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November 20, 2018

Iron County Ambulance District Ironton, 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, 2018.

The computed contributions required for LAGERS participation will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the state law which governs LAGERS. 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, 2018. 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			roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	2.30%	2.70%	0.20%	5.20%
L-3	General	2.90	4.00	0.30	7.20
LT-4(65)	General	2.60	3.30	0.20	6.10
LT-5(65)	General	3.20	4.40	0.30	7.90
L-7	General	3.60	5.30	0.30	9.20
LT-8(65)	General	3.80	5.50	0.30	9.60
L-12	General	4.20	6.60	0.40	11.20
LT-14(65)	General	4.30	6.70	0.40	11.40
L-6	General	4.90	7.90	0.50	13.30

<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 (Contributory Plan - 3 Year FAS)</u> (4% member contributions are additional)

		Percents of Active Member Payroll			roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	2.40%	2.90%	0.20%	5.50%
L-3	General	3.10	4.10	0.30	7.50
LT-4(65)	General	2.70	3.50	0.20	6.40
LT-5(65)	General	3.30	4.60	0.30	8.20
L-7	General	3.70	5.50	0.30	9.50
LT-8(65)	General	3.90	5.80	0.30	10.00
L-12	General	4.40	6.90	0.40	11.70
LT-14(65)	General	4.50	7.00	0.40	11.90
L-6	General	5.00	8.40	0.50	13.90

<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.



## <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	2.70%	6.10%	0.20%	9.00%
L-3	General	3.30	7.50	0.30	11.10
LT-4(65)	General	3.00	6.70	0.20	9.90
LT-5(65)	General	3.60	7.90	0.30	11.80
L-7	General	4.00	8.80	0.30	13.10
LT-8(65)	General	4.20	9.00	0.30	13.50
L-12	General	4.60	10.10	0.40	15.10
LT-14(65)	General	4.70	10.20	0.40	15.30
L-6	General	5.30	11.40	0.50	17.20

<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.



## <u>Employer Contribution Rates (Non-Contributory Plan - 3 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	2.70%	6.30%	0.20%	9.20%
L-3	General	3.40	7.70	0.30	11.40
LT-4(65)	General	3.10	6.90	0.20	10.20
LT-5(65)	General	3.70	8.10	0.30	12.10
L-7	General	4.10	9.00	0.30	13.40
LT-8(65)	General	4.30	9.30	0.30	13.90
L-12	General	4.80	10.40	0.40	15.60
LT-14(65)	General	4.90	10.50	0.40	15.80
L-6	General	5.50	11.80	0.50	17.80

<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			/roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	2.60%	3.20%	0.20%	6.00%
L-3	General	3.30	4.50	0.30	8.10
LT-4(65)	General	3.30	4.30	0.20	7.80
LT-5(65)	General	3.80	5.30	0.30	9.40
L-7	General	4.00	5.90	0.30	10.20
LT-8(65)	General	4.40	6.40	0.30	11.10
L-12	General	4.70	7.30	0.40	12.40
LT-14(65)	General	4.90	7.60	0.40	12.90
L-6	General	5.40	8.80	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 (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			/roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	2.70%	3.30%	0.20%	6.20%
L-3	General	3.40	4.70	0.30	8.40
LT-4(65)	General	3.40	4.50	0.20	8.10
LT-5(65)	General	4.00	5.60	0.30	9.90
L-7	General	4.20	6.20	0.30	10.70
LT-8(65)	General	4.50	6.80	0.30	11.60
L-12	General	4.90	7.70	0.40	13.00
LT-14(65)	General	5.10	8.00	0.40	13.50
L-6	General	5.60	9.20	0.50	15.30

- # 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.



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

		Percents of Active Member Payroll			roll
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	2.90%	6.60%	0.20%	9.70%
L-3	General	3.70	8.00	0.30	12.00
LT-4(65)	General	3.60	7.70	0.20	11.50
LT-5(65)	General	4.20	8.80	0.30	13.30
L-7	General	4.40	9.40	0.30	14.10
LT-8(65)	General	4.70	10.00	0.30	15.00
L-12	General	5.10	10.80	0.40	16.30
LT-14(65)	General	5.30	11.10	0.40	16.80
L-6	General	5.90	12.20	0.50	18.60

- # 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			roll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	3.00%	6.80%	0.20%	10.00%
L-3	General	3.80	8.20	0.30	12.30
LT-4(65)	General	3.80	7.90	0.20	11.90
LT-5(65)	General	4.30	9.10	0.30	13.70
L-7	General	4.60	9.70	0.30	14.60
LT-8(65)	General	4.90	10.30	0.30	15.50
L-12	General	5.30	11.20	0.40	16.90
LT-14(65)	General	5.50	11.50	0.40	17.40
L-6	General	6.10	12.60	0.50	19.20

- # 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. 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	\$ 48,091			
L-3	66,588			
LT-4(65)	56,415			
LT-5(65)	73,062			
L-7	85,085			
LT-8(65)	88,784			
L-12	103,582			
LT-14(65)	105,431			
L-6	123,003			

3 Yea	r FAS
Benefit	
Program	General
L-1	\$ 50,866
L-3	69,363
LT-4(65)	59,190
LT-5(65)	75,837
L-7	87,859
LT-8(65)	92,484
L-12	108,206
LT-14(65)	110,055
L-6	128,552

