



Table of Contents

Pa	ıge
Actuary's Certification Letter	1
Alternate Plans Available	3
Employer Contribution Rates	
Regular Eligibility: Contributory Plan	4
Non-Contributory Plan	6
Rule of 80 Eligibility: Contributory Plan	8
Non-Contributory Plan	.0
Employer Contribution Dollars	.2
Appendix I Unfunded Actuarial Accrued Liability1	L5
Appendix II	
Summary of Financial Assumptions	.7
Appendix III	
Summary of LAGERS Provisions2	!1
Appendix IV	
Benefit Illustrations	24
Appendix V	
Age & Service Characteristics of Employees	33





April 6, 2018

New Madrid County Port Authority New Madrid, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of the actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, the benefits provided by the Missouri Local Government Employees Retirement System (LAGERS). This report contains the information needed to comply with Missouri state disclosure requirements regarding the adoption of LAGERS benefits by a political subdivision (Sections 105.660 - 106.685 RSMo).

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

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

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

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

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2017.

The computed contributions required for LAGERS participation will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the state law which governs LAGERS. Summary provisions of the law as well as benefit illustrations can be found in Appendices III and IV.

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was February 28, 2018. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor



Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for either a contributory plan or a non-contributory plan, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

Contributory Plan. Under the contributory plan, each covered member contributes 4% of compensation to LAGERS. If an employee terminates before being eligible for an immediate benefit, the member's contributions, plus any interest credited to the member's individual account, are refunded upon request.

Non-Contributory Plan. Under the non-contributory plan, there is no individual employee contribution to the plan, no individual account maintained for each employee, and no refund paid to employees who terminate before being eligible for a benefit.

The law further provides for nine different benefit programs (benefit formula factors) and allows an employer to elect "rule of 80" eligibility for benefits. Under the rule of 80, employees are eligible for unreduced benefits at the earlier of (i) attainment of their minimum service retirement age or (ii) such time as their years of age plus years of LAGERS credited service equals 80.

In total this allows for 72 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program which they feel best suits their particular situation.

The applicable combinations of these items may be changed from time to time, however, there are limitations on the frequency of changes. A more detailed description of plan provisions may be found in Appendix III of this report.



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

		Pe	Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate	
L-1	General	12.50%	3.90%	0.20%	16.60%	
L-3	General	15.70	5.60	0.30	21.60	
LT-4(65)	General	13.70	4.70	0.20	18.60	
LT-5(65)	General	16.60	6.20	0.30	23.10	
L-7	General	18.90	7.20	0.30	26.40	
LT-8(65)	General	19.50	7.60	0.30	27.40	
L-12	General	22.00	8.80	0.40	31.20	
LT-14(65)	General	22.30	9.00	0.40	31.70	
L-6	General	25.20	10.40	0.50	36.10	

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



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

		Percents of Active Member Payroll			
					Total
	_	Prior	_		Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	12.90%	4.20%	0.20%	17.30%
L-3	General	16.20	5.90	0.30	22.40
LT-4(65)	General	14.20	5.00	0.20	19.40
LT-5(65)	General	17.20	6.50	0.30	24.00
L-7	General	19.50	7.50	0.30	27.30
LT-8(65)	General	20.10	7.90	0.30	28.30
L-12	General	22.80	9.20	0.40	32.40
LT-14(65)	General	23.10	9.40	0.40	32.90
L-6	General	26.00	10.90	0.50	37.40

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



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	12.60%	7.50%	0.20%	20.30%
L-3	General	15.70	9.20	0.30	25.20
LT-4(65)	General	13.80	8.30	0.20	22.30
LT-5(65)	General	16.70	9.70	0.30	26.70
L-7	General	18.90	10.80	0.30	30.00
LT-8(65)	General	19.50	11.20	0.30	31.00
L-12	General	22.00	12.50	0.40	34.90
LT-14(65)	General	22.40	12.70	0.40	35.50
L-6	General	25.20	14.10	0.50	39.80

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



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.00%	7.70%	0.20%	20.90%
L-3	General	16.30	9.50	0.30	26.10
LT-4(65)	General	14.30	8.50	0.20	23.00
LT-5(65)	General	17.20	10.00	0.30	27.50
L-7	General	19.50	11.20	0.30	31.00
LT-8(65)	General	20.20	11.60	0.30	32.10
L-12	General	22.80	12.90	0.40	36.10
LT-14(65)	General	23.10	13.10	0.40	36.60
L-6	General	26.00	14.60	0.50	41.10

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



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	12.50%	3.90%	0.20%	16.60%
L-3	General	15.70	5.60	0.30	21.60
LT-4(65)	General	13.70	4.70	0.20	18.60
LT-5(65)	General	16.60	6.20	0.30	23.10
L-7	General	18.90	7.20	0.30	26.40
LT-8(65)	General	19.50	7.60	0.30	27.40
L-12	General	22.00	8.80	0.40	31.20
LT-14(65)	General	22.30	9.00	0.40	31.70
L-6	General	25.20	10.40	0.50	36.10

