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December 8, 2020

Pettis County Ambulance District Sedalia, Missouri

Ladies and Gentlemen:

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

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

The contribution requirement for benefits likely to accrue as a result of the future service of your employees is described on pages 4 thru 7 as the normal cost rate and the casualty rate. 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 7 as the prior service cost rate. 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 rate 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 normal cost rate, casualty rate, and prior service cost rate (the total employer contribution rate as shown on pages 4 thru 7). These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on pages 8 and 9 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 29, 2020.

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

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was September 30, 2020. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,

Mite Draplor

Mita D. Drazilov, ASA, FCA, MAAA



# Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for a member contribution rate of either 0%, 2%, 4% or 6%, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

*Member Contribution Rate - 0% Plan.* Under the 0% 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.

*Member Contribution Rate - 2%, 4% or 6% Plan.* Under any plan other than 0%, each covered member contributes a percentage 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.

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 144 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.



			Percents of Active Member Payroll					
					Total Employer Contribution Rate			
		Normal		Prior		Based Upon 1	-	
Benefit	Employee	Cost	Casualty	Service		lember Cont		
Program	Groups	Rate	Rate	Cost Rate *	0%	2%	4%	6%
L-1	General	6.50%	0.20%	2.10%	8.80%	6.90%	5.00%	3.10%
L-3	General	7.90	0.30	2.60	10.80	8.90	7.00	5.10
LT-4(65)	General	7.20	0.20	2.30	9.70	7.80	5.90	4.00
LT-5(65)	General	8.40	0.30	2.80	11.50	9.60	7.70	5.80
L-7	General	9.30	0.30	3.10	12.70	10.80	8.90	7.00
LT-8(65)	General	9.70	0.30	3.20	13.20	11.30	9.40	7.50
L-12	General	10.70	0.40	3.60	14.70	12.80	10.90	9.00
LT-14(65)	General	10.90	0.40	3.70	15.00	13.10	11.20	9.30
L-6	General	12.10	0.50	4.10	16.70	14.80	12.90	11.00

### Employer Contribution Rates 5 Year FAS - Regular Retirement Eligibility

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



#### Employer Contribution Rates <u>3 Year FAS - Regular Retirement Eligibility</u>

			Percents of Active Member Payroll					
					Total Employer Contribution Rate			Rate
		Normal		Prior	l	Based Upon t	the Following	5
Benefit	Employee	Cost	Casualty	Service	N	lember Cont	ribution Rate	S
Program	Groups	Rate	Rate	Cost Rate *	0%	2%	4%	6%
L-1	General	6.70%	0.20%	2.10%	9.00%	7.10%	5.20%	3.30%
L-3	General	8.20	0.30	2.70	11.20	9.30	7.40	5.50
LT-4(65)	General	7.40	0.20	2.40	10.00	8.10	6.20	4.30
LT-5(65)	General	8.70	0.30	2.90	11.90	10.00	8.10	6.20
L-7	General	9.60	0.30	3.20	13.10	11.20	9.30	7.40
LT-8(65)	General	10.00	0.30	3.30	13.60	11.70	9.80	7.90
L-12	General	11.10	0.40	3.70	15.20	13.30	11.40	9.50
LT-14(65)	General	11.20	0.40	3.80	15.40	13.50	11.60	9.70
L-6	General	12.50	0.50	4.30	17.30	15.40	13.50	11.60

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



#### Employer Contribution Rates 5 Year FAS - Rule of 80 Retirement Eligibility#

			Percents of Active Member Payroll					
					Total Employer Contribution Rate			Rate
		Normal		Prior	I	Based Upon 1	the Following	5
Benefit	Employee	Cost	Casualty	Service	N	lember Cont	ribution Rate	s
Program	Groups	Rate	Rate	Cost Rate *	0%	2%	4%	6%
L-1	General	6.90%	0.20%	2.20%	9.30%	7.40%	5.50%	3.60%
L-3	General	8.40	0.30	2.70	11.40	9.50	7.60	5.70
LT-4(65)	General	8.10	0.20	2.60	10.90	9.00	7.10	5.20
LT-5(65)	General	9.30	0.30	3.10	12.70	10.80	8.90	7.00
L-7	General	9.90	0.30	3.30	13.50	11.60	9.70	7.80
LT-8(65)	General	10.50	0.30	3.50	14.30	12.40	10.50	8.60
L-12	General	11.40	0.40	3.80	15.60	13.70	11.80	9.90
LT-14(65)	General	11.70	0.40	4.00	16.10	14.20	12.30	10.40
L-6	General	13.00	0.50	4.40	17.90	16.00	14.10	12.20

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

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



#### Employer Contribution Rates <u>3 Year FAS - Rule of 80 Retirement Eligibility#</u>

			Percents of Active Member Payroll					
					Total Employer Contribution Rate			Rate
		Normal		Prior	l	Based Upon t	the Following	3
Benefit	Employee	Cost	Casualty	Service	N	lember Cont	ribution Rate	s
Program	Groups	Rate	Rate	Cost Rate *	0%	2%	4%	6%
L-1	General	7.10%	0.20%	2.30%	9.60%	7.70%	5.80%	3.90%
L-3	General	8.70	0.30	2.80	11.80	9.90	8.00	6.10
LT-4(65)	General	8.40	0.20	2.70	11.30	9.40	7.50	5.60
LT-5(65)	General	9.60	0.30	3.20	13.10	11.20	9.30	7.40
L-7	General	10.30	0.30	3.40	14.00	12.10	10.20	8.30
LT-8(65)	General	10.90	0.30	3.60	14.80	12.90	11.00	9.10
L-12	General	11.80	0.40	4.00	16.20	14.30	12.40	10.50
LT-14(65)	General	12.10	0.40	4.10	16.60	14.70	12.80	10.90
L-6	General	13.40	0.50	4.60	18.50	16.60	14.70	12.80

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

\* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



#### Employer Contribution Dollars General

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:

5 Year FAS								
Benefit	N	lember Cont	tribution Rat	e				
Program	0%	2%	4%	6%				
L-1	\$ 260,630	\$ 204,357	\$ 148,085	\$ 91,813				
L-3	319,864	263,591	207,319	151,047				
LT-4(65)	287,285	231,013	174,740	118,468				
LT-5(65)	340,596	284,323	228,051	171,779				
L-7	376,136	319,864	263,591	207,319				
LT-8(65)	390,945	334,672	278,400	222,128				
L-12	435,370	379,098	322,826	266,553				
LT-14(65)	444,255	387,983	331,711	275,438				
L-6	494,604	438,332	382,060	325,787				

Regular	Retirement	Eligibilitv

3 Year FAS									
Benefit	N	lember Cont	tribution Rat	e					
Program	0%	2%	4%	6%					
L-1	\$ 266,553	\$ 210,281	\$ 154,008	\$ 97,736					
L-3	331,711	275,438	219,166	162,894					
LT-4(65)	296,170	239,898	183,626	127,353					
LT-5(65)	352,443	296,170	239,898	183,626					
L-7	387,983	331,711	275,438	219,166					
LT-8(65)	402,791	346,519	290,247	233,974					
L-12	450,179	393,906	337,634	281,362					
LT-14(65)	456,102	399,830	343,557	287,285					
L-6	512,374	456,102	399,830	343,557					

#### **Rule of 80 Retirement Eligibility**

	5 Year FAS					3 Year FAS				
Benefit	Ν	lember Cont	ribution Rat	e		Benefit	Member Contribution Rate			e
Program	0%	2%	4%	6%		Program	0%	2%	4%	6%
L-1	\$ 275,438	\$ 219,166	\$ 162,894	\$ 106,621		L-1	\$ 284,323	\$ 228,051	\$ 171,779	\$ 115,506
L-3	337,634	281,362	225,089	168,817		L-3	349,481	293,208	236,936	180,664
LT-4(65)	322,826	266,553	210,281	154,008		LT-4(65)	334,672	278,400	222,128	165,855
LT-5(65)	376,136	319,864	263,591	207,319		LT-5(65)	387,983	331,711	275,438	219,166
L-7	399,830	343,557	287,285	231,013		L-7	414,638	358,366	302,094	245,821
LT-8(65)	423,523	367,251	310,979	254,706		LT-8(65)	438,332	382,060	325,787	269,515
L-12	462,025	405,753	349,481	293,208		L-12	479,796	423,523	367,251	310,979
LT-14(65)	476,834	420,562	364,289	308,017		LT-14(65)	491,643	435,370	379,098	322,826
L-6	530,145	473,872	417,600	361,328		L-6	547,915	491,643	435,370	379,098

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	53
Annual Payroll	\$ 2,961,702

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



**APPENDIX** I

UNFUNDED ACTUARIAL ACCRUED LIABILITY

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

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

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 7 as the "Prior Service Cost Rate" 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:

## **Pettis County Ambulance District**

		Member Contribution Rate - 0%				
Benefit	Employee					
Group	Group	(5 Year FAS)	(3 Year FAS)			
L-1	General	\$ 1,075,772	\$ 1,113,718			
L-3	General	1,344,732	1,392,219			
LT-4(65)	General	1,209,821	1,252,484			
LT-5(65)	General	1,445,229	1,496,262			
L-7	General	1,613,671	1,670,728			
LT-8(65)	General	1,680,648	1,740,069			
L-12	General	1,882,610	1,949,095			
LT-14(65)	General	1,916,147	1,983,787			
L-6	General	2,151,401	2,227,590			

#### **Regular Retirement Eligibility**



### Unfunded Actuarial Accrued Liability (UAAL)

		Member Contribution Rate - 0%				
Benefit	Employee	UAAL	UAAL			
Group	Group	(5 Year FAS)	(3 Year FAS)			
L-1	General	\$ 1,147,129	\$ 1,188,096			
L-3	General	1,433,866	1,485,196			
LT-4(65)	General	1,368,536	1,417,481			
LT-5(65)	General	1,599,923	1,657,213			
L-7	General	1,720,748	1,782,231			
LT-8(65)	General	1,831,529	1,896,932			
L-12	General	2,007,470	2,079,260			
LT-14(65)	General	2,062,816	2,136,611			
L-6	General	2,294,241	2,376,195			

### Rule of 80 Retirement Eligibility



**APPENDIX II** 

SUMMARY OF FINANCIAL ASSUMPTIONS

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

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

- 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 7.25% 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. The pre-retirement 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 3.25% 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.
- 9. This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.



#### Schedule 1.

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

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

	Percent Increase in Individual's Pay				
Sample		During Next Year			
Ages	General	Police/Public Safety	Fire		
25	6.55%	6.55%	7.15%		
30	5.75	5.75	6.05		
35	5.25	5.25	5.15		
40	4.75	4.75	4.45		
45	4.25	4.25	4.15		
50	3.85	3.85	3.85		
55	3.65	3.65	3.65		
60	3.55	3.55	3.25		
65	3.25	3.25	3.25		



### Schedule 2.

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

Retirement	General	Members	Retirement	Retirement Police/	
Ages	Men	Women	Ages	Public Safety	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%

#### **Early Retirement**

#### **Normal Retirement**

Retirement	General	Members	Retirement	Police/	
Ages	Men	Women	Ages	Public Safety	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. (Concluded)

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

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



**APPENDIX III** 

SUMMARY OF LAGERS PROVISIONS

# Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS Benefits and Conditions Evaluated and/or Considered as of February 29, 2020 (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, public safety 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 Prograr	n: 1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Prograr	n: 1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Prograr	m: 1.50% for life, plus 0.50% to age 65
LT-14(65) Benefit Progra	am: 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, public safety 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 a percent of compensation beginning after completion of sufficient employment for 6 months of credited service. The law governing LAGERS has a provision for the adoption of a 2%, 4% or 6% member contribution rate.

