

# THE INITIAL ACTUARIAL VALUATION FOR WRIGHT COUNTY EMERGENCY SERVICES BOARD AS OF OCTOBER 31, 2017

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December 7, 2017

Wright County Emergency Services Board Mountain Grove, 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).

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, 2017.

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. 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 October 31, 2017. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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 opinion herein.

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

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#### **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)

		Percents of Active Member Payroll			
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	0.50%	3.10%	0.20%	3.80%
L-3	General	0.70	4.50	0.30	5.50
LT-4(65)	General	0.60	3.80	0.20	4.60
LT-5(65)	General	0.70	4.90	0.30	5.90
L-7	General	0.80	5.80	0.30	6.90
LT-8(65)	General	0.90	6.10	0.30	7.30
L-12	General	1.00	7.10	0.40	8.50
LT-14(65)	General	1.00	7.30	0.40	8.70
L-6	General	1.20	8.50	0.50	10.20

<sup>\*</sup> Assumes that credit is granted for 100% of service rendered prior to the membership date. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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

		Percents of Active Member Payroll			
					Total
Benefit	Employee	Prior Service	Current	Diaghility	Employer Contribution
Program	Employee Groups	Cost *	Cost	Disability Cost	Rate
L-1	General	0.50%	3.30%	0.20%	4.00%
L-3	General	0.70	4.70	0.30	5.70
LT-4(65)	General	0.60	4.00	0.20	4.80
LT-5(65)	General	0.80	5.20	0.30	6.30
L-7	General	0.90	6.10	0.30	7.30
LT-8(65)	General	0.90	6.40	0.30	7.60
L-12	General	1.00	7.50	0.40	8.90
LT-14(65)	General	1.10	7.60	0.40	9.10
L-6	General	1.20	8.80	0.50	10.50

<sup>\*</sup> Assumes that credit is granted for 100% of service rendered prior to the membership date. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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

		Percents of Active Member Payroll			
D 64	F 1	<b>Prior</b>		D: 134	Total Employer
Benefit Program	Employee Groups	Service Cost *	Current Cost	Disability Cost	Contribution Rate
Tiogram	Groups	Cost	Cost	Cost	Rate
L-1	General	0.60%	6.50%	0.20%	7.30%
L-3	General	0.80	8.00	0.30	9.10
LT-4(65)	General	0.70	7.20	0.20	8.10
LT-5(65)	General	0.90	8.50	0.30	9.70
L-7	General	1.00	9.40	0.30	10.70
LT-8(65)	General	1.00	9.70	0.30	11.00
L-12	General	1.10	10.80	0.40	12.30
LT-14(65)	General	1.10	11.00	0.40	12.50
L-6	General	1.30	12.20	0.50	14.00

<sup>\*</sup> Assumes that credit is granted for 100% of service rendered prior to the membership date. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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

		Percents of Active Member Payroll			
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	0.70%	6.80%	0.20%	7.70%
L-3	General	0.80	8.20	0.30	9.30
LT-4(65)	General	0.80	7.40	0.20	8.40
LT-5(65)	General	0.90	8.70	0.30	9.90
L-7	General	1.00	9.70	0.30	11.00
LT-8(65)	General	1.00	10.00	0.30	11.30
L-12	General	1.20	11.10	0.40	12.70
LT-14(65)	General	1.20	11.30	0.40	12.90
L-6	General	1.30	12.60	0.50	14.40

<sup>\*</sup> Assumes that credit is granted for 100% of service rendered prior to the membership date. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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

Rule of 80 Retirement Eligibility#

		Percents of Active Member Payroll			yroll
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	0.50%	3.50%	0.20%	4.20%
L-3	General	0.70	4.90	0.30	5.90
LT-4(65)	General	0.60	4.50	0.20	5.30
LT-5(65)	General	0.80	5.70	0.30	6.80
L-7	General	0.90	6.30	0.30	7.50
LT-8(65)	General	0.90	6.80	0.30	8.00
L-12	General	1.00	7.70	0.40	9.10
LT-14(65)	General	1.00	8.00	0.40	9.40
L-6	General	1.20	9.10	0.50	10.80

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- \* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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)

Rule of 80 Retirement Eligibility#

		Percents of Active Member Payroll			
					Total
		Prior			Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	0.60%	3.70%	0.20%	4.50%
L-3	General	0.70	5.10	0.30	6.10
LT-4(65)	General	0.70	4.80	0.20	5.70
LT-5(65)	General	0.80	6.00	0.30	7.10
L-7	General	0.90	6.60	0.30	7.80
LT-8(65)	General	0.90	7.20	0.30	8.40
L-12	General	1.10	8.10	0.40	9.60
LT-14(65)	General	1.10	8.40	0.40	9.90
L-6	General	1.20	9.60	0.50	11.30

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

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

#### Rule of 80 Retirement Eligibility#

		Percents of Active Member Payroll			
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	0.70%	6.90%	0.20%	7.80%
L-3	General	0.80	8.40	0.30	9.50
LT-4(65)	General	0.80	8.00	0.20	9.00
LT-5(65)	General	0.90	9.20	0.30	10.40
L-7	General	1.00	9.90	0.30	11.20
LT-8(65)	General	1.00	10.40	0.30	11.70
L-12	General	1.20	11.40	0.40	13.00
LT-14(65)	General	1.20	11.60	0.40	13.20
L-6	General	1.30	12.90	0.50	14.70

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- \* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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)

#### Rule of 80 Retirement Eligibility#

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	0.70%	7.10%	0.20%	8.00%
L-3	General	0.90	8.60	0.30	9.80
LT-4(65)	General	0.80	8.20	0.20	9.20
LT-5(65)	General	0.90	9.50	0.30	10.70
L-7	General	1.00	10.20	0.30	11.50
LT-8(65)	General	1.10	10.70	0.30	12.10
L-12	General	1.20	11.70	0.40	13.30
LT-14(65)	General	1.20	12.00	0.40	13.60
L-6	General	1.40	13.30	0.50	15.20

- # 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. 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. <u>If payroll during your first year of LAGERS participation equals the annual payroll reported for this valuation</u>, the approximate employer dollar contribution for the year would be as follows:

#### **Contributory Plan**

5 Year	5 Year FAS				
Benefit					
Program	General				
L-1	\$ 10,415				
L-3	15,074				
LT-4(65)	12,607				
LT-5(65)	16,170				
L-7	18,911				
LT-8(65)	20,007				
L-12	23,296				
LT-14(65)	23,844				
L-6	27,956				

3 Yea	r FAS
Benefit	
Program	General
L-1	\$ 10,963
L-3	15,622
LT-4(65)	13,156
LT-5(65)	17,267
L-7	20,007
LT-8(65)	20,830
L-12	24,393
LT-14(65)	24,941
L-6	28,778