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



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

		Pe	Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate	
L-1	General	12.90%	4.20%	0.20%	17.30%	
L-3	General	16.20	5.90	0.30	22.40	
LT-4(65)	General	14.20	5.00	0.20	19.40	
LT-5(65)	General	17.20	6.50	0.30	24.00	
L-7	General	19.50	7.50	0.30	27.30	
LT-8(65)	General	20.10	7.90	0.30	28.30	
L-12	General	22.80	9.20	0.40	32.40	
LT-14(65)	General	23.10	9.40	0.40	32.90	
L-6	General	26.00	10.90	0.50	37.40	

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	12.60%	7.50%	0.20%	20.30%
L-3	General	15.70	9.20	0.30	25.20
LT-4(65)	General	13.80	8.30	0.20	22.30
LT-5(65)	General	16.70	9.70	0.30	26.70
L-7	General	18.90	10.80	0.30	30.00
LT-8(65)	General	19.50	11.20	0.30	31.00
L-12	General	22.00	12.50	0.40	34.90
LT-14(65)	General	22.40	12.70	0.40	35.50
L-6	General	25.20	14.10	0.50	39.80

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



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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.00%	7.70%	0.20%	20.90%
L-3	General	16.30	9.50	0.30	26.10
LT-4(65)	General	14.30	8.50	0.20	23.00
LT-5(65)	General	17.20	10.00	0.30	27.50
L-7	General	19.50	11.20	0.30	31.00
LT-8(65)	General	20.20	11.60	0.30	32.10
L-12	General	22.80	12.90	0.40	36.10
LT-14(65)	General	23.10	13.10	0.40	36.60
L-6	General	26.00	14.60	0.50	41.10

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



Employer Contribution Dollars Regular Retirement Eligibility

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

Contributory Plan

5 Yea	5 Year FAS				
Benefit					
Program	General				
L-1	\$ 14,853				
L-3	19,326				
LT-4(65)	16,642				
LT-5(65)	20,668				
L-7	23,621				
LT-8(65)	24,516				
L-12	27,916				
LT-14(65)	28,363				
L-6	32,300				

3 Year FAS			
Benefit			
Program	General		
L-1	\$ 15,479		
L-3	20,042		
LT-4(65)	17,358		
LT-5(65)	21,474		
L-7	24,426		
LT-8(65)	25,321		
L-12	28,990		
LT-14(65)	29,437		
L-6	33,463		

Non-Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 18,163			
L-3	22,547			
LT-4(65)	19,953			
LT-5(65)	23,890			
L-7	26,842			
LT-8(65)	27,737			
L-12	31,226			
LT-14(65)	31,763			
L-6	35,611			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 18,700			
L-3	23,353			
LT-4(65)	20,579			
LT-5(65)	24,605			
L-7	27,737			
LT-8(65)	28,721			
L-12	32,300			
LT-14(65)	32,747			
L-6	36,774			

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



Employer Contribution Dollars Rule of 80 Retirement Eligibility

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

Contributory Plan

5 Year FAS					
Benefit					
Program	General				
L-1	\$ 14,853				
L-3	19,326				
LT-4(65)	16,642				
LT-5(65)	20,668				
L-7	23,621				
LT-8(65)	24,516				
L-12	27,916				
LT-14(65)	28,363				
L-6	32,300				

3 Year FAS					
Benefit					
Program	General				
L-1	\$ 15,479				
L-3	20,042				
LT-4(65)	17,358				
LT-5(65)	21,474				
L-7	24,426				
LT-8(65)	25,321				
L-12	28,990				
LT-14(65)	29,437				
L-6	33,463				

Non-Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 18,163			
L-3	22,547			
LT-4(65)	19,953			
LT-5(65)	23,890			
L-7	26,842			
LT-8(65)	27,737			
L-12	31,226			
LT-14(65)	31,763			
L-6	35,611			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 18,700			
L-3	23,353			
LT-4(65)	20,579			
LT-5(65)	24,605			
L-7	27,737			
LT-8(65)	28,721			
L-12	32,300			
LT-14(65)	32,747			
L-6	36,774			

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	1
Annual Payroll	\$ 89,474

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





UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability (UAAL)

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

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

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

New Madrid County Port Authority

		Contri	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 197,354	\$ 204,095	\$ 198,586	\$ 205,293
L-3	General	247,255	255,682	248,228	256,620
LT-4(65)	General	216,652	224,064	217,754	225,125
LT-5(65)	General	261,722	270,655	262,606	271,494
L-7	General	297,144	307,273	297,875	307,940
LT-8(65)	General	306,793	317,255	307,460	317,857
L-12	General	347,042	358,850	347,525	359,270
LT-14(65)	General	351,862	363,840	352,318	364,223
L-6	General	396,941	410,429	397,165	410,593



Unfunded Actuarial Accrued Liability (UAAL)

		Contri	butory	Non-Con	tributory
Benefit	Employee	UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
Group	Group				
L-1	General	\$ 197,354	\$ 204,095	\$ 198,586	\$ 205,293
L-3	General	247,255	255,682	248,228	256,620
LT-4(65)	General	216,652	224,064	217,754	225,125
LT-5(65)	General	261,722	270,655	262,606	271,494
L-7	General	297,144	307,273	297,875	307,940
LT-8(65)	General	306,793	317,255	307,460	317,857
L-12	General	347,042	358,850	347,525	359,270
LT-14(65)	General	351,862	363,840	352,318	364,223
L-6	General	396,941	410,429	397,165	410,593





SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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



Schedule 1.