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 0% plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the 0% plan may be done at the time of membership or a later date; however, a change in the member contribution rate may not be made more frequently than every 2 years. Under the 0% plan there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

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



**APPENDIX IV** 

**BENEFIT ILLUSTRATIONS** 

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

Final		Estimated	Estim	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	\$ 525	\$ 948	\$1,473	98%	
2,000	700	1,095	1,795	90%	
2,500	875	1,242	2,117	85%	
3,000	1,050	1,388	2,438	81%	
3,500	1,225	1,535	2,760	79%	
4,000	1,400	1,682	3,082	77%	
25 Years of Service:					
\$1,500	\$ 375	\$ 948	\$1,323	88%	
2,000	500	1,095	1,595	80%	
2,500	625	1,242	1,867	75%	
3,000	750	1,388	2,138	71%	
3,500	875	1,535	2,410	69%	
4,000	1,000	1,682	2,682	67%	
15 Years of Service:					
\$1,500	\$225	\$ 948	\$1,173	78%	
2,000	300	1,095	1,395	70%	
2,500	375	1,242	1,617	65%	
3,000	450	1,388	1,838	61%	
3,500	525	1,535	2,060	59%	
4,000	600	1,682	2,282	57%	

<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>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 2020 - 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	Estima	ated
Average	LAGERS	Social	Monthly	y Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 948	\$1,604	107%
2,000	875	1,095	1,970	99%
2,500	1,094	1,242	2,336	93%
3,000	1,313	1,388	2,701	90%
3,500	1,531	1,535	3,066	88%
4,000	1,750	1,682	3,432	86%
25 Years of Service:				
\$1,500	\$ 469	\$ 948	\$1,417	94%
2,000	625	1,095	1,720	86%
2,500	781	1,242	2,023	81%
3,000	938	1,388	2,326	78%
3,500	1,094	1,535	2,629	75%
4,000	1,250	1,682	2,932	73%
15 Years of Service:				
\$1,500	\$281	\$ 948	\$1,229	82%
2,000	375	1,095	1,470	74%
2,500	469	1,242	1,711	68%
3,000	563	1,388	1,951	65%
3,500	656	1,535	2,191	63%
4,000	750	1,682	2,432	61%

<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>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 2020 - 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	Estim	ated
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	\$ 788	\$ 948	\$1,736	116%
2,000	1,050	1,095	2,145	107%
2,500	1,313	1,242	2,555	102%
3,000	1,575	1,388	2,963	99%
3,500	1,838	1,535	3,373	96%
4,000	2,100	1,682	3,782	95%
25 Years of Service:				
\$1,500	\$ 563	\$ 948	\$1,511	101%
2,000	750	1,095	1,845	92%
2,500	938	1,242	2,180	87%
3,000	1,125	1,388	2,513	84%
3,500	1,313	1,535	2,848	81%
4,000	1,500	1,682	3,182	80%
15 Years of Service:				
\$1,500	\$338	\$ 948	\$1,286	86%
2,000	450	1,095	1,545	77%
2,500	563	1,242	1,805	72%
3,000	675	1,388	2,063	69%
3,500	788	1,535	2,323	66%
4,000	900	1,682	2,582	65%

 "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>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 2020 - 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<sup>1</sup>)

Final		Estimated	Estim	ated
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	\$ 919	\$ 948	\$1,867	124%
2,000	1,225	1,095	2,320	116%
2,500	1,531	1,242	2,773	111%
3,000	1,838	1,388	3,226	108%
3,500	2,144	1,535	3,679	105%
4,000	2,450	1,682	4,132	103%
25 Years of Service:				
\$1,500	\$ 656	\$ 948	\$1,604	107%
2,000	875	1,095	1,970	99%
2,500	1,094	1,242	2,336	93%
3,000	1,313	1,388	2,701	90%
3,500	1,531	1,535	3,066	88%
4,000	1,750	1,682	3,432	86%
15 Years of Service:				
\$1,500	\$ 394	\$ 948	\$1,342	89%
2,000	525	1,095	1,620	81%
2,500	656	1,242	1,898	76%
3,000	788	1,388	2,176	73%
3,500	919	1,535	2,454	70%
4,000	1,050	1,682	2,732	68%

<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>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 2020 - 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	Estima	ated
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	\$ 948	\$1,998	133%
2,000	1,400	1,095	2,495	125%
2,500	1,750	1,242	2,992	120%
3,000	2,100	1,388	3,488	116%
3,500	2,450	1,535	3,985	114%
4,000	2,800	1,682	4,482	112%
25 Years of Service:				
\$1,500	\$ 750	\$ 948	\$1,698	113%
2,000	1,000	1,095	2,095	105%
2,500	1,250	1,242	2,492	100%
3,000	1,500	1,388	2,888	96%
3,500	1,750	1,535	3,285	94%
4,000	2,000	1,682	3,682	92%
15 Years of Service:				
\$1,500	\$ 450	\$ 948	\$1,398	93%
2,000	600	1,095	1,695	85%
2,500	750	1,242	1,992	80%
3,000	900	1,388	2,288	76%
3,500	1,050	1,535	2,585	74%
4,000	1,200	1,682	2,882	72%

<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>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 2020 - 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)

Final	LAGERS		Estimated	Estimated		Percent		
Average	BENE	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	2:							
\$1,500	\$1,050	\$ 525	\$ 948	\$1,050	\$1,473	70%	98%	
2,000	1,400	700	1,095	1,400	1,795	70%	90%	
2,500	1,750	875	1,242	1,750	2,117	70%	85%	
3,000	2,100	1,050	1,388	2,100	2,438	70%	81%	
3,500	2,450	1,225	1,535	2,450	2,760	70%	79%	
4,000	2,800	1,400	1,682	2,800	3,082	70%	77%	
25 Years of Service	9:							
\$1,500	\$ 750	\$ 375	\$ 948	\$ 750	\$1,323	50%	88%	
2,000	1,000	500	1,095	1,000	1,595	50%	80%	
2,500	1,250	625	1,242	1,250	1,867	50%	75%	
3,000	1,500	750	1,388	1,500	2,138	50%	71%	
3,500	1,750	875	1,535	1,750	2,410	50%	69%	
4,000	2,000	1,000	1,682	2,000	2,682	50%	67%	
15 Years of Service	2:							
\$1,500	\$ 450	\$225	\$ 948	\$ 450	\$1,173	30%	78%	
2,000	600	300	1,095	600	1,395	30%	70%	
2,500	750	375	1,242	750	1,617	30%	65%	
3,000	900	450	1,388	900	1,838	30%	61%	
3,500	1,050	525	1,535	1,050	2,060	30%	59%	
4,000	1,200	600	1,682	1,200	2,282	30%	57%	

<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>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 2020 - 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	LAGERS BENEFIT <sup>3</sup>		Estimated	Estimated		Percent	
Average			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	2:						
\$1,500	\$1,050	\$ 656	\$ 948	\$1,050	\$1,604	70%	107%
2,000	1,400	875	1,095	1,400	1,970	70%	99%
2,500	1,750	1,094	1,242	1,750	2,336	70%	93%
3,000	2,100	1,313	1,388	2,100	2,701	70%	90%
3,500	2,450	1,531	1,535	2,450	3,066	70%	88%
4,000	2,800	1,750	1,682	2,800	3,432	70%	86%
25 Years of Service	2:						
\$1,500	\$ 750	\$ 469	\$ 948	\$ 750	\$1,417	50%	94%
2,000	1,000	625	1,095	1,000	1,720	50%	86%
2,500	1,250	781	1,242	1,250	2,023	50%	81%
3,000	1,500	938	1,388	1,500	2,326	50%	78%
3,500	1,750	1,094	1,535	1,750	2,629	50%	75%
4,000	2,000	1,250	1,682	2,000	2,932	50%	73%
15 Years of Service	e:						
\$1,500	\$ 450	\$281	\$ 948	\$ 450	\$1,229	30%	82%
2,000	600	375	1,095	600	1,470	30%	74%
2,500	750	469	1,242	750	1,711	30%	68%
3,000	900	563	1,388	900	1,951	30%	65%
3,500	1,050	656	1,535	1,050	2,191	30%	63%
4,000	1,200	750	1,682	1,200	2,432	30%	61%

<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>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 2020 - 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-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)

inal LAGERS Estimated erage <u>BENEFIT<sup>3</sup></u> Social y (FAS) <sup>1</sup> To 65 At 65 Security <sup>2</sup>		Estimated	Estim	ated	Percent of FAS		
		Social	Monthl	y Total			
		To 65	At 65	To 65	At 65		
::							
\$1,050	\$ 788	\$ 948	\$1,050	\$1,736	70%	116%	
1,400	1,050	1,095	1,400	2,145	70%	107%	
1,750	1,313	1,242	1,750	2,555	70%	102%	
2,100	1,575	1,388	2,100	2,963	70%	99%	
2,450	1,838	1,535	2,450	3,373	70%	96%	
2,800	2,100	1,682	2,800	3,782	70%	95%	
::							
\$ 750	\$ 563	\$ 948	\$ 750	\$1,511	50%	101%	
1,000	750	1,095	1,000	1,845	50%	92%	
1,250	938	1,242	1,250	2,180	50%	87%	
1,500	1,125	1,388	1,500	2,513	50%	84%	
1,750	1,313	1,535	1,750	2,848	50%	81%	
2,000	1,500	1,682	2,000	3,182	50%	80%	
:							
\$ 450	\$338	\$ 948	\$ 450	\$1,286	30%	86%	
600	450	1,095	600	1,545	30%	77%	
750	563	1,242	750	1,805	30%	72%	
900	675	1,388	900	2,063	30%	69%	
1,050	788	1,535	1,050	2,323	30%	66%	
1,200	900	1,682	1,200	2,582	30%	65%	
	To 65     \$1,050     1,400     1,750     2,100     2,450     2,800     ::     \$ 750     1,000     1,250     1,500     1,750     2,000     ::     \$ 450     600     750     900     1,050	BENEFIT <sup>3</sup> To 65     At 65       \$1,050     \$ 788       1,400     1,050       1,750     1,313       2,100     1,575       2,450     1,838       2,800     2,100       1,250     938       1,000     750       1,250     938       1,500     1,125       1,750     1,313       2,000     1,500       1,500     1,250       938     1,500       1,500     1,251       1,750     1,313       2,000     1,500       1,750     1,313       2,000     1,500       1,750     563       1,750     1,313       2,000     1,500       \$ 450     \$338       600     450       750     563       900     675       1,050     788	BENEFIT <sup>3</sup> Social Security <sup>2</sup> To 65     At 65     Security <sup>2</sup> \$1,050     \$ 788     \$ 948       1,400     1,050     1,095       1,750     1,313     1,242       2,100     1,575     1,388       2,450     1,838     1,535       2,800     2,100     1,682       *:     *     *       \$ 750     \$ 563     \$ 948       1,000     750     1,095       1,250     938     1,242       1,500     1,125     1,388       1,750     1,313     1,535       2,000     1,500     1,682       *:     *     *       \$ 450     \$ 338     \$ 948       1,750     1,313     1,535       2,000     1,500     1,682       *:     *     *     *       \$ 450     \$ 338     \$ 948       600     450     1,095       750     563     1,242       900     67	BENEFIT $^3$ Social Security $^2$ MonthTo 65At 65Security $^2$ To 65::\$1,050\$788\$948\$1,0501,4001,0501,0951,4001,7501,3131,2421,7502,1001,5751,3882,1002,4501,8381,5352,4502,8002,1001,6822,800:::::\$ 750\$ 563\$ 948\$ 7501,0007501,0951,0001,2509381,2421,2501,5001,1251,3881,5001,7501,3131,5351,7502,0001,5001,6822,000:::::\$ 450\$338\$ 948\$ 4506004501,0956007505631,2427509006751,3889001,0507881,5351,050	BENEFIT <sup>3</sup> Social Security <sup>2</sup> Monthly Total       To 65     At 65     Security <sup>2</sup> To 65     At 65       \$1,050     \$ 788     \$ 948     \$1,050     \$1,736       1,400     1,050     1,095     1,400     2,145       1,750     1,313     1,242     1,750     2,555       2,100     1,575     1,388     2,100     2,963       2,450     1,838     1,535     2,450     3,373       2,800     2,100     1,682     2,800     3,782       *:     *     *     *     *     *     *       \$ 750     \$ 563     \$ 948     \$ 750     \$ 1,511       1,000     750     1,095     1,000     1,845       1,250     938     1,242     1,250     2,180       1,500     1,125     1,388     1,500     2,513       1,750     1,313     1,535     1,750     2,848       2,000     1,500     1,682     2,000     3,182       *:	BENEFIT <sup>3</sup> Social Security <sup>2</sup> Monthly Total     of F       To 65     At 65     Security <sup>2</sup> To 65     At 65     To 65       S1,050     \$ 788     \$ 948     \$1,050     \$1,736     70%       1,400     1,050     1,095     1,400     2,145     70%       1,750     1,313     1,242     1,750     2,555     70%       2,100     1,575     1,388     2,100     2,963     70%       2,450     1,838     1,535     2,450     3,373     70%       2,800     2,100     1,682     2,800     3,782     70%       1,000     750     1,095     1,000     1,845     50%       1,250     938     1,242     1,250     2,180     50%       1,500     1,125     1,388     1,500     2,513     50%       1,500     1,125     1,388     1,500     2,513     50%       1,500     1,125     1,388     1,500     2,148     50%       1,500     <	

