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January 19, 2018

Warren County Ambulance District Warrenton, 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 December 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 opinions herein.

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor



## 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 Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	6.70%	2.70%	0.20%	9.60%
L-3	General	8.50	3.90	0.30	12.70
LT-4(65)	General	7.40	3.30	0.20	10.90
LT-5(65)	General	9.00	4.40	0.30	13.70
L-7	General	10.30	5.20	0.30	15.80
LT-8(65)	General	10.60	5.60	0.30	16.50
L-12	General	12.00	6.60	0.40	19.00
LT-14(65)	General	12.20	6.70	0.40	19.30
L-6	General	13.80	7.90	0.50	22.20

<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			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	7.00%	2.80%	0.20%	10.00%
L-3	General	8.80	4.20	0.30	13.30
LT-4(65)	General	7.70	3.50	0.20	11.40
LT-5(65)	General	9.40	4.60	0.30	14.30
L-7	General	10.60	5.50	0.30	16.40
LT-8(65)	General	11.00	5.80	0.30	17.10
L-12	General	12.50	6.90	0.40	19.80
LT-14(65)	General	12.60	7.10	0.40	20.10
L-6	General	14.30	8.20	0.50	23.00

<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.



## <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	7.10%	6.10%	0.20%	13.40%
L-3	General	8.90	7.40	0.30	16.60
LT-4(65)	General	7.80	6.70	0.20	14.70
LT-5(65)	General	9.40	7.90	0.30	17.60
L-7	General	10.70	8.70	0.30	19.70
LT-8(65)	General	11.00	9.10	0.30	20.40
L-12	General	12.40	10.10	0.40	22.90
LT-14(65)	General	12.60	10.20	0.40	23.20
L-6	General	14.20	11.40	0.50	26.10

<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 Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	7.40%	6.30%	0.20%	13.90%
L-3	General	9.20	7.70	0.30	17.20
LT-4(65)	General	8.10	7.00	0.20	15.30
LT-5(65)	General	9.70	8.20	0.30	18.20
L-7	General	11.00	9.00	0.30	20.30
LT-8(65)	General	11.40	9.30	0.30	21.00
L-12	General	12.90	10.40	0.40	23.70
LT-14(65)	General	13.10	10.50	0.40	24.00
L-6	General	14.70	11.70	0.50	26.90

<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)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	7.70%	3.20%	0.20%	11.10%
L-3	General	9.70	4.60	0.30	14.60
LT-4(65)	General	9.50	4.50	0.20	14.20
LT-5(65)	General	11.10	5.50	0.30	16.90
L-7	General	11.70	6.00	0.30	18.00
LT-8(65)	General	12.60	6.70	0.30	19.60
L-12	General	13.70	7.40	0.40	21.50
LT-14(65)	General	14.20	7.70	0.40	22.30
L-6	General	15.70	8.90	0.50	25.10

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- \* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	8.00%	3.40%	0.20%	11.60%
L-3	General	10.00	4.90	0.30	15.20
LT-4(65)	General	9.90	4.70	0.20	14.80
LT-5(65)	General	11.50	5.80	0.30	17.60
L-7	General	12.10	6.40	0.30	18.80
LT-8(65)	General	13.10	6.90	0.30	20.30
L-12	General	14.20	7.80	0.40	22.40
LT-14(65)	General	14.70	8.10	0.40	23.20
L-6	General	16.20	9.40	0.50	26.10

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



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

		Percents of Active Member Payroll			roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	8.00%	6.70%	0.20%	14.90%
L-3	General	10.00	8.10	0.30	18.40
LT-4(65)	General	9.80	7.90	0.20	17.90
LT-5(65)	General	11.40	9.10	0.30	20.80
L-7	General	12.00	9.60	0.30	21.90
LT-8(65)	General	13.00	10.20	0.30	23.50
L-12	General	14.00	11.00	0.40	25.40
LT-14(65)	General	14.50	11.30	0.40	26.20
L-6	General	16.10	12.40	0.50	29.00

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



## <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	8.30%	6.90%	0.20%	15.40%
L-3	General	10.40	8.40	0.30	19.10
LT-4(65)	General	10.20	8.20	0.20	18.60
LT-5(65)	General	11.80	9.40	0.30	21.50
L-7	General	12.50	9.90	0.30	22.70
LT-8(65)	General	13.40	10.50	0.30	24.20
L-12	General	14.50	11.40	0.40	26.30
LT-14(65)	General	15.00	11.70	0.40	27.10
L-6	General	16.60	12.90	0.50	30.00

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



## **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 Yea	5 Year FAS			
Benefit				
Program	General			
L-1	\$ 173,576			
L-3	229,627			
LT-4(65)	197,081			
LT-5(65)	247,708			
L-7	285,678			
LT-8(65)	298,334			
L-12	343,537			
LT-14(65)	348,961			
L-6	401,395			

3 Yea	ar FAS
Benefit	
Program	General
L-1	\$ 180,809
L-3	240,476
LT-4(65)	206,122
LT-5(65)	258,556
L-7	296,526
LT-8(65)	309,183
L-12	358,001
LT-14(65)	363,425
L-6	415,860

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

5 Yea	r FAS
Benefit	
Program	General
L-1	\$ 242,284
L-3	300,142
LT-4(65)	265,789
LT-5(65)	318,223
L-7	356,193
LT-8(65)	368,850
L-12	414,052
LT-14(65)	419,476
L-6	471,911

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 251,324			
L-3	310,991			
LT-4(65)	276,637			
LT-5(65)	329,072			
L-7	367,042			
LT-8(65)	379,698			
L-12	428,517			
LT-14(65)	433,941			
L-6	486,375			

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	\$ 200,698			
L-3	263,981			
LT-4(65)	256,748			
LT-5(65)	305,567			
L-7	325,456			
LT-8(65)	354,385			
L-12	388,739			
LT-14(65)	403,203			
L-6	453,830			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 209,738				
L-3	274,829				
LT-4(65)	267,597				
LT-5(65)	318,223				
L-7	339,920				
LT-8(65)	367,042				
L-12	405,011				
LT-14(65)	419,476				
L-6	471,911				