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

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 83,235			
L-3	102,657			
LT-4(65)	91,559			
LT-5(65)	109,131			
L-7	121,154			
LT-8(65)	124,853			
L-12	139,650			
LT-14(65)	141,500			
L-6	159,072			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 85,085				
L-3	105,431				
LT-4(65)	94,333				
LT-5(65)	111,905				
L-7	123,928				
LT-8(65)	128,552				
L-12	144,274				
LT-14(65)	146,124				
L-6	164,621				

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	\$ 55,490			
L-3	74,912			
LT-4(65)	72,137			
LT-5(65)	86,935			
L-7	94,333			
LT-8(65)	102,657			
L-12	114,680			
LT-14(65)	119,304			
L-6	135,951			

3 Yea	3 Year FAS					
Benefit						
Program	General					
L-1	\$ 57,340					
L-3	77,686					
LT-4(65)	74,912					
LT-5(65)	91,559					
L-7	98,957					
LT-8(65)	107,281					
L-12	120,229					
LT-14(65)	124,853					
L-6	141,500					

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

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 89,709			
L-3	110,980			
LT-4(65)	106,356			
LT-5(65)	123,003			
L-7	130,402			
LT-8(65)	138,725			
L-12	150,748			
LT-14(65)	155,372			
L-6	172,019			

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 92,484				
L-3	113,755				
LT-4(65)	110,055				
LT-5(65)	126,703				
L-7	135,026				
LT-8(65)	143,350				
L-12	156,297				
LT-14(65)	160,921				
L-6	177,569				

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	25
Annual Payroll	\$ 924,836

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:

#### **Iron 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	\$ 373,676	\$ 388,397	\$ 432,693	\$ 447,863
L-3	General	478,587	497,066	540,908	559,812
LT-4(65)	General	428,810	445,470	487,549	504,594
LT-5(65)	General	519,977	539,879	581,971	602,333
L-7	General	583,672	605,717	649,012	671,802
LT-8(65)	General	611,242	634,235	676,418	700,181
L-12	General	688,440	714,072	757,120	783,771
LT-14(65)	General	702,224	728,323	770,842	797,969
L-6	General	792,808	821,951	865,319	895,717



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

		Contri	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 421,574	\$ 438,194	\$ 477,637	\$ 494,742
L-3	General	537,936	558,669	597,065	618,394
LT-4(65)	General	534,448	555,123	590,127	611,204
LT-5(65)	General	622,517	646,375	681,369	705,771
L-7	General	654,330	679,319	716,421	742,178
LT-8(65)	General	710,728	737,780	772,650	800,392
L-12	General	770,515	799,555	835,863	865,750
LT-14(65)	General	798,723	828,806	863,974	894,902
L-6	General	886,334	919,353	955,192	989,453





**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	Men		Women		P	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**

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 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	15	25	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	30	15	30	45
63	30	15	30	45
64	30	20	30	45
65	30	25	100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		





**SUMMARY OF LAGERS PROVISIONS** 

# Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS Benefits and Conditions Evaluated and/or Considered as of February 28, 2018 (Section references are to RSMo)

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

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

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

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

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

LT-4(65) Benefit Program: 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.





**BENEFIT ILLUSTRATIONS** 

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

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

Final		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	\$ 525	\$ 889	\$1,414	94%
2,000	700	1,032	1,732	87%
2,500	875	1,175	2,050	82%
3,000	1,050	1,318	2,368	79%
3,500	1,225	1,462	2,687	77%
4,000	1,400	1,604	3,004	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 889	\$1,264	84%
2,000	500	1,032	1,532	77%
2,500	625	1,175	1,800	72%
3,000	750	1,318	2,068	69%
3,500	875	1,462	2,337	67%
4,000	1,000	1,604	2,604	65%
15 Years of Service:				
\$1,500	\$225	\$ 889	\$1,114	74%
2,000	300	1,032	1,332	67%
2,500	375	1,175	1,550	62%
3,000	450	1,318	1,768	59%
3,500	525	1,462	1,987	57%
4,000	600	1,604	2,204	55%