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

5 Year	5 Year FAS				
Benefit					
Program	General				
L-1	\$ 20,007				
L-3	24,941				
LT-4(65)	22,200				
LT-5(65)	26,585				
L-7	29,326				
LT-8(65)	30,148				
L-12	33,711				
LT-14(65)	34,259				
L-6	38,370				

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 21,104			
L-3	25,489			
LT-4(65)	23,022			
LT-5(65)	27,133			
L-7	30,148			
LT-8(65)	30,970			
L-12	34,807			
LT-14(65)	35,356			
L-6	39,467			

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. <u>If payroll during your first year of LAGERS participation equals the annual payroll reported for this valuation</u>, the approximate employer dollar contribution for the year would be as follows:

#### **Contributory Plan**

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 11,511			
L-3	16,170			
LT-4(65)	14,526			
LT-5(65)	18,637			
L-7	20,556			
LT-8(65)	21,926			
L-12	24,941			
LT-14(65)	25,763			
L-6	29,600			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 12,333				
L-3	16,719				
LT-4(65)	15,622				
LT-5(65)	19,459				
L-7	21,378				
LT-8(65)	23,022				
L-12	26,311				
LT-14(65)	27,133				
L-6	30,970				

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

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 21,378			
L-3	26,037			
LT-4(65)	24,667			
LT-5(65)	28,504			
L-7	30,696			
LT-8(65)	32,067			
L-12	35,630			
LT-14(65)	36,178			
L-6	40,289			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 21,926			
L-3	26,859			
LT-4(65)	25,215			
LT-5(65)	29,326			
L-7	31,518			
LT-8(65)	33,163			
L-12	36,452			
LT-14(65)	37,274			
L-6	41,659			

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.

## Wright County Emergency Services Board Employees and Payroll Included in the Valuation

	General
Number of Employees	11
Annual Payroll	\$ 274,074

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

#### APPENDIX I

## UNFUNDED ACTUARIAL ACCRUED LIABILITY

#### UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

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

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

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

#### Wright County Emergency Services Board

		Contri	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS) (3 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 25,047	\$ 26,086	\$ 31,188	\$ 32,250
L-3	General	32,660	33,923	38,991	40,320
LT-4(65)	General	28,945	30,158	35,083	36,269
LT-5(65)	General	35,603	37,001	41,918	43,327
L-7	General	40,259	41,885	46,766	48,367
LT-8(65)	General	42,207	43,906	48,716	50,383
L-12	General	47,916	49,745	54,524	56,479
LT-14(65)	General	48,934	50,747	55,509	57,489
L-6	General	55,532	57,666	62,326	64,480

#### UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

#### Rule of 80 Retirement Eligibility

		Contri	butory	Non-Cor	ntributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS) (3 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 25,906	\$ 27,023	\$ 32,015	\$ 33,094
L-3	General	33,731	35,042	40,001	41,401
LT-4(65)	General	30,868	32,126	36,916	38,198
LT-5(65)	General	37,456	38,923	43,702	45,205
L-7	General	41,555	43,177	48,002	49,645
LT-8(65)	General	44,015	45,732	50,446	52,209
L-12	General	49,399	51,276	55,988	57,951
LT-14(65)	General	50,649	52,549	57,215	59,232
L-6	General	57,220	59,420	63,949	66,215

#### APPENDIX II

#### SUMMARY OF FINANCIAL ASSUMPTIONS

## Summary of Assumptions Used in Actuarial Valuations Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

Separations From Active Employment (Not Including Death-In-Service)

Before Age & Service Retirement and Individual Pay Increase Assumptions

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

		General Members							
Sample	Years of	N	<b>I</b> en	Wo	omen	Po	olice	F	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

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

**Schedule 2. (Continued)** 

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

#### APPENDIX III

## SUMMARY OF LAGERS PROVISIONS

#### Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS

## Benefits and Conditions Evaluated and/or Considered as of February 28, 2017

(Section references are to RSMo)

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

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

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

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

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

LT-4(65) Benefit Program: 1.00% for life, plus 1.00% to age 65 LT-5(65) Benefit Program: 1.25% for life, plus 0.75% to age 65 LT-8(65) Benefit Program: 1.50% for life, plus 0.50% to age 65 LT-14(65) Benefit Program: 1.75% for life, plus 0.25% to age 65

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### APPENDIX IV

## BENEFIT ILLUSTRATIONS

(L-1 Benefit Program is Years of Credited Service times: 1.00% of FAS  $^{I}$  )

	Estimated	Estin	nated
LAGERS	Social	Month	ly Total
BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
ee:			
\$ 525	\$ 875	\$1,400	93%
700	1,016	1,716	86%
875	1,157	2,032	81%
1,050	1,297	2,347	78%
1,225	1,438	2,663	76%
1,400	1,579	2,979	74%
ee:			
\$ 375	\$ 875	\$1,250	83%
500	1,016	1,516	76%
625	1,157	1,782	71%
750	1,297	2,047	68%
875	1,438	2,313	66%
1,000	1,579	2,579	64%
e:			
\$225	\$ 875	\$1,100	73%
300	1,016	1,316	66%
375	1,157	1,532	61%
450	1,297	1,747	58%
525	1,438	1,963	56%
600	1,579	2,179	54%
	### SENEFIT 3  ### SE	LAGERS BENEFIT 3 Security 2  Tel:  \$ 525 \$875 700 1,016 875 1,157 1,050 1,297 1,225 1,438 1,400 1,579  Tel:  \$ 375 \$875 500 1,016 625 1,157 750 1,297 875 1,438 1,000 1,579  Tel:  \$ 225 \$875 300 1,016 375 1,157 450 1,297 525 1,438	LAGERS BENEFIT 3         Social Security 2         Month Month Security 3           See:         \$           \$ 525         \$ 875         \$ 1,400           700         1,016         1,716           875         1,157         2,032           1,050         1,297         2,347           1,225         1,438         2,663           1,400         1,579         2,979           See:         \$ 875         \$ 1,250           500         1,016         1,516           625         1,157         1,782           750         1,297         2,047           875         1,438         2,313           1,000         1,579         2,579           See:    **BENEFIT**  **Total Company C

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(L-3 Benefit Program is Years of Credited Service times: 1.25% of FAS  $^{I}$  )

Final		Estimated	Estin	nated
Average	<b>LAGERS</b>	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,016	1,891	95%
2,500	1,094	1,157	2,251	90%
3,000	1,313	1,297	2,610	87%
3,500	1,531	1,438	2,969	85%
4,000	1,750	1,579	3,329	83%
25 Years of Service	ce:			
\$1,500	\$ 469	\$ 875	\$1,344	90%
2,000	625	1,016	1,641	82%
2,500	781	1,157	1,938	78%
3,000	938	1,297	2,235	75%
3,500	1,094	1,438	2,532	72%
4,000	1,250	1,579	2,829	71%
15 Years of Service	ce:			
\$1,500	\$281	\$ 875	\$1,156	77%
2,000	375	1,016	1,391	70%
2,500	469	1,157	1,626	65%
3,000	563	1,297	1,860	62%
3,500	656	1,438	2,094	60%
4,000	750	1,579	2,329	58%