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

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 269,405			
L-3	332,688			
LT-4(65)	323,648			
LT-5(65)	376,082			
L-7	395,971			
LT-8(65)	424,900			
L-12	459,254			
LT-14(65)	473,719			
L-6	524,345			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 278,445			
L-3	345,345			
LT-4(65)	336,304			
LT-5(65)	388,739			
L-7	410,436			
LT-8(65)	437,557			
L-12	475,527			
LT-14(65)	489,992			
L-6	542,426			

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	33
Annual Payroll	\$ 1,808,087

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:

#### **Warren County Ambulance District**

		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	\$ 2,140,658	\$ 2,217,679	\$ 2,265,044	\$ 2,341,875
L-3	General	2,705,942	2,801,801	2,831,330	2,927,307
LT-4(65)	General	2,368,789	2,453,793	2,491,632	2,576,417
LT-5(65)	General	2,877,065	2,978,843	3,001,244	3,103,216
L-7	General	3,269,663	3,384,321	3,397,619	3,512,790
LT-8(65)	General	3,383,734	3,502,411	3,510,914	3,630,035
L-12	General	3,832,391	3,965,837	3,963,869	4,098,232
LT-14(65)	General	3,889,434	4,024,904	4,020,482	4,156,794
L-6	General	4,394,488	4,547,050	4,530,190	4,683,676



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

		Contri	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 2,448,973	\$ 2,538,248	\$ 2,556,467	\$ 2,645,491
L-3	General	3,087,870	3,199,080	3,195,596	3,306,851
LT-4(65)	General	3,031,999	3,142,507	3,137,268	3,247,470
LT-5(65)	General	3,525,129	3,652,267	3,631,194	3,758,293
L-7	General	3,725,426	3,858,503	3,834,767	3,968,293
LT-8(65)	General	4,016,957	4,160,628	4,125,159	4,269,245
L-12	General	4,361,942	4,517,009	4,473,797	4,629,577
LT-14(65)	General	4,507,641	4,668,062	4,618,992	4,780,042
L-6	General	4,997,937	5,175,122	5,112,965	5,290,958





**SUMMARY OF FINANCIAL ASSUMPTIONS** 

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

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

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



#### Schedule 1.

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

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

		General Members							
Sample	Years of	N	⁄len	Wo	omen	Po	olice	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	<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**

General Members		ment <u>General Members</u> Retiremen		Retirement		
Men	Women	Ages	Police	Fire		
3.00%	3.00%	50	2.50%	2.50%		
3.00%	3.00%	51	2.50%	2.50%		
3.00%	3.00%	52	2.50%	2.50%		
3.00%	3.00%	53	2.50%	2.50%		
3.00%	3.00%	54	2.50%	2.50%		
	Men 3.00% 3.00% 3.00% 3.00%	Men         Women           3.00%         3.00%           3.00%         3.00%           3.00%         3.00%           3.00%         3.00%	Men         Women         Ages           3.00%         3.00%         50           3.00%         3.00%         51           3.00%         3.00%         52           3.00%         3.00%         53	Men         Women         Ages         Police           3.00%         3.00%         50         2.50%           3.00%         3.00%         51         2.50%           3.00%         3.00%         52         2.50%           3.00%         3.00%         53         2.50%		

#### **Normal Retirement**

Retirement	<b>General Members</b>		ment General Membe		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 66	25 25	25 25	60 61	10 10	15 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	<b>General Members</b>			
Ages	Men	Women	Police	Fire
50	15%	15%	25%	25%
51	15/0	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
			100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		
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, 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:

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)

Estimated Estimated		ated	
LAGERS	Social Monthly Total		/ Total
BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
\$ 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%
\$ 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%
\$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%
	\$ 525 700 875 1,050 1,225 1,400 \$ 375 500 625 750 875 1,000 \$225 300 375 450 525	LAGERS Security 2  \$ 525 \$ 875 700 1,016 875 1,157 1,050 1,297 1,225 1,438 1,400 1,579  \$ 375 \$ 875 500 1,016 625 1,157 750 1,297 875 1,438 1,000 1,579  \$ \$225 \$ 875 300 1,016 375 1,157 450 1,297 525 1,438	LAGERS BENEFIT³         Social Security²         Monthly Security²           \$ 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           \$ 375         \$ 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           \$225         \$ 875         \$1,100           300         1,016         1,316           375         1,157         1,532           450         1,297         1,747           525         1,438         1,963

<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>quot;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.

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

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	\$ 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:				
\$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:				
\$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>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 2017 - 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 Esti		Estima	ated	
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	\$ 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:					
\$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:					
\$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.

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 2017 - 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	Monthly	/ Total	
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS	
35 Years of Service:					
\$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 Service:					
\$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 Service:					
\$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>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 2017 - 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		ated
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	\$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:				
\$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:				
\$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>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 2017 - 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	Pero	cent
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	9:						
\$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 Service	e:						
\$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 Service	e:						
\$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>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.

 $<sup>^3</sup>$  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 2017 - 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	ated	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	\$ 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 Service	2:						
\$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 Service	e:						
\$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%

<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 2017 - 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 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 Service	:						
\$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 Service	:						
\$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 Service	:						
\$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%

<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 2017 - 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	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>:</b> :							
\$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 Service	2:							
\$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 Service	2:							
\$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>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 2017 - it does not include any amounts which might be payable to an eligible spouse or children.