<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>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 2020 - 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-14(65) Benefit Program is Years of Credited Service

times: 2.00% of FAS  $^1$  to age 65)

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

Final	Average BENEFIT <sup>3</sup> Social		Estimated	Estimated		Percent		
Average			Social	Month	y Total	of FAS		
Salary (FAS) <sup>1</sup>			To 65	At 65	To 65	At 65		
35 Years of Service	2:							
\$1,500	\$1,050	\$ 919	\$ 948	\$1,050	\$1,867	70%	124%	
2,000	1,400	1,225	1,095	1,400	2,320	70%	116%	
2,500	1,750	1,531	1,242	1,750	2,773	70%	111%	
3,000	2,100	1,838	1,388	2,100	3,226	70%	108%	
3,500	2,450	2,144	1,535	2,450	3,679	70%	105%	
4,000	2,800	2,450	1,682	2,800	4,132	70%	103%	
25 Years of Service	2:							
\$1,500	\$ 750	\$ 656	\$ 948	\$ 750	\$1,604	50%	107%	
2,000	1,000	875	1,095	1,000	1,970	50%	99%	
2,500	1,250	1,094	1,242	1,250	2,336	50%	93%	
3,000	1,500	1,313	1,388	1,500	2,701	50%	90%	
3,500	1,750	1,531	1,535	1,750	3,066	50%	88%	
4,000	2,000	1,750	1,682	2,000	3,432	50%	86%	
15 Years of Service	2:							
\$1,500	\$ 450	\$ 394	\$ 948	\$ 450	\$1,342	30%	89%	
2,000	600	525	1,095	600	1,620	30%	81%	
2,500	750	656	1,242	750	1,898	30%	76%	
3,000	900	788	1,388	900	2,176	30%	73%	
3,500	1,050	919	1,535	1,050	2,454	30%	70%	
4,000	1,200	1,050	1,682	1,200	2,732	30%	68%	

<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>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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.



**APPENDIX V** 

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

# Pettis County Ambulance District - General

#### September 30, 2020

By Attained Age and	Years of Service
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	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	4							4	\$ 130,734	
25-29	7	1						8	\$ 395,743	
30-34	8	4						12	\$ 573,522	
35-39	7	3						10	\$ 635,206	
40-44	4	2						6	\$ 383,365	
45-49	3	2						5	\$ 279,323	
50-54	2	4						6	\$ 428,397	
55-59		1						1	\$ 84,922	
60-64	1							1	\$ 50,490	
65-69										
70 & Over										
Totals	36	17						53	\$ 2,961,702	

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

Age: 37.3 years. Benefit Service: 3.7 years. Annual Pay: \$55,881.



**APPENDIX VI** 

**RISK COMMENTARY** 

# **Risk Commentary**

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

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

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

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

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

The computed contribution rates shown on pages 4 thru 7 may be considered as a minimum contribution rate for the selected benefit provisions that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



# **Risk Commentary (Concluded)**

## **PLAN MATURITY MEASURES**

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

#### RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

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

#### RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

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

#### RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

#### DURATION OF ACTUARIAL ACCRUED LIABILITY

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

## ADDITIONAL RISK ASSESSMENT

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





December 8, 2020 E-mail

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

Dear Bob:

Enclosed is the report of the September 30, 2020 Initial Actuarial Valuation of LAGERS benefits for the employees of

Pettis County Ambulance District

Sincerely,

Mita Drapilor

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp



December 8, 2020

Pettis County Ambulance District Sedalia, 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 September 30, 2020 Initial Valuation for the Pettis County Ambulance District dated December 8, 2020.

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 29, 2020. The unfunded actuarial accrued liability shown for each member contribution rate option is based on the 0% member contribution rate plan.

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 Drazilov Mita D. Drazilov, ASA, FCA, MAAA

#### Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

			1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
	F-11-1-1		l Employer	Unfunded		l Employer	Unfunded		Employer	Unfunded	
Valuation	Estimated Projected	As a %	ibution Annual	Actuarial Accrued	As a %	ibution Annual	Actuarial Accrued	As a %	bution Annual	Actuarial Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2020	\$ 2,961,702	8.8%	\$260,630	\$ 1,075,772	10.8%	\$319,864	\$ 1,344,732	9.7%	\$287,285	\$ 1,209,821	
2021	3,057,957	8.8	269,100	1,090,510	10.8	330,259	1,363,155	9.7	296,622	1,226,395	
2022	3,157,341	8.8	277,846	1,104,261	10.8	340,993	1,380,344	9.7	306,262	1,241,859	
2023	3,259,955	8.8	286,876	1,116,886	10.8	352,075	1,396,125	9.7	316,216	1,256,057	
2024	3,365,904	8.8	296,200	1,128,235	10.8	363,518	1,410,311	9.7	326,493	1,268,820	
2025	3,475,296	8.8	305,826	1,138,144	10.8	375,332	1,422,697	9.7	337,104	1,279,963	
2026	3,588,243	8.8	315,765	1,146,435	10.8	387,530	1,433,060	9.7	348,060	1,289,287	
2027	3,704,861	8.8	326,028	1,152,914	10.8	400,125	1,441,159	9.7	359,372	1,296,574	
2028	3,825,269	8.8	336,624	1,157,372	10.8	413,129	1,446,732	9.7	371,051	1,301,588	
2029	3,949,590	8.8	347,564	1,159,582	10.8	426,556	1,449,494	9.7	383,110	1,304,073	

#### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram LT-8(65) Bene		(65) Benefit P	fit Program	
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2020	\$ 2,961,702	11.5%	\$340,596	\$ 1,445,229	12.7%	\$376,136	\$ 1,613,671	13.2%	\$390,945	\$ 1,680,648	
2021	3,057,957	11.5	351,665	1,465,028	12.7	388,361	1,635,778	13.2	403,650	1,703,673	
2022	3,157,341	11.5	363,094	1,483,501	12.7	400,982	1,656,404	13.2	416,769	1,725,155	
2023	3,259,955	11.5	374,895	1,500,462	12.7	414,014	1,675,342	13.2	430,314	1,744,879	
2024	3,365,904	11.5	387,079	1,515,708	12.7	427,470	1,692,365	13.2	444,299	1,762,609	
2025	3,475,296	11.5	399,659	1,529,019	12.7	441,363	1,707,228	13.2	458,739	1,778,089	
2026	3,588,243	11.5	412,648	1,540,157	12.7	455,707	1,719,664	13.2	473,648	1,791,041	
2027	3,704,861	11.5	426,059	1,548,861	12.7	470,517	1,729,383	13.2	489,042	1,801,163	
2028	3,825,269	11.5	439,906	1,554,851	12.7	485,809	1,736,071	13.2	504,936	1,808,128	
2029	3,949,590	11.5	454,203	1,557,820	12.7	501,598	1,739,386	13.2	521,346	1,811,581	

		L-3	12 Benefit Pro	• • • • •		rogram L-6 Benefit Pro		gram		
	Estimated		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	14.7%	\$435,370	\$ 1,882,610	15.0%	\$444,255	\$ 1,916,147	16.7%	\$494,604	\$ 2,151,401
2021	3,057,957	14.7	449,520	1,908,401	15.0	458,694	1,942,398	16.7	510,679	2,180,875
2022	3,157,341	14.7	464,129	1,932,465	15.0	473,601	1,966,890	16.7	527,276	2,208,374
2023	3,259,955	14.7	479,213	1,954,559	15.0	488,993	1,989,377	16.7	544,412	2,233,622
2024	3,365,904	14.7	494,788	1,974,419	15.0	504,886	2,009,591	16.7	562,106	2,256,318
2025	3,475,296	14.7	510,869	1,991,759	15.0	521,294	2,027,240	16.7	580,374	2,276,134
2026	3,588,243	14.7	527,472	2,006,268	15.0	538,236	2,042,007	16.7	599,237	2,292,714
2027	3,704,861	14.7	544,615	2,017,607	15.0	555,729	2,053,548	16.7	618,712	2,305,672
2028	3,825,269	14.7	562,315	2,025,409	15.0	573,790	2,061,489	16.7	638,820	2,314,588
2029	3,949,590	14.7	580,590	2,029,276	15.0	592,439	2,065,425	16.7	659,582	2,319,008

- 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 (2% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		Ŀ	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2020	\$ 2,961,702	6.9%	\$204,357	\$ 1,075,772	8.9%	\$263,591	\$ 1,344,732	7.8%	\$231,013	\$ 1,209,821	
2021	3,057,957	6.9	210,999	1,090,510	8.9	272,158	1,363,155	7.8	238,521	1,226,395	
2022	3,157,341	6.9	217,857	1,104,261	8.9	281,003	1,380,344	7.8	246,273	1,241,859	
2023	3,259,955	6.9	224,937	1,116,886	8.9	290,136	1,396,125	7.8	254,276	1,256,057	
2024	3,365,904	6.9	232,247	1,128,235	8.9	299,565	1,410,311	7.8	262,541	1,268,820	
2025	3,475,296	6.9	239,795	1,138,144	8.9	309,301	1,422,697	7.8	271,073	1,279,963	
2026	3,588,243	6.9	247,589	1,146,435	8.9	319,354	1,433,060	7.8	279,883	1,289,287	
2027	3,704,861	6.9	255,635	1,152,914	8.9	329,733	1,441,159	7.8	288,979	1,296,574	
2028	3,825,269	6.9	263,944	1,157,372	8.9	340,449	1,446,732	7.8	298,371	1,301,588	
2029	3,949,590	6.9	272,522	1,159,582	8.9	351,514	1,449,494	7.8	308,068	1,304,073	

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	9.6%	\$284,323	\$ 1,445,229	10.8%	\$319,864	\$ 1,613,671	11.3%	\$334,672	\$ 1,680,648
2021	3,057,957	9.6	293,564	1,465,028	10.8	330,259	1,635,778	11.3	345,549	1,703,673
2022	3,157,341	9.6	303,105	1,483,501	10.8	340,993	1,656,404	11.3	356,780	1,725,155
2023	3,259,955	9.6	312,956	1,500,462	10.8	352,075	1,675,342	11.3	368,375	1,744,879
2024	3,365,904	9.6	323,127	1,515,708	10.8	363,518	1,692,365	11.3	380,347	1,762,609
2025	3,475,296	9.6	333,628	1,529,019	10.8	375,332	1,707,228	11.3	392,708	1,778,089
2026	3,588,243	9.6	344,471	1,540,157	10.8	387,530	1,719,664	11.3	405,471	1,791,041
2027	3,704,861	9.6	355,667	1,548,861	10.8	400,125	1,729,383	11.3	418,649	1,801,163
2028	3,825,269	9.6	367,226	1,554,851	10.8	413,129	1,736,071	11.3	432,255	1,808,128
2029	3,949,590	9.6	379,161	1,557,820	10.8	426,556	1,739,386	11.3	446,304	1,811,581

	L-3	12 Benefit Pro	· · · · ·		rogram L-6 Benef		6 Benefit Pro	gram		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	12.8%	\$379 <i>,</i> 098	\$ 1,882,610	13.1%	\$387 <i>,</i> 983	\$ 1,916,147	14.8%	\$438,332	\$ 2,151,401
2021	3,057,957	12.8	391,418	1,908,401	13.1	400,592	1,942,398	14.8	452,578	2,180,875
2022	3,157,341	12.8	404,140	1,932,465	13.1	413,612	1,966,890	14.8	467,286	2,208,374
2023	3,259,955	12.8	417,274	1,954,559	13.1	427,054	1,989,377	14.8	482,473	2,233,622
2024	3,365,904	12.8	430,836	1,974,419	13.1	440,933	2,009,591	14.8	498,154	2,256,318
2025	3,475,296	12.8	444,838	1,991,759	13.1	455,264	2,027,240	14.8	514,344	2,276,134
2026	3,588,243	12.8	459,295	2,006,268	13.1	470,060	2,042,007	14.8	531,060	2,292,714
2027	3,704,861	12.8	474,222	2,017,607	13.1	485,337	2,053,548	14.8	548,319	2,305,672
2028	3,825,269	12.8	489,634	2,025,409	13.1	501,110	2,061,489	14.8	566,140	2,314,588
2029	3,949,590	12.8	505,548	2,029,276	13.1	517,396	2,065,425	14.8	584,539	2,319,008