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(L-7 Benefit Program is Years of Credited Service times: 1.50% of FAS  $^{I}$  )

Final		Estimated	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$ 788	\$ 875	\$1,663	111%
2,000	1,050	1,016	2,066	103%
2,500	1,313	1,157	2,470	99%
3,000	1,575	1,297	2,872	96%
3,500	1,838	1,438	3,276	94%
4,000	2,100	1,579	3,679	92%
25 Years of Service	ce:			
\$1,500	\$ 563	\$ 875	\$1,438	96%
2,000	750	1,016	1,766	88%
2,500	938	1,157	2,095	84%
3,000	1,125	1,297	2,422	81%
3,500	1,313	1,438	2,751	79%
4,000	1,500	1,579	3,079	77%
15 Years of Service	ce:			
\$1,500	\$338	\$ 875	\$1,213	81%
2,000	450	1,016	1,466	73%
2,500	563	1,157	1,720	69%
3,000	675	1,297	1,972	66%
3,500	788	1,438	2,226	64%
4,000	900	1,579	2,479	62%

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(L-12 Benefit Program is Years of Credited Service times: 1.75% of FAS  $^{I}$  )

Final		Estimated	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) 1	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Servi	ce:			
\$1,500	\$ 919	\$ 875	\$1,794	120%
2,000	1,225	1,016	2,241	112%
2,500	1,531	1,157	2,688	108%
3,000	1,838	1,297	3,135	105%
3,500	2,144	1,438	3,582	102%
4,000	2,450	1,579	4,029	101%
25 Years of Servi	ce:			
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,016	1,891	95%
2,500	1,094	1,157	2,251	90%
3,000	1,313	1,297	2,610	87%
3,500	1,531	1,438	2,969	85%
4,000	1,750	1,579	3,329	83%
15 Years of Servi	ce:			
\$1,500	\$ 394	\$ 875	\$1,269	85%
2,000	525	1,016	1,541	77%
2,500	656	1,157	1,813	73%
3,000	788	1,297	2,085	70%
3,500	919	1,438	2,357	67%
4,000	1,050	1,579	2,629	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.

<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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(L-6 Benefit Program is Years of Credited Service times: 2.00% of FAS  $^{I}$  )

Final		Estimated	Estin	nated
Average	<b>LAGERS</b>	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$1,050	\$ 875	\$1,925	128%
2,000	1,400	1,016	2,416	121%
2,500	1,750	1,157	2,907	116%
3,000	2,100	1,297	3,397	113%
3,500	2,450	1,438	3,888	111%
4,000	2,800	1,579	4,379	109%
25 Years of Service	ce:			
\$1,500	\$ 750	\$ 875	\$1,625	108%
2,000	1,000	1,016	2,016	101%
2,500	1,250	1,157	2,407	96%
3,000	1,500	1,297	2,797	93%
3,500	1,750	1,438	3,188	91%
4,000	2,000	1,579	3,579	89%
15 Years of Service	ce:			
\$1,500	\$ 450	\$ 875	\$1,325	88%
2,000	600	1,016	1,616	81%
2,500	750	1,157	1,907	76%
3,000	900	1,297	2,197	73%
3,500	1,050	1,438	2,488	71%
4,000	1,200	1,579	2,779	69%

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(LT-4(65) Benefit Program is Years of Credited Service times: 2.00% of FAS  $^I$  to age 65) 1.00% of FAS  $^I$  at age 65)

Final	LAC	GERS	Estimated	Esti	mated	Pen	cent
Average	BEN	EFIT <sup>3</sup>	Social	Montl	aly Total	of I	FAS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Serv	ice:						
\$1,500	\$1,050	\$ 525	\$ 875	\$1,050	\$1,400	70%	93%
2,000	1,400	700	1,016	1,400	1,716	70%	86%
2,500	1,750	875	1,157	1,750	2,032	70%	81%
3,000	2,100	1,050	1,297	2,100	2,347	70%	78%
3,500	2,450	1,225	1,438	2,450	2,663	70%	76%
4,000	2,800	1,400	1,579	2,800	2,979	70%	74%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 375	\$ 875	\$ 750	\$1,250	50%	83%
2,000	1,000	500	1,016	1,000	1,516	50%	76%
2,500	1,250	625	1,157	1,250	1,782	50%	71%
3,000	1,500	750	1,297	1,500	2,047	50%	68%
3,500	1,750	875	1,438	1,750	2,313	50%	66%
4,000	2,000	1,000	1,579	2,000	2,579	50%	64%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$225	\$ 875	\$ 450	\$1,100	30%	73%
2,000	600	300	1,016	600	1,316	30%	66%
2,500	750	375	1,157	750	1,532	30%	61%
3,000	900	450	1,297	900	1,747	30%	58%
3,500	1,050	525	1,438	1,050	1,963	30%	56%
4,000	1,200	600	1,579	1,200	2,179	30%	54%

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

(LT-5(65) Benefit Program is Years of Credited Service times: 2.00% of FAS  $^I$  to age 65) 1.25% of FAS  $^I$  at age 65)

Final		GERS	Estimated		mated		cent
Average	BEN	EFIT <sup>3</sup>	Social	Mont	nly Total	of I	FAS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Serv	ice:						
\$1,500	\$1,050	\$ 656	\$ 875	\$1,050	\$1,531	70%	102%
2,000	1,400	875	1,016	1,400	1,891	70%	95%
2,500	1,750	1,094	1,157	1,750	2,251	70%	90%
3,000	2,100	1,313	1,297	2,100	2,610	70%	87%
3,500	2,450	1,531	1,438	2,450	2,969	70%	85%
4,000	2,800	1,750	1,579	2,800	3,329	70%	83%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 469	\$ 875	\$ 750	\$1,344	50%	90%
2,000	1,000	625	1,016	1,000	1,641	50%	82%
2,500	1,250	781	1,157	1,250	1,938	50%	78%
3,000	1,500	938	1,297	1,500	2,235	50%	75%
3,500	1,750	1,094	1,438	1,750	2,532	50%	72%
4,000	2,000	1,250	1,579	2,000	2,829	50%	71%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$281	\$ 875	\$ 450	\$1,156	30%	77%
2,000	600	375	1,016	600	1,391	30%	70%
2,500	750	469	1,157	750	1,626	30%	65%
3,000	900	563	1,297	900	1,860	30%	62%
3,500	1,050	656	1,438	1,050	2,094	30%	60%
4,000	1,200	750	1,579	1,200	2,329	30%	58%
1	~ · · · · ·			, ,			

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

(LT-8(65) Benefit Program is Years of Credited Service times: 2.00% of FAS  $^I$  to age 65) 1.50% of FAS  $^I$  at age 65)

