20
LT-14(65)	General	2.00	13.10	0.40	15.50
L-6	General	2.20	14.60	0.50	17.30

<sup>\*</sup> Prior service credit was given for vesting purposes only.



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
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L-1	General	1.10%	8.00%	0.20%	9.30%
L-3	General	1.40	9.80	0.30	11.50
LT-4(65)	General	1.20	8.80	0.20	10.20
LT-5(65)	General	1.50	10.40	0.30	12.20
L-7	General	1.70	11.50	0.30	13.50
LT-8(65)	General	1.80	12.00	0.30	14.10
L-12	General	2.00	13.30	0.40	15.70
LT-14(65)	General	2.00	13.50	0.40	15.90
L-6	General	2.30	15.10	0.50	17.90

<sup>\*</sup> Prior service credit was given for vesting purposes only.



### 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	1.00%	4.40%	0.20%	5.60%
L-3	General	1.30	6.20	0.30	7.80
LT-4(65)	General	1.20	5.70	0.20	7.10
LT-5(65)	General	1.50	7.10	0.30	8.90
L-7	General	1.60	7.90	0.30	9.80
LT-8(65)	General	1.70	8.60	0.30	10.60
L-12	General	1.90	9.70	0.40	12.00
LT-14(65)	General	2.00	10.00	0.40	12.40
L-6	General	2.20	11.50	0.50	14.20

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



### Employer Contribution Rates (Contributory Plan - 3 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	1.00%	4.70%	0.20%	5.90%
L-3	General	1.40	6.50	0.30	8.20
LT-4(65)	General	1.30	6.00	0.20	7.50
LT-5(65)	General	1.50	7.50	0.30	9.30
L-7	General	1.70	8.30	0.30	10.30
LT-8(65)	General	1.80	8.90	0.30	11.00
L-12	General	2.00	10.10	0.40	12.50
LT-14(65)	General	2.10	10.50	0.40	13.00
L-6	General	2.30	12.00	0.50	14.80

<sup>#</sup> 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.



<sup>\*</sup> Prior service credit was given for vesting purposes only.

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.20%	8.10%	0.20%	9.50%
L-3	General	1.50	9.90	0.30	11.70
LT-4(65)	General	1.40	9.30	0.20	10.90
LT-5(65)	General	1.60	10.80	0.30	12.70
L-7	General	1.70	11.70	0.30	13.70
LT-8(65)	General	1.90	12.30	0.30	14.50
L-12	General	2.00	13.50	0.40	15.90
LT-14(65)	General	2.10	13.80	0.40	16.30
L-6	General	2.30	15.30	0.50	18.10

<sup>#</sup> 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.



<sup>\*</sup> Prior service credit was given for vesting purposes only.

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	1.20%	8.40%	0.20%	9.80%
L-3	General	1.50	10.20	0.30	12.00
LT-4(65)	General	1.40	9.60	0.20	11.20
LT-5(65)	General	1.70	11.20	0.30	13.20
L-7	General	1.80	12.10	0.30	14.20
LT-8(65)	General	1.90	12.70	0.30	14.90
L-12	General	2.10	13.90	0.40	16.40
LT-14(65)	General	2.20	14.30	0.40	16.90
L-6	General	2.40	15.80	0.50	18.70

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



## **Employer Contribution Dollars Regular Retirement Eligibility**

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

#### **Contributory Plan**

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 3,757			
L-3	5,275			
LT-4(65)	4,408			
LT-5(65)	5,781			
L-7	6,720			
LT-8(65)	7,009			
L-12	8,165			
LT-14(65)	8,382			
L-6	9,683			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 3,974			
L-3	5,492			
LT-4(65)	4,697			
LT-5(65)	5,997			
L-7	6,937			
LT-8(65)	7,370			
L-12	8,527			
LT-14(65)	8,671			
L-6	10,116			

#### **Non-Contributory Plan**

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 6,503			
L-3	8,093			
LT-4(65)	7,226			
LT-5(65)	8,599			
L-7	9,538			
LT-8(65)	9,827			
L-12	10,983			
LT-14(65)	11,200			
L-6	12,501			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 6,720			
L-3	8,310			
LT-4(65)	7,370			
LT-5(65)	8,816			
L-7	9,755			
LT-8(65)	10,189			
L-12	11,345			
LT-14(65)	11,489			
L-6	12,934			

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



### **Employer Contribution Dollars** Rule of 80 Retirement Eligibility

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

#### **Contributory Plan**

5 Year FAS					
Benefit					
Program	General				
L-1	\$ 4,047				
L-3	5,636				
LT-4(65)	5,130				
LT-5(65)	6,431				
L-7	7,081				
LT-8(65)	7,659				
L-12	8,671				
LT-14(65)	8,960				
L-6	10,261				

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 4,263				
L-3	5,925				
LT-4(65)	5,419				
LT-5(65)	6,720				
L-7	7,443				
LT-8(65)	7,948				
L-12	9,032				
LT-14(65)	9,394				
L-6	10,694				