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

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



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

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

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

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

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

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



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

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

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

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

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

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



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

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

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

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

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

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



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

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

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

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

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

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



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

# 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)

LAG	ERS	Estimated	Estim	nated	Perc	ent
BENI	EFIT <sup>3</sup>	Social	Month	y Total	of F	AS
To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
2:						
\$1,050	\$ 525	\$ 889	\$1,050	\$1,414	70%	94%
1,400	700	1,032	1,400	1,732	70%	87%
1,750	875	1,175	1,750	2,050	70%	82%
2,100	1,050	1,318	2,100	2,368	70%	79%
2,450	1,225	1,462	2,450	2,687	70%	77%
2,800	1,400	1,604	2,800	3,004	70%	75%
e:						
\$ 750	\$ 375	\$ 889	\$ 750	\$1,264	50%	84%
1,000	500	1,032	1,000	1,532	50%	77%
1,250	625	1,175	1,250	1,800	50%	72%
1,500	750	1,318	1,500	2,068	50%	69%
1,750	875	1,462	1,750	2,337	50%	67%
2,000	1,000	1,604	2,000	2,604	50%	65%
e:						
\$ 450	\$225	\$ 889	\$ 450	\$1,114	30%	74%
600	300	1,032	600	1,332	30%	67%
750	375	1,175	750	1,550	30%	62%
900	450	1,318	900	1,768	30%	59%
1,050	525	1,462	1,050	1,987	30%	57%
1,200	600	1,604	1,200	2,204	30%	55%
	\$1,050 1,400 1,750 2,100 2,450 2,800 2: \$ 750 1,000 1,250 1,500 1,750 2,000 2: \$ 450 600 750 900 1,050	\$1,050 \$ 525 1,400 700 1,750 875 2,100 1,050 2,450 1,225 2,800 1,400 2: \$ 750 \$ 375 1,000 500 1,250 625 1,500 750 1,750 875 2,000 1,000 2: \$ 450 \$225 600 300 750 375 900 450 1,050 525	BENEFIT 3         Social Security 2           2:         \$1,050         \$ 525         \$ 889           1,400         700         1,032           1,750         875         1,175           2,100         1,050         1,318           2,450         1,225         1,462           2,800         1,400         1,604           3:         \$ 889           1,000         500         1,032           1,250         625         1,175           1,500         750         1,318           1,750         875         1,462           2,000         1,000         1,604           3:         \$ 450         \$225         \$ 889           600         300         1,032           750         375         1,175           900         450         1,318           1,050         525         1,462	BENEFIT <sup>3</sup> Social Security <sup>2</sup> Month To 65           To 65         At 65         Security <sup>2</sup> To 65           Security         To 65         To 65           Security         \$ 1,050         1,032         1,400           1,750         1,250         1,218         2,100           1,250         625         1,175         1,250           1,250         1,318         1,500           1,750         875         1,462         1,750           2,000         1,000         1,604         2,000           Security         \$ 450         \$ 600         300         1,032         600           750         375         1,175         750         900         450         1,318         900      <	BENEFIT³         Social         Monthly Total           To 65         At 65         Security²         To 65         At 65           \$1,050         \$ 525         \$ 889         \$1,050         \$1,414           1,400         700         1,032         1,400         1,732           1,750         875         1,175         1,750         2,050           2,100         1,050         1,318         2,100         2,368           2,450         1,225         1,462         2,450         2,687           2,800         1,400         1,604         2,800         3,004           8:         \$ 750         \$ 375         \$ 889         \$ 750         \$1,264           1,000         500         1,032         1,000         1,532           1,250         625         1,175         1,250         1,800           1,500         750         1,318         1,500         2,068           1,750         875         1,462         1,750         2,337           2,000         1,000         1,604         2,000         2,604           2:         \$ 450         \$225         \$ 889         \$ 450         \$1,114           600	Social   Monthly Total   Of F

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

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



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

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

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

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



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

#### **Missouri LAGERS**

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

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

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

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

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

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



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

#### **Missouri LAGERS**

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

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

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

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

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

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



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



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

## **Iron County Ambulance District**

### October 31, 2018

## By Attained Age and Years of Service

		Years of Service to Valuation Date Totals													
Attained									Valuation						
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll						
Under 20															
20-24	3							3	\$ 61,711						
25-29	4	1						5	\$ 209,732						
30-34	1	1						2	\$ 99,909						
35-39	3							3	\$ 84,555						
40-44	3		1					4	\$ 117,499						
45-49	1	3	1		1			6	\$ 267,154						
50-54			1					1	\$ 46,614						
55-59															
60-64															
65-69	1							1	\$ 37,662						
70 & Over															
Totals	16	5	3		1			25 \$ 924,836							

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

Age: 37.5 years.

Benefit Service: 4.8 years.

Annual Pay: \$36,993.





November 20, 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 October 31, 2018 Initial Actuarial Valuation of LAGERS benefits for the employees of

Iron County Ambulance District

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



November 20, 2018

Iron County Ambulance District Ironton, 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, 2018 Initial Valuation for the Iron County Ambulance District dated November 20, 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, 2018.

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

Respectfully submitted,

Mita Draylov Mita D. Drazilov, ASA, FCA, MAAA

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

(4% member contributions are additional)

#### Regular Retirement Eligibility

			L-1 Benefit Program			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated Employer d Contribution		Unfunded		l Employer	Unfunded Actuarial	Estimated Employer		Unfunded Actuarial
	Estimated	Contr	ibution	Actuarial	Contribution			Contr	Contribution	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 924,836	5.2%	\$48,091	\$ 373,676	7.2%	\$66,588	\$ 478,587	6.1%	\$56,415	\$ 428,810
2019	954,893	5.2	49,654	378,795	7.2	68,752	485,144	6.1	58,248	434,685
2020	985,927	5.2	51,268	383,571	7.2	70,987	491,261	6.1	60,142	440,166
2021	1,017,970	5.2	52,934	387,956	7.2	73,294	496,878	6.1	62,096	445,198
2022	1,051,054	5.2	54,655	391,898	7.2	75,676	501,927	6.1	64,114	449,722
2023	1,085,213	5.2	56,431	395,340	7.2	78,135	506,335	6.1	66,198	453,672
2024	1,120,482	5.2	58,265	398,220	7.2	80,675	510,023	6.1	68,349	456,977
2025	1,156,898	5.2	60,159	400,471	7.2	83,297	512,905	6.1	70,571	459,560
2026	1,194,497	5.2	62,114	402,020	7.2	86,004	514,888	6.1	72,864	461,337
2027	1,233,318	5.2	64,133	402,788	7.2	88,799	515,871	6.1	75,232	462,218

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated	Estimated Employer  Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 924,836	7.9%	\$73,062	\$ 519,977	9.2%	\$85,085	\$ 583,672	9.6%	\$88,784	\$ 611,242	
2019	954,893	7.9	75,437	527,101	9.2	87,850	591,668	9.6	91,670	619,616	
2020	985,927	7.9	77,888	533,747	9.2	90,705	599,129	9.6	94,649	627,429	
2021	1,017,970	7.9	80,420	539,849	9.2	93,653	605,979	9.6	97,725	634,602	
2022	1,051,054	7.9	83,033	545,334	9.2	96,697	612,136	9.6	100,901	641,050	
2023	1,085,213	7.9	85,732	550,123	9.2	99,840	617,512	9.6	104,180	646,680	
2024	1,120,482	7.9	88,518	554,130	9.2	103,084	622,010	9.6	107,566	651,391	
2025	1,156,898	7.9	91,395	557,262	9.2	106,435	625,525	9.6	111,062	655,072	
2026	1,194,497	7.9	94,365	559,417	9.2	109,894	627,944	9.6	114,672	657,605	
2027	1.233.318	7.9	97.432	560.485	9.2	113.465	629.143	9.6	118.399	658.861	