Final	LAGERS		Estimated	Esti	mated	Percent	
Average	BEN	EFIT <sup>3</sup>	Social	Montl	ıly Total	of l	FAS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Serv	ice:						
\$1,500	\$1,050	\$ 788	\$ 875	\$1,050	\$1,663	70%	111%
2,000	1,400	1,050	1,016	1,400	2,066	70%	103%
2,500	1,750	1,313	1,157	1,750	2,470	70%	99%
3,000	2,100	1,575	1,297	2,100	2,872	70%	96%
3,500	2,450	1,838	1,438	2,450	3,276	70%	94%
4,000	2,800	2,100	1,579	2,800	3,679	70%	92%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 563	\$ 875	\$ 750	\$1,438	50%	96%
2,000	1,000	750	1,016	1,000	1,766	50%	88%
2,500	1,250	938	1,157	1,250	2,095	50%	84%
3,000	1,500	1,125	1,297	1,500	2,422	50%	81%
3,500	1,750	1,313	1,438	1,750	2,751	50%	79%
4,000	2,000	1,500	1,579	2,000	3,079	50%	77%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$338	\$ 875	\$ 450	\$1,213	30%	81%
2,000	600	450	1,016	600	1,466	30%	73%
2,500	750	563	1,157	750	1,720	30%	69%
3,000	900	675	1,297	900	1,972	30%	66%
3,500	1,050	788	1,438	1,050	2,226	30%	64%
4,000	1,200	900	1,579	1,200	2,479	30%	62%
1	~ 1 "						

<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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

(LT-14(65) Benefit Program is Years of Credited Service times: 2.00% of FAS <sup>1</sup> to age 65)
1.75% of FAS <sup>1</sup> at age 65)

Final LAGERS		Estimated	Esti	mated	Percent		
Average	BEN	EFIT <sup>3</sup>	Social	Montl	aly Total	of l	FAS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Serv	ice:						
\$1,500	\$1,050	\$ 919	\$ 875	\$1,050	\$1,794	70%	120%
2,000	1,400	1,225	1,016	1,400	2,241	70%	112%
2,500	1,750	1,531	1,157	1,750	2,688	70%	108%
3,000	2,100	1,838	1,297	2,100	3,135	70%	105%
3,500	2,450	2,144	1,438	2,450	3,582	70%	102%
4,000	2,800	2,450	1,579	2,800	4,029	70%	101%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 656	\$ 875	\$ 750	\$1,531	50%	102%
2,000	1,000	875	1,016	1,000	1,891	50%	95%
2,500	1,250	1,094	1,157	1,250	2,251	50%	90%
3,000	1,500	1,313	1,297	1,500	2,610	50%	87%
3,500	1,750	1,531	1,438	1,750	2,969	50%	85%
4,000	2,000	1,750	1,579	2,000	3,329	50%	83%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$ 394	\$ 875	\$ 450	\$1,269	30%	85%
2,000	600	525	1,016	600	1,541	30%	77%
2,500	750	656	1,157	750	1,813	30%	73%
3,000	900	788	1,297	900	2,085	30%	70%
3,500	1,050	919	1,438	1,050	2,357	30%	67%
4,000	1,200	1,050	1,579	1,200	2,629	30%	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.

<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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

# APPENDIX V

## AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

## Wright County Emergency Services Board

### October 31, 2017

## 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	2							2	\$ 41,600					
25-29	2							2	\$ 43,160					
30-34	1							1	\$ 18,720					
35-39	2							2	\$ 43,680					
40-44	2							2	\$ 56,784					
45-49	1							1	\$ 20,280					
50-54	1							1	\$ 49,850					
55-59														
60-64														
65-69														
70 & Over														
Totals	11							11	\$ 274,074					

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

Age: 34.7 years.

Benefit Service: 1.0 years. Annual Pay: \$24,916.



December 7, 2017 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 October 31, 2017 Initial Actuarial Valuation of LAGERS benefits for the employees of

Wright County Emergency Services Board

Sincerely,

Mita D. Drazilov

MDD:adh



December 7, 2017

Wright County Emergency Services Board Mountain Grove, 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 October 31, 2017 Initial Valuation for the Wright County Emergency Services Board dated December 7, 2017.

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, 2017.

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 opinion herein.

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

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

(4% member contributions are additional)

#### Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contr	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	
2017	\$ 274,074	3.8%	\$10,415	\$ 25,047	5.5%	\$15,074	\$ 32,660	4.6%	\$12,607	\$ 28,945	
2018	282,981	3.8	10,753	25,390	5.5	15,564	33,107	4.6	13,017	29,342	
2019	292,178	3.8	11,103	25,710	5.5	16,070	33,524	4.6	13,440	29,712	
2020	301,674	3.8	11,464	26,004	5.5	16,592	33,907	4.6	13,877	30,052	
2021	311,478	3.8	11,836	26,268	5.5	17,131	34,252	4.6	14,328	30,357	
2022	321,601	3.8	12,221	26,499	5.5	17,688	34,553	4.6	14,794	30,624	
2023	332,053	3.8	12,618	26,692	5.5	18,263	34,805	4.6	15,274	30,847	
2024	342,845	3.8	13,028	26,843	5.5	18,856	35,002	4.6	15,771	31,021	
2025	353,987	3.8	13,452	26,947	5.5	19,469	35,137	4.6	16,283	31,141	
2026	365,492	3.8	13.889	26,998	5.5	20,102	35,204	4.6	16,813	31,200	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) 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
2017	\$ 274,074	5.9%	\$16,170	\$ 35,603	6.9%	\$18,911	\$ 40,259	7.3%	\$20,007	\$ 42,207
2018	282,981	5.9	16,696	36,091	6.9	19,526	40,811	7.3	20,658	42,785
2019	292,178	5.9	17,239	36,546	6.9	20,160	41,326	7.3	21,329	43,324
2020	301,674	5.9	17,799	36,964	6.9	20,816	41,798	7.3	22,022	43,819
2021	311,478	5.9	18,377	37,340	6.9	21,492	42,223	7.3	22,738	44,264
2022	321,601	5.9	18,974	37,668	6.9	22,190	42,594	7.3	23,477	44,653
2023	332,053	5.9	19,591	37,942	6.9	22,912	42,904	7.3	24,240	44,978
2024	342,845	5.9	20,228	38,156	6.9	23,656	43,146	7.3	25,028	45,232
2025	353,987	5.9	20,885	38,304	6.9	24,425	43,313	7.3	25,841	45,407
2026	365,492	5.9	21,564	38,377	6.9	25,219	43,396	7.3	26,681	45,494