- 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 (4% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	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
2020	\$ 2,961,702	5.0%	\$148,085	\$ 1,075,772	7.0%	\$207,319	\$ 1,344,732	5.9%	\$174,740	\$ 1,209,821
2021	3,057,957	5.0	152,898	1,090,510	7.0	214,057	1,363,155	5.9	180,419	1,226,395
2022	3,157,341	5.0	157,867	1,104,261	7.0	221,014	1,380,344	5.9	186,283	1,241,859
2023	3,259,955	5.0	162,998	1,116,886	7.0	228,197	1,396,125	5.9	192,337	1,256,057
2024	3,365,904	5.0	168,295	1,128,235	7.0	235,613	1,410,311	5.9	198,588	1,268,820
2025	3,475,296	5.0	173,765	1,138,144	7.0	243,271	1,422,697	5.9	205,042	1,279,963
2026	3,588,243	5.0	179,412	1,146,435	7.0	251,177	1,433,060	5.9	211,706	1,289,287
2027	3,704,861	5.0	185,243	1,152,914	7.0	259,340	1,441,159	5.9	218,587	1,296,574
2028	3,825,269	5.0	191,263	1,157,372	7.0	267,769	1,446,732	5.9	225,691	1,301,588
2029	3,949,590	5.0	197,480	1,159,582	7.0	276,471	1,449,494	5.9	233,026	1,304,073

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	L	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	7.7%	\$228,051	\$ 1,445,229	8.9%	\$263,591	\$ 1,613,671	9.4%	\$278 <i>,</i> 400	\$ 1,680,648
2021	3,057,957	7.7	235,463	1,465,028	8.9	272,158	1,635,778	9.4	287,448	1,703,673
2022	3,157,341	7.7	243,115	1,483,501	8.9	281,003	1,656,404	9.4	296,790	1,725,155
2023	3,259,955	7.7	251,017	1,500,462	8.9	290,136	1,675,342	9.4	306,436	1,744,879
2024	3,365,904	7.7	259,175	1,515,708	8.9	299,565	1,692,365	9.4	316,395	1,762,609
2025	3,475,296	7.7	267,598	1,529,019	8.9	309,301	1,707,228	9.4	326,678	1,778,089
2026	3,588,243	7.7	276,295	1,540,157	8.9	319,354	1,719,664	9.4	337,295	1,791,041
2027	3,704,861	7.7	285,274	1,548,861	8.9	329,733	1,729,383	9.4	348,257	1,801,163
2028	3,825,269	7.7	294,546	1,554,851	8.9	340,449	1,736,071	9.4	359,575	1,808,128
2029	3,949,590	7.7	304,118	1,557,820	8.9	351,514	1,739,386	9.4	371,261	1,811,581

	L-3	12 Benefit Pro	gram LT-14(65) Benefit Pr		rogram L-6 Benefi		6 Benefit Pro	0		
	Estimated		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	10.9%	\$322,826	\$ 1,882,610	11.2%	\$331,711	\$ 1,916,147	12.9%	\$382,060	\$ 2,151,401
2021	3,057,957	10.9	333,317	1,908,401	11.2	342,491	1,942,398	12.9	394,476	2,180,875
2022	3,157,341	10.9	344,150	1,932,465	11.2	353,622	1,966,890	12.9	407,297	2,208,374
2023	3,259,955	10.9	355,335	1,954,559	11.2	365,115	1,989,377	12.9	420,534	2,233,622
2024	3,365,904	10.9	366,884	1,974,419	11.2	376,981	2,009,591	12.9	434,202	2,256,318
2025	3,475,296	10.9	378,807	1,991,759	11.2	389,233	2,027,240	12.9	448,313	2,276,134
2026	3,588,243	10.9	391,118	2,006,268	11.2	401,883	2,042,007	12.9	462,883	2,292,714
2027	3,704,861	10.9	403,830	2,017,607	11.2	414,944	2,053,548	12.9	477,927	2,305,672
2028	3,825,269	10.9	416,954	2,025,409	11.2	428,430	2,061,489	12.9	493,460	2,314,588
2029	3,949,590	10.9	430,505	2,029,276	11.2	442,354	2,065,425	12.9	509,497	2,319,008

- 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 (6% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
			l Employer	Unfunded		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	
2020	\$ 2,961,702	3.1%	\$91,813	\$ 1,075,772	5.1%	\$151,047	\$ 1,344,732	4.0%	\$118,468	\$ 1,209,821	
2021	3,057,957	3.1	94,797	1,090,510	5.1	155,956	1,363,155	4.0	122,318	1,226,395	
2022	3,157,341	3.1	97 <i>,</i> 878	1,104,261	5.1	161,024	1,380,344	4.0	126,294	1,241,859	
2023	3,259,955	3.1	101,059	1,116,886	5.1	166,258	1,396,125	4.0	130,398	1,256,057	
2024	3,365,904	3.1	104,343	1,128,235	5.1	171,661	1,410,311	4.0	134,636	1,268,820	
2025	3,475,296	3.1	107,734	1,138,144	5.1	177,240	1,422,697	4.0	139,012	1,279,963	
2026	3,588,243	3.1	111,236	1,146,435	5.1	183,000	1,433,060	4.0	143,530	1,289,287	
2027	3,704,861	3.1	114,851	1,152,914	5.1	188,948	1,441,159	4.0	148,194	1,296,574	
2028	3,825,269	3.1	118,583	1,157,372	5.1	195,089	1,446,732	4.0	153,011	1,301,588	
2029	3,949,590	3.1	122,437	1,159,582	5.1	201,429	1,449,494	4.0	157,984	1,304,073	

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		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	
2020	\$ 2,961,702	5.8%	\$171,779	\$ 1,445,229	7.0%	\$207,319	\$ 1,613,671	7.5%	\$222,128	\$ 1,680,648	
2021	3,057,957	5.8	177,362	1,465,028	7.0	214,057	1,635,778	7.5	229,347	1,703,673	
2022	3,157,341	5.8	183,126	1,483,501	7.0	221,014	1,656,404	7.5	236,801	1,725,155	
2023	3,259,955	5.8	189,077	1,500,462	7.0	228,197	1,675,342	7.5	244,497	1,744,879	
2024	3,365,904	5.8	195,222	1,515,708	7.0	235,613	1,692,365	7.5	252,443	1,762,609	
2025	3,475,296	5.8	201,567	1,529,019	7.0	243,271	1,707,228	7.5	260,647	1,778,089	
2026	3,588,243	5.8	208,118	1,540,157	7.0	251,177	1,719,664	7.5	269,118	1,791,041	
2027	3,704,861	5.8	214,882	1,548,861	7.0	259,340	1,729,383	7.5	277,865	1,801,163	
2028	3,825,269	5.8	221,866	1,554,851	7.0	267,769	1,736,071	7.5	286,895	1,808,128	
2029	3,949,590	5.8	229,076	1,557,820	7.0	276,471	1,739,386	7.5	296,219	1,811,581	

		L-:	12 Benefit Pro	ogram	LT-14	4(65) Benefit I	Program L-6 Benef		6 Benefit Pro	fit Program	
	Estimated		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2020	\$ 2,961,702	9.0%	\$266,553	\$ 1,882,610	9.3%	\$275,438	\$ 1,916,147	11.0%	\$325,787	\$ 2,151,401	
2021	3,057,957	9.0	275,216	1,908,401	9.3	284,390	1,942,398	11.0	336,375	2,180,875	
2022	3,157,341	9.0	284,161	1,932,465	9.3	293,633	1,966,890	11.0	347,308	2,208,374	
2023	3,259,955	9.0	293,396	1,954,559	9.3	303,176	1,989,377	11.0	358,595	2,233,622	
2024	3,365,904	9.0	302,931	1,974,419	9.3	313,029	2,009,591	11.0	370,249	2,256,318	
2025	3,475,296	9.0	312,777	1,991,759	9.3	323,203	2,027,240	11.0	382,283	2,276,134	
2026	3,588,243	9.0	322,942	2,006,268	9.3	333,707	2,042,007	11.0	394,707	2,292,714	
2027	3,704,861	9.0	333,437	2,017,607	9.3	344,552	2,053,548	11.0	407,535	2,305,672	
2028	3,825,269	9.0	344,274	2,025,409	9.3	355,750	2,061,489	11.0	420,780	2,314,588	
2029	3,949,590	9.0	355,463	2,029,276	9.3	367,312	2,065,425	11.0	434,455	2,319,008	

- 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 (0% Member Contribution Rate, 3 Year FAS)

		Ŀ	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		Employer	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	
2020	\$ 2,961,702	9.0%	\$266,553	\$ 1,113,718	11.2%	\$331,711	\$ 1,392,219	10.0%	\$296,170	\$ 1,252,484	
2021	3,057,957	9.0	275,216	1,128,976	11.2	342,491	1,411,292	10.0	305,796	1,269,643	
2022	3,157,341	9.0	284,161	1,143,212	11.2	353,622	1,429,088	10.0	315,734	1,285,652	
2023	3,259,955	9.0	293,396	1,156,282	11.2	365,115	1,445,427	10.0	325,996	1,300,351	
2024	3,365,904	9.0	302,931	1,168,031	11.2	376,981	1,460,114	10.0	336,590	1,313,564	
2025	3,475,296	9.0	312,777	1,178,289	11.2	389,233	1,472,937	10.0	347,530	1,325,100	
2026	3,588,243	9.0	322,942	1,186,872	11.2	401,883	1,483,666	10.0	358,824	1,334,752	
2027	3,704,861	9.0	333,437	1,193,580	11.2	414,944	1,492,051	10.0	370,486	1,342,296	
2028	3,825,269	9.0	344,274	1,198,196	11.2	428,430	1,497,821	10.0	382,527	1,347,487	
2029	3,949,590	9.0	355,463	1,200,484	11.2	442,354	1,500,681	10.0	394,959	1,350,060	

#### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram	LT-8	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 2,961,702	11.9%	\$352 <i>,</i> 443	\$ 1,496,262	13.1%	\$387 <i>,</i> 983	\$ 1,670,728	13.6%	\$402,791	\$ 1,740,069
2021	3,057,957	11.9	363,897	1,516,761	13.1	400,592	1,693,617	13.6	415,882	1,763,908
2022	3,157,341	11.9	375,724	1,535,886	13.1	413,612	1,714,972	13.6	429,398	1,786,150
2023	3,259,955	11.9	387,935	1,553,446	13.1	427,054	1,734,579	13.6	443,354	1,806,571
2024	3,365,904	11.9	400,543	1,569,230	13.1	440,933	1,752,204	13.6	457,763	1,824,927
2025	3,475,296	11.9	413,560	1,583,012	13.1	455,264	1,767,592	13.6	472,640	1,840,954
2026	3,588,243	11.9	427,001	1,594,543	13.1	470,060	1,780,468	13.6	488,001	1,854,364
2027	3,704,861	11.9	440,878	1,603,555	13.1	485,337	1,790,531	13.6	503,861	1,864,844
2028	3,825,269	11.9	455,207	1,609,756	13.1	501,110	1,797,455	13.6	520,237	1,872,055
2029	3,949,590	11.9	470,001	1,612,830	13.1	517,396	1,800,887	13.6	537,144	1,875,630