		L-12 Benefit Program			LT-1	4(65) Benefit I	Program	L-6 Benefit Program		
		Estimated	d Employer	Unfunded	Estimate	d Employer	Unfunded	Estimated	d 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
2018	\$ 924,836	11.2%	\$103,582	\$ 688,440	11.4%	\$105,431	\$ 702,224	13.3%	\$123,003	\$ 792,808
2019	954,893	11.2	106,948	697,872	11.4	108,858	711,844	13.3	127,001	803,669
2020	985,927	11.2	110,424	706,672	11.4	112,396	720,820	13.3	131,128	813,803
2021	1,017,970	11.2	114,013	714,751	11.4	116,049	729,061	13.3	135,390	823,107
2022	1,051,054	11.2	117,718	722,014	11.4	119,820	736,469	13.3	139,790	831,471
2023	1,085,213	11.2	121,544	728,355	11.4	123,714	742,937	13.3	144,333	838,773
2024	1,120,482	11.2	125,494	733,661	11.4	127,735	748,349	13.3	149,024	844,883
2025	1,156,898	11.2	129,573	737,807	11.4	131,886	752,578	13.3	153,867	849,658
2026	1,194,497	11.2	133,784	740,660	11.4	136,173	755,488	13.3	158,868	852,944
2027	1,233,318	11.2	138,132	742,074	11.4	140,598	756,931	13.3	164,031	854,573

- 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			3 Benefit Pro	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated Employer Contribution		Unfunded Actuarial	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial				Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 924,836	5.5%	\$50,866	\$ 388,397	7.5%	\$69,363	\$ 497,066	6.4%	\$59,190	\$ 445,470
2019	954,893	5.5	52,519	393,718	7.5	71,617	503,876	6.4	61,113	451,573
2020	985,927	5.5	54,226	398,683	7.5	73,945	510,230	6.4	63,099	457,267
2021	1,017,970	5.5	55,988	403,241	7.5	76,348	516,063	6.4	65,150	462,495
2022	1,051,054	5.5	57,808	407,338	7.5	78,829	521,307	6.4	67,267	467,194
2023	1,085,213	5.5	59,687	410,915	7.5	81,391	525,885	6.4	69,454	471,297
2024	1,120,482	5.5	61,627	413,908	7.5	84,036	529,716	6.4	71,711	474,730
2025	1,156,898	5.5	63,629	416,247	7.5	86,767	532,710	6.4	74,041	477,413
2026	1,194,497	5.5	65,697	417,857	7.5	89,587	534,770	6.4	76,448	479,259
2027	1,233,318	5.5	67,832	418,655	7.5	92,499	535,791	6.4	78,932	480,174

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	8.2%	\$75,837	\$ 539,879	9.5%	\$87,859	\$ 605,717	10.0%	\$92,484	\$ 634,235
2019	954,893	8.2	78,301	547,275	9.5	90,715	614,015	10.0	95,489	642,924
2020	985,927	8.2	80,846	554,176	9.5	93,663	621,757	10.0	98,593	651,031
2021	1,017,970	8.2	83,474	560,512	9.5	96,707	628,866	10.0	101,797	658,474
2022	1,051,054	8.2	86,186	566,207	9.5	99,850	635,256	10.0	105,105	665,165
2023	1,085,213	8.2	88,987	571,180	9.5	103,095	640,835	10.0	108,521	671,007
2024	1,120,482	8.2	91,880	575,341	9.5	106,446	645,503	10.0	112,048	675,895
2025	1,156,898	8.2	94,866	578,593	9.5	109,905	649,151	10.0	115,690	679,715
2026	1,194,497	8.2	97,949	580,830	9.5	113,477	651,661	10.0	119,450	682,343
2027	1.233.318	8.2	101.132	581,939	9.5	117.165	652,905	10.0	123.332	683.646

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated	d Employer	Unfunded	Estimate	d Employer	Unfunded	Estimated	d 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
2018	\$ 924,836	11.7%	\$108,206	\$ 714,072	11.9%	\$110,055	\$ 728,323	13.9%	\$128,552	\$ 821,951
2019	954,893	11.7	111,722	723,855	11.9	113,632	738,301	13.9	132,730	833,212
2020	985,927	11.7	115,353	732,982	11.9	117,325	747,611	13.9	137,044	843,718
2021	1,017,970	11.7	119,102	741,362	11.9	121,138	756,158	13.9	141,498	853,364
2022	1,051,054	11.7	122,973	748,895	11.9	125,075	763,841	13.9	146,097	862,035
2023	1,085,213	11.7	126,970	755,472	11.9	129,140	770,549	13.9	150,845	869,606
2024	1,120,482	11.7	131,096	760,975	11.9	133,337	776,162	13.9	155,747	875,941
2025	1,156,898	11.7	135,357	765,276	11.9	137,671	780,549	13.9	160,809	880,892
2026	1,194,497	11.7	139,756	768,235	11.9	142,145	783,567	13.9	166,035	884,298
2027	1,233,318	11.7	144,298	769,702	11.9	146,765	785,063	13.9	171,431	885,987