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
	Ending 4 a	Estimated Employer Contribution		Unfunded		Employer	Unfunded	Estimated Employer Contribution		Unfunded
¥7 1 4	Estimated			Actuarial		bution	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
2017	\$ 274,074	8.5%	\$23,296	\$ 47,916	8.7%	\$23,844	\$ 48,934	10.2%	\$27,956	\$ 55,532
2018	282,981	8.5	24,053	48,572	8.7	24,619	49,604	10.2	28,864	56,293
2019	292,178	8.5	24,835	49,184	8.7	25,419	50,229	10.2	29,802	57,003
2020	301,674	8.5	25,642	49,746	8.7	26,246	50,803	10.2	30,771	57,655
2021	311,478	8.5	26,476	50,251	8.7	27,099	51,319	10.2	31,771	58,241
2022	321,601	8.5	27,336	50,692	8.7	27,979	51,770	10.2	32,803	58,752
2023	332,053	8.5	28,225	51,061	8.7	28,889	52,147	10.2	33,869	59,180
2024	342,845	8.5	29,142	51,350	8.7	29,828	52,442	10.2	34,970	59,514
2025	353,987	8.5	30,089	51,549	8.7	30,797	52,645	10.2	36,107	59,744
2026	365,492	8.5	31,067	51,647	8.7	31,798	52,746	10.2	37,280	59,858

- 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 Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program		
		Estimated	Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	Contribution		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
2017	\$ 274,074	4.0%	\$10,963	\$ 26,086	5.7%	\$15,622	\$ 33,923	4.8%	\$13,156	\$ 30,158
2018	282,981	4.0	11,319	26,443	5.7	16,130	34,388	4.8	13,583	30,571
2019	292,178	4.0	11,687	26,776	5.7	16,654	34,822	4.8	14,025	30,956
2020	301,674	4.0	12,067	27,082	5.7	17,195	35,220	4.8	14,480	31,310
2021	311,478	4.0	12,459	27,357	5.7	17,754	35,578	4.8	14,951	31,628
2022	321,601	4.0	12,864	27,597	5.7	18,331	35,890	4.8	15,437	31,906
2023	332,053	4.0	13,282	27,798	5.7	18,927	36,151	4.8	15,939	32,138
2024	342,845	4.0	13,714	27,955	5.7	19,542	36,355	4.8	16,457	32,320
2025	353,987	4.0	14,159	28,063	5.7	20,177	36,496	4.8	16,991	32,445
2026	365,492	4.0	14,620	28,117	5.7	20,833	36,566	4.8	17,544	32,507

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) 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
2017	\$ 274,074	6.3%	\$17,267	\$ 37,001	7.3%	\$20,007	\$ 41,885	7.6%	\$20,830	\$ 43,906
2018	282,981	6.3	17,828	37,508	7.3	20,658	42,459	7.6	21,507	44,508
2019	292,178	6.3	18,407	37,981	7.3	21,329	42,994	7.6	22,206	45,069
2020	301,674	6.3	19,005	38,415	7.3	22,022	43,486	7.6	22,927	45,584
2021	311,478	6.3	19,623	38,805	7.3	22,738	43,928	7.6	23,672	46,047
2022	321,601	6.3	20,261	39,146	7.3	23,477	44,314	7.6	24,442	46,451
2023	332,053	6.3	20,919	39,431	7.3	24,240	44,637	7.6	25,236	46,789
2024	342,845	6.3	21,599	39,654	7.3	25,028	44,889	7.6	26,056	47,053
2025	353,987	6.3	22,301	39,807	7.3	25,841	45,063	7.6	26,903	47,235
2026	365,492	6.3	23,026	39,883	7.3	26,681	45,149	7.6	27,777	47,325

		L-12 Benefit Program			LT-14(	(65) Benefit F	Program	L-6 Benefit Program		
	T 4 1		Estimated Employer Contribution		Estimated	1 - 3 -	Unfunded	Estimated Employer Contribution		Unfunded
Valuation	Estimated Projected	As a % of	Annual	Actuarial Accrued	Contri As a % of	Annual	Actuarial Accrued	As a % of	Annual	Actuarial Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 274,074	8.9%	\$24,393	\$ 49,745	9.1%	\$24,941	\$ 50,747	10.5%	\$28,778	\$ 57,666
2018	282,981	8.9	25,185	50,426	9.1	25,751	51,442	10.5	29,713	58,456
2019	292,178	8.9	26,004	51,062	9.1	26,588	52,091	10.5	30,679	59,193
2020	301,674	8.9	26,849	51,646	9.1	27,452	52,687	10.5	31,676	59,870
2021	311,478	8.9	27,722	52,171	9.1	28,344	53,222	10.5	32,705	60,478
2022	321,601	8.9	28,622	52,629	9.1	29,266	53,689	10.5	33,768	61,009
2023	332,053	8.9	29,553	53,012	9.1	30,217	54,080	10.5	34,866	61,453
2024	342,845	8.9	30,513	53,312	9.1	31,199	54,386	10.5	35,999	61,800
2025	353,987	8.9	31,505	53,518	9.1	32,213	54,596	10.5	37,169	62,039
2026	365,492	8.9	32,529	53,620	9.1	33,260	54,700	10.5	38,377	62,157

- 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 Prog	gram	LT-4(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	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
2017	\$ 274,074	7.3%	\$20,007	\$ 31,188	9.1%	\$24,941	\$ 38,991	8.1%	\$22,200	\$ 35,083
2018	282,981	7.3	20,658	31,615	9.1	25,751	39,525	8.1	22,921	35,564
2019	292,178	7.3	21,329	32,014	9.1	26,588	40,023	8.1	23,666	36,012
2020	301,674	7.3	22,022	32,380	9.1	27,452	40,481	8.1	24,436	36,424
2021	311,478	7.3	22,738	32,709	9.1	28,344	40,892	8.1	25,230	36,794
2022	321,601	7.3	23,477	32,996	9.1	29,266	41,251	8.1	26,050	37,117
2023	332,053	7.3	24,240	33,236	9.1	30,217	41,551	8.1	26,896	37,387
2024	342,845	7.3	25,028	33,424	9.1	31,199	41,786	8.1	27,770	37,598
2025	353,987	7.3	25,841	33,553	9.1	32,213	41,948	8.1	28,673	37,743
2026	365,492	7.3	26,681	33,617	9.1	33,260	42,028	8.1	29,605	37,815

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) 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	
2017	\$ 274,074	9.7%	\$26,585	\$41,918	10.7%	\$29,326	\$ 46,766	11.0%	\$30,148	\$ 48,716	
2018	282,981	9.7	27,449	42,492	10.7	30,279	47,407	11.0	31,128	49,383	
2019	292,178	9.7	28,341	43,028	10.7	31,263	48,005	11.0	32,140	50,006	
2020	301,674	9.7	29,262	43,520	10.7	32,279	48,554	11.0	33,184	50,578	
2021	311,478	9.7	30,213	43,962	10.7	33,328	49,047	11.0	34,263	51,092	
2022	321,601	9.7	31,195	44,348	10.7	34,411	49,478	11.0	35,376	51,541	
2023	332,053	9.7	32,209	44,671	10.7	35,530	49,838	11.0	36,526	51,916	
2024	342,845	9.7	33,256	44,923	10.7	36,684	50,120	11.0	37,713	52,209	
2025	353,987	9.7	34,337	45,097	10.7	37,877	50,314	11.0	38,939	52,411	
2026	365,492	9.7	35,453	45,183	10.7	39,108	50,410	11.0	40,204	52,511	