#### **Non-Contributory Plan**

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 6,865			
L-3	8,454			
LT-4(65)	7,876			
LT-5(65)	9,177			
L-7	9,899			
LT-8(65)	10,478			
L-12	11,489			
LT-14(65)	11,778			
L-6	13,079			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 7,081			
L-3	8,671			
LT-4(65)	8,093			
LT-5(65)	9,538			
L-7	10,261			
LT-8(65)	10,767			
L-12	11,850			
LT-14(65)	12,212			
L-6	13,512			

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



#### **Employees and Payroll Included in the Valuation**

	General
Number of Employees	2
Annual Payroll	\$ 72,259

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:

#### **Mercer County Soil & Water Conservation District**

		Contril	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 11,919	\$ 12,441	\$ 14,117	\$ 14,551
L-3	General	15,896	16,534	17,638	18,222
LT-4(65)	General	13,004	13,550	15,198	15,661
LT-5(65)	General	16,704	17,367	18,458	19,055
L-7	General	19,767	20,493	21,173	21,827
LT-8(65)	General	20,317	21,072	21,702	22,379
L-12	General	23,591	24,454	24,678	25,489
LT-14(65)	General	23,853	24,729	24,958	25,759
L-6	General	27,412	28,396	28,233	29,124



#### **Unfunded Actuarial Accrued Liability (UAAL)**

		Contri	butory	Non-Con	tributory
Benefit	Employee	UAAL	UAAL	UAAL	UAAL
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)
L-1	General	\$ 12,634	\$ 13,191	\$ 14,834	\$ 15,326
L-3	General	16,731	17,382	18,555	19,177
LT-4(65)	General	15,305	15,951	17,497	18,060
LT-5(65)	General	18,730	19,451	20,542	21,234
L-7	General	20,708	21,491	22,252	22,990
LT-8(65)	General	22,032	22,867	23,571	24,365
L-12	General	24,648	25,590	25,961	26,831
LT-14(65)	General	25,315	26,279	26,620	27,513
L-6	General	28,605	29,659	29,682	30,675





**SUMMARY OF FINANCIAL ASSUMPTIONS** 

#### **Summary of Assumptions Used in Actuarial Valuations**

#### **Assumptions Adopted by Board of Trustees After Consulting With Actuary**

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



#### Schedule 1.

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

#### Percent of Active Members Separating Within Next Year

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

### Percent Increase in Individual's Pay

Sample	During Next Year					
Ages	<b>General &amp; Police</b>	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, 2018 (Section references are to RSMo)

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

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

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

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

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

LT-4(65) Benefit Program:

LT-5(65) Benefit Program:

LT-8(65) Benefit Program:

1.00% for life, plus 1.00% to age 65

1.25% for life, plus 0.75% to age 65

LT-14(65) Benefit Program:

1.50% for life, plus 0.50% to age 65

LT-14(65) Benefit Program:

1.75% for life, plus 0.25% to age 65

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

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

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

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



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

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

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

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

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

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

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

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

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



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

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

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

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

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

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





**BENEFIT ILLUSTRATIONS** 

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

Final		Estimated	Estimated Estimated	
Average	LAGERS	Social	Monthly	/ Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 889	\$1,414	94%
2,000	700	1,032	1,732	87%
2,500	875	1,175	2,050	82%
3,000	1,050	1,318	2,368	79%
3,500	1,225	1,462	2,687	77%
4,000	1,400	1,604	3,004	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 889	\$1,264	84%
2,000	500	1,032	1,532	77%
2,500	625	1,175	1,800	72%
3,000	750	1,318	2,068	69%
3,500	875	1,462	2,337	67%
4,000	1,000	1,604	2,604	65%
15 Years of Service:				
\$1,500	\$225	\$ 889	\$1,114	74%
2,000	300	1,032	1,332	67%
2,500	375	1,175	1,550	62%
3,000	450	1,318	1,768	59%
3,500	525	1,462	1,987	57%
4,000	600	1,604	2,204	55%
4,000	000	1,004	2,204	JJ/0

<sup>&</sup>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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

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

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

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

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

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

<sup>&</sup>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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

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

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

<sup>&</sup>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¢.



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

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

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

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

#### **Missouri LAGERS**

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

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

1.00% of FAS <sup>1</sup> at age 65)

Final	LAG	ERS	Estimated	Estim	nated	Perc	ent
Average	BENI	EFIT <sup>3</sup>	Social	Month	y Total	of F	AS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Service	2:						
\$1,500	\$1,050	\$ 525	\$ 889	\$1,050	\$1,414	70%	94%
2,000	1,400	700	1,032	1,400	1,732	70%	87%
2,500	1,750	875	1,175	1,750	2,050	70%	82%
3,000	2,100	1,050	1,318	2,100	2,368	70%	79%
3,500	2,450	1,225	1,462	2,450	2,687	70%	77%
4,000	2,800	1,400	1,604	2,800	3,004	70%	75%
25 Years of Service	e:						
\$1,500	\$ 750	\$ 375	\$ 889	\$ 750	\$1,264	50%	84%
2,000	1,000	500	1,032	1,000	1,532	50%	77%
2,500	1,250	625	1,175	1,250	1,800	50%	72%
3,000	1,500	750	1,318	1,500	2,068	50%	69%
3,500	1,750	875	1,462	1,750	2,337	50%	67%
4,000	2,000	1,000	1,604	2,000	2,604	50%	65%
15 Years of Service	e:						
\$1,500	\$ 450	\$225	\$ 889	\$ 450	\$1,114	30%	74%
2,000	600	300	1,032	600	1,332	30%	67%
2,500	750	375	1,175	750	1,550	30%	62%
3,000	900	450	1,318	900	1,768	30%	59%
3,500	1,050	525	1,462	1,050	1,987	30%	57%
4,000	1,200	600	1,604	1,200	2,204	30%	55%
4							