- 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		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	9.0%	\$83,235	\$ 432,693	11.1%	\$102,657	\$ 540,908	9.9%	\$91,559	\$ 487,549
2019	954,893	9.0	85,940	438,621	11.1	105,993	548,318	9.9	94,534	494,228
2020	985,927	9.0	88,733	444,152	11.1	109,438	555,232	9.9	97,607	500,460
2021	1,017,970	9.0	91,617	449,230	11.1	112,995	561,580	9.9	100,779	506,182
2022	1,051,054	9.0	94,595	453,795	11.1	116,667	567,286	9.9	104,054	511,325
2023	1,085,213	9.0	97,669	457,780	11.1	120,459	572,268	9.9	107,436	515,816
2024	1,120,482	9.0	100,843	461,115	11.1	124,374	576,437	9.9	110,928	519,573
2025	1,156,898	9.0	104,121	463,721	11.1	128,416	579,695	9.9	114,533	522,509
2026	1,194,497	9.0	107,505	465,514	11.1	132,589	581,937	9.9	118,255	524,530
2027	1,233,318	9.0	110,999	466,403	11.1	136,898	583,048	9.9	122,098	525,532

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	11.8%	\$109,131	\$ 581,971	13.1%	\$121,154	\$ 649,012	13.5%	\$124,853	\$ 676,418
2019	954,893	11.8	112,677	589,944	13.1	125,091	657,903	13.5	128,911	685,685
2020	985,927	11.8	116,339	597,383	13.1	129,156	666,199	13.5	133,100	694,331
2021	1,017,970	11.8	120,120	604,213	13.1	133,354	673,816	13.5	137,426	702,269
2022	1,051,054	11.8	124,024	610,352	13.1	137,688	680,663	13.5	141,892	709,405
2023	1,085,213	11.8	128,055	615,712	13.1	142,163	686,641	13.5	146,504	715,635
2024	1,120,482	11.8	132,217	620,197	13.1	146,783	691,643	13.5	151,265	720,848
2025	1,156,898	11.8	136,514	623,702	13.1	151,554	695,552	13.5	156,181	724,922
2026	1,194,497	11.8	140,951	626,114	13.1	156,479	698,242	13.5	161,257	727,725
2027	1.233.318	11.8	145.532	627.310	13.1	161.565	699.575	13.5	166.498	729.115

		L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
		Estimated	d Employer	Unfunded	Estimated	d Employer	Unfunded	Estimated	d Employer	Unfunded
	Estimated	Contr	ibution	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
2018	\$ 924,836	15.1%	\$139,650	\$ 757,120	15.3%	\$141,500	\$ 770,842	17.2%	\$159,072	\$ 865,319
2019	954,893	15.1	144,189	767,492	15.3	146,099	781,402	17.2	164,242	877,174
2020	985,927	15.1	148,875	777,170	15.3	150,847	791,255	17.2	169,579	888,235
2021	1,017,970	15.1	153,713	786,055	15.3	155,749	800,301	17.2	175,091	898,390
2022	1,051,054	15.1	158,709	794,042	15.3	160,811	808,433	17.2	180,781	907,518
2023	1,085,213	15.1	163,867	801,016	15.3	166,038	815,533	17.2	186,657	915,488
2024	1,120,482	15.1	169,193	806,851	15.3	171,434	821,474	17.2	192,723	922,157
2025	1,156,898	15.1	174,692	811,411	15.3	177,005	826,117	17.2	198,986	927,369
2026	1,194,497	15.1	180,369	814,549	15.3	182,758	829,312	17.2	205,453	930,955
2027	1,233,318	15.1	186,231	816,104	15.3	188,698	830,896	17.2	212,131	932,733

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revis ed 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	Contri	d Employer ribution Annual Dollars \$94,333 97,399 100,565 103,833 107,208 110,692	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 924,836	9.2%	\$85,085	\$ 447,863	11.4%	\$105,431	\$ 559,812	10.2%	\$94,333	\$ 504,594
2019	954,893	9.2	87,850	453,999	11.4	108,858	567,481	10.2	97,399	511,507
2020	985,927	9.2	90,705	459,724	11.4	112,396	574,637	10.2	100,565	517,957
2021	1,017,970	9.2	93,653	464,980	11.4	116,049	581,207	10.2	103,833	523,879
2022	1,051,054	9.2	96,697	469,705	11.4	119,820	587,113	10.2	107,208	529,202
2023	1,085,213	9.2	99,840	473,830	11.4	123,714	592,269	10.2	110,692	533,850
2024	1,120,482	9.2	103,084	477,282	11.4	127,735	596,583	10.2	114,289	537,739
2025	1,156,898	9.2	106,435	479,979	11.4	131,886	599,955	10.2	118,004	540,778
2026	1,194,497	9.2	109,894	481,835	11.4	136,173	602,275	10.2	121,839	542,869
2027	1,233,318	9.2	113,465	482,755	11.4	140,598	603,425	10.2	125,798	543,906