		L-12 Benefit Program			LT-14(	65) Benefit F	rogram	L-6 Benefit Program		
		Estimated Employer		Unfunded		Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	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
2017	\$ 274,074	12.3%	\$33,711	\$ 54,524	12.5%	\$34,259	\$ 55,509	14.0%	\$38,370	\$ 62,326
2018	282,981	12.3	34,807	55,271	12.5	35,373	56,269	14.0	39,617	63,180
2019	292,178	12.3	35,938	55,968	12.5	36,522	56,979	14.0	40,905	63,977
2020	301,674	12.3	37,106	56,608	12.5	37,709	57,630	14.0	42,234	64,708
2021	311,478	12.3	38,312	57,183	12.5	38,935	58,216	14.0	43,607	65,365
2022	321,601	12.3	39,557	57,685	12.5	40,200	58,727	14.0	45,024	65,939
2023	332,053	12.3	40,843	58,105	12.5	41,507	59,155	14.0	46,487	66,419
2024	342,845	12.3	42,170	58,433	12.5	42,856	59,489	14.0	47,998	66,794
2025	353,987	12.3	43,540	58,659	12.5	44,248	59,719	14.0	49,558	67,052
2026	365,492	12.3	44,956	58,771	12.5	45,687	59,833	14.0	51,169	67,180

- 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 Prog	gram	L-3	Benefit Prog	gram	LT-4(	rogram	
			nated Employer Unfunded		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contr	ibution	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
2017	\$ 274,074	7.7%	\$21,104	\$ 32,250	9.3%	\$25,489	\$ 40,320	8.4%	\$23,022	\$ 36,269
2018	282,981	7.7	21,790	32,692	9.3	26,317	40,872	8.4	23,770	36,766
2019	292,178	7.7	22,498	33,104	9.3	27,173	41,387	8.4	24,543	37,230
2020	301,674	7.7	23,229	33,482	9.3	28,056	41,860	8.4	25,341	37,656
2021	311,478	7.7	23,984	33,822	9.3	28,967	42,285	8.4	26,164	38,039
2022	321,601	7.7	24,763	34,119	9.3	29,909	42,656	8.4	27,014	38,373
2023	332,053	7.7	25,568	34,368	9.3	30,881	42,967	8.4	27,892	38,653
2024	342,845	7.7	26,399	34,562	9.3	31,885	43,210	8.4	28,799	38,871
2025	353,987	7.7	27,257	34,696	9.3	32,921	43,377	8.4	29,735	39,021
2026	365,492	7.7	28,143	34,762	9.3	33,991	43,460	8.4	30,701	39,096

		LT-5(	65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		Estimated Employer Contribution			Employer bution	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	
2017	\$ 274,074	9.9%	\$27,133	\$ 43,327	11.0%	\$30,148	\$ 48,367	11.3%	\$30,970	\$ 50,383	
2018	282,981	9.9	28,015	43,921	11.0	31,128	49,030	11.3	31,977	51,073	
2019	292,178	9.9	28,926	44,475	11.0	32,140	49,648	11.3	33,016	51,717	
2020	301,674	9.9	29,866	44,983	11.0	33,184	50,216	11.3	34,089	52,308	
2021	311,478	9.9	30,836	45,440	11.0	34,263	50,726	11.3	35,197	52,839	
2022	321,601	9.9	31,838	45,839	11.0	35,376	51,171	11.3	36,341	53,303	
2023	332,053	9.9	32,873	46,173	11.0	36,526	51,544	11.3	37,522	53,691	
2024	342,845	9.9	33,942	46,434	11.0	37,713	51,835	11.3	38,741	53,994	
2025	353,987	9.9	35,045	46,614	11.0	38,939	52,035	11.3	40,001	54,203	
2026	365,492	9.9	36,184	46,703	11.0	40,204	52,134	11.3	41,301	54,306	

		L-12	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
			Employer	Unfunded	Estimated		Unfunded		Employer	Unfunded		
** *			bution	Actuarial		bution	Actuarial		bution	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		
2017	\$ 274,074	12.7%	\$34,807	\$ 56,479	12.9%	\$35,356	\$ 57,489	14.4%	\$39,467	\$ 64,480		
2018	282,981	12.7	35,939	57,253	12.9	36,505	58,277	14.4	40,749	65,363		
2019	292,178	12.7	37,107	57,975	12.9	37,691	59,012	14.4	42,074	66,187		
2020	301,674	12.7	38,313	58,638	12.9	38,916	59,687	14.4	43,441	66,944		
2021	311,478	12.7	39,558	59,234	12.9	40,181	60,293	14.4	44,853	67,624		
2022	321,601	12.7	40,843	59,754	12.9	41,487	60,823	14.4	46,311	68,218		
2023	332,053	12.7	42,171	60,189	12.9	42,835	61,266	14.4	47,816	68,715		
2024	342,845	12.7	43,541	60,529	12.9	44,227	61,612	14.4	49,370	69,103		
2025	353,987	12.7	44,956	60,763	12.9	45,664	61,850	14.4	50,974	69,370		
2026	365,492	12.7	46,417	60,879	12.9	47,148	61,968	14.4	52,631	69,502		

- 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 Prog	gram	L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	Estimated Employe		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	
2017	\$ 274,074	4.2%	\$11,511	\$ 25,906	5.9%	\$16,170	\$ 33,731	5.3%	\$14,526	\$ 30,868	
2018	282,981	4.2	11,885	26,261	5.9	16,696	34,193	5.3	14,998	31,291	
2019	292,178	4.2	12,271	26,592	5.9	17,239	34,624	5.3	15,485	31,686	
2020	301,674	4.2	12,670	26,896	5.9	17,799	35,020	5.3	15,989	32,048	
2021	311,478	4.2	13,082	27,169	5.9	18,377	35,376	5.3	16,508	32,374	
2022	321,601	4.2	13,507	27,408	5.9	18,974	35,687	5.3	17,045	32,658	
2023	332,053	4.2	13,946	27,608	5.9	19,591	35,947	5.3	17,599	32,896	
2024	342,845	4.2	14,399	27,764	5.9	20,228	36,150	5.3	18,171	33,082	
2025	353,987	4.2	14,867	27,871	5.9	20,885	36,290	5.3	18,761	33,210	
2026	365,492	4.2	15,351	27,924	5.9	21,564	36,359	5.3	19,371	33,273	