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

Percent of Active Members Separating Within Next Year

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

Percent Increase in Individual's Pay

Sample	During Next Year				
Ages	General & Police	Fire			
25	6.55%	7.15%			
30	5.75	6.05			
35	5.25	5.15			
40	4.75	4.45			
45	4.25	4.15			
50	3.85	3.85			
55	3.65	3.65			
60	3.55	3.25			
65	3.25	3.25			



Schedule 2.

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

Early Retirement

Retirement	General Members		Retirement		
Ages	Ages Men Women		Ages	Police	Fire
55	3.00%	3.00%	50	2.50%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	2.50%

Normal Retirement

Retirement	General Members		Retirement		
Ages	Men Women		Ages	Police	Fire
60	10%	10%	55	10%	13%
61	10	10	56	10	13
62	25	15	57	10	13
63	20	15	58	10	13
64	20	15	59	10	13
65 66	25 25	25 25	60 61	10 10	15 15
67	20	25	62	25	20
68	20	25	63	20	20
69	20	20	64	20	20
70	100	100	65	100	100



Schedule 2. (Continued)

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

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





SUMMARY OF LAGERS PROVISIONS

Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS Benefits and Conditions Evaluated and/or Considered as of February 28, 2017

(Section references are to RSMo)

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

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

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

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

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

LT-4(65) Benefit Program:

LT-5(65) Benefit Program:

LT-8(65) Benefit Program:

1.00% for life, plus 1.00% to age 65

1.25% for life, plus 0.75% to age 65

LT-14(65) Benefit Program:

1.50% for life, plus 0.50% to age 65

LT-14(65) Benefit Program:

1.75% for life, plus 0.25% to age 65

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

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

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

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



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

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

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

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

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

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

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

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

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



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

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

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

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

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

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





BENEFIT ILLUSTRATIONS

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 875	\$1,400	93%
2,000	700	1,016	1,716	86%
2,500	875	1,157	2,032	81%
3,000	1,050	1,297	2,347	78%
3,500	1,225	1,438	2,663	76%
4,000	1,400	1,579	2,979	74%
25 Years of Service:				
\$1,500	\$ 375	\$ 875	\$1,250	83%
2,000	500	1,016	1,516	76%
2,500	625	1,157	1,782	71%
3,000	750	1,297	2,047	68%
3,500	875	1,438	2,313	66%
4,000	1,000	1,579	2,579	64%
15 Years of Service:				
\$1,500	\$225	\$ 875	\$1,100	73%
2,000	300	1,016	1,316	66%
2,500	375	1,157	1,532	61%
3,000	450	1,297	1,747	58%
3,500	525	1,438	1,963	56%
4,000	600	1,579	2,179	54%

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

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

	Estimated Estimated		ated
LAGERS	Social Monthly Total		/ Total
BENEFIT ³	Security ²	\$	% of FAS
\$ 656	\$ 875	\$1,531	102%
875	1,016	1,891	95%
1,094	1,157	2,251	90%
1,313	1,297	2,610	87%
1,531	1,438	2,969	85%
1,750	1,579	3,329	83%
\$ 469	\$ 875	\$1,344	90%
625	1,016	1,641	82%
781	1,157	1,938	78%
938	1,297	2,235	75%
1,094	1,438	2,532	72%
1,250	1,579	2,829	71%
\$281	\$ 875	\$1,156	77%
375	1,016	1,391	70%
469	1,157	1,626	65%
563	1,297	1,860	62%
656	1,438	2,094	60%
750	1,579	2,329	58%
	\$ 656 875 1,094 1,313 1,531 1,750 \$ 469 625 781 938 1,094 1,250 \$281 375 469 563 656	LAGERS Security 2 \$ 656 \$ 875	LAGERS BENEFIT³ Social Security² Monthly Security² \$ 656 \$ 875 \$1,531 875 1,016 1,891 1,094 1,157 2,251 1,313 1,297 2,610 1,531 1,438 2,969 1,750 1,579 3,329 \$ 469 \$ 875 \$1,344 625 1,016 1,641 781 1,157 1,938 938 1,297 2,235 1,094 1,438 2,532 1,250 1,579 2,829 \$281 \$ 875 \$1,156 375 1,016 1,391 469 1,157 1,626 563 1,297 1,860 656 1,438 2,094

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Final		Estimated Estimated		ated
Average	LAGERS	Social	Social Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 875	\$1,794	120%
2,000	1,225	1,016	2,241	112%
2,500	1,531	1,157	2,688	108%
3,000	1,838	1,297	3,135	105%
3,500	2,144	1,438	3,582	102%
4,000	2,450	1,579	4,029	101%
25 Years of Service:				
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,016	1,891	95%
2,500	1,094	1,157	2,251	90%
3,000	1,313	1,297	2,610	87%
3,500	1,531	1,438	2,969	85%
4,000	1,750	1,579	3,329	83%
15 Years of Service:				
\$1,500	\$ 394	\$ 875	\$1,269	85%
2,000	525	1,016	1,541	77%
2,500	656	1,157	1,813	73%
3,000	788	1,297	2,085	70%
3,500	919	1,438	2,357	67%
4,000	1,050	1,579	2,629	66%