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		ed Employer Unfunded tribution Actuarial			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
2018	\$ 924,836	12.1%	\$111,905	\$ 602,333	13.4%	\$123,928	\$ 671,802	13.9%	\$128,552	\$ 700,181
2019	954,893	12.1	115,542	610,585	13.4	127,956	681,006	13.9	132,730	709,773
2020	985,927	12.1	119,297	618,284	13.4	132,114	689,593	13.9	137,044	718,723
2021	1,017,970	12.1	123,174	625,353	13.4	136,408	697,477	13.9	141,498	726,940
2022	1,051,054	12.1	127,178	631,707	13.4	140,841	704,564	13.9	146,097	734,326
2023	1,085,213	12.1	131,311	637,255	13.4	145,419	710,752	13.9	150,845	740,775
2024	1,120,482	12.1	135,578	641,897	13.4	150,145	715,929	13.9	155,747	746,171
2025	1,156,898	12.1	139,985	645,525	13.4	155,024	719,975	13.9	160,809	750,388
2026	1,194,497	12.1	144,534	648,021	13.4	160,063	722,759	13.9	166,035	753,290
2027	1.233.318	12.1	149.231	649.258	13.4	165.265	724.139	13.9	171.431	754.728

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram
		Estimated	d Employer	Unfunded	Estimated	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
2018	\$ 924,836	15.6%	\$144,274	\$ 783,771	15.8%	\$146,124	\$ 797,969	17.8%	\$164,621	\$ 895,717
2019	954,893	15.6	148,963	794,509	15.8	150,873	808,901	17.8	169,971	907,988
2020	985,927	15.6	153,805	804,527	15.8	155,776	819,101	17.8	175,495	919,437
2021	1,017,970	15.6	158,803	813,725	15.8	160,839	828,466	17.8	181,199	929,949
2022	1,051,054	15.6	163,964	821,993	15.8	166,067	836,884	17.8	187,088	939,398
2023	1,085,213	15.6	169,293	829,212	15.8	171,464	844,234	17.8	193,168	947,648
2024	1,120,482	15.6	174,795	835,252	15.8	177,036	850,384	17.8	199,446	954,551
2025	1,156,898	15.6	180,476	839,973	15.8	182,790	855,190	17.8	205,928	959,946
2026	1,194,497	15.6	186,342	843,221	15.8	188,731	858,497	17.8	212,620	963,658
2027	1,233,318	15.6	192,398	844,831	15.8	194,864	860,136	17.8	219,531	965,498

- 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	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		Employer	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	6.0%	\$55,490	\$ 421,574	8.1%	\$74,912	\$ 537,936	7.8%	\$72,137	\$ 534,448
2019	954,893	6.0	57,294	427,349	8.1	77,346	545,306	7.8	74,482	541,770
2020	985,927	6.0	59,156	432,738	8.1	79,860	552,182	7.8	76,902	548,601
2021	1,017,970	6.0	61,078	437,685	8.1	82,456	558,495	7.8	79,402	554,873
2022	1,051,054	6.0	63,063	442,132	8.1	85,135	564,170	7.8	81,982	560,511
2023	1,085,213	6.0	65,113	446,015	8.1	87,902	569,125	7.8	84,647	565,434
2024	1,120,482	6.0	67,229	449,264	8.1	90,759	573,271	7.8	87,398	569,553
2025	1,156,898	6.0	69,414	451,803	8.1	93,709	576,511	7.8	90,238	572,772
2026	1,194,497	6.0	71,670	453,550	8.1	96,754	578,740	7.8	93,171	574,987
2027	1,233,318	6.0	73,999	454,416	8.1	99,899	579,845	7.8	96,199	576,085

			(65) Benefit P	rogram	L-	-7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		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
2018	\$ 924,836	9.4%	\$86,935	\$ 622,517	10.2%	\$94,333	\$ 654,330	11.1%	\$102,657	\$ 710,728
2019	954,893	9.4	89,760	631,045	10.2	97,399	663,294	11.1	105,993	720,465
2020	985,927	9.4	92,677	639,002	10.2	100,565	671,658	11.1	109,438	729,550
2021	1,017,970	9.4	95,689	646,308	10.2	103,833	679,337	11.1	112,995	737,891
2022	1,051,054	9.4	98,799	652,875	10.2	107,208	686,240	11.1	116,667	745,389
2023	1,085,213	9.4	102,010	658,609	10.2	110,692	692,267	11.1	120,459	751,935
2024	1,120,482	9.4	105,325	663,407	10.2	114,289	697,310	11.1	124,374	757,412
2025	1,156,898	9.4	108,748	667,156	10.2	118,004	701,251	11.1	128,416	761,693
2026	1,194,497	9.4	112,283	669,736	10.2	121,839	703,963	11.1	132,589	764,638
2027	1,233,318	9.4	115,932	671,015	10.2	125,798	705,307	11.1	136,898	766,098

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L-	6 Benefit Pro	gram
	Estimated	Estimated	d Employer	Unfunded	Estimated	d Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 924,836	12.4%	\$114,680	\$ 770,515	12.9%	\$119,304	\$ 798,723	14.7%	\$135,951	\$ 886,334
2019	954,893	12.4	118,407	781,071	12.9	123,181	809,665	14.7	140,369	898,477
2020	985,927	12.4	122,255	790,920	12.9	127,185	819,874	14.7	144,931	909,806
2021	1,017,970	12.4	126,228	799,963	12.9	131,318	829,248	14.7	149,642	920,208
2022	1,051,054	12.4	130,331	808,091	12.9	135,586	837,674	14.7	154,505	929,558
2023	1,085,213	12.4	134,566	815,188	12.9	139,992	845,031	14.7	159,526	937,722
2024	1,120,482	12.4	138,940	821,126	12.9	144,542	851,186	14.7	164,711	944,553
2025	1,156,898	12.4	143,455	825,767	12.9	149,240	855,997	14.7	170,064	949,891
2026	1,194,497	12.4	148,118	828,960	12.9	154,090	859,307	14.7	175,591	953,564
2027	1,233,318	12.4	152,931	830,543	12.9	159,098	860,948	14.7	181,298	955,385