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

### **Warren County Ambulance District**

#### December 31, 2017

#### By Attained Age and Years of Service

		Yea	ars of Se	rvice to \		Totals			
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20									
20-24	2							2	\$ 77,655
25-29									
30-34	5	1						6	\$ 267,834
35-39	1	4						5	\$ 275,805
40-44	1			2				3	\$ 162,958
45-49		1	1		4			6	\$ 380,659
50-54	2			2				4	\$ 222,766
55-59		1	1	2				4	\$ 202,394
60-64				1				1	\$ 46,800
65-69							2	2	\$ 171,216
70 & Over									
Totals	11	7	2	2	33	\$ 1,808,087			

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

Age: 44.0 years.

Benefit Service: 11.7 years.

Annual Pay: \$54,791.





January 19, 2018 E-mail

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

Dear Bob:

Enclosed is the report of the December 31, 2017 Initial Actuarial Valuation of LAGERS benefits for the employees of

Warren County Ambulance District

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



January 19, 2018

Warren County Ambulance District Warrenton, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the December 31, 2017 Initial Valuation for the Warren County Ambulance District dated January 19, 2018.

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 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	3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contri	bution Actuarial		Contribution		Actuarial
Valuation	Projected	As a %	As a % Annual		As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 1,808,087	9.6%	\$173,576	\$ 2,140,658	12.7%	\$229,627	\$ 2,705,942	10.9%	\$197,081	\$ 2,368,789
2018	1,866,850	9.6	179,218	2,169,985	12.7	237,090	2,743,013	10.9	203,487	2,401,241
2019	1,927,523	9.6	185,042	2,197,347	12.7	244,795	2,777,601	10.9	210,100	2,431,519
2020	1,990,167	9.6	191,056	2,222,469	12.7	252,751	2,809,357	10.9	216,928	2,459,318
2021	2,054,847	9.6	197,265	2,245,051	12.7	260,966	2,837,903	10.9	223,978	2,484,307
2022	2,121,630	9.6	203,676	2,264,768	12.7	269,447	2,862,826	10.9	231,258	2,506,125
2023	2,190,583	9.6	210,296	2,281,265	12.7	278,204	2,883,680	10.9	238,774	2,524,380
2024	2,261,777	9.6	217,131	2,294,158	12.7	287,246	2,899,978	10.9	246,534	2,538,647
2025	2,335,285	9.6	224,187	2,303,030	12.7	296,581	2,911,192	10.9	254,546	2,548,464
2026	2,411,182	9.6	231,473	2,307,428	12.7	306,220	2,916,751	10.9	262,819	2,553,330

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	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	\$ 1,808,087	13.7%	\$247,708	\$ 2,877,065	15.8%	\$285,678	\$ 3,269,663	16.5%	\$298,334	\$ 3,383,734	
2018	1,866,850	13.7	255,758	2,916,480	15.8	294,962	3,314,457	16.5	308,030	3,430,091	
2019	1,927,523	13.7	264,071	2,953,255	15.8	304,549	3,356,250	16.5	318,041	3,473,342	
2020	1,990,167	13.7	272,653	2,987,019	15.8	314,446	3,394,622	16.5	328,378	3,513,052	
2021	2,054,847	13.7	281,514	3,017,370	15.8	324,666	3,429,114	16.5	339,050	3,548,748	
2022	2,121,630	13.7	290,663	3,043,870	15.8	335,218	3,459,230	16.5	350,069	3,579,914	
2023	2,190,583	13.7	300,110	3,066,043	15.8	346,112	3,484,428	16.5	361,446	3,605,991	
2024	2,261,777	13.7	309,863	3,083,371	15.8	357,361	3,504,121	16.5	373,193	3,626,371	
2025	2,335,285	13.7	319,934	3,095,295	15.8	368,975	3,517,672	16.5	385,322	3,640,394	
2026	2.411.182	13.7	330.332	3.101.205	15.8	380.967	3.524.389	16.5	397.845	3.647.345	

		L-12 Benefit Program			LT-14	(65) Benefit	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	Contribution		Contr	ibution	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	\$ 1,808,087	19.0%	\$343,537	\$ 3,832,391	19.3%	\$348,961	\$ 3,889,434	22.2%	\$401,395	\$ 4,394,488
2018	1,866,850	19.0	354,702	3,884,894	19.3	360,302	3,942,719	22.2	414,441	4,454,692
2019	1,927,523	19.0	366,229	3,933,880	19.3	372,012	3,992,434	22.2	427,910	4,510,863
2020	1,990,167	19.0	378,132	3,978,856	19.3	384,102	4,038,079	22.2	441,817	4,562,435
2021	2,054,847	19.0	390,421	4,019,285	19.3	396,585	4,079,110	22.2	456,176	4,608,793
2022	2,121,630	19.0	403,110	4,054,584	19.3	409,475	4,114,934	22.2	471,002	4,649,269
2023	2,190,583	19.0	416,211	4,084,119	19.3	422,783	4,144,909	22.2	486,309	4,683,136
2024	2,261,777	19.0	429,738	4,107,201	19.3	436,523	4,168,335	22.2	502,114	4,709,604
2025	2,335,285	19.0	443,704	4,123,084	19.3	450,710	4,184,454	22.2	518,433	4,727,816
2026	2,411,182	19.0	458,125	4,130,957	19.3	465,358	4,192,444	22.2	535,282	4,736,844

- 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.
- 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	3 Benefit Pro	gram	LT-4(65) Benefit Program			
	Estimated Employer		l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded	
	Estimated	Contribution		Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a %	As a % Annual		As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 1,808,087	10.0%	\$180,809	\$ 2,217,679	13.3%	\$240,476	\$ 2,801,801	11.4%	\$206,122	\$ 2,453,793	
2018	1,866,850	10.0	186,685	2,248,061	13.3	248,291	2,840,185	11.4	212,821	2,487,410	
2019	1,927,523	10.0	192,752	2,276,408	13.3	256,361	2,875,998	11.4	219,738	2,518,775	
2020	1,990,167	10.0	199,017	2,302,434	13.3	264,692	2,908,879	11.4	226,879	2,547,572	
2021	2,054,847	10.0	205,485	2,325,829	13.3	273,295	2,938,436	11.4	234,253	2,573,458	
2022	2,121,630	10.0	212,163	2,346,255	13.3	282,177	2,964,242	11.4	241,866	2,596,059	
2023	2,190,583	10.0	219,058	2,363,346	13.3	291,348	2,985,835	11.4	249,726	2,614,970	
2024	2,261,777	10.0	226,178	2,376,703	13.3	300,816	3,002,710	11.4	257,843	2,629,749	
2025	2,335,285	10.0	233,529	2,385,894	13.3	310,593	3,014,322	11.4	266,222	2,639,918	
2026	2,411,182	10.0	241,118	2,390,450	13.3	320,687	3,020,078	11.4	274,875	2,644,959	