		LT-5(	65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(	65) Benefit P	rogram
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		Employer bution	Unfunded Actuarial		Employer bution	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
2017	\$ 274,074	6.8%	\$18,637	\$ 37,456	7.5%	\$20,556	\$ 41,555	8.0%	\$21,926	\$ 44,015
2018	282,981	6.8	19,243	37,969	7.5	21,224	42,124	8.0	22,638	44,618
2019	292,178	6.8	19,868	38,448	7.5	21,913	42,655	8.0	23,374	45,181
2020	301,674	6.8	20,514	38,888	7.5	22,626	43,143	8.0	24,134	45,698
2021	311,478	6.8	21,181	39,283	7.5	23,361	43,581	8.0	24,918	46,162
2022	321,601	6.8	21,869	39,628	7.5	24,120	43,964	8.0	25,728	46,567
2023	332,053	6.8	22,580	39,917	7.5	24,904	44,284	8.0	26,564	46,906
2024	342,845	6.8	23,313	40,143	7.5	25,713	44,534	8.0	27,428	47,171
2025	353,987	6.8	24,071	40,298	7.5	26,549	44,706	8.0	28,319	47,353
2026	365,492	6.8	24,853	40,375	7.5	27,412	44,791	8.0	29,239	47,443

		L-12	2 Benefit Pro	gram	LT-14(	(65) Benefit F	Program	L-6	gram	
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contribution		Actuarial	Contri	bution	Actuarial	Contri	bution	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
2017	\$ 274,074	9.1%	\$24,941	\$ 49,399	9.4%	\$25,763	\$ 50,649	10.8%	\$29,600	\$ 57,220
2018	282,981	9.1	25,751	50,076	9.4	26,600	51,343	10.8	30,562	58,004
2019	292,178	9.1	26,588	50,707	9.4	27,465	51,990	10.8	31,555	58,735
2020	301,674	9.1	27,452	51,287	9.4	28,357	52,584	10.8	32,581	59,407
2021	311,478	9.1	28,344	51,808	9.4	29,279	53,118	10.8	33,640	60,011
2022	321,601	9.1	29,266	52,263	9.4	30,230	53,585	10.8	34,733	60,538
2023	332,053	9.1	30,217	52,644	9.4	31,213	53,975	10.8	35,862	60,979
2024	342,845	9.1	31,199	52,942	9.4	32,227	54,280	10.8	37,027	61,324
2025	353,987	9.1	32,213	53,147	9.4	33,275	54,490	10.8	38,231	61,561
2026	365,492	9.1	33,260	53,248	9.4	34,356	54,594	10.8	39,473	61,679

- 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 Prog	gram	L-3	Benefit Prog	gram	LT-4(	LT-4(65) Benefit Pi		
			Estimated Employer		Estimated	Estimated Employer		Estimated Employer		Unfunded	
	Estimated	Contribution		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	
2017	\$ 274,074	4.5%	\$12,333	\$ 27,023	6.1%	\$16,719	\$ 35,042	5.7%	\$15,622	\$ 32,126	
2018	282,981	4.5	12,734	27,393	6.1	17,262	35,522	5.7	16,130	32,566	
2019	292,178	4.5	13,148	27,738	6.1	17,823	35,970	5.7	16,654	32,977	
2020	301,674	4.5	13,575	28,055	6.1	18,402	36,381	5.7	17,195	33,354	
2021	311,478	4.5	14,017	28,340	6.1	19,000	36,751	5.7	17,754	33,693	
2022	321,601	4.5	14,472	28,589	6.1	19,618	37,074	5.7	18,331	33,989	
2023	332,053	4.5	14,942	28,797	6.1	20,255	37,344	5.7	18,927	34,237	
2024	342,845	4.5	15,428	28,960	6.1	20,914	37,555	5.7	19,542	34,430	
2025	353,987	4.5	15,929	29,072	6.1	21,593	37,700	5.7	20,177	34,563	
2026	365,492	4.5	16,447	29,128	6.1	22,295	37,772	5.7	20,833	34,629	

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution			Employer bution	Unfunded Actuarial		Employer bution	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
2017	\$ 274,074	7.1%	\$19,459	\$ 38,923	7.8%	\$21,378	\$ 43,177	8.4%	\$23,022	\$ 45,732
2018	282,981	7.1	20,092	39,456	7.8	22,073	43,769	8.4	23,770	46,359
2019	292,178	7.1	20,745	39,954	7.8	22,790	44,321	8.4	24,543	46,944
2020	301,674	7.1	21,419	40,411	7.8	23,531	44,828	8.4	25,341	47,481
2021	311,478	7.1	22,115	40,822	7.8	24,295	45,283	8.4	26,164	47,963
2022	321,601	7.1	22,834	41,181	7.8	25,085	45,681	8.4	27,014	48,384
2023	332,053	7.1	23,576	41,481	7.8	25,900	46,014	8.4	27,892	48,736
2024	342,845	7.1	24,342	41,715	7.8	26,742	46,274	8.4	28,799	49,011
2025	353,987	7.1	25,133	41,876	7.8	27,611	46,453	8.4	29,735	49,201
2026	365,492	7.1	25,950	41,956	7.8	28,508	46,542	8.4	30,701	49,295

		L-12	2 Benefit Pro	gram	LT-14(	65) Benefit F	Program	L-6	gram	
	Fstimated		Estimated Employer			Employer	Unfunded		Employer	Unfunded
	Estimated	Contribution		Actuarial	Contri	bution	Actuarial	Contri	bution	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
2017	\$ 274,074	9.6%	\$26,311	\$ 51,276	9.9%	\$27,133	\$ 52,549	11.3%	\$30,970	\$ 59,420
2018	282,981	9.6	27,166	51,978	9.9	28,015	53,269	11.3	31,977	60,234
2019	292,178	9.6	28,049	52,633	9.9	28,926	53,941	11.3	33,016	60,994
2020	301,674	9.6	28,961	53,235	9.9	29,866	54,558	11.3	34,089	61,691
2021	311,478	9.6	29,902	53,776	9.9	30,836	55,112	11.3	35,197	62,318
2022	321,601	9.6	30,874	54,248	9.9	31,838	55,596	11.3	36,341	62,865
2023	332,053	9.6	31,877	54,643	9.9	32,873	56,001	11.3	37,522	63,323
2024	342,845	9.6	32,913	54,952	9.9	33,942	56,317	11.3	38,741	63,681
2025	353,987	9.6	33,983	55,165	9.9	35,045	56,535	11.3	40,001	63,927
2026	365,492	9.6	35,087	55,270	9.9	36,184	56,643	11.3	41,301	64,049

- 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)