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

#### **Missouri LAGERS**

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

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

1.25% of FAS <sup>1</sup> at age 65)

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

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

# **Missouri LAGERS**

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

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

1.50% of FAS <sup>1</sup> at age 65)

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

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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

## **Missouri LAGERS**

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

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

1.75% of FAS <sup>1</sup> at age 65)

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

<sup>&</sup>lt;sup>1</sup> "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.

<sup>&</sup>lt;sup>3</sup> Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



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



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

# July 31, 2018

# By Attained Age and Years of Service

		Years of Service to Valuation Date Totals												
Attained									Valuation					
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll					
Under 20														
20-24														
25-29														
30-34														
35-39														
40-44			1					1	\$ 38,563					
45-49														
50-54														
55-59		1						1	\$ 33,696					
60-64														
65-69														
70 & Over														
Totals		1 1 2 \$72,259												

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

Age: 50.4 years.

Benefit Service: 0.0 years. Annual Pay: \$36,130.





**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.





January 31, 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 July 31, 2018 Initial Actuarial Valuation of LAGERS benefits for the employees of

Mercer County Soil & Water Conservation District

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



January 31, 2019

Mercer County Soil & Water Conservation District Princeton, 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 July 31, 2018 Initial Valuation for the Mercer County Soil & Water Conservation District dated January 31, 2019.

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

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

Respectfully submitted,

Mita 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	Estimated Employer Un		Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contribution		Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	5.2%	\$3,757	\$ 11,919	7.3%	\$5,275	\$ 15,896	6.1%	\$4,408	\$ 13,004
2019	74,607	5.2	3,880	12,082	7.3	5,446	16,114	6.1	4,551	13,182
2020	77,032	5.2	4,006	12,234	7.3	5,623	16,317	6.1	4,699	13,348
2021	79,536	5.2	4,136	12,374	7.3	5,806	16,504	6.1	4,852	13,501
2022	82,121	5.2	4,270	12,500	7.3	5,995	16,672	6.1	5,009	13,638
2023	84,790	5.2	4,409	12,610	7.3	6,190	16,818	6.1	5,172	13,758
2024	87,546	5.2	4,552	12,702	7.3	6,391	16,941	6.1	5,340	13,858
2025	90,391	5.2	4,700	12,774	7.3	6,599	17,037	6.1	5,514	13,936
2026	93,329	5.2	4,853	12,823	7.3	6,813	17,103	6.1	5,693	13,990
2027	96,362	5.2	5,011	12,847	7.3	7,034	17,136	6.1	5,878	14,017

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 72,259	8.0%	\$5,781	\$ 16,704	9.3%	\$6,720	\$ 19,767	9.7%	\$7,009	\$ 20,317	
2019	74,607	8.0	5,969	16,933	9.3	6,938	20,038	9.7	7,237	20,595	
2020	77,032	8.0	6,163	17,147	9.3	7,164	20,291	9.7	7,472	20,855	
2021	79,536	8.0	6,363	17,343	9.3	7,397	20,523	9.7	7,715	21,093	
2022	82,121	8.0	6,570	17,519	9.3	7,637	20,732	9.7	7,966	21,307	
2023	84,790	8.0	6,783	17,673	9.3	7,885	20,914	9.7	8,225	21,494	
2024	87,546	8.0	7,004	17,802	9.3	8,142	21,066	9.7	8,492	21,651	
2025	90,391	8.0	7,231	17,903	9.3	8,406	21,185	9.7	8,768	21,773	
2026	93,329	8.0	7,466	17,972	9.3	8,680	21,267	9.7	9,053	21,857	
2027	96,362	8.0	7,709	18,006	9.3	8,962	21,308	9.7	9,347	21,899	

		L-12 Benefit Program			LT-14	l(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Estimated Employer  Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	11.3%	\$8,165	\$ 23,591	11.6%	\$8,382	\$ 23,853	13.4%	\$9,683	\$ 27,412
2019	74,607	11.3	8,431	23,914	11.6	8,654	24,180	13.4	9,997	27,788
2020	77,032	11.3	8,705	24,216	11.6	8,936	24,485	13.4	10,322	28,138
2021	79,536	11.3	8,988	24,493	11.6	9,226	24,765	13.4	10,658	28,460
2022	82,121	11.3	9,280	24,742	11.6	9,526	25,017	13.4	11,004	28,749
2023	84,790	11.3	9,581	24,959	11.6	9,836	25,237	13.4	11,362	29,001
2024	87,546	11.3	9,893	25,141	11.6	10,155	25,421	13.4	11,731	29,212
2025	90,391	11.3	10,214	25,283	11.6	10,485	25,565	13.4	12,112	29,377
2026	93,329	11.3	10,546	25,381	11.6	10,826	25,664	13.4	12,506	29,491
2027	96,362	11.3	10,889	25,429	11.6	11,178	25,713	13.4	12,913	29,547