		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
2017	\$ 1,808,087	14.3%	\$258,556	\$ 2,978,843	16.4%	\$296,526	\$ 3,384,321	17.1%	\$309,183	\$ 3,502,411
2018	1,866,850	14.3	266,960	3,019,653	16.4	306,163	3,430,686	17.1	319,231	3,550,393
2019	1,927,523	14.3	275,636	3,057,729	16.4	316,114	3,473,945	17.1	329,606	3,595,161
2020	1,990,167	14.3	284,594	3,092,688	16.4	326,387	3,513,662	17.1	340,319	3,636,264
2021	2,054,847	14.3	293,843	3,124,113	16.4	336,995	3,549,364	17.1	351,379	3,673,212
2022	2,121,630	14.3	303,393	3,151,550	16.4	347,947	3,580,536	17.1	362,799	3,705,471
2023	2,190,583	14.3	313,253	3,174,507	16.4	359,256	3,606,618	17.1	374,590	3,732,463
2024	2,261,777	14.3	323,434	3,192,448	16.4	370,931	3,627,001	17.1	386,764	3,753,558
2025	2,335,285	14.3	333,946	3,204,793	16.4	382,987	3,641,027	17.1	399,334	3,768,073
2026	2.411.182	14.3	344.799	3.210.912	16.4	395.434	3.647.979	17.1	412.312	3.775.268

		L-12 Benefit Program			LT-14	(65) Benefit	Program	L-6 Benefit Program		
	Estimated		l Employer	Unfunded		Estimated Employer			l Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	19.8%	\$358,001	\$ 3,965,837	20.1%	\$363,425	\$ 4,024,904	23.0%	\$415,860	\$ 4,547,050
2018	1,866,850	19.8	369,636	4,020,168	20.1	375,237	4,080,045	23.0	429,376	4,609,344
2019	1,927,523	19.8	381,650	4,070,860	20.1	387,432	4,131,492	23.0	443,330	4,667,465
2020	1,990,167	19.8	394,053	4,117,402	20.1	400,024	4,178,727	23.0	457,738	4,720,828
2021	2,054,847	19.8	406,860	4,159,239	20.1	413,024	4,221,187	23.0	472,615	4,768,796
2022	2,121,630	19.8	420,083	4,195,767	20.1	426,448	4,258,259	23.0	487,975	4,810,677
2023	2,190,583	19.8	433,735	4,226,330	20.1	440,307	4,289,278	23.0	503,834	4,845,720
2024	2,261,777	19.8	447,832	4,250,216	20.1	454,617	4,313,520	23.0	520,209	4,873,106
2025	2,335,285	19.8	462,386	4,266,652	20.1	469,392	4,330,201	23.0	537,116	4,891,951
2026	2,411,182	19.8	477,414	4,274,799	20.1	484,648	4,338,469	23.0	554,572	4,901,292

- 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	Contribution		Contri	ibution Actuaria		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	\$ 1,808,087	13.4%	\$242,284	\$ 2,265,044	16.6%	\$300,142	\$ 2,831,330	14.7%	\$265,789	\$ 2,491,632	
2018	1,866,850	13.4	250,158	2,296,075	16.6	309,897	2,870,119	14.7	274,427	2,525,767	
2019	1,927,523	13.4	258,288	2,325,027	16.6	319,969	2,906,309	14.7	283,346	2,557,615	
2020	1,990,167	13.4	266,682	2,351,609	16.6	330,368	2,939,537	14.7	292,555	2,586,856	
2021	2,054,847	13.4	275,349	2,375,503	16.6	341,105	2,969,405	14.7	302,063	2,613,141	
2022	2,121,630	13.4	284,298	2,396,366	16.6	352,191	2,995,483	14.7	311,880	2,636,091	
2023	2,190,583	13.4	293,538	2,413,822	16.6	363,637	3,017,303	14.7	322,016	2,655,293	
2024	2,261,777	13.4	303,078	2,427,464	16.6	375,455	3,034,356	14.7	332,481	2,670,300	
2025	2,335,285	13.4	312,928	2,436,851	16.6	387,657	3,046,090	14.7	343,287	2,680,626	
2026	2,411,182	13.4	323,098	2,441,504	16.6	400,256	3,051,906	14.7	354,444	2,685,745	

		LT-5	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		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	\$ 1,808,087	17.6%	\$318,223	\$ 3,001,244	19.7%	\$356,193	\$ 3,397,619	20.4%	\$368,850	\$ 3,510,914	
2018	1,866,850	17.6	328,566	3,042,361	19.7	367,769	3,444,166	20.4	380,837	3,559,013	
2019	1,927,523	17.6	339,244	3,080,723	19.7	379,722	3,487,595	20.4	393,215	3,603,890	
2020	1,990,167	17.6	350,269	3,115,945	19.7	392,063	3,527,468	20.4	405,994	3,645,093	
2021	2,054,847	17.6	361,653	3,147,606	19.7	404,805	3,563,310	20.4	419,189	3,682,130	
2022	2,121,630	17.6	373,407	3,175,249	19.7	417,961	3,594,604	20.4	432,813	3,714,468	
2023	2,190,583	17.6	385,543	3,198,379	19.7	431,545	3,620,788	20.4	446,879	3,741,525	
2024	2,261,777	17.6	398,073	3,216,455	19.7	445,570	3,641,252	20.4	461,403	3,762,671	
2025	2,335,285	17.6	411,010	3,228,893	19.7	460,051	3,655,333	20.4	476,398	3,777,221	
2026	2.411.182	17.6	424.368	3.235.058	19.7	475.003	3.662.313	20.4	491.881	3.784.434	