		L-3	12 Benefit Pro	ogram	LT-1	4(65) Benefit I	Program	Ŀ	II     Dollars       %     \$512,374       529,027	-0	
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		• •	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	
2020	\$ 2,961,702	15.2%	\$450,179	\$ 1,949,095	15.4%	\$456,102	\$ 1,983,787	17.3%	\$512,374	\$ 2,227,590	
2021	3,057,957	15.2	464,809	1,975,797	15.4	470,925	2,010,965	17.3	529,027	2,258,108	
2022	3,157,341	15.2	479,916	2,000,711	15.4	486,231	2,036,322	17.3	546,220	2,286,581	
2023	3,259,955	15.2	495,513	2,023,585	15.4	502,033	2,059,603	17.3	563,972	2,312,723	
2024	3,365,904	15.2	511,617	2,044,146	15.4	518,349	2,080,530	17.3	582,301	2,336,222	
2025	3,475,296	15.2	528,245	2,062,098	15.4	535,196	2,098,802	17.3	601,226	2,356,740	
2026	3,588,243	15.2	545,413	2,077,119	15.4	552,589	2,114,090	17.3	620,766	2,373,907	
2027	3,704,861	15.2	563,139	2,088,858	15.4	570,549	2,126,038	17.3	640,941	2,387,324	
2028	3,825,269	15.2	581,441	2,096,936	15.4	589,091	2,134,259	17.3	661,772	2,396,556	
2029	3,949,590	15.2	600,338	2,100,940	15.4	608,237	2,138,334	17.3	683,279	2,401,132	

- 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 (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contri	ibution	Actuarial	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	
2020	\$ 2,961,702	7.1%	\$210,281	\$ 1,113,718	9.3%	\$275,438	\$ 1,392,219	8.1%	\$239 <i>,</i> 898	\$ 1,252,484	
2021	3,057,957	7.1	217,115	1,128,976	9.3	284,390	1,411,292	8.1	247,695	1,269,643	
2022	3,157,341	7.1	224,171	1,143,212	9.3	293,633	1,429,088	8.1	255,745	1,285,652	
2023	3,259,955	7.1	231,457	1,156,282	9.3	303,176	1,445,427	8.1	264,056	1,300,351	
2024	3,365,904	7.1	238,979	1,168,031	9.3	313,029	1,460,114	8.1	272,638	1,313,564	
2025	3,475,296	7.1	246,746	1,178,289	9.3	323,203	1,472,937	8.1	281,499	1,325,100	
2026	3,588,243	7.1	254,765	1,186,872	9.3	333,707	1,483,666	8.1	290,648	1,334,752	
2027	3,704,861	7.1	263,045	1,193,580	9.3	344,552	1,492,051	8.1	300,094	1,342,296	
2028	3,825,269	7.1	271,594	1,198,196	9.3	355,750	1,497,821	8.1	309,847	1,347,487	
2029	3,949,590	7.1	280,421	1,200,484	9.3	367,312	1,500,681	8.1	319,917	1,350,060	

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	L	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	10.0%	\$296,170	\$ 1,496,262	11.2%	\$331,711	\$ 1,670,728	11.7%	\$346,519	\$ 1,740,069
2021	3,057,957	10.0	305,796	1,516,761	11.2	342,491	1,693,617	11.7	357,781	1,763,908
2022	3,157,341	10.0	315,734	1,535,886	11.2	353,622	1,714,972	11.7	369,409	1,786,150
2023	3,259,955	10.0	325,996	1,553,446	11.2	365,115	1,734,579	11.7	381,415	1,806,571
2024	3,365,904	10.0	336,590	1,569,230	11.2	376,981	1,752,204	11.7	393,811	1,824,927
2025	3,475,296	10.0	347,530	1,583,012	11.2	389,233	1,767,592	11.7	406,610	1,840,954
2026	3,588,243	10.0	358,824	1,594,543	11.2	401,883	1,780,468	11.7	419,824	1,854,364
2027	3,704,861	10.0	370,486	1,603,555	11.2	414,944	1,790,531	11.7	433,469	1,864,844
2028	3,825,269	10.0	382,527	1,609,756	11.2	428,430	1,797,455	11.7	447,556	1,872,055
2029	3,949,590	10.0	394,959	1,612,830	11.2	442,354	1,800,887	11.7	462,102	1,875,630

		L-3	12 Benefit Pro	ogram	LT-1	4(65) Benefit I	Program	Ŀ	mated Employer   Contribution   % of Annual   roll Dollars   .4% \$456,102   .4 470,925	Benefit Program	
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		• •	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	
2020	\$ 2,961,702	13.3%	\$393,906	\$ 1,949,095	13.5%	\$399 <i>,</i> 830	\$ 1,983,787	15.4%	\$456,102	\$ 2,227,590	
2021	3,057,957	13.3	406,708	1,975,797	13.5	412,824	2,010,965	15.4	470,925	2,258,108	
2022	3,157,341	13.3	419,926	2,000,711	13.5	426,241	2,036,322	15.4	486,231	2,286,581	
2023	3,259,955	13.3	433,574	2,023,585	13.5	440,094	2,059,603	15.4	502,033	2,312,723	
2024	3,365,904	13.3	447,665	2,044,146	13.5	454,397	2,080,530	15.4	518,349	2,336,222	
2025	3,475,296	13.3	462,214	2,062,098	13.5	469,165	2,098,802	15.4	535,196	2,356,740	
2026	3,588,243	13.3	477,236	2,077,119	13.5	484,413	2,114,090	15.4	552,589	2,373,907	
2027	3,704,861	13.3	492,747	2,088,858	13.5	500,156	2,126,038	15.4	570,549	2,387,324	
2028	3,825,269	13.3	508,761	2,096,936	13.5	516,411	2,134,259	15.4	589,091	2,396,556	
2029	3,949,590	13.3	525,295	2,100,940	13.5	533,195	2,138,334	15.4	608,237	2,401,132	

- 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 (4% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

		Ŀ	1 Benefit Pro	gram	Ŀ	3 Benefit Pro	gram LT-4(65) Bene		(65) Benefit P	v .	
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	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	
2020	\$ 2,961,702	5.2%	\$154,008	\$ 1,113,718	7.4%	\$219,166	\$ 1,392,219	6.2%	\$183,626	\$ 1,252,484	
2021	3,057,957	5.2	159,014	1,128,976	7.4	226,289	1,411,292	6.2	189,593	1,269,643	
2022	3,157,341	5.2	164,182	1,143,212	7.4	233,643	1,429,088	6.2	195,755	1,285,652	
2023	3,259,955	5.2	169,518	1,156,282	7.4	241,237	1,445,427	6.2	202,117	1,300,351	
2024	3,365,904	5.2	175,027	1,168,031	7.4	249,077	1,460,114	6.2	208,686	1,313,564	
2025	3,475,296	5.2	180,715	1,178,289	7.4	257,172	1,472,937	6.2	215,468	1,325,100	
2026	3,588,243	5.2	186,589	1,186,872	7.4	265,530	1,483,666	6.2	222,471	1,334,752	
2027	3,704,861	5.2	192,653	1,193,580	7.4	274,160	1,492,051	6.2	229,701	1,342,296	
2028	3,825,269	5.2	198,914	1,198,196	7.4	283,070	1,497,821	6.2	237,167	1,347,487	
2029	3,949,590	5.2	205,379	1,200,484	7.4	292,270	1,500,681	6.2	244,875	1,350,060	

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram	LT-8	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 2,961,702	8.1%	\$239 <i>,</i> 898	\$ 1,496,262	9.3%	\$275,438	\$ 1,670,728	9.8%	\$290,247	\$ 1,740,069
2021	3,057,957	8.1	247,695	1,516,761	9.3	284,390	1,693,617	9.8	299,680	1,763,908
2022	3,157,341	8.1	255,745	1,535,886	9.3	293,633	1,714,972	9.8	309,419	1,786,150
2023	3,259,955	8.1	264,056	1,553,446	9.3	303,176	1,734,579	9.8	319,476	1,806,571
2024	3,365,904	8.1	272,638	1,569,230	9.3	313,029	1,752,204	9.8	329,859	1,824,927
2025	3,475,296	8.1	281,499	1,583,012	9.3	323,203	1,767,592	9.8	340,579	1,840,954
2026	3,588,243	8.1	290,648	1,594,543	9.3	333,707	1,780,468	9.8	351,648	1,854,364
2027	3,704,861	8.1	300,094	1,603,555	9.3	344,552	1,790,531	9.8	363,076	1,864,844
2028	3,825,269	8.1	309,847	1,609,756	9.3	355,750	1,797,455	9.8	374,876	1,872,055
2029	3,949,590	8.1	319,917	1,612,830	9.3	367,312	1,800,887	9.8	387,060	1,875,630

	Estimated Projected Payroll \$ 2,961,702 3,057,957 3,157,341	L-3	12 Benefit Pro	ogram	LT-14	4(65) Benefit	Program	Ŀ	6 Benefit Pro	gram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	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
2020	\$ 2,961,702	11.4%	\$337,634	\$ 1,949,095	11.6%	\$343,557	\$ 1,983,787	13.5%	\$399 <i>,</i> 830	\$ 2,227,590
2021	3,057,957	11.4	348,607	1,975,797	11.6	354,723	2,010,965	13.5	412,824	2,258,108
2022	3,157,341	11.4	359,937	2,000,711	11.6	366,252	2,036,322	13.5	426,241	2,286,581
2023	3,259,955	11.4	371,635	2,023,585	11.6	378,155	2,059,603	13.5	440,094	2,312,723
2024	3,365,904	11.4	383,713	2,044,146	11.6	390,445	2,080,530	13.5	454,397	2,336,222
2025	3,475,296	11.4	396,184	2,062,098	11.6	403,134	2,098,802	13.5	469,165	2,356,740
2026	3,588,243	11.4	409,060	2,077,119	11.6	416,236	2,114,090	13.5	484,413	2,373,907
2027	3,704,861	11.4	422,354	2,088,858	11.6	429,764	2,126,038	13.5	500,156	2,387,324
2028	3,825,269	11.4	436,081	2,096,936	11.6	443,731	2,134,259	13.5	516,411	2,396,556
2029	3,949,590	11.4	450,253	2,100,940	11.6	458,152	2,138,334	13.5	533,195	2,401,132

- 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 (6% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

		Ŀ	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
			l Employer	Unfunded		Employer	Unfunded		l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	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	
2020	\$ 2,961,702	3.3%	\$97,736	\$ 1,113,718	5.5%	\$162,894	\$ 1,392,219	4.3%	\$127,353	\$ 1,252,484	
2021	3,057,957	3.3	100,913	1,128,976	5.5	168,188	1,411,292	4.3	131,492	1,269,643	
2022	3,157,341	3.3	104,192	1,143,212	5.5	173,654	1,429,088	4.3	135,766	1,285,652	
2023	3,259,955	3.3	107,579	1,156,282	5.5	179,298	1,445,427	4.3	140,178	1,300,351	
2024	3,365,904	3.3	111,075	1,168,031	5.5	185,125	1,460,114	4.3	144,734	1,313,564	
2025	3,475,296	3.3	114,685	1,178,289	5.5	191,141	1,472,937	4.3	149,438	1,325,100	
2026	3,588,243	3.3	118,412	1,186,872	5.5	197,353	1,483,666	4.3	154,294	1,334,752	
2027	3,704,861	3.3	122,260	1,193,580	5.5	203,767	1,492,051	4.3	159,309	1,342,296	
2028	3,825,269	3.3	126,234	1,198,196	5.5	210,390	1,497,821	4.3	164,487	1,347,487	
2029	3,949,590	3.3	130,336	1,200,484	5.5	217,227	1,500,681	4.3	169,832	1,350,060	

### **Regular Retirement Eligibility**

		LT-5	(65) Benefit P			gram	LT-8(65) Benefit		rogram	
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	6.2%	\$183,626	\$ 1,496,262	7.4%	\$219,166	\$ 1,670,728	7.9%	\$233,974	\$ 1,740,069
2021	3,057,957	6.2	189,593	1,516,761	7.4	226,289	1,693,617	7.9	241,579	1,763,908
2022	3,157,341	6.2	195,755	1,535,886	7.4	233,643	1,714,972	7.9	249,430	1,786,150
2023	3,259,955	6.2	202,117	1,553,446	7.4	241,237	1,734,579	7.9	257,536	1,806,571
2024	3,365,904	6.2	208,686	1,569,230	7.4	249,077	1,752,204	7.9	265,906	1,824,927
2025	3,475,296	6.2	215,468	1,583,012	7.4	257,172	1,767,592	7.9	274,548	1,840,954
2026	3,588,243	6.2	222,471	1,594,543	7.4	265,530	1,780,468	7.9	283,471	1,854,364
2027	3,704,861	6.2	229,701	1,603,555	7.4	274,160	1,790,531	7.9	292,684	1,864,844
2028	3,825,269	6.2	237,167	1,609,756	7.4	283,070	1,797,455	7.9	302,196	1,872,055
2029	3,949,590	6.2	244,875	1,612,830	7.4	292,270	1,800,887	7.9	312,018	1,875,630