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> 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 Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contribution		Actuarial	Contri	ibution	Actuarial
Valuation		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	5.5%	\$3,974	\$ 12,441	7.6%	\$5,492	\$ 16,534	6.5%	\$4,697	\$ 13,550
2019	74,607	5.5	4,103	12,611	7.6	5,670	16,761	6.5	4,849	13,736
2020	77,032	5.5	4,237	12,770	7.6	5,854	16,972	6.5	5,007	13,909
2021	79,536	5.5	4,374	12,916	7.6	6,045	17,166	6.5	5,170	14,068
2022	82,121	5.5	4,517	13,047	7.6	6,241	17,340	6.5	5,338	14,211
2023	84,790	5.5	4,663	13,162	7.6	6,444	17,492	6.5	5,511	14,336
2024	87,546	5.5	4,815	13,258	7.6	6,653	17,619	6.5	5,690	14,440
2025	90,391	5.5	4,972	13,333	7.6	6,870	17,719	6.5	5,875	14,522
2026	93,329	5.5	5,133	13,385	7.6	7,093	17,788	6.5	6,066	14,578
2027	96,362	5.5	5,300	13,411	7.6	7,324	17,822	6.5	6,264	14,606

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Paties at a d	Estimated Employer ated Contribution		Unfunded		d Employer	Unfunded		l Employer	Unfunded
	Estimated			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
2018	\$ 72,259	8.3%	\$5,997	\$ 17,367	9.6%	\$6,937	\$ 20,493	10.2%	\$7,370	\$ 21,072
2019	74,607	8.3	6,192	17,605	9.6	7,162	20,774	10.2	7,610	21,361
2020	77,032	8.3	6,394	17,827	9.6	7,395	21,036	10.2	7,857	21,630
2021	79,536	8.3	6,601	18,031	9.6	7,635	21,277	10.2	8,113	21,877
2022	82,121	8.3	6,816	18,214	9.6	7,884	21,493	10.2	8,376	22,099
2023	84,790	8.3	7,038	18,374	9.6	8,140	21,682	10.2	8,649	22,293
2024	87,546	8.3	7,266	18,508	9.6	8,404	21,840	10.2	8,930	22,455
2025	90,391	8.3	7,502	18,613	9.6	8,678	21,963	10.2	9,220	22,582
2026	93,329	8.3	7,746	18,685	9.6	8,960	22,048	10.2	9,520	22,669
2027	96 362	8.3	7 998	18 721	9.6	9 251	22 090	10.2	9 8 2 9	22 712

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	11.8%	\$8,527	\$ 24,454	12.0%	\$8,671	\$ 24,729	14.0%	\$10,116	\$ 28,396
2019	74,607	11.8	8,804	24,789	12.0	8,953	25,068	14.0	10,445	28,785
2020	77,032	11.8	9,090	25,102	12.0	9,244	25,384	14.0	10,784	29,148
2021	79,536	11.8	9,385	25,389	12.0	9,544	25,674	14.0	11,135	29,481
2022	82,121	11.8	9,690	25,647	12.0	9,855	25,935	14.0	11,497	29,781
2023	84,790	11.8	10,005	25,872	12.0	10,175	26,163	14.0	11,871	30,043
2024	87,546	11.8	10,330	26,060	12.0	10,506	26,354	14.0	12,256	30,262
2025	90,391	11.8	10,666	26,207	12.0	10,847	26,503	14.0	12,655	30,433
2026	93,329	11.8	11,013	26,308	12.0	11,199	26,605	14.0	13,066	30,551
2027	96,362	11.8	11,371	26,358	12.0	11,563	26,656	14.0	13,491	30,609

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> 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 Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	9.0%	\$6,503	\$ 14,117	11.2%	\$8,093	\$ 17,638	10.0%	\$7,226	\$ 15,198
2019	74,607	9.0	6,715	14,310	11.2	8,356	17,880	10.0	7,461	15,406
2020	77,032	9.0	6,933	14,490	11.2	8,628	18,105	10.0	7,703	15,600
2021	79,536	9.0	7,158	14,656	11.2	8,908	18,312	10.0	7,954	15,778
2022	82,121	9.0	7,391	14,805	11.2	9,198	18,498	10.0	8,212	15,938
2023	84,790	9.0	7,631	14,935	11.2	9,496	18,660	10.0	8,479	16,078
2024	87,546	9.0	7,879	15,044	11.2	9,805	18,796	10.0	8,755	16,195
2025	90,391	9.0	8,135	15,129	11.2	10,124	18,902	10.0	9,039	16,287
2026	93,329	9.0	8,400	15,188	11.2	10,453	18,975	10.0	9,333	16,350
2027	96,362	9.0	8,673	15,217	11.2	10,793	19,011	10.0	9,636	16,381