- 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	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 924,836	6.2%	\$57,340	\$ 438,194	8.4%	\$77,686	\$ 558,669	8.1%	\$74,912	\$ 555,123
2019	954,893	6.2	59,203	444,197	8.4	80,211	566,323	8.1	77,346	562,728
2020	985,927	6.2	61,127	449,798	8.4	82,818	573,464	8.1	79,860	569,824
2021	1,017,970	6.2	63,114	454,941	8.4	85,509	580,020	8.1	82,456	576,339
2022	1,051,054	6.2	65,165	459,564	8.4	88,289	585,914	8.1	85,135	582,195
2023	1,085,213	6.2	67,283	463,600	8.4	91,158	591,060	8.1	87,902	587,308
2024	1,120,482	6.2	69,470	466,977	8.4	94,120	595,365	8.1	90,759	591,586
2025	1,156,898	6.2	71,728	469,616	8.4	97,179	598,730	8.1	93,709	594,929
2026	1,194,497	6.2	74,059	471,432	8.4	100,338	601,045	8.1	96,754	597,230
2027	1,233,318	6.2	76,466	472,332	8.4	103,599	602,193	8.1	99,899	598,370

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		Estimated Employer Contribution			d Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	9.9%	\$91,559	\$ 646,375	10.7%	\$98,957	\$ 679,319	11.6%	\$107,281	\$ 737,780
2019	954,893	9.9	94,534	655,230	10.7	102,174	688,626	11.6	110,768	747,887
2020	985,927	9.9	97,607	663,492	10.7	105,494	697,309	11.6	114,368	757,317
2021	1,017,970	9.9	100,779	671,078	10.7	108,923	705,281	11.6	118,085	765,975
2022	1,051,054	9.9	104,054	677,897	10.7	112,463	712,447	11.6	121,922	773,758
2023	1,085,213	9.9	107,436	683,851	10.7	116,118	718,704	11.6	125,885	780,553
2024	1,120,482	9.9	110,928	688,832	10.7	119,892	723,939	11.6	129,976	786,239
2025	1,156,898	9.9	114,533	692,725	10.7	123,788	728,030	11.6	134,200	790,683
2026	1,194,497	9.9	118,255	695,404	10.7	127,811	730,845	11.6	138,562	793,741
2027	1.233.318	9.9	122.098	696.732	10.7	131.965	732.241	11.6	143.065	795.257

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L	-6 Benefit Pro	gram
		Estimated	d Employer	Unfunded	Estimated	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
2018	\$ 924,836	13.0%	\$120,229	\$ 799,555	13.5%	\$124,853	\$ 828,806	15.3%	\$141,500	\$ 919,353
2019	954,893	13.0	124,136	810,509	13.5	128,911	840,161	15.3	146,099	931,948
2020	985,927	13.0	128,171	820,729	13.5	133,100	850,755	15.3	150,847	943,699
2021	1,017,970	13.0	132,336	830,112	13.5	137,426	860,482	15.3	155,749	954,488
2022	1,051,054	13.0	136,637	838,547	13.5	141,892	869,225	15.3	160,811	964,186
2023	1,085,213	13.0	141,078	845,911	13.5	146,504	876,859	15.3	166,038	972,654
2024	1,120,482	13.0	145,663	852,073	13.5	151,265	883,246	15.3	171,434	979,739
2025	1,156,898	13.0	150,397	856,889	13.5	156,181	888,238	15.3	177,005	985,276
2026	1,194,497	13.0	155,285	860,203	13.5	161,257	891,673	15.3	182,758	989,086
2027	1,233,318	13.0	160,331	861,846	13.5	166,498	893,376	15.3	188,698	990,975

- 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 Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
			l Employer	Unfunded		d Employer	Unfunded		l Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 924,836	9.7%	\$89,709	\$ 477,637	12.0%	\$110,980	\$ 597,065	11.5%	\$106,356	\$ 590,127
2019	954,893	9.7	92,625	484,181	12.0	114,587	605,245	11.5	109,813	598,212
2020	985,927	9.7	95,635	490,286	12.0	118,311	612,877	11.5	113,382	605,755
2021	1,017,970	9.7	98,743	495,891	12.0	122,156	619,884	11.5	117,067	612,681
2022	1,051,054	9.7	101,952	500,930	12.0	126,126	626,183	11.5	120,871	618,906
2023	1,085,213	9.7	105,266	505,329	12.0	130,226	631,682	11.5	124,799	624,341
2024	1,120,482	9.7	108,687	509,010	12.0	134,458	636,283	11.5	128,855	628,889
2025	1,156,898	9.7	112,219	511,887	12.0	138,828	639,879	11.5	133,043	632,443
2026	1,194,497	9.7	115,866	513,866	12.0	143,340	642,353	11.5	137,367	634,889
2027	1,233,318	9.7	119,632	514,847	12.0	147,998	643,580	11.5	141,832	636,101

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	13.3%	\$123,003	\$ 681,369	14.1%	\$130,402	\$ 716,421	15.0%	\$138,725	\$ 772,650
2019	954,893	13.3	127,001	690,704	14.1	134,640	726,236	15.0	143,234	783,235
2020	985,927	13.3	131,128	699,413	14.1	139,016	735,393	15.0	147,889	793,111
2021	1,017,970	13.3	135,390	707,409	14.1	143,534	743,801	15.0	152,696	802,179
2022	1,051,054	13.3	139,790	714,597	14.1	148,199	751,359	15.0	157,658	810,330
2023	1,085,213	13.3	144,333	720,873	14.1	153,015	757,958	15.0	162,782	817,447
2024	1,120,482	13.3	149,024	726,124	14.1	157,988	763,479	15.0	168,072	823,402
2025	1,156,898	13.3	153,867	730,228	14.1	163,123	767,794	15.0	173,535	828,056
2026	1,194,497	13.3	158,868	733,052	14.1	168,424	770,763	15.0	179,175	831,258
2027	1.233.318	13.3	164.031	734.452	14.1	173.898	772.235	15.0	184.998	832.845