	L-12 Benefit Program			ogram	LT-14	l(65) Benefit	Program	L-6 Benefit Program		
			Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	Contribution		Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	22.9%	\$414,052	\$ 3,963,869	23.2%	\$419,476	\$ 4,020,482	26.1%	\$471,911	\$ 4,530,190
2018	1,866,850	22.9	427,509	4,018,173	23.2	433,109	4,075,562	26.1	487,248	4,592,253
2019	1,927,523	22.9	441,403	4,068,840	23.2	447,185	4,126,952	26.1	503,084	4,650,158
2020	1,990,167	22.9	455,748	4,115,359	23.2	461,719	4,174,135	26.1	519,434	4,703,323
2021	2,054,847	22.9	470,560	4,157,175	23.2	476,725	4,216,548	26.1	536,315	4,751,113
2022	2,121,630	22.9	485,853	4,193,685	23.2	492,218	4,253,579	26.1	553,745	4,792,839
2023	2,190,583	22.9	501,644	4,224,233	23.2	508,215	4,284,564	26.1	571,742	4,827,752
2024	2,261,777	22.9	517,947	4,248,107	23.2	524,732	4,308,779	26.1	590,324	4,855,037
2025	2,335,285	22.9	534,780	4,264,535	23.2	541,786	4,325,441	26.1	609,509	4,873,812
2026	2,411,182	22.9	552,161	4,272,678	23.2	559,394	4,333,700	26.1	629,319	4,883,118

- 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 Pro	gram	L-	3 Benefit Pro	gram	LT-4	65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	ibution	Actuarial	Contr	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	\$ 1,808,087	13.9%	\$251,324	\$ 2,341,875	17.2%	\$310,991	\$ 2,927,307	15.3%	\$276,637	\$ 2,576,417
2018	1,866,850	13.9	259,492	2,373,958	17.2	321,098	2,967,411	15.3	285,628	2,611,714
2019	1,927,523	13.9	267,926	2,403,892	17.2	331,534	3,004,828	15.3	294,911	2,644,646
2020	1,990,167	13.9	276,633	2,431,376	17.2	342,309	3,039,182	15.3	304,496	2,674,882
2021	2,054,847	13.9	285,624	2,456,081	17.2	353,434	3,070,063	15.3	314,392	2,702,061
2022	2,121,630	13.9	294,907	2,477,651	17.2	364,920	3,097,025	15.3	324,609	2,725,791
2023	2,190,583	13.9	304,491	2,495,699	17.2	376,780	3,119,585	15.3	335,159	2,745,647
2024	2,261,777	13.9	314,387	2,509,804	17.2	389,026	3,137,216	15.3	346,052	2,761,165
2025	2,335,285	13.9	324,605	2,519,510	17.2	401,669	3,149,348	15.3	357,299	2,771,843
2026	2,411,182	13.9	335,154	2,524,321	17.2	414,723	3,155,362	15.3	368,911	2,777,136

		LT-5(65) Benefit Program  Estimated Employer Unfunded			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		Estimated Employer Contribution			l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 1,808,087	18.2%	\$329,072	\$ 3,103,216	20.3%	\$367,042	\$ 3,512,790	21.0%	\$379,698	\$ 3,630,035	
2018	1,866,850	18.2	339,767	3,145,730	20.3	378,971	3,560,915	21.0	392,039	3,679,766	
2019	1,927,523	18.2	350,809	3,185,396	20.3	391,287	3,605,816	21.0	404,780	3,726,166	
2020	1,990,167	18.2	362,210	3,221,814	20.3	404,004	3,647,041	21.0	417,935	3,768,767	
2021	2,054,847	18.2	373,982	3,254,551	20.3	417,134	3,684,098	21.0	431,518	3,807,061	
2022	2,121,630	18.2	386,137	3,283,134	20.3	430,691	3,716,453	21.0	445,542	3,840,496	
2023	2,190,583	18.2	398,686	3,307,049	20.3	444,688	3,743,525	21.0	460,022	3,868,471	
2024	2,261,777	18.2	411,643	3,325,739	20.3	459,141	3,764,682	21.0	474,973	3,890,334	
2025	2,335,285	18.2	425,022	3,338,600	20.3	474,063	3,779,240	21.0	490,410	3,905,378	
2026	2.411.182	18.2	438.835	3.344.975	20.3	489.470	3.786.456	21.0	506.348	3.912.835	

		L-1	L2 Benefit Pro	ogram	LT-14	l(65) Benefit	Program	L-	6 Benefit Pro	gram
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		Annual Dollars \$486,375 \$502,183 \$518,504 \$535,355 \$552,754	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll		Accrued Liability
2017	\$ 1,808,087	23.7%	\$428,517	\$ 4,098,232	24.0%	\$433,941	\$ 4,156,794	26.9%	\$486,375	\$ 4,683,676
2018	1,866,850	23.7	442,443	4,154,377	24.0	448,044	4,213,741	26.9	502,183	4,747,842
2019	1,927,523	23.7	456,823	4,206,761	24.0	462,606	4,266,874	26.9	518,504	4,807,709
2020	1,990,167	23.7	471,670	4,254,857	24.0	477,640	4,315,657	26.9	535,355	4,862,675
2021	2,054,847	23.7	486,999	4,298,090	24.0	493,163	4,359,508	26.9	552,754	4,912,084
2022	2,121,630	23.7	502,826	4,335,837	24.0	509,191	4,397,795	26.9	570,718	4,955,224
2023	2,190,583	23.7	519,168	4,367,421	24.0	525,740	4,429,830	26.9	589,267	4,991,320
2024	2,261,777	23.7	536,041	4,392,104	24.0	542,826	4,454,866	26.9	608,418	5,019,529
2025	2,335,285	23.7	553,463	4,409,088	24.0	560,468	4,472,093	26.9	628,192	5,038,940
2026	2,411,182	23.7	571,450	4,417,507	24.0	578,684	4,480,632	26.9	648,608	5,048,562