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 72,259	11.9%	\$8,599	\$ 18,458	13.2%	\$9,538	\$ 21,173	13.6%	\$9,827	\$ 21,702	
2019	74,607	11.9	8,878	18,711	13.2	9,848	21,463	13.6	10,147	21,999	
2020	77,032	11.9	9,167	18,947	13.2	10,168	21,734	13.6	10,476	22,276	
2021	79,536	11.9	9,465	19,164	13.2	10,499	21,982	13.6	10,817	22,531	
2022	82,121	11.9	9,772	19,359	13.2	10,840	22,205	13.6	11,168	22,760	
2023	84,790	11.9	10,090	19,529	13.2	11,192	22,400	13.6	11,531	22,960	
2024	87,546	11.9	10,418	19,671	13.2	11,556	22,563	13.6	11,906	23,127	
2025	90,391	11.9	10,757	19,782	13.2	11,932	22,691	13.6	12,293	23,258	
2026	93,329	11.9	11,106	19,858	13.2	12,319	22,779	13.6	12,693	23,348	
2027	96.362	11.9	11.467	19.896	13.2	12.720	22.822	13.6	13.105	23.393	

			L-12 Benefit Program			4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	15.2%	\$10,983	\$ 24,678	15.5%	\$11,200	\$ 24,958	17.3%	\$12,501	\$ 28,233
2019	74,607	15.2	11,340	25,016	15.5	11,564	25,300	17.3	12,907	28,620
2020	77,032	15.2	11,709	25,331	15.5	11,940	25,619	17.3	13,327	28,981
2021	79,536	15.2	12,089	25,621	15.5	12,328	25,912	17.3	13,760	29,312
2022	82,121	15.2	12,482	25,881	15.5	12,729	26,175	17.3	14,207	29,610
2023	84,790	15.2	12,888	26,108	15.5	13,142	26,405	17.3	14,669	29,870
2024	87,546	15.2	13,307	26,298	15.5	13,570	26,597	17.3	15,145	30,088
2025	90,391	15.2	13,739	26,447	15.5	14,011	26,747	17.3	15,638	30,258
2026	93,329	15.2	14,186	26,549	15.5	14,466	26,850	17.3	16,146	30,375
2027	96,362	15.2	14,647	26,600	15.5	14,936	26,901	17.3	16,671	30,433

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



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

#### Regular Retirement Eligibility

			L-1 Benefit Program			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	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	9.3%	\$6,720	\$ 14,551	11.5%	\$8,310	\$ 18,222	10.2%	\$7,370	\$ 15,661
2019	74,607	9.3	6,938	14,750	11.5	8,580	18,472	10.2	7,610	15,876
2020	77,032	9.3	7,164	14,936	11.5	8,859	18,705	10.2	7,857	16,076
2021	79,536	9.3	7,397	15,107	11.5	9,147	18,919	10.2	8,113	16,260
2022	82,121	9.3	7,637	15,261	11.5	9,444	19,111	10.2	8,376	16,425
2023	84,790	9.3	7,885	15,395	11.5	9,751	19,279	10.2	8,649	16,569
2024	87,546	9.3	8,142	15,507	11.5	10,068	19,419	10.2	8,930	16,690
2025	90,391	9.3	8,406	15,595	11.5	10,395	19,529	10.2	9,220	16,784
2026	93,329	9.3	8,680	15,655	11.5	10,733	19,605	10.2	9,520	16,849
2027	96,362	9.3	8,962	15,685	11.5	11,082	19,642	10.2	9,829	16,881

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial	· · · · · · · · · · · · · · · · · · ·		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
2018	\$ 72,259	12.2%	\$8,816	\$ 19,055	13.5%	\$9,755	\$ 21,827	14.1%	\$10,189	\$ 22,379
2019	74,607	12.2	9,102	19,316	13.5	10,072	22,126	14.1	10,520	22,686
2020	77,032	12.2	9,398	19,560	13.5	10,399	22,405	14.1	10,862	22,972
2021	79,536	12.2	9,703	19,784	13.5	10,737	22,661	14.1	11,215	23,235
2022	82,121	12.2	10,019	19,985	13.5	11,086	22,891	14.1	11,579	23,471
2023	84,790	12.2	10,344	20,161	13.5	11,447	23,092	14.1	11,955	23,677
2024	87,546	12.2	10,681	20,308	13.5	11,819	23,260	14.1	12,344	23,849
2025	90,391	12.2	11,028	20,423	13.5	12,203	23,391	14.1	12,745	23,984
2026	93,329	12.2	11,386	20,502	13.5	12,599	23,481	14.1	13,159	24,077
2027	96,362	12.2	11,756	20,541	13.5	13,009	23,526	14.1	13,587	24,123