		L-:	12 Benefit Pro	gram	LT-14	4(65) Benefit I	Program	L	6 Benefit Pro	gram
	Estimated	Estimated	d Employer	Unfunded	Estimated	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
2018	\$ 924,836	16.3%	\$150,748	\$ 835,863	16.8%	\$155,372	\$ 863,974	18.6%	\$172,019	\$ 955,192
2019	954,893	16.3	155,648	847,314	16.8	160,422	875,810	18.6	177,610	968,278
2020	985,927	16.3	160,706	857,998	16.8	165,636	886,853	18.6	183,382	980,487
2021	1,017,970	16.3	165,929	867,807	16.8	171,019	896,992	18.6	189,342	991,697
2022	1,051,054	16.3	171,322	876,625	16.8	176,577	906,106	18.6	195,496	1,001,774
2023	1,085,213	16.3	176,890	884,324	16.8	182,316	914,064	18.6	201,850	1,010,572
2024	1,120,482	16.3	182,639	890,766	16.8	188,241	920,722	18.6	208,410	1,017,933
2025	1,156,898	16.3	188,574	895,800	16.8	194,359	925,926	18.6	215,183	1,023,686
2026	1,194,497	16.3	194,703	899,264	16.8	200,675	929,507	18.6	222,176	1,027,645
2027	1,233,318	16.3	201,031	900,981	16.8	207,197	931,282	18.6	229,397	1,029,607

- 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 Prog	gram	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
2018	\$ 924,836	10.0%	\$92,484	\$ 494,742	12.3%	\$113,755	\$ 618,394	11.9%	\$110,055	\$ 611,204
2019	954,893	10.0	95,489	501,520	12.3	117,452	626,866	11.9	113,632	619,577
2020	985,927	10.0	98,593	507,844	12.3	121,269	634,770	11.9	117,325	627,389
2021	1,017,970	10.0	101,797	513,650	12.3	125,210	642,027	11.9	121,138	634,562
2022	1,051,054	10.0	105,105	518,869	12.3	129,280	648,551	11.9	125,075	641,010
2023	1,085,213	10.0	108,521	523,426	12.3	133,481	654,247	11.9	129,140	646,640
2024	1,120,482	10.0	112,048	527,239	12.3	137,819	659,013	11.9	133,337	651,350
2025	1,156,898	10.0	115,690	530,219	12.3	142,298	662,738	11.9	137,671	655,031
2026	1,194,497	10.0	119,450	532,269	12.3	146,923	665,301	11.9	142,145	657,564
2027	1,233,318	10.0	123,332	533,285	12.3	151,698	666,571	11.9	146,765	658,820

	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 924,836	13.7%	\$126,703	\$ 705,771	14.6%	\$135,026	\$ 742,178	15.5%	\$143,350	\$ 800,392
2019	954,893	13.7	130,820	715,440	14.6	139,414	752,346	15.5	148,008	811,357
2020	985,927	13.7	135,072	724,461	14.6	143,945	761,833	15.5	152,819	821,588
2021	1,017,970	13.7	139,462	732,744	14.6	148,624	770,543	15.5	157,785	830,981
2022	1,051,054	13.7	143,994	740,189	14.6	153,454	778,372	15.5	162,913	839,425
2023	1,085,213	13.7	148,674	746,690	14.6	158,441	785,208	15.5	168,208	846,797
2024	1,120,482	13.7	153,506	752,129	14.6	163,590	790,928	15.5	173,675	852,965
2025	1,156,898	13.7	158,495	756,380	14.6	168,907	795,398	15.5	179,319	857,786
2026	1,194,497	13.7	163,646	759,305	14.6	174,397	798,474	15.5	185,147	861,103
2027	1 233 318	13.7	168 965	760 755	146	180 064	799 999	15.5	191 164	862 747

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Em	d Employer	Unfunded	nded Estimate	d 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
2018	\$ 924,836	16.9%	\$156,297	\$ 865,750	17.4%	\$160,921	\$ 894,902	19.2%	\$177,569	\$ 989,453
2019	954,893	16.9	161,377	877,611	17.4	166,151	907,162	19.2	183,339	1,003,008
2020	985,927	16.9	166,622	888,677	17.4	171,551	918,601	19.2	189,298	1,015,655
2021	1,017,970	16.9	172,037	898,837	17.4	177,127	929,103	19.2	195,450	1,027,267
2022	1,051,054	16.9	177,628	907,970	17.4	182,883	938,544	19.2	201,802	1,037,705
2023	1,085,213	16.9	183,401	915,944	17.4	188,827	946,787	19.2	208,361	1,046,818
2024	1,120,482	16.9	189,361	922,616	17.4	194,964	953,684	19.2	215,133	1,054,443
2025	1,156,898	16.9	195,516	927,830	17.4	201,300	959,074	19.2	222,124	1,060,402
2026	1,194,497	16.9	201,870	931,418	17.4	207,842	962,783	19.2	229,343	1,064,503
2027	1,233,318	16.9	208,431	933,197	17.4	214,597	964,621	19.2	236,797	1,066,536

- 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.