- 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 Pro	gram	L-:	3 Benefit Pro	gram	LT-4(	LT-4(65) Benefit Pi	
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	ed Contribution		Actuarial	Contri	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	\$ 1,808,087	11.1%	\$200,698	\$ 2,448,973	14.6%	\$263,981	\$ 3,087,870	14.2%	\$256,748	\$ 3,031,999
2018	1,866,850	11.1	207,220	2,482,524	14.6	272,560	3,130,173	14.2	265,093	3,073,537
2019	1,927,523	11.1	213,955	2,513,827	14.6	281,418	3,169,643	14.2	273,708	3,112,292
2020	1,990,167	11.1	220,909	2,542,567	14.6	290,564	3,205,881	14.2	282,604	3,147,875
2021	2,054,847	11.1	228,088	2,568,402	14.6	300,008	3,238,456	14.2	291,788	3,179,860
2022	2,121,630	11.1	235,501	2,590,959	14.6	309,758	3,266,897	14.2	301,271	3,207,787
2023	2,190,583	11.1	243,155	2,609,832	14.6	319,825	3,290,694	14.2	311,063	3,231,154
2024	2,261,777	11.1	251,057	2,624,582	14.6	330,219	3,309,292	14.2	321,172	3,249,415
2025	2,335,285	11.1	259,217	2,634,731	14.6	340,952	3,322,089	14.2	331,610	3,261,981
2026	2,411,182	11.1	267,641	2,639,762	14.6	352,033	3,328,432	14.2	342,388	3,268,210

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution			d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	16.9%	\$305,567	\$ 3,525,129	18.0%	\$325,456	\$ 3,725,426	19.6%	\$354,385	\$ 4,016,957
2018	1,866,850	16.9	315,498	3,573,423	18.0	336,033	3,776,464	19.6	365,903	4,071,989
2019	1,927,523	16.9	325,751	3,618,482	18.0	346,954	3,824,083	19.6	377,795	4,123,334
2020	1,990,167	16.9	336,338	3,659,852	18.0	358,230	3,867,803	19.6	390,073	4,170,476
2021	2,054,847	16.9	347,269	3,697,039	18.0	369,872	3,907,103	19.6	402,750	4,212,852
2022	2,121,630	16.9	358,555	3,729,508	18.0	381,893	3,941,417	19.6	415,839	4,249,851
2023	2,190,583	16.9	370,209	3,756,675	18.0	394,305	3,970,128	19.6	429,354	4,280,808
2024	2,261,777	16.9	382,240	3,777,907	18.0	407,120	3,992,566	19.6	443,308	4,305,002
2025	2,335,285	16.9	394,663	3,792,516	18.0	420,351	4,008,005	19.6	457,716	4,321,650
2026	2.411.182	16.9	407.490	3.799.758	18.0	434.013	4.015.658	19.6	472.592	4.329.902

		L-1	2 Benefit Pro	ogram	LT-14	l(65) Benefit	Program	L-	6 Benefit Pro	gram
	Estimated		l Employer	Unfunded		d Employer	Unfunded		l Employer	Unfunded
	Estimated	Contribution		Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	21.5%	\$388,739	\$ 4,361,942	22.3%	\$403,203	\$ 4,507,641	25.1%	\$453,830	\$ 4,997,937
2018	1,866,850	21.5	401,373	4,421,700	22.3	416,308	4,569,395	25.1	468,579	5,066,408
2019	1,927,523	21.5	414,417	4,477,455	22.3	429,838	4,627,012	25.1	483,808	5,130,292
2020	1,990,167	21.5	427,886	4,528,645	22.3	443,807	4,679,912	25.1	499,532	5,188,946
2021	2,054,847	21.5	441,792	4,574,660	22.3	458,231	4,727,464	25.1	515,767	5,241,670
2022	2,121,630	21.5	456,150	4,614,836	22.3	473,123	4,768,982	25.1	532,529	5,287,704
2023	2,190,583	21.5	470,975	4,648,452	22.3	488,500	4,803,721	25.1	549,836	5,326,221
2024	2,261,777	21.5	486,282	4,674,724	22.3	504,376	4,830,870	25.1	567,706	5,356,323
2025	2,335,285	21.5	502,086	4,692,801	22.3	520,769	4,849,551	25.1	586,157	5,377,036
2026	2,411,182	21.5	518,404	4,701,762	22.3	537,694	4,858,811	25.1	605,207	5,387,303

- 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 Pro	gram	L-3	Benefit Pro	gram	LT-4(65) Benefit P		rogram
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		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
2017	\$ 1,808,087	11.6%	\$209,738	\$ 2,538,248	15.2%	\$274,829	\$ 3,199,080	14.8%	\$267,597	\$ 3,142,507
2018	1,866,850	11.6	216,555	2,573,022	15.2	283,761	3,242,907	14.8	276,294	3,185,559
2019	1,927,523	11.6	223,593	2,605,466	15.2	292,983	3,283,798	14.8	285,273	3,225,727
2020	1,990,167	11.6	230,859	2,635,254	15.2	302,505	3,321,341	14.8	294,545	3,262,607
2021	2,054,847	11.6	238,362	2,662,031	15.2	312,337	3,355,089	14.8	304,117	3,295,758
2022	2,121,630	11.6	246,109	2,685,410	15.2	322,488	3,384,555	14.8	314,001	3,324,703
2023	2,190,583	11.6	254,108	2,704,971	15.2	332,969	3,409,209	14.8	324,206	3,348,921
2024	2,261,777	11.6	262,366	2,720,259	15.2	343,790	3,428,477	14.8	334,743	3,367,848
2025	2,335,285	11.6	270,893	2,730,778	15.2	354,963	3,441,735	14.8	345,622	3,380,872
2026	2,411,182	11.6	279,697	2,735,992	15.2	366,500	3,448,307	14.8	356,855	3,387,328