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

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



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

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

1.00% of FAS ¹ at age 65)

Final	LAG	ERS	Estimated	Estim	nated	Perc	ent
Average	BENI	EFIT ³	Social	Month	y Total	of F	AS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Service	e:						
\$1,500	\$1,050	\$ 525	\$ 875	\$1,050	\$1,400	70%	93%
2,000	1,400	700	1,016	1,400	1,716	70%	86%
2,500	1,750	875	1,157	1,750	2,032	70%	81%
3,000	2,100	1,050	1,297	2,100	2,347	70%	78%
3,500	2,450	1,225	1,438	2,450	2,663	70%	76%
4,000	2,800	1,400	1,579	2,800	2,979	70%	74%
25 Years of Service	e:						
\$1,500	\$ 750	\$ 375	\$ 875	\$ 750	\$1,250	50%	83%
2,000	1,000	500	1,016	1,000	1,516	50%	76%
2,500	1,250	625	1,157	1,250	1,782	50%	71%
3,000	1,500	750	1,297	1,500	2,047	50%	68%
3,500	1,750	875	1,438	1,750	2,313	50%	66%
4,000	2,000	1,000	1,579	2,000	2,579	50%	64%
15 Years of Service	e:						
\$1,500	\$ 450	\$225	\$ 875	\$ 450	\$1,100	30%	73%
2,000	600	300	1,016	600	1,316	30%	66%
2,500	750	375	1,157	750	1,532	30%	61%
3,000	900	450	1,297	900	1,747	30%	58%
3,500	1,050	525	1,438	1,050	1,963	30%	56%
4,000	1,200	600	1,579	1,200	2,179	30%	54%
4							

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

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

1.25% of FAS ¹ at age 65)

Final	LAG	ERS	Estimated	Estim	ated	Perc	ent
Average	BENI	EFIT ³	Social	Monthl	y Total	of F	AS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Service	2:						
\$1,500	\$1,050	\$ 656	\$ 875	\$1,050	\$1,531	70%	102%
2,000	1,400	875	1,016	1,400	1,891	70%	95%
2,500	1,750	1,094	1,157	1,750	2,251	70%	90%
3,000	2,100	1,313	1,297	2,100	2,610	70%	87%
3,500	2,450	1,531	1,438	2,450	2,969	70%	85%
4,000	2,800	1,750	1,579	2,800	3,329	70%	83%
25 Years of Service	e:						
\$1,500	\$ 750	\$ 469	\$ 875	\$ 750	\$1,344	50%	90%
2,000	1,000	625	1,016	1,000	1,641	50%	82%
2,500	1,250	781	1,157	1,250	1,938	50%	78%
3,000	1,500	938	1,297	1,500	2,235	50%	75%
3,500	1,750	1,094	1,438	1,750	2,532	50%	72%
4,000	2,000	1,250	1,579	2,000	2,829	50%	71%
15 Years of Service	e:						
\$1,500	\$ 450	\$281	\$ 875	\$ 450	\$1,156	30%	77%
2,000	600	375	1,016	600	1,391	30%	70%
2,500	750	469	1,157	750	1,626	30%	65%
3,000	900	563	1,297	900	1,860	30%	62%
3,500	1,050	656	1,438	1,050	2,094	30%	60%
4,000	1,200	750	1,579	1,200	2,329	30%	58%

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

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

1.50% of FAS ¹ at age 65)

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

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.

Missouri LAGERS

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

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

1.75% of FAS ¹ at age 65)

Final	LAGERS		Estimated	Estimated		Percent		
Average	BENI	EFIT ³	Social	Month	y Total	of F	AS	
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65	
35 Years of Service	e:							
\$1,500	\$1,050	\$ 919	\$ 875	\$1,050	\$1,794	70%	120%	
2,000	1,400	1,225	1,016	1,400	2,241	70%	112%	
2,500	1,750	1,531	1,157	1,750	2,688	70%	108%	
3,000	2,100	1,838	1,297	2,100	3,135	70%	105%	
3,500	2,450	2,144	1,438	2,450	3,582	70%	102%	
4,000	2,800	2,450	1,579	2,800	4,029	70%	101%	
25 Years of Service	e:							
\$1,500	\$ 750	\$ 656	\$ 875	\$ 750	\$1,531	50%	102%	
2,000	1,000	875	1,016	1,000	1,891	50%	95%	
2,500	1,250	1,094	1,157	1,250	2,251	50%	90%	
3,000	1,500	1,313	1,297	1,500	2,610	50%	87%	
3,500	1,750	1,531	1,438	1,750	2,969	50%	85%	
4,000	2,000	1,750	1,579	2,000	3,329	50%	83%	
15 Years of Service	e:							
\$1,500	\$ 450	\$ 394	\$ 875	\$ 450	\$1,269	30%	85%	
2,000	600	525	1,016	600	1,541	30%	77%	
2,500	750	656	1,157	750	1,813	30%	73%	
3,000	900	788	1,297	900	2,085	30%	70%	
3,500	1,050	919	1,438	1,050	2,357	30%	67%	
4,000	1,200	1,050	1,579	1,200	2,629	30%	66%	

¹ "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.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.



² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2017 - it does not include any amounts which might be payable to an eligible spouse or children.



AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

New Madrid County Port Authority

February 28, 2018

By Attained Age and Years of Service

		Years of Service to Valuation Date Totals												
Attained									Valuation					
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll					
Under 20														
20-24														
25-29														
30-34														
35-39														
40-44														
45-49														
50-54														
55-59				1				1	\$ 89,474					
60-64														
65-69														
70 & Over														
Totals				1				1	\$ 89,474					

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

Age: 59.2 years.

Benefit Service: 19.0 years.

Annual Pay: \$89,474.





April 6, 2018 E-mail

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

Dear Bob:

Enclosed is the report of the February 28, 2018 Initial Actuarial Valuation of LAGERS benefits for the employees of

New Madrid County Port Authority

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

Mita Drazilor

MDD:wp



April 6, 2018

New Madrid County Port Authority New Madrid, 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 February 28, 2018 Initial Valuation for the New Madrid County Port Authority dated April 6, 2018.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2017.

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

Respectfully submitted,

Mita D. Drazilov, ASA, FCA, MAAA

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

Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Proរុ	gram	LT-4(65) Benefit Program		
		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 89,474	16.6%	\$14,853	\$ 197,354	21.6%	\$19,326	\$ 247,255	18.6%	\$16,642	\$ 216,652
2019	92,382	16.6	15,335	200,058	21.6	19,955	250,642	18.6	17,183	219,620
2020	95,384	16.6	15,834	202,581	21.6	20,603	253,802	18.6	17,741	222,389
2021	98,484	16.6	16,348	204,897	21.6	21,273	256,704	18.6	18,318	224,932
2022	101,685	16.6	16,880	206,979	21.6	21,964	259,312	18.6	18,913	227,218
2023	104,990	16.6	17,428	208,797	21.6	22,678	261,589	18.6	19,528	229,214
2024	108,402	16.6	17,995	210,318	21.6	23,415	263,495	18.6	20,163	230,884
2025	111,925	16.6	18,580	211,507	21.6	24,176	264,984	18.6	20,818	232,189
2026	115,563	16.6	19,183	212,325	21.6	24,962	266,009	18.6	21,495	233,087
2027	119,319	16.6	19,807	212,730	21.6	25,773	266,517	18.6	22,193	233,532

		LT-5(65) Benefit Program			L-	7 Benefit Pro	gram	LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 89,474	23.1%	\$20,668	\$ 261,722	26.4%	\$23,621	\$ 297,144	27.4%	\$24,516	\$ 306,793
2019	92,382	23.1	21,340	265,308	26.4	24,389	301,215	27.4	25,313	310,996
2020	95,384	23.1	22,034	268,653	26.4	25,181	305,013	27.4	26,135	314,917
2021	98,484	23.1	22,750	271,724	26.4	26,000	308,500	27.4	26,985	318,517
2022	101,685	23.1	23,489	274,485	26.4	26,845	311,635	27.4	27,862	321,753
2023	104,990	23.1	24,253	276,896	26.4	27,717	314,372	27.4	28,767	324,579
2024	108,402	23.1	25,041	278,913	26.4	28,618	316,662	27.4	29,702	326,943
2025	111,925	23.1	25,855	280,489	26.4	29,548	318,452	27.4	30,667	328,791
2026	115,563	23.1	26,695	281,574	26.4	30,509	319,683	27.4	31,664	330,062
2027	119.319	23.1	27.563	282.112	26.4	31.500	320.293	27.4	32.693	330.692

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated Co		l Employer	Unfunded		Estimated Employer		Estimated Employer Contribution		Unfunded
			bution	Actuarial	Contribution		Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 89,474	31.2%	\$27,916	\$ 347,042	31.7%	\$28,363	\$ 351,862	36.1%	\$32,300	\$ 396,941
2019	92,382	31.2	28,823	351,796	31.7	29,285	356,682	36.1	33,350	402,379
2020	95,384	31.2	29,760	356,232	31.7	30,237	361,180	36.1	34,434	407,453
2021	98,484	31.2	30,727	360,305	31.7	31,219	365,309	36.1	35,553	412,111
2022	101,685	31.2	31,726	363,966	31.7	32,234	369,021	36.1	36,708	416,298
2023	104,990	31.2	32,757	367,162	31.7	33,282	372,262	36.1	37,901	419,954
2024	108,402	31.2	33,821	369,837	31.7	34,363	374,974	36.1	39,133	423,013
2025	111,925	31.2	34,921	371,927	31.7	35,480	377,093	36.1	40,405	425,404
2026	115,563	31.2	36,056	373,365	31.7	36,633	378,551	36.1	41,718	427,049
2027	119,319	31.2	37,228	374,078	31.7	37,824	379,274	36.1	43,074	427,864