	Estimated	L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
			Estimated Employer Contribution			d Employer	Unfunded	Estimated Employer Contribution		Unfunded Actuarial
			ibution	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
2018	\$ 72,259	15.7%	\$11,345	\$ 25,489	15.9%	\$11,489	\$ 25,759	17.9%	\$12,934	\$ 29,124
2019	74,607	15.7	11,713	25,838	15.9	11,863	26,112	17.9	13,355	29,523
2020	77,032	15.7	12,094	26,164	15.9	12,248	26,441	17.9	13,789	29,895
2021	79,536	15.7	12,487	26,463	15.9	12,646	26,743	17.9	14,237	30,237
2022	82,121	15.7	12,893	26,732	15.9	13,057	27,015	17.9	14,700	30,544
2023	84,790	15.7	13,312	26,967	15.9	13,482	27,252	17.9	15,177	30,812
2024	87,546	15.7	13,745	27,163	15.9	13,920	27,451	17.9	15,671	31,036
2025	90,391	15.7	14,191	27,317	15.9	14,372	27,606	17.9	16,180	31,211
2026	93,329	15.7	14,653	27,423	15.9	14,839	27,713	17.9	16,706	31,332
2027	96,362	15.7	15,129	27,475	15.9	15,322	27,766	17.9	17,249	31,392

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> 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 Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	bution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	5.6%	\$4,047	\$ 12,634	7.8%	\$5,636	\$ 16,731	7.1%	\$5,130	\$ 15,305
2019	74,607	5.6	4,178	12,807	7.8	5,819	16,960	7.1	5,297	15,515
2020	77,032	5.6	4,314	12,968	7.8	6,008	17,174	7.1	5,469	15,711
2021	79,536	5.6	4,454	13,116	7.8	6,204	17,370	7.1	5,647	15,891
2022	82,121	5.6	4,599	13,249	7.8	6,405	17,546	7.1	5,831	16,052
2023	84,790	5.6	4,748	13,365	7.8	6,614	17,700	7.1	6,020	16,193
2024	87,546	5.6	4,903	13,462	7.8	6,829	17,829	7.1	6,216	16,311
2025	90,391	5.6	5,062	13,538	7.8	7,050	17,930	7.1	6,418	16,403
2026	93,329	5.6	5,226	13,590	7.8	7,280	17,999	7.1	6,626	16,466
2027	96,362	5.6	5,396	13,616	7.8	7,516	18,033	7.1	6,842	16,497

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	8.9%	\$6,431	\$ 18,730	9.8%	\$7,081	\$ 20,708	10.6%	\$7,659	\$ 22,032
2019	74,607	8.9	6,640	18,987	9.8	7,311	20,992	10.6	7,908	22,334
2020	77,032	8.9	6,856	19,226	9.8	7,549	21,257	10.6	8,165	22,616
2021	79,536	8.9	7,079	19,446	9.8	7,795	21,500	10.6	8,431	22,875
2022	82,121	8.9	7,309	19,644	9.8	8,048	21,718	10.6	8,705	23,107
2023	84,790	8.9	7,546	19,817	9.8	8,309	21,909	10.6	8,988	23,310
2024	87,546	8.9	7,792	19,961	9.8	8,580	22,069	10.6	9,280	23,480
2025	90,391	8.9	8,045	20,074	9.8	8,858	22,194	10.6	9,581	23,613
2026	93,329	8.9	8,306	20,152	9.8	9,146	22,280	10.6	9,893	23,704
2027	96.362	8.9	8.576	20.190	9.8	9.443	22.323	10.6	10.214	23.749

	Estimated	L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
				Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	12.0%	\$8,671	\$ 24,648	12.4%	\$8,960	\$ 25,315	14.2%	\$10,261	\$ 28,605
2019	74,607	12.0	8,953	24,986	12.4	9,251	25,662	14.2	10,594	28,997
2020	77,032	12.0	9,244	25,301	12.4	9,552	25,986	14.2	10,939	29,363
2021	79,536	12.0	9,544	25,590	12.4	9,862	26,283	14.2	11,294	29,699
2022	82,121	12.0	9,855	25,850	12.4	10,183	26,550	14.2	11,661	30,001
2023	84,790	12.0	10,175	26,077	12.4	10,514	26,783	14.2	12,040	30,264
2024	87,546	12.0	10,506	26,267	12.4	10,856	26,978	14.2	12,432	30,484
2025	90,391	12.0	10,847	26,415	12.4	11,208	27,130	14.2	12,836	30,656
2026	93,329	12.0	11,199	26,517	12.4	11,573	27,235	14.2	13,253	30,775
2027	96,362	12.0	11,563	26,568	12.4	11,949	27,287	14.2	13,683	30,834