		LT-5	(65) Benefit F	Program	L-	7 Benefit Pro	gram	LT-8	(65) Benefit F	Program
		Estimated	d Employer	Unfunded	Estimate	d Employer	Unfunded	Estimated	d Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	17.6%	\$318,223	\$ 3,652,267	18.8%	\$339,920	\$ 3,858,503	20.3%	\$367,042	\$ 4,160,628
2018	1,866,850	17.6	328,566	3,702,303	18.8	350,968	3,911,364	20.3	378,971	4,217,628
2019	1,927,523	17.6	339,244	3,748,987	18.8	362,374	3,960,684	20.3	391,287	4,270,810
2020	1,990,167	17.6	350,269	3,791,849	18.8	374,151	4,005,966	20.3	404,004	4,319,638
2021	2,054,847	17.6	361,653	3,830,378	18.8	386,311	4,046,670	20.3	417,134	4,363,529
2022	2,121,630	17.6	373,407	3,864,018	18.8	398,866	4,082,209	20.3	430,691	4,401,851
2023	2,190,583	17.6	385,543	3,892,165	18.8	411,830	4,111,945	20.3	444,688	4,433,916
2024	2,261,777	17.6	398,073	3,914,162	18.8	425,214	4,135,184	20.3	459,141	4,458,975
2025	2,335,285	17.6	411,010	3,929,298	18.8	439,034	4,151,175	20.3	474,063	4,476,218
2026	2 411 182	17.6	424 368	3 936 801	18.8	453 302	4 159 102	20.3	489 470	4 484 765

		L-1	L2 Benefit Pro	ogram	LT-14	l(65) Benefit	Program	L-	6 Benefit Pro	gram
		Estimated	l Employer	Unfunded	Estimated	d Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	nated Contribution		Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	22.4%	\$405,011	\$ 4,517,009	23.2%	\$419,476	\$ 4,668,062	26.1%	\$471,911	\$ 5,175,122
2018	1,866,850	22.4	418,174	4,578,891	23.2	433,109	4,732,014	26.1	487,248	5,246,020
2019	1,927,523	22.4	431,765	4,636,628	23.2	447,185	4,791,682	26.1	503,084	5,312,169
2020	1,990,167	22.4	445,797	4,689,638	23.2	461,719	4,846,465	26.1	519,434	5,372,903
2021	2,054,847	22.4	460,286	4,737,289	23.2	476,725	4,895,710	26.1	536,315	5,427,497
2022	2,121,630	22.4	475,245	4,778,894	23.2	492,218	4,938,706	26.1	553,745	5,475,163
2023	2,190,583	22.4	490,691	4,813,705	23.2	508,215	4,974,681	26.1	571,742	5,515,046
2024	2,261,777	22.4	506,638	4,840,910	23.2	524,732	5,002,796	26.1	590,324	5,546,215
2025	2,335,285	22.4	523,104	4,859,630	23.2	541,786	5,022,142	26.1	609,509	5,567,662
2026	2,411,182	22.4	540,105	4,868,909	23.2	559,394	5,031,732	26.1	629,319	5,578,293

- 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.
- 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 Pro	gram	L-:	3 Benefit Pro	gram	LT-4(	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	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	\$ 1,808,087	14.9%	\$269,405	\$ 2,556,467	18.4%	\$332,688	\$ 3,195,596	17.9%	\$323,648	\$ 3,137,268
2018	1,866,850	14.9	278,161	2,591,490	18.4	343,500	3,239,375	17.9	334,166	3,180,248
2019	1,927,523	14.9	287,201	2,624,167	18.4	354,664	3,280,221	17.9	345,027	3,220,349
2020	1,990,167	14.9	296,535	2,654,169	18.4	366,191	3,317,724	17.9	356,240	3,257,167
2021	2,054,847	14.9	306,172	2,681,138	18.4	378,092	3,351,435	17.9	367,818	3,290,263
2022	2,121,630	14.9	316,123	2,704,685	18.4	390,380	3,380,868	17.9	379,772	3,319,159
2023	2,190,583	14.9	326,397	2,724,387	18.4	403,067	3,405,495	17.9	392,114	3,343,337
2024	2,261,777	14.9	337,005	2,739,784	18.4	416,167	3,424,742	17.9	404,858	3,362,232
2025	2,335,285	14.9	347,957	2,750,379	18.4	429,692	3,437,986	17.9	418,016	3,375,234
2026	2,411,182	14.9	359,266	2,755,631	18.4	443,657	3,444,551	17.9	431,602	3,381,679

	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2017	\$ 1,808,087	20.8%	\$376,082	\$ 3,631,194	21.9%	\$395,971	\$ 3,834,767	23.5%	\$424,900	\$ 4,125,159
2018	1,866,850	20.8	388,305	3,680,941	21.9	408,840	3,887,303	23.5	438,710	4,181,673
2019	1,927,523	20.8	400,925	3,727,355	21.9	422,128	3,936,319	23.5	452,968	4,234,401
2020	1,990,167	20.8	413,955	3,769,970	21.9	435,847	3,981,323	23.5	467,689	4,282,813
2021	2,054,847	20.8	427,408	3,808,276	21.9	450,011	4,021,777	23.5	482,889	4,326,330
2022	2,121,630	20.8	441,299	3,841,722	21.9	464,637	4,057,098	23.5	498,583	4,364,325
2023	2,190,583	20.8	455,641	3,869,706	21.9	479,738	4,086,651	23.5	514,787	4,396,116
2024	2,261,777	20.8	470,450	3,891,576	21.9	495,329	4,109,747	23.5	531,518	4,420,961
2025	2,335,285	20.8	485,739	3,906,625	21.9	511,427	4,125,640	23.5	548,792	4,438,057
2026	2.411.182	20.8	501.526	3.914.085	21.9	528.049	4.133.518	23.5	566.628	4.446.531