- 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 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

Regular Retirement Eligibility

		L-1 Benefit Program			L-3	3 Benefit Pro	gram	LT-4(65) Benefit Program		
	Estimated		Estimated Employer Contribution			Estimated Employer Contribution			Employer bution	Unfunded Actuarial
Valuation	Valuation Projected Year Payroll		Annual Dollars	Actuarial Accrued Liability	As a %	Annual Dollars	Actuarial Accrued Liability	As a %	Annual Dollars	Accrued Liability
2018	\$ 89,474	of Payroll 17.3%	\$15,479	\$ 204,095	22.4%	\$20,042	\$ 255,682	19.4%	\$17,358	\$ 224,064
2019	92,382	17.3%	15,982	206,891	22.476	20,694	259,185	19.4%	17,922	227,134
2020	95,384	17.3	16,501	209,500	22.4	21,366	262,453	19.4	18,504	229,998
2020	98,484	17.3	17,038	211,895	22.4	22,060	265,454	19.4	19,106	232,628
2022	101,685	17.3	17,592	214,048	22.4	22,777	268,151	19.4	19,727	234,992
2023	104.990	17.3	18,163	215,928	22.4	23,518	270.506	19.4	20,368	237,056
2024	108,402	17.3	18,754	217,501	22.4	24,282	272,476	19.4	21,030	238,783
2025	111,925	17.3	19,363	218,730	22.4	25,071	274,016	19.4	21,713	240,133
2026	115.563	17.3	19.992	219.576	22.4	25.886	275.076	19.4	22.419	241.062
2027	119,319	17.3	20,642	219,995	22.4	26,727	275,601	19.4	23,148	241,522

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Projected Year Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability		
2018	\$ 89,474	24.0%	\$21,474	\$ 270,655	27.3%	\$24,426	\$ 307,273	28.3%	\$25,321	\$ 317,255	
2019	92,382	24.0	22,172	274,363	27.3	25,220	311,483	28.3	26,144	321,601	
2020	95,384	24.0	22,892	277,823	27.3	26,040	315,411	28.3	26,994	325,656	
2021	98,484	24.0	23,636	280,999	27.3	26,886	319,017	28.3	27,871	329,379	
2022	101,685	24.0	24,404	283,854	27.3	27,760	322,259	28.3	28,777	332,726	
2023	104,990	24.0	25,198	286,347	27.3	28,662	325,089	28.3	29,712	335,648	
2024	108,402	24.0	26,016	288,433	27.3	29,594	327,457	28.3	30,678	338,093	
2025	111,925	24.0	26,862	290,063	27.3	30,556	329,308	28.3	31,675	340,004	
2026	115,563	24.0	27,735	291,185	27.3	31,549	330,581	28.3	32,704	341,319	
2027	119.319	24.0	28.637	291.741	27.3	32.574	331.212	28.3	33.767	341.971	

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Employer	Unfunded Actuarial		l Employer bution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 89,474	32.4%	\$28,990	\$ 358,850	32.9%	\$29,437	\$ 363,840	37.4%	\$33,463	\$ 410,429
2019	92,382	32.4	29,932	363,766	32.9	30,394	368,825	37.4	34,551	416,052
2020	95,384	32.4	30,904	368,353	32.9	31,381	373,476	37.4	35,674	421,298
2021	98,484	32.4	31,909	372,564	32.9	32,401	377,746	37.4	36,833	426,115
2022	101,685	32.4	32,946	376,350	32.9	33,454	381,584	37.4	38,030	430,445
2023	104,990	32.4	34,017	379,655	32.9	34,542	384,935	37.4	39,266	434,225
2024	108,402	32.4	35,122	382,421	32.9	35,664	387,739	37.4	40,542	437,388
2025	111,925	32.4	36,264	384,582	32.9	36,823	389,930	37.4	41,860	439,860
2026	115,563	32.4	37,442	386,069	32.9	38,020	391,438	37.4	43,221	441,561
2027	119,319	32.4	38,659	386,806	32.9	39,256	392,185	37.4	44,625	442,404

- 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.
- 1) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1	1 Benefit Pro	gram	L-3	Benefit Proរុ	gram	LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation			Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 89,474	20.3%	\$18,163	\$ 198,586	25.2%	\$22,547	\$ 248,228	22.3%	\$19,953	\$ 217,754
2019	92,382	20.3	18,754	201,307	25.2	23,280	251,629	22.3	20,601	220,737
2020	95,384	20.3	19,363	203,845	25.2	24,037	254,802	22.3	21,271	223,520
2021	98,484	20.3	19,992	206,176	25.2	24,818	257,715	22.3	21,962	226,075
2022	101,685	20.3	20,642	208,271	25.2	25,625	260,334	22.3	22,676	228,372
2023	104,990	20.3	21,313	210,100	25.2	26,457	262,620	22.3	23,413	230,378
2024	108,402	20.3	22,006	211,630	25.2	27,317	264,533	22.3	24,174	232,056
2025	111,925	20.3	22,721	212,826	25.2	28,205	266,028	22.3	24,959	233,368
2026	115,563	20.3	23,459	213,649	25.2	29,122	267,057	22.3	25,771	234,270
2027	119,319	20.3	24,222	214,057	25.2	30,068	267,567	22.3	26,608	234,717

			LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation Projected Year Payroll	As a % of Payroll	Annual Dollars	As a % of Payroll		Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability		
2018	\$ 89,474	26.7%	\$23,890	\$ 262,606	30.0%	\$26,842	\$ 297,875	31.0%	\$27,737	\$ 307,460	
2019	92,382	26.7	24,666	266,204	30.0	27,715	301,956	31.0	28,638	311,672	
2020	95,384	26.7	25,468	269,561	30.0	28,615	305,763	31.0	29,569	315,602	
2021	98,484	26.7	26,295	272,643	30.0	29,545	309,259	31.0	30,530	319,210	
2022	101,685	26.7	27,150	275,413	30.0	30,506	312,401	31.0	31,522	322,453	
2023	104,990	26.7	28,032	277,832	30.0	31,497	315,145	31.0	32,547	325,285	
2024	108,402	26.7	28,943	279,856	30.0	32,521	317,441	31.0	33,605	327,654	
2025	111,925	26.7	29,884	281,438	30.0	33,578	319,235	31.0	34,697	329,506	
2026	115,563	26.7	30,855	282,526	30.0	34,669	320,469	31.0	35,825	330,780	
2027	119 319	26.7	31 858	283 065	30.0	35 796	321 081	31.0	36 989	331 412	

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Employer	Unfunded Actuarial		l Employer bution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 89,474	34.9%	\$31,226	\$ 347,525	35.5%	\$31,763	\$ 352,318	39.8%	\$35,611	\$ 397,165
2019	92,382	34.9	32,241	352,286	35.5	32,796	357,145	39.8	36,768	402,606
2020	95,384	34.9	33,289	356,728	35.5	33,861	361,648	39.8	37,963	407,683
2021	98,484	34.9	34,371	360,806	35.5	34,962	365,783	39.8	39,197	412,344
2022	101,685	34.9	35,488	364,472	35.5	36,098	369,500	39.8	40,471	416,534
2023	104,990	34.9	36,642	367,673	35.5	37,271	372,745	39.8	41,786	420,192
2024	108,402	34.9	37,832	370,351	35.5	38,483	375,460	39.8	43,144	423,253
2025	111,925	34.9	39,062	372,444	35.5	39,733	377,582	39.8	44,546	425,645
2026	115,563	34.9	40,331	373,884	35.5	41,025	379,042	39.8	45,994	427,291
2027	119,319	34.9	41,642	374,598	35.5	42,358	379,766	39.8	47,489	428,107

- 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 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1	L Benefit Pro	gram	L-3	3 Benefit Proរុ	gram	LT-4(65) Benefit P	rogram
	Estimated		Employer	Unfunded		Employer	Unfunded		Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 89,474	20.9%	\$18,700	\$ 205,293	26.1%	\$23,353	\$ 256,620	23.0%	\$20,579	\$ 225,125
2019	92,382	20.9	19,308	208,105	26.1	24,112	260,136	23.0	21,248	228,209
2020	95,384	20.9	19,935	210,729	26.1	24,895	263,416	23.0	21,938	231,087
2021	98,484	20.9	20,583	213,138	26.1	25,704	266,428	23.0	22,651	233,729
2022	101,685	20.9	21,252	215,304	26.1	26,540	269,135	23.0	23,388	236,104
2023	104,990	20.9	21,943	217,195	26.1	27,402	271,499	23.0	24,148	238,178
2024	108,402	20.9	22,656	218,777	26.1	28,293	273,477	23.0	24,932	239,913
2025	111,925	20.9	23,392	220,013	26.1	29,212	275,023	23.0	25,743	241,269
2026	115,563	20.9	24,153	220,864	26.1	30,162	276,087	23.0	26,579	242,202
2027	119,319	20.9	24,938	221,286	26.1	31,142	276,614	23.0	27,443	242,664

		LT-5(65) Benefit Program			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 Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 89,474	27.5%	\$24,605	\$ 271,494	31.0%	\$27,737	\$ 307,940	32.1%	\$28,721	\$ 317,857	
2019	92,382	27.5	25,405	275,213	31.0	28,638	312,159	32.1	29,655	322,212	
2020	95,384	27.5	26,231	278,683	31.0	29,569	316,095	32.1	30,618	326,275	
2021	98,484	27.5	27,083	281,869	31.0	30,530	319,709	32.1	31,613	330,005	
2022	101,685	27.5	27,963	284,733	31.0	31,522	322,958	32.1	32,641	333,358	
2023	104,990	27.5	28,872	287,234	31.0	32,547	325,794	32.1	33,702	336,286	
2024	108,402	27.5	29,811	289,326	31.0	33,605	328,167	32.1	34,797	338,736	
2025	111,925	27.5	30,779	290,961	31.0	34,697	330,022	32.1	35,928	340,650	
2026	115,563	27.5	31,780	292,086	31.0	35,825	331,298	32.1	37,096	341,967	
2027	119 319	27 5	32 813	292 644	31.0	36 989	331 931	32.1	38 301	342 620	