#### Rule of 80 Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(	rogram	
		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		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
2017	\$ 274,074	7.8%	\$21,378	\$ 32,015	9.5%	\$26,037	\$ 40,001	9.0%	\$24,667	\$ 36,916
2018	282,981	7.8	22,073	32,454	9.5	26,883	40,549	9.0	25,468	37,422
2019	292,178	7.8	22,790	32,863	9.5	27,757	41,060	9.0	26,296	37,894
2020	301,674	7.8	23,531	33,239	9.5	28,659	41,529	9.0	27,151	38,327
2021	311,478	7.8	24,295	33,577	9.5	29,590	41,951	9.0	28,033	38,716
2022	321,601	7.8	25,085	33,872	9.5	30,552	42,319	9.0	28,944	39,056
2023	332,053	7.8	25,900	34,119	9.5	31,545	42,627	9.0	29,885	39,340
2024	342,845	7.8	26,742	34,312	9.5	32,570	42,868	9.0	30,856	39,562
2025	353,987	7.8	27,611	34,445	9.5	33,629	43,034	9.0	31,859	39,715
2026	365,492	7.8	28,508	34,511	9.5	34,722	43,116	9.0	32,894	39,791

		LT-5(	65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(	rogram	
			Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial		Employer bution	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
2017	\$ 274,074	10.4%	\$28,504	\$ 43,702	11.2%	\$30,696	\$ 48,002	11.7%	\$32,067	\$ 50,446
2018	282,981	10.4	29,430	44,301	11.2	31,694	48,660	11.7	33,109	51,137
2019	292,178	10.4	30,387	44,860	11.2	32,724	49,274	11.7	34,185	51,782
2020	301,674	10.4	31,374	45,373	11.2	33,787	49,837	11.7	35,296	52,374
2021	311,478	10.4	32,394	45,834	11.2	34,886	50,343	11.7	36,443	52,906
2022	321,601	10.4	33,447	46,237	11.2	36,019	50,785	11.7	37,627	53,371
2023	332,053	10.4	34,534	46,574	11.2	37,190	51,155	11.7	38,850	53,760
2024	342,845	10.4	35,656	46,837	11.2	38,399	51,444	11.7	40,113	54,064
2025	353,987	10.4	36,815	47,018	11.2	39,647	51,643	11.7	41,416	54,273
2026	365,492	10.4	38,011	47,108	11.2	40,935	51,742	11.7	42,763	54,377

		L-12	2 Benefit Pro	gram	LT-14(	65) Benefit F	Program	L-6	gram	
		Estimated Employer		Unfunded	Estimated		Unfunded		Employer	Unfunded
	Estimated	Contribution		Actuarial	Contri	bution	Actuarial	Contri	bution	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
2017	\$ 274,074	13.0%	\$35,630	\$ 55,988	13.2%	\$36,178	\$ 57,215	14.7%	\$40,289	\$ 63,949
2018	282,981	13.0	36,788	56,755	13.2	37,353	57,999	14.7	41,598	64,825
2019	292,178	13.0	37,983	57,471	13.2	38,567	58,730	14.7	42,950	65,642
2020	301,674	13.0	39,218	58,128	13.2	39,821	59,401	14.7	44,346	66,392
2021	311,478	13.0	40,492	58,719	13.2	41,115	60,005	14.7	45,787	67,067
2022	321,601	13.0	41,808	59,235	13.2	42,451	60,532	14.7	47,275	67,656
2023	332,053	13.0	43,167	59,666	13.2	43,831	60,973	14.7	48,812	68,149
2024	342,845	13.0	44,570	60,003	13.2	45,256	61,318	14.7	50,398	68,534
2025	353,987	13.0	46,018	60,235	13.2	46,726	61,555	14.7	52,036	68,799
2026	365,492	13.0	47,514	60,350	13.2	48,245	61,673	14.7	53,727	68,930

- 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 Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer		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
2017	\$ 274,074	8.0%	\$21,926	\$ 33,094	9.8%	\$26,859	\$ 41,401	9.2%	\$25,215	\$ 38,198
2018	282,981	8.0	22,638	33,547	9.8	27,732	41,968	9.2	26,034	38,721
2019	292,178	8.0	23,374	33,970	9.8	28,633	42,497	9.2	26,880	39,209
2020	301,674	8.0	24,134	34,358	9.8	29,564	42,983	9.2	27,754	39,657
2021	311,478	8.0	24,918	34,707	9.8	30,525	43,420	9.2	28,656	40,060
2022	321,601	8.0	25,728	35,012	9.8	31,517	43,801	9.2	29,587	40,412
2023	332,053	8.0	26,564	35,267	9.8	32,541	44,120	9.2	30,549	40,706
2024	342,845	8.0	27,428	35,466	9.8	33,599	44,369	9.2	31,542	40,936
2025	353,987	8.0	28,319	35,603	9.8	34,691	44,541	9.2	32,567	41,094
2026	365,492	8.0	29,239	35,671	9.8	35,818	44,626	9.2	33,625	41,172

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		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
2017	\$ 274,074	10.7%	\$29,326	\$ 45,205	11.5%	\$31,518	\$ 49,645	12.1%	\$33,163	\$ 52,209
2018	282,981	10.7	30,279	45,824	11.5	32,543	50,325	12.1	34,241	52,924
2019	292,178	10.7	31,263	46,402	11.5	33,600	50,960	12.1	35,354	53,591
2020	301,674	10.7	32,279	46,933	11.5	34,693	51,543	12.1	36,503	54,204
2021	311,478	10.7	33,328	47,410	11.5	35,820	52,067	12.1	37,689	54,755
2022	321,601	10.7	34,411	47,826	11.5	36,984	52,524	12.1	38,914	55,236
2023	332,053	10.7	35,530	48,174	11.5	38,186	52,907	12.1	40,178	55,638
2024	342,845	10.7	36,684	48,446	11.5	39,427	53,206	12.1	41,484	55,952
2025	353,987	10.7	37,877	48,633	11.5	40,709	53,412	12.1	42,832	56,168
2026	365,492	10.7	39,108	48,726	11.5	42,032	53,514	12.1	44,225	56,275

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		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
2017	\$ 274,074	13.3%	\$36,452	\$ 57,951	13.6%	\$37,274	\$ 59,232	15.2%	\$41,659	\$ 66,215
2018	282,981	13.3	37,636	58,745	13.6	38,485	60,043	15.2	43,013	67,122
2019	292,178	13.3	38,860	59,486	13.6	39,736	60,800	15.2	44,411	67,968
2020	301,674	13.3	40,123	60,166	13.6	41,028	61,495	15.2	45,854	68,745
2021	311,478	13.3	41,427	60,777	13.6	42,361	62,120	15.2	47,345	69,444
2022	321,601	13.3	42,773	61,311	13.6	43,738	62,666	15.2	48,883	70,054
2023	332,053	13.3	44,163	61,758	13.6	45,159	63,122	15.2	50,472	70,564
2024	342,845	13.3	45,598	62,107	13.6	46,627	63,479	15.2	52,112	70,963
2025	353,987	13.3	47,080	62,347	13.6	48,142	63,724	15.2	53,806	71,237
2026	365,492	13.3	48,610	62,466	13.6	49,707	63,846	15.2	55,555	71,373

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- 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.