		L-3	12 Benefit Pro	ogram			Inded Estimated Employer   varial Contribution   rued As a % of   Annual   vility Payroll   83,787 11.6%	gram		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		• •	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability			Accrued Liability
2020	\$ 2,961,702	9.5%	\$281,362	\$ 1,949,095	9.7%	\$287,285	\$ 1,983,787	11.6%	\$343 <i>,</i> 557	\$ 2,227,590
2021	3,057,957	9.5	290,506	1,975,797	9.7	296,622	2,010,965	11.6	354,723	2,258,108
2022	3,157,341	9.5	299,947	2,000,711	9.7	306,262	2,036,322	11.6	366,252	2,286,581
2023	3,259,955	9.5	309,696	2,023,585	9.7	316,216	2,059,603	11.6	378,155	2,312,723
2024	3,365,904	9.5	319,761	2,044,146	9.7	326,493	2,080,530	11.6	390,445	2,336,222
2025	3,475,296	9.5	330,153	2,062,098	9.7	337,104	2,098,802	11.6	403,134	2,356,740
2026	3,588,243	9.5	340,883	2,077,119	9.7	348,060	2,114,090	11.6	416,236	2,373,907
2027	3,704,861	9.5	351,962	2,088,858	9.7	359,372	2,126,038	11.6	429,764	2,387,324
2028	3,825,269	9.5	363,401	2,096,936	9.7	371,051	2,134,259	11.6	443,731	2,396,556
2029	3,949,590	9.5	375,211	2,100,940	9.7	383,110	2,138,334	11.6	458,152	2,401,132

- 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 (0% Member Contribution Rate, 5 Year FAS)

		L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2020	\$ 2,961,702	9.3%	\$275,438	\$ 1,147,129	11.4%	\$337,634	\$ 1,433,866	10.9%	\$322 <i>,</i> 826	\$ 1,368,536	
2021	3,057,957	9.3	284,390	1,162,844	11.4	348,607	1,453,510	10.9	333,317	1,387,285	
2022	3,157,341	9.3	293,633	1,177,507	11.4	359,937	1,471,838	10.9	344,150	1,404,778	
2023	3,259,955	9.3	303,176	1,190,969	11.4	371,635	1,488,665	10.9	355,335	1,420,839	
2024	3,365,904	9.3	313,029	1,203,070	11.4	383,713	1,503,791	10.9	366,884	1,435,276	
2025	3,475,296	9.3	323,203	1,213,636	11.4	396,184	1,516,998	10.9	378,807	1,447,881	
2026	3,588,243	9.3	333,707	1,222,477	11.4	409,060	1,528,048	10.9	391,118	1,458,428	
2027	3,704,861	9.3	344,552	1,229,386	11.4	422,354	1,536,684	10.9	403,830	1,466,671	
2028	3,825,269	9.3	355,750	1,234,140	11.4	436,081	1,542,626	10.9	416,954	1,472,343	
2029	3,949,590	9.3	367,312	1,236,497	11.4	450,253	1,545,572	10.9	430,505	1,475,154	

#### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	12.7%	\$376,136	\$ 1,599,923	13.5%	\$399 <i>,</i> 830	\$ 1,720,748	14.3%	\$423,523	\$ 1,831,529
2021	3,057,957	12.7	388,361	1,621,842	13.5	412,824	1,744,322	14.3	437,288	1,856,621
2022	3,157,341	12.7	400,982	1,642,292	13.5	426,241	1,766,317	14.3	451,500	1,880,032
2023	3,259,955	12.7	414,014	1,661,068	13.5	440,094	1,786,511	14.3	466,174	1,901,526
2024	3,365,904	12.7	427,470	1,677,946	13.5	454,397	1,804,664	14.3	481,324	1,920,847
2025	3,475,296	12.7	441,363	1,692,682	13.5	469,165	1,820,513	14.3	496,967	1,937,717
2026	3,588,243	12.7	455,707	1,705,012	13.5	484,413	1,833,774	14.3	513,119	1,951,832
2027	3,704,861	12.7	470,517	1,714,648	13.5	500,156	1,844,138	14.3	529,795	1,962,863
2028	3,825,269	12.7	485,809	1,721,279	13.5	516,411	1,851,269	14.3	547,013	1,970,453
2029	3,949,590	12.7	501,598	1,724,566	13.5	533,195	1,854,804	14.3	564,791	1,974,216

		L-3	12 Benefit Pro	ogram	LT-14	4(65) Benefit	Program	Ŀ	L-6 Benefit Pro ated Employer ontribution	gram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		• •	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
2020	\$ 2,961,702	15.6%	\$462,025	\$ 2,007,470	16.1%	\$476,834	\$ 2,062,816	17.9%	\$530,145	\$ 2,294,241
2021	3,057,957	15.6	477,041	2,034,972	16.1	492,331	2,091,076	17.9	547,374	2,325,672
2022	3,157,341	15.6	492,545	2,060,632	16.1	508,332	2,117,443	17.9	565,164	2,354,997
2023	3,259,955	15.6	508,553	2,084,191	16.1	524,853	2,141,652	17.9	583,532	2,381,922
2024	3,365,904	15.6	525,081	2,105,368	16.1	541,911	2,163,413	17.9	602,497	2,406,124
2025	3,475,296	15.6	542,146	2,123,858	16.1	559,523	2,182,413	17.9	622,078	2,427,255
2026	3,588,243	15.6	559,766	2,139,329	16.1	577,707	2,198,310	17.9	642,295	2,444,936
2027	3,704,861	15.6	577,958	2,151,420	16.1	596,483	2,210,734	17.9	663,170	2,458,754
2028	3,825,269	15.6	596,742	2,159,740	16.1	615,868	2,219,283	17.9	684,723	2,468,262
2029	3,949,590	15.6	616,136	2,163,864	16.1	635,884	2,223,521	17.9	706,977	2,472,975

- 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 (2% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		Ŀ	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4(65) Benefit Program			
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	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	
2020	\$ 2,961,702	7.4%	\$219,166	\$ 1,147,129	9.5%	\$281,362	\$ 1,433,866	9.0%	\$266,553	\$ 1,368,536	
2021	3,057,957	7.4	226,289	1,162,844	9.5	290,506	1,453,510	9.0	275,216	1,387,285	
2022	3,157,341	7.4	233,643	1,177,507	9.5	299,947	1,471,838	9.0	284,161	1,404,778	
2023	3,259,955	7.4	241,237	1,190,969	9.5	309,696	1,488,665	9.0	293,396	1,420,839	
2024	3,365,904	7.4	249,077	1,203,070	9.5	319,761	1,503,791	9.0	302,931	1,435,276	
2025	3,475,296	7.4	257,172	1,213,636	9.5	330,153	1,516,998	9.0	312,777	1,447,881	
2026	3,588,243	7.4	265,530	1,222,477	9.5	340,883	1,528,048	9.0	322,942	1,458,428	
2027	3,704,861	7.4	274,160	1,229,386	9.5	351,962	1,536,684	9.0	333,437	1,466,671	
2028	3,825,269	7.4	283,070	1,234,140	9.5	363,401	1,542,626	9.0	344,274	1,472,343	
2029	3,949,590	7.4	292,270	1,236,497	9.5	375,211	1,545,572	9.0	355,463	1,475,154	

### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram	L	7 Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		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	
2020	\$ 2,961,702	10.8%	\$319,864	\$ 1,599,923	11.6%	\$343,557	\$ 1,720,748	12.4%	\$367,251	\$ 1,831,529	
2021	3,057,957	10.8	330,259	1,621,842	11.6	354,723	1,744,322	12.4	379,187	1,856,621	
2022	3,157,341	10.8	340,993	1,642,292	11.6	366,252	1,766,317	12.4	391,510	1,880,032	
2023	3,259,955	10.8	352,075	1,661,068	11.6	378,155	1,786,511	12.4	404,234	1,901,526	
2024	3,365,904	10.8	363,518	1,677,946	11.6	390,445	1,804,664	12.4	417,372	1,920,847	
2025	3,475,296	10.8	375,332	1,692,682	11.6	403,134	1,820,513	12.4	430,937	1,937,717	
2026	3,588,243	10.8	387,530	1,705,012	11.6	416,236	1,833,774	12.4	444,942	1,951,832	
2027	3,704,861	10.8	400,125	1,714,648	11.6	429,764	1,844,138	12.4	459,403	1,962,863	
2028	3,825,269	10.8	413,129	1,721,279	11.6	443,731	1,851,269	12.4	474,333	1,970,453	
2029	3,949,590	10.8	426,556	1,724,566	11.6	458,152	1,854,804	12.4	489,749	1,974,216	

		L-3	12 Benefit Pro	ogram	LT-14	4(65) Benefit I	Program	Ŀ	L-6 Benefit Prog ed Employer ribution Annual Dollars	gram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		• •	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
2020	\$ 2,961,702	13.7%	\$405,753	\$ 2,007,470	14.2%	\$420,562	\$ 2,062,816	16.0%	\$473,872	\$ 2,294,241
2021	3,057,957	13.7	418,940	2,034,972	14.2	434,230	2,091,076	16.0	489,273	2,325,672
2022	3,157,341	13.7	432,556	2,060,632	14.2	448,342	2,117,443	16.0	505,175	2,354,997
2023	3,259,955	13.7	446,614	2,084,191	14.2	462,914	2,141,652	16.0	521,593	2,381,922
2024	3,365,904	13.7	461,129	2,105,368	14.2	477,958	2,163,413	16.0	538,545	2,406,124
2025	3,475,296	13.7	476,116	2,123,858	14.2	493,492	2,182,413	16.0	556,047	2,427,255
2026	3,588,243	13.7	491,589	2,139,329	14.2	509,531	2,198,310	16.0	574,119	2,444,936
2027	3,704,861	13.7	507,566	2,151,420	14.2	526,090	2,210,734	16.0	592,778	2,458,754
2028	3,825,269	13.7	524,062	2,159,740	14.2	543,188	2,219,283	16.0	612,043	2,468,262
2029	3,949,590	13.7	541,094	2,163,864	14.2	560,842	2,223,521	16.0	631,934	2,472,975

- 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 (4% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	<u> </u>		gram	am LT-4(65) Benefit Pr		rogram	
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	5.5%	\$162,894	\$ 1,147,129	7.6%	\$225,089	\$ 1,433,866	7.1%	\$210,281	\$ 1,368,536
2021	3,057,957	5.5	168,188	1,162,844	7.6	232,405	1,453,510	7.1	217,115	1,387,285
2022	3,157,341	5.5	173,654	1,177,507	7.6	239,958	1,471,838	7.1	224,171	1,404,778
2023	3,259,955	5.5	179,298	1,190,969	7.6	247,757	1,488,665	7.1	231,457	1,420,839
2024	3,365,904	5.5	185,125	1,203,070	7.6	255,809	1,503,791	7.1	238,979	1,435,276
2025	3,475,296	5.5	191,141	1,213,636	7.6	264,122	1,516,998	7.1	246,746	1,447,881
2026	3,588,243	5.5	197,353	1,222,477	7.6	272,706	1,528,048	7.1	254,765	1,458,428
2027	3,704,861	5.5	203,767	1,229,386	7.6	281,569	1,536,684	7.1	263,045	1,466,671
2028	3,825,269	5.5	210,390	1,234,140	7.6	290,720	1,542,626	7.1	271,594	1,472,343
2029	3,949,590	5.5	217,227	1,236,497	7.6	300,169	1,545,572	7.1	280,421	1,475,154

### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P			gram	am LT-8(65) Benefi		rogram	
	Estimated		l Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	8.9%	\$263,591	\$ 1,599,923	9.7%	\$287,285	\$ 1,720,748	10.5%	\$310,979	\$ 1,831,529
2021	3,057,957	8.9	272,158	1,621,842	9.7	296,622	1,744,322	10.5	321,085	1,856,621
2022	3,157,341	8.9	281,003	1,642,292	9.7	306,262	1,766,317	10.5	331,521	1,880,032
2023	3,259,955	8.9	290,136	1,661,068	9.7	316,216	1,786,511	10.5	342,295	1,901,526
2024	3,365,904	8.9	299,565	1,677,946	9.7	326,493	1,804,664	10.5	353,420	1,920,847
2025	3,475,296	8.9	309,301	1,692,682	9.7	337,104	1,820,513	10.5	364,906	1,937,717
2026	3,588,243	8.9	319,354	1,705,012	9.7	348,060	1,833,774	10.5	376,766	1,951,832
2027	3,704,861	8.9	329,733	1,714,648	9.7	359,372	1,844,138	10.5	389,010	1,962,863
2028	3,825,269	8.9	340,449	1,721,279	9.7	371,051	1,851,269	10.5	401,653	1,970,453
2029	3,949,590	8.9	351,514	1,724,566	9.7	383,110	1,854,804	10.5	414,707	1,974,216

		L-3	12 Benefit Pro	ogram	LT-1	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	11.8%	\$349,481	\$ 2,007,470	12.3%	\$364,289	\$ 2,062,816	14.1%	\$417,600	\$ 2,294,241
2021	3,057,957	11.8	360,839	2,034,972	12.3	376,129	2,091,076	14.1	431,172	2,325,672
2022	3,157,341	11.8	372,566	2,060,632	12.3	388,353	2,117,443	14.1	445,185	2,354,997
2023	3,259,955	11.8	384,675	2,084,191	12.3	400,974	2,141,652	14.1	459,654	2,381,922
2024	3,365,904	11.8	397,177	2,105,368	12.3	414,006	2,163,413	14.1	474,592	2,406,124
2025	3,475,296	11.8	410,085	2,123,858	12.3	427,461	2,182,413	14.1	490,017	2,427,255
2026	3,588,243	11.8	423,413	2,139,329	12.3	441,354	2,198,310	14.1	505,942	2,444,936
2027	3,704,861	11.8	437,174	2,151,420	12.3	455,698	2,210,734	14.1	522,385	2,458,754
2028	3,825,269	11.8	451,382	2,159,740	12.3	470,508	2,219,283	14.1	539,363	2,468,262
2029	3,949,590	11.8	466,052	2,163,864	12.3	485,800	2,223,521	14.1	556,892	2,472,975

- 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 (6% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	L-	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded 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
2020	\$ 2,961,702	3.6%	\$106,621	\$ 1,147,129	5.7%	\$168,817	\$ 1,433,866	5.2%	\$154,008	\$ 1,368,536
2021	3,057,957	3.6	110,086	1,162,844	5.7	174,304	1,453,510	5.2	159,014	1,387,285
2022	3,157,341	3.6	113,664	1,177,507	5.7	179,968	1,471,838	5.2	164,182	1,404,778
2023	3,259,955	3.6	117,358	1,190,969	5.7	185,817	1,488,665	5.2	169,518	1,420,839
2024	3,365,904	3.6	121,173	1,203,070	5.7	191,857	1,503,791	5.2	175,027	1,435,276
2025	3,475,296	3.6	125,111	1,213,636	5.7	198,092	1,516,998	5.2	180,715	1,447,881
2026	3,588,243	3.6	129,177	1,222,477	5.7	204,530	1,528,048	5.2	186,589	1,458,428
2027	3,704,861	3.6	133,375	1,229,386	5.7	211,177	1,536,684	5.2	192,653	1,466,671
2028	3,825,269	3.6	137,710	1,234,140	5.7	218,040	1,542,626	5.2	198,914	1,472,343
2029	3,949,590	3.6	142,185	1,236,497	5.7	225,127	1,545,572	5.2	205,379	1,475,154

### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram			gram	LT-8(65) Benefit F		rogram
	Estimated		d Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	7.0%	\$207 <i>,</i> 319	\$ 1,599,923	7.8%	\$231,013	\$ 1,720,748	8.6%	\$254,706	\$ 1,831,529
2021	3,057,957	7.0	214,057	1,621,842	7.8	238,521	1,744,322	8.6	262,984	1,856,621
2022	3,157,341	7.0	221,014	1,642,292	7.8	246,273	1,766,317	8.6	271,531	1,880,032
2023	3,259,955	7.0	228,197	1,661,068	7.8	254,276	1,786,511	8.6	280,356	1,901,526
2024	3,365,904	7.0	235,613	1,677,946	7.8	262,541	1,804,664	8.6	289,468	1,920,847
2025	3,475,296	7.0	243,271	1,692,682	7.8	271,073	1,820,513	8.6	298,875	1,937,717
2026	3,588,243	7.0	251,177	1,705,012	7.8	279,883	1,833,774	8.6	308 <i>,</i> 589	1,951,832
2027	3,704,861	7.0	259,340	1,714,648	7.8	288,979	1,844,138	8.6	318,618	1,962,863
2028	3,825,269	7.0	267,769	1,721,279	7.8	298,371	1,851,269	8.6	328,973	1,970,453
2029	3,949,590	7.0	276,471	1,724,566	7.8	308,068	1,854,804	8.6	339,665	1,974,216

		L-:	L2 Benefit Pro	ogram	LT-14(65) Benefit Program L-6 Benefit Program		JoyerUnfundedEstimated EmployernActuarialContributionnualAccruedAs a % ofAnnualLiabilityPayroll08,017\$ 2,062,81612.2%18,0282,091,07612.228,3632,117,44312.2385,196			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution			• •	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars				Accrued Liability
2020	\$ 2,961,702	9.9%	\$293,208	\$ 2,007,470	10.4%	\$308,017	\$ 2,062,816	12.2%	\$361,328	\$ 2,294,241
2021	3,057,957	9.9	302,738	2,034,972	10.4	318,028	2,091,076	12.2	373,071	2,325,672
2022	3,157,341	9.9	312,577	2,060,632	10.4	328,363	2,117,443	12.2	385,196	2,354,997
2023	3,259,955	9.9	322,736	2,084,191	10.4	339,035	2,141,652	12.2	397,715	2,381,922
2024	3,365,904	9.9	333,224	2,105,368	10.4	350,054	2,163,413	12.2	410,640	2,406,124
2025	3,475,296	9.9	344,054	2,123,858	10.4	361,431	2,182,413	12.2	423,986	2,427,255
2026	3,588,243	9.9	355,236	2,139,329	10.4	373,177	2,198,310	12.2	437,766	2,444,936
2027	3,704,861	9.9	366,781	2,151,420	10.4	385,306	2,210,734	12.2	451,993	2,458,754
2028	3,825,269	9.9	378,702	2,159,740	10.4	397,828	2,219,283	12.2	466,683	2,468,262
2029	3,949,590	9.9	391.009	2,163,864	10.4	410,757	2,223,521	12.2	481,850	2,472,975

- 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 (0% Member Contribution Rate, 3 Year FAS)

		L-	1 Benefit Pro	gram	L	3 Benefit Pro	gram	LT-4(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2020	\$ 2,961,702	9.6%	\$284,323	\$ 1,188,096	11.8%	\$349,481	\$ 1,485,196	11.3%	\$334,672	\$ 1,417,481	
2021	3,057,957	9.6	293,564	1,204,373	11.8	360,839	1,505,543	11.3	345,549	1,436,900	
2022	3,157,341	9.6	303,105	1,219,559	11.8	372,566	1,524,527	11.3	356,780	1,455,018	
2023	3,259,955	9.6	312,956	1,233,502	11.8	384,675	1,541,957	11.3	368,375	1,471,653	
2024	3,365,904	9.6	323,127	1,246,036	11.8	397,177	1,557,625	11.3	380,347	1,486,606	
2025	3,475,296	9.6	333,628	1,256,979	11.8	410,085	1,571,305	11.3	392,708	1,499,662	
2026	3,588,243	9.6	344,471	1,266,135	11.8	423,413	1,582,751	11.3	405,471	1,510,586	
2027	3,704,861	9.6	355,667	1,273,291	11.8	437,174	1,591,696	11.3	418,649	1,519,123	
2028	3,825,269	9.6	367,226	1,278,215	11.8	451,382	1,597,851	11.3	432,255	1,524,998	
2029	3,949,590	9.6	379,161	1,280,656	11.8	466,052	1,600,902	11.3	446,304	1,527,910	

#### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation	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	
2020	\$ 2,961,702	13.1%	\$387 <i>,</i> 983	\$ 1,657,213	14.0%	\$414,638	\$ 1,782,231	14.8%	\$438 <i>,</i> 332	\$ 1,896,932	
2021	3,057,957	13.1	400,592	1,679,917	14.0	428,114	1,806,647	14.8	452 <i>,</i> 578	1,922,920	
2022	3,157,341	13.1	413,612	1,701,100	14.0	442,028	1,829,428	14.8	467,286	1,947,167	
2023	3,259,955	13.1	427,054	1,720,549	14.0	456,394	1,850,344	14.8	482,473	1,969,429	
2024	3,365,904	13.1	440,933	1,738,031	14.0	471,227	1,869,145	14.8	498,154	1,989,440	
2025	3,475,296	13.1	455,264	1,753,295	14.0	486,541	1,885,560	14.8	514,344	2,006,912	
2026	3,588,243	13.1	470,060	1,766,067	14.0	502,354	1,899,295	14.8	531,060	2,021,531	
2027	3,704,861	13.1	485,337	1,776,048	14.0	518,681	1,910,029	14.8	548,319	2,032,956	
2028	3,825,269	13.1	501,110	1,782,916	14.0	535 <i>,</i> 538	1,917,415	14.8	566,140	2,040,818	
2029	3,949,590	13.1	517,396	1,786,320	14.0	552,943	1,921,076	14.8	584,539	2,044,715	

		L-3	12 Benefit Pro	• · · · ·		Program	L-6 Benefit Pr		gram	
	Estimated		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	16.2%	\$479,796	\$ 2,079,260	16.6%	\$491,643	\$ 2,136,611	18.5%	\$547,915	\$ 2,376,195
2021	3,057,957	16.2	495,389	2,107,746	16.6	507,621	2,165,882	18.5	565,722	2,408,749
2022	3,157,341	16.2	511,489	2,134,323	16.6	524,119	2,193,192	18.5	584,108	2,439,122
2023	3,259,955	16.2	528,113	2,158,725	16.6	541,153	2,218,267	18.5	603,092	2,467,008
2024	3,365,904	16.2	545,276	2,180,660	16.6	558,740	2,240,807	18.5	622,692	2,492,075
2025	3,475,296	16.2	562,998	2,199,811	16.6	576,899	2,260,487	18.5	642,930	2,513,961
2026	3,588,243	16.2	581,295	2,215,835	16.6	595,648	2,276,953	18.5	663,825	2,532,274
2027	3,704,861	16.2	600,187	2,228,358	16.6	615,007	2,289,822	18.5	685,399	2,546,586
2028	3,825,269	16.2	619,694	2,236,975	16.6	634,995	2,298,677	18.5	707,675	2,556,434
2029	3,949,590	16.2	639,834	2,241,246	16.6	655,632	2,303,066	18.5	730,674	2,561,315

- 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 (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded 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
2020	\$ 2,961,702	7.7%	\$228,051	\$ 1,188,096	9.9%	\$293,208	\$ 1,485,196	9.4%	\$278,400	\$ 1,417,481
2021	3,057,957	7.7	235,463	1,204,373	9.9	302,738	1,505,543	9.4	287,448	1,436,900
2022	3,157,341	7.7	243,115	1,219,559	9.9	312,577	1,524,527	9.4	296,790	1,455,018
2023	3,259,955	7.7	251,017	1,233,502	9.9	322,736	1,541,957	9.4	306,436	1,471,653
2024	3,365,904	7.7	259,175	1,246,036	9.9	333,224	1,557,625	9.4	316,395	1,486,606
2025	3,475,296	7.7	267,598	1,256,979	9.9	344,054	1,571,305	9.4	326,678	1,499,662
2026	3,588,243	7.7	276,295	1,266,135	9.9	355,236	1,582,751	9.4	337,295	1,510,586
2027	3,704,861	7.7	285,274	1,273,291	9.9	366,781	1,591,696	9.4	348,257	1,519,123
2028	3,825,269	7.7	294,546	1,278,215	9.9	378,702	1,597,851	9.4	359 <i>,</i> 575	1,524,998
2029	3,949,590	7.7	304,118	1,280,656	9.9	391,009	1,600,902	9.4	371,261	1,527,910

### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		d Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2020	\$ 2,961,702	11.2%	\$331,711	\$ 1,657,213	12.1%	\$358,366	\$ 1,782,231	12.9%	\$382 <i>,</i> 060	\$ 1,896,932	
2021	3,057,957	11.2	342,491	1,679,917	12.1	370,013	1,806,647	12.9	394,476	1,922,920	
2022	3,157,341	11.2	353,622	1,701,100	12.1	382,038	1,829,428	12.9	407,297	1,947,167	
2023	3,259,955	11.2	365,115	1,720,549	12.1	394,455	1,850,344	12.9	420,534	1,969,429	
2024	3,365,904	11.2	376,981	1,738,031	12.1	407,274	1,869,145	12.9	434,202	1,989,440	
2025	3,475,296	11.2	389,233	1,753,295	12.1	420,511	1,885,560	12.9	448,313	2,006,912	
2026	3,588,243	11.2	401,883	1,766,067	12.1	434,177	1,899,295	12.9	462,883	2,021,531	
2027	3,704,861	11.2	414,944	1,776,048	12.1	448,288	1,910,029	12.9	477,927	2,032,956	
2028	3,825,269	11.2	428,430	1,782,916	12.1	462,858	1,917,415	12.9	493,460	2,040,818	
2029	3,949,590	11.2	442,354	1,786,320	12.1	477,900	1,921,076	12.9	509,497	2,044,715	

		L-:	AyrollDollars14.3%\$423,523.4.3437,288.4.3451,500	ogram	LT-14	4(65) Benefit I	Program	Ŀ	6 Benefit Pro	gram
	Estimated		• •	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll		Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	14.3%	\$423,523	\$ 2,079,260	14.7%	\$435 <i>,</i> 370	\$ 2,136,611	16.6%	\$491,643	\$ 2,376,195
2021	3,057,957	14.3	437,288	2,107,746	14.7	449,520	2,165,882	16.6	507,621	2,408,749
2022	3,157,341	14.3	451,500	2,134,323	14.7	464,129	2,193,192	16.6	524,119	2,439,122
2023	3,259,955	14.3	466,174	2,158,725	14.7	479,213	2,218,267	16.6	541,153	2,467,008
2024	3,365,904	14.3	481,324	2,180,660	14.7	494,788	2,240,807	16.6	558,740	2,492,075
2025	3,475,296	14.3	496,967	2,199,811	14.7	510,869	2,260,487	16.6	576,899	2,513,961
2026	3,588,243	14.3	513,119	2,215,835	14.7	527,472	2,276,953	16.6	595,648	2,532,274
2027	3,704,861	14.3	529,795	2,228,358	14.7	544,615	2,289,822	16.6	615,007	2,546,586
2028	3,825,269	14.3	547,013	2,236,975	14.7	562,315	2,298,677	16.6	634,995	2,556,434
2029	3,949,590	14.3	564,791	2,241,246	14.7	580,590	2,303,066	16.6	655,632	2,561,315

- 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 (4% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

		L-	1 Benefit Pro	gram	Ŀ	3 Benefit Pro	gram	LT-4	(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded 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
2020	\$ 2,961,702	5.8%	\$171,779	\$ 1,188,096	8.0%	\$236,936	\$ 1,485,196	7.5%	\$222,128	\$ 1,417,481
2021	3,057,957	5.8	177,362	1,204,373	8.0	244,637	1,505,543	7.5	229,347	1,436,900
2022	3,157,341	5.8	183,126	1,219,559	8.0	252,587	1,524,527	7.5	236,801	1,455,018
2023	3,259,955	5.8	189,077	1,233,502	8.0	260,796	1,541,957	7.5	244,497	1,471,653
2024	3,365,904	5.8	195,222	1,246,036	8.0	269,272	1,557,625	7.5	252,443	1,486,606
2025	3,475,296	5.8	201,567	1,256,979	8.0	278,024	1,571,305	7.5	260,647	1,499,662
2026	3,588,243	5.8	208,118	1,266,135	8.0	287,059	1,582,751	7.5	269,118	1,510,586
2027	3,704,861	5.8	214,882	1,273,291	8.0	296,389	1,591,696	7.5	277,865	1,519,123
2028	3,825,269	5.8	221,866	1,278,215	8.0	306,022	1,597,851	7.5	286,895	1,524,998
2029	3,949,590	5.8	229,076	1,280,656	8.0	315,967	1,600,902	7.5	296,219	1,527,910

### Rule of 80 Retirement Eligibility

		LT-5	(65) Benefit P	rogram	Ŀ	7 Benefit Pro	gram LT-8(65) Ber		(65) Benefit P	rogram
	Estimated		l Employer ibution	Unfunded Actuarial		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
2020	\$ 2,961,702	9.3%	\$275,438	\$ 1,657,213	10.2%	\$302,094	\$ 1,782,231	11.0%	\$325,787	\$ 1,896,932
2021	3,057,957	9.3	284,390	1,679,917	10.2	311,912	1,806,647	11.0	336,375	1,922,920
2022	3,157,341	9.3	293,633	1,701,100	10.2	322,049	1,829,428	11.0	347,308	1,947,167
2023	3,259,955	9.3	303,176	1,720,549	10.2	332,515	1,850,344	11.0	358 <i>,</i> 595	1,969,429
2024	3,365,904	9.3	313,029	1,738,031	10.2	343,322	1,869,145	11.0	370,249	1,989,440
2025	3,475,296	9.3	323,203	1,753,295	10.2	354,480	1,885,560	11.0	382,283	2,006,912
2026	3,588,243	9.3	333,707	1,766,067	10.2	366,001	1,899,295	11.0	394,707	2,021,531
2027	3,704,861	9.3	344,552	1,776,048	10.2	377,896	1,910,029	11.0	407,535	2,032,956
2028	3,825,269	9.3	355,750	1,782,916	10.2	390,177	1,917,415	11.0	420,780	2,040,818
2029	3,949,590	9.3	367,312	1,786,320	10.2	402,858	1,921,076	11.0	434,455	2,044,715

	Year     Payroll       1020     \$ 2,961,702       1021     3,057,957       1022     3,157,341	L-12 Benefit Program			LT-14	4(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	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
2020	\$ 2,961,702	12.4%	\$367,251	\$ 2,079,260	12.8%	\$379 <i>,</i> 098	\$ 2,136,611	14.7%	\$435,370	\$ 2,376,195
2021	3,057,957	12.4	379,187	2,107,746	12.8	391,418	2,165,882	14.7	449,520	2,408,749
2022	3,157,341	12.4	391,510	2,134,323	12.8	404,140	2,193,192	14.7	464,129	2,439,122
2023	3,259,955	12.4	404,234	2,158,725	12.8	417,274	2,218,267	14.7	479,213	2,467,008
2024	3,365,904	12.4	417,372	2,180,660	12.8	430,836	2,240,807	14.7	494,788	2,492,075
2025	3,475,296	12.4	430,937	2,199,811	12.8	444,838	2,260,487	14.7	510,869	2,513,961
2026	3,588,243	12.4	444,942	2,215,835	12.8	459,295	2,276,953	14.7	527,472	2,532,274
2027	3,704,861	12.4	459,403	2,228,358	12.8	474,222	2,289,822	14.7	544,615	2,546,586
2028	3,825,269	12.4	474,333	2,236,975	12.8	489,634	2,298,677	14.7	562,315	2,556,434
2029	3,949,590	12.4	489,749	2,241,246	12.8	505,548	2,303,066	14.7	580,590	2,561,315

- 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 (6% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-	1 Benefit Pro	gram	Ŀ	3 Benefit Pro	gram	LT-4(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	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	
2020	\$ 2,961,702	3.9%	\$115,506	\$ 1,188,096	6.1%	\$180,664	\$ 1,485,196	5.6%	\$165,855	\$ 1,417,481	
2021	3,057,957	3.9	119,260	1,204,373	6.1	186,535	1,505,543	5.6	171,246	1,436,900	
2022	3,157,341	3.9	123,136	1,219,559	6.1	192,598	1,524,527	5.6	176,811	1,455,018	
2023	3,259,955	3.9	127,138	1,233,502	6.1	198,857	1,541,957	5.6	182,557	1,471,653	
2024	3,365,904	3.9	131,270	1,246,036	6.1	205,320	1,557,625	5.6	188,491	1,486,606	
2025	3,475,296	3.9	135,537	1,256,979	6.1	211,993	1,571,305	5.6	194,617	1,499,662	
2026	3,588,243	3.9	139,941	1,266,135	6.1	218,883	1,582,751	5.6	200,942	1,510,586	
2027	3,704,861	3.9	144,490	1,273,291	6.1	225,997	1,591,696	5.6	207,472	1,519,123	
2028	3,825,269	3.9	149,185	1,278,215	6.1	233,341	1,597,851	5.6	214,215	1,524,998	
2029	3,949,590	3.9	154,034	1,280,656	6.1	240,925	1,600,902	5.6	221,177	1,527,910	

		LT-5	(65) Benefit P	rogram	L	7 Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		d Employer ibution	Unfunded Actuarial		l 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	
2020	\$ 2,961,702	7.4%	\$219,166	\$ 1,657,213	8.3%	\$245,821	\$ 1,782,231	9.1%	\$269,515	\$ 1,896,932	
2021	3,057,957	7.4	226,289	1,679,917	8.3	253,810	1,806,647	9.1	278,274	1,922,920	
2022	3,157,341	7.4	233,643	1,701,100	8.3	262,059	1,829,428	9.1	287,318	1,947,167	
2023	3,259,955	7.4	241,237	1,720,549	8.3	270,576	1,850,344	9.1	296,656	1,969,429	
2024	3,365,904	7.4	249,077	1,738,031	8.3	279,370	1,869,145	9.1	306,297	1,989,440	
2025	3,475,296	7.4	257,172	1,753,295	8.3	288,450	1,885,560	9.1	316,252	2,006,912	
2026	3,588,243	7.4	265,530	1,766,067	8.3	297,824	1,899,295	9.1	326,530	2,021,531	
2027	3,704,861	7.4	274,160	1,776,048	8.3	307,503	1,910,029	9.1	337,142	2,032,956	
2028	3,825,269	7.4	283,070	1,782,916	8.3	317,497	1,917,415	9.1	348,099	2,040,818	
2029	3,949,590	7.4	292,270	1,786,320	8.3	327,816	1,921,076	9.1	359,413	2,044,715	

	Estimated tion Projected	L-3	12 Benefit Pro	ogram	LT-14	4(65) Benefit I	Program	Ŀ	6 Benefit Pro	gram
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2020	\$ 2,961,702	10.5%	\$310,979	\$ 2,079,260	10.9%	\$322,826	\$ 2,136,611	12.8%	\$379 <i>,</i> 098	\$ 2,376,195
2021	3,057,957	10.5	321,085	2,107,746	10.9	333,317	2,165,882	12.8	391,418	2,408,749
2022	3,157,341	10.5	331,521	2,134,323	10.9	344,150	2,193,192	12.8	404,140	2,439,122
2023	3,259,955	10.5	342,295	2,158,725	10.9	355,335	2,218,267	12.8	417,274	2,467,008
2024	3,365,904	10.5	353,420	2,180,660	10.9	366,884	2,240,807	12.8	430,836	2,492,075
2025	3,475,296	10.5	364,906	2,199,811	10.9	378,807	2,260,487	12.8	444,838	2,513,961
2026	3,588,243	10.5	376,766	2,215,835	10.9	391,118	2,276,953	12.8	459,295	2,532,274
2027	3,704,861	10.5	389,010	2,228,358	10.9	403,830	2,289,822	12.8	474,222	2,546,586
2028	3,825,269	10.5	401,653	2,236,975	10.9	416,954	2,298,677	12.8	489,634	2,556,434
2029	3,949,590	10.5	414,707	2,241,246	10.9	430,505	2,303,066	12.8	505,548	2,561,315

- 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.