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> 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			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	5.9%	\$4,263	\$ 13,191	8.2%	\$5,925	\$ 17,382	7.5%	\$5,419	\$ 15,951
2019	74,607	5.9	4,402	13,372	8.2	6,118	17,620	7.5	5,596	16,170
2020	77,032	5.9	4,545	13,541	8.2	6,317	17,842	7.5	5,777	16,374
2021	79,536	5.9	4,693	13,696	8.2	6,522	18,046	7.5	5,965	16,561
2022	82,121	5.9	4,845	13,835	8.2	6,734	18,229	7.5	6,159	16,729
2023	84,790	5.9	5,003	13,957	8.2	6,953	18,389	7.5	6,359	16,876
2024	87,546	5.9	5,165	14,059	8.2	7,179	18,523	7.5	6,566	16,999
2025	90,391	5.9	5,333	14,138	8.2	7,412	18,628	7.5	6,779	17,095
2026	93,329	5.9	5,506	14,193	8.2	7,653	18,700	7.5	7,000	17,161
2027	96,362	5.9	5,685	14,220	8.2	7,902	18,736	7.5	7,227	17,194

		LT-5(65) Benefit Program			L	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		l Employer Unfunded ibution 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
2018	\$ 72,259	9.3%	\$6,720	\$ 19,451	10.3%	\$7,443	\$ 21,491	11.0%	\$7,948	\$ 22,867
2019	74,607	9.3	6,938	19,717	10.3	7,685	21,785	11.0	8,207	23,180
2020	77,032	9.3	7,164	19,966	10.3	7,934	22,060	11.0	8,474	23,472
2021	79,536	9.3	7,397	20,194	10.3	8,192	22,312	11.0	8,749	23,740
2022	82,121	9.3	7,637	20,399	10.3	8,458	22,539	11.0	9,033	23,981
2023	84,790	9.3	7,885	20,578	10.3	8,733	22,737	11.0	9,327	24,192
2024	87,546	9.3	8,142	20,728	10.3	9,017	22,903	11.0	9,630	24,368
2025	90,391	9.3	8,406	20,845	10.3	9,310	23,032	11.0	9,943	24,506
2026	93,329	9.3	8,680	20,926	10.3	9,613	23,121	11.0	10,266	24,601
2027	96.362	9.3	8.962	20.966	10.3	9.925	23.165	11.0	10.600	24.648

		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
2018	\$ 72,259	12.5%	\$9,032	\$ 25,590	13.0%	\$9,394	\$ 26,279	14.8%	\$10,694	\$ 29,659
2019	74,607	12.5	9,326	25,941	13.0	9,699	26,639	14.8	11,042	30,065
2020	77,032	12.5	9,629	26,268	13.0	10,014	26,975	14.8	11,401	30,444
2021	79,536	12.5	9,942	26,568	13.0	10,340	27,283	14.8	11,771	30,792
2022	82,121	12.5	10,265	26,838	13.0	10,676	27,560	14.8	12,154	31,105
2023	84,790	12.5	10,599	27,074	13.0	11,023	27,802	14.8	12,549	31,378
2024	87,546	12.5	10,943	27,271	13.0	11,381	28,005	14.8	12,957	31,607
2025	90,391	12.5	11,299	27,425	13.0	11,751	28,163	14.8	13,378	31,786
2026	93,329	12.5	11,666	27,531	13.0	12,133	28,272	14.8	13,813	31,909
2027	96,362	12.5	12,045	27,584	13.0	12,527	28,326	14.8	14,262	31,970

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

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded Actuarial	Estimated Employer		Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	bution		Contr	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
2018	\$ 72,259	9.5%	\$6,865	\$ 14,834	11.7%	\$8,454	\$ 18,555	10.9%	\$7,876	\$ 17,497
2019	74,607	9.5	7,088	15,037	11.7	8,729	18,809	10.9	8,132	17,737
2020	77,032	9.5	7,318	15,227	11.7	9,013	19,046	10.9	8,396	17,961
2021	79,536	9.5	7,556	15,401	11.7	9,306	19,264	10.9	8,669	18,166
2022	82,121	9.5	7,801	15,557	11.7	9,608	19,460	10.9	8,951	18,351
2023	84,790	9.5	8,055	15,694	11.7	9,920	19,631	10.9	9,242	18,512
2024	87,546	9.5	8,317	15,808	11.7	10,243	19,774	10.9	9,543	18,647
2025	90,391	9.5	8,587	15,897	11.7	10,576	19,886	10.9	9,853	18,752
2026	93,329	9.5	8,866	15,958	11.7	10,919	19,963	10.9	10,173	18,825
2027	96,362	9.5	9,154	15,988	11.7	11,274	20,001	10.9	10,503	18,861

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	12.7%	\$9,177	\$ 20,542	13.7%	\$9,899	\$ 22,252	14.5%	\$10,478	\$ 23,571
2019	74,607	12.7	9,475	20,823	13.7	10,221	22,557	14.5	10,818	23,894
2020	77,032	12.7	9,783	21,086	13.7	10,553	22,841	14.5	11,170	24,195
2021	79,536	12.7	10,101	21,327	13.7	10,896	23,102	14.5	11,533	24,472
2022	82,121	12.7	10,429	21,544	13.7	11,251	23,337	14.5	11,908	24,721
2023	84,790	12.7	10,768	21,733	13.7	11,616	23,542	14.5	12,295	24,938
2024	87,546	12.7	11,118	21,891	13.7	11,994	23,713	14.5	12,694	25,120
2025	90,391	12.7	11,480	22,015	13.7	12,384	23,847	14.5	13,107	25,262
2026	93,329	12.7	11,853	22,100	13.7	12,786	23,939	14.5	13,533	25,360
2027	96.362	12.7	12.238	22.142	13.7	13.202	23.985	14.5	13.972	25.408