		L-1	L2 Benefit Pro	ogram	LT-14	l(65) Benefit	Program	L-	6 Benefit Pro	gram
	Estimated		l Employer	Unfunded		d Employer	Unfunded		l Employer	Unfunded
	Estimated	Contribution		Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 1,808,087	25.4%	\$459,254	\$ 4,473,797	26.2%	\$473,719	\$ 4,618,992	29.0%	\$524,345	\$ 5,112,965
2018	1,866,850	25.4	474,180	4,535,087	26.2	489,115	4,682,271	29.0	541,387	5,183,012
2019	1,927,523	25.4	489,591	4,592,272	26.2	505,011	4,741,311	29.0	558,982	5,248,367
2020	1,990,167	25.4	505,502	4,644,775	26.2	521,424	4,795,518	29.0	577,148	5,308,371
2021	2,054,847	25.4	521,931	4,691,970	26.2	538,370	4,844,245	29.0	595,906	5,362,309
2022	2,121,630	25.4	538,894	4,733,177	26.2	555,867	4,886,789	29.0	615,273	5,409,403
2023	2,190,583	25.4	556,408	4,767,655	26.2	573,933	4,922,386	29.0	635,269	5,448,807
2024	2,261,777	25.4	574,491	4,794,600	26.2	592,586	4,950,206	29.0	655,915	5,479,602
2025	2,335,285	25.4	593,162	4,813,141	26.2	611,845	4,969,349	29.0	677,233	5,500,792
2026	2,411,182	25.4	612,440	4,822,332	26.2	631,730	4,978,838	29.0	699,243	5,511,296

- 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	\$ 1,808,087	15.4%	\$278,445	\$ 2,645,491	19.1%	\$345,345	\$ 3,306,851	18.6%	\$336,304	\$ 3,247,470
2018	1,866,850	15.4	287,495	2,681,734	19.1	356,568	3,352,154	18.6	347,234	3,291,960
2019	1,927,523	15.4	296,839	2,715,549	19.1	368,157	3,394,423	18.6	358,519	3,333,470
2020	1,990,167	15.4	306,486	2,746,596	19.1	380,122	3,433,231	18.6	370,171	3,371,581
2021	2,054,847	15.4	316,446	2,774,504	19.1	392,476	3,468,116	18.6	382,202	3,405,839
2022	2,121,630	15.4	326,731	2,798,871	19.1	405,231	3,498,574	18.6	394,623	3,435,750
2023	2,190,583	15.4	337,350	2,819,259	19.1	418,401	3,524,059	18.6	407,448	3,460,777
2024	2,261,777	15.4	348,314	2,835,193	19.1	431,999	3,543,976	18.6	420,691	3,480,336
2025	2,335,285	15.4	359,634	2,846,157	19.1	446,039	3,557,681	18.6	434,363	3,493,795
2026	2,411,182	15.4	371,322	2,851,592	19.1	460,536	3,564,474	18.6	448,480	3,500,466

	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 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
2017	\$ 1,808,087	21.5%	\$388,739	\$ 3,758,293	22.7%	\$410,436	\$ 3,968,293	24.2%	\$437,557	\$ 4,269,245
2018	1,866,850	21.5	401,373	3,809,781	22.7	423,775	4,022,658	24.2	451,778	4,327,733
2019	1,927,523	21.5	414,417	3,857,820	22.7	437,548	4,073,381	24.2	466,461	4,382,303
2020	1,990,167	21.5	427,886	3,901,926	22.7	451,768	4,119,952	24.2	481,620	4,432,406
2021	2,054,847	21.5	441,792	3,941,573	22.7	466,450	4,161,814	24.2	497,273	4,477,443
2022	2,121,630	21.5	456,150	3,976,189	22.7	481,610	4,198,365	24.2	513,434	4,516,765
2023	2,190,583	21.5	470,975	4,005,153	22.7	497,262	4,228,947	24.2	530,121	4,549,667
2024	2,261,777	21.5	486,282	4,027,789	22.7	513,423	4,252,848	24.2	547,350	4,575,380
2025	2,335,285	21.5	502,086	4,043,365	22.7	530,110	4,269,294	24.2	565,139	4,593,073
2026	2.411.182	21.5	518.404	4.051.086	22.7	547.338	4.277.446	24.2	583.506	4.601.843

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer nated Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
	Estimated									
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	\$ 1,808,087	26.3%	\$475,527	\$ 4,629,577	27.1%	\$489,992	\$ 4,780,042	30.0%	\$542,426	\$ 5,290,958
2018	1,866,850	26.3	490,982	4,693,002	27.1	505,916	4,845,528	30.0	560,055	5,363,443
2019	1,927,523	26.3	506,939	4,752,178	27.1	522,359	4,906,627	30.0	578,257	5,431,073
2020	1,990,167	26.3	523,414	4,806,509	27.1	539,335	4,962,724	30.0	597,050	5,493,166
2021	2,054,847	26.3	540,425	4,855,348	27.1	556,864	5,013,150	30.0	616,454	5,548,982
2022	2,121,630	26.3	557,989	4,897,989	27.1	574,962	5,057,177	30.0	636,489	5,597,715
2023	2,190,583	26.3	576,123	4,933,668	27.1	593,648	5,094,015	30.0	657,175	5,638,491
2024	2,261,777	26.3	594,847	4,961,551	27.1	612,942	5,122,805	30.0	678,533	5,670,358
2025	2,335,285	26.3	614,180	4,980,738	27.1	632,862	5,142,615	30.0	700,586	5,692,286
2026	2,411,182	26.3	634,141	4,990,249	27.1	653,430	5,152,435	30.0	723,355	5,703,155

- 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.