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	15.9%	\$11,489	\$ 25,961	16.3%	\$11,778	\$ 26,620	18.1%	\$13,079	\$ 29,682
2019	74,607	15.9	11,863	26,317	16.3	12,161	26,985	18.1	13,504	30,089
2020	77,032	15.9	12,248	26,649	16.3	12,556	27,325	18.1	13,943	30,468
2021	79,536	15.9	12,646	26,954	16.3	12,964	27,637	18.1	14,396	30,816
2022	82,121	15.9	13,057	27,228	16.3	13,386	27,918	18.1	14,864	31,129
2023	84,790	15.9	13,482	27,467	16.3	13,821	28,163	18.1	15,347	31,402
2024	87,546	15.9	13,920	27,667	16.3	14,270	28,368	18.1	15,846	31,631
2025	90,391	15.9	14,372	27,823	16.3	14,734	28,528	18.1	16,361	31,810
2026	93,329	15.9	14,839	27,931	16.3	15,213	28,638	18.1	16,893	31,933
2027	96,362	15.9	15,322	27,984	16.3	15,707	28,693	18.1	17,442	31,994

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> 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 Prog	gram	LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
	Estimated			Actuarial						
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 72,259	9.8%	\$7,081	\$ 15,326	12.0%	\$8,671	\$ 19,177	11.2%	\$8,093	\$ 18,060
2019	74,607	9.8	7,311	15,536	12.0	8,953	19,440	11.2	8,356	18,307
2020	77,032	9.8	7,549	15,732	12.0	9,244	19,685	11.2	8,628	18,538
2021	79,536	9.8	7,795	15,912	12.0	9,544	19,910	11.2	8,908	18,750
2022	82,121	9.8	8,048	16,074	12.0	9,855	20,112	11.2	9,198	18,941
2023	84,790	9.8	8,309	16,215	12.0	10,175	20,289	11.2	9,496	19,107
2024	87,546	9.8	8,580	16,333	12.0	10,506	20,437	11.2	9,805	19,246
2025	90,391	9.8	8,858	16,425	12.0	10,847	20,553	11.2	10,124	19,355
2026	93,329	9.8	9,146	16,489	12.0	11,199	20,632	11.2	10,453	19,430
2027	96,362	9.8	9,443	16,520	12.0	11,563	20,671	11.2	10,793	19,467

	Estimated	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 72,259	13.2%	\$9,538	\$ 21,234	14.2%	\$10,261	\$ 22,990	14.9%	\$10,767	\$ 24,365
2019	74,607	13.2	9,848	21,525	14.2	10,594	23,305	14.9	11,116	24,699
2020	77,032	13.2	10,168	21,796	14.2	10,939	23,599	14.9	11,478	25,010
2021	79,536	13.2	10,499	22,045	14.2	11,294	23,869	14.9	11,851	25,296
2022	82,121	13.2	10,840	22,269	14.2	11,661	24,112	14.9	12,236	25,553
2023	84,790	13.2	11,192	22,465	14.2	12,040	24,324	14.9	12,634	25,777
2024	87,546	13.2	11,556	22,629	14.2	12,432	24,501	14.9	13,044	25,965
2025	90,391	13.2	11,932	22,757	14.2	12,836	24,639	14.9	13,468	26,112
2026	93,329	13.2	12,319	22,845	14.2	13,253	24,734	14.9	13,906	26,213
2027	96.362	13.2	12.720	22.889	14.2	13.683	24.781	14.9	14.358	26.263

	Estimated	L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
			l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 72,259	16.4%	\$11,850	\$ 26,831	16.9%	\$12,212	\$ 27,513	18.7%	\$13,512	\$ 30,675
2019	74,607	16.4	12,236	27,199	16.9	12,609	27,890	18.7	13,952	31,095
2020	77,032	16.4	12,633	27,542	16.9	13,018	28,242	18.7	14,405	31,487
2021	79,536	16.4	13,044	27,857	16.9	13,442	28,565	18.7	14,873	31,847
2022	82,121	16.4	13,468	28,140	16.9	13,878	28,855	18.7	15,357	32,171
2023	84,790	16.4	13,906	28,387	16.9	14,330	29,108	18.7	15,856	32,454
2024	87,546	16.4	14,358	28,594	16.9	14,795	29,320	18.7	16,371	32,690
2025	90,391	16.4	14,824	28,756	16.9	15,276	29,486	18.7	16,903	32,875
2026	93,329	16.4	15,306	28,867	16.9	15,773	29,600	18.7	17,453	33,002
2027	96,362	16.4	15,803	28,922	16.9	16,285	29,657	18.7	18,020	33,065

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