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer bution	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
2018	\$ 89,474	36.1%	\$32,300	\$ 359,270	36.6%	\$32,747	\$ 364,223	41.1%	\$36,774	\$ 410,593
2019	92,382	36.1	33,350	364,192	36.6	33,812	369,213	41.1	37,969	416,218
2020	95,384	36.1	34,434	368,784	36.6	34,911	373,869	41.1	39,203	421,466
2021	98,484	36.1	35,553	373,000	36.6	36,045	378,143	41.1	40,477	426,285
2022	101,685	36.1	36,708	376,790	36.6	37,217	381,985	41.1	41,793	430,616
2023	104,990	36.1	37,901	380,099	36.6	38,426	385,340	41.1	43,151	434,398
2024	108,402	36.1	39,133	382,868	36.6	39,675	388,147	41.1	44,553	437,562
2025	111,925	36.1	40,405	385,032	36.6	40,965	390,341	41.1	46,001	440,035
2026	115,563	36.1	41,718	386,521	36.6	42,296	391,850	41.1	47,496	441,737
2027	119,319	36.1	43,074	387,259	36.6	43,671	392,598	41.1	49,040	442,580

- 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.
- 1) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

Rule of 80 Retirement Eligibility

		L-:	1 Benefit Pro	gram	L-3	3 Benefit Pro	gram	LT-4(65) Benefit P	rogram
	Estimated		Estimated Employer Unfunded Contribution Actuarial			Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation Year	Projected Payroll	As a % of Pavroll	Annual Dollars	Accrued Liability	As a % of Pavroll	Annual Dollars	Accrued Liability	As a % of Pavroll	Annual Dollars	Accrued Liability
2018	\$ 89,474	16.6%	\$14,853	\$ 197,354	21.6%	\$19,326	\$ 247,255	18.6%	\$16,642	\$ 216,652
2019	92,382	16.6	15,335	200,058	21.6	19,955	250,642	18.6	17,183	219,620
2020	95,384	16.6	15,834	202,581	21.6	20,603	253,802	18.6	17,741	222,389
2021	98,484	16.6	16,348	204,897	21.6	21,273	256,704	18.6	18,318	224,932
2022	101,685	16.6	16,880	206,979	21.6	21,964	259,312	18.6	18,913	227,218
2023	104,990	16.6	17,428	208,797	21.6	22,678	261,589	18.6	19,528	229,214
2024	108,402	16.6	17,995	210,318	21.6	23,415	263,495	18.6	20,163	230,884
2025	111,925	16.6	18,580	211,507	21.6	24,176	264,984	18.6	20,818	232,189
2026	115,563	16.6	19,183	212,325	21.6	24,962	266,009	18.6	21,495	233,087
2027	119,319	16.6	19,807	212,730	21.6	25,773	266,517	18.6	22,193	233,532

		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 Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2018	\$ 89,474	23.1%	\$20,668	\$ 261,722	26.4%	\$23,621	\$ 297,144	27.4%	\$24,516	\$ 306,793	
2019	92,382	23.1	21,340	265,308	26.4	24,389	301,215	27.4	25,313	310,996	
2020	95,384	23.1	22,034	268,653	26.4	25,181	305,013	27.4	26,135	314,917	
2021	98,484	23.1	22,750	271,724	26.4	26,000	308,500	27.4	26,985	318,517	
2022	101,685	23.1	23,489	274,485	26.4	26,845	311,635	27.4	27,862	321,753	
2023	104,990	23.1	24,253	276,896	26.4	27,717	314,372	27.4	28,767	324,579	
2024	108,402	23.1	25,041	278,913	26.4	28,618	316,662	27.4	29,702	326,943	
2025	111,925	23.1	25,855	280,489	26.4	29,548	318,452	27.4	30,667	328,791	
2026	115,563	23.1	26,695	281,574	26.4	30,509	319,683	27.4	31,664	330,062	
2027	119.319	23.1	27.563	282.112	26.4	31.500	320.293	27.4	32.693	330.692	

		L-1	.2 Benefit Pro	gram	LT-14	(65) Benefit I	Program	L-(6 Benefit Pro	gram
	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
2018	\$ 89,474	31.2%	\$27,916	\$ 347,042	31.7%	\$28,363	\$ 351,862	36.1%	\$32,300	\$ 396,941
2019	92,382	31.2	28,823	351,796	31.7	29,285	356,682	36.1	33,350	402,379
2020	95,384	31.2	29,760	356,232	31.7	30,237	361,180	36.1	34,434	407,453
2021	98,484	31.2	30,727	360,305	31.7	31,219	365,309	36.1	35,553	412,111
2022	101,685	31.2	31,726	363,966	31.7	32,234	369,021	36.1	36,708	416,298
2023	104,990	31.2	32,757	367,162	31.7	33,282	372,262	36.1	37,901	419,954
2024	108,402	31.2	33,821	369,837	31.7	34,363	374,974	36.1	39,133	423,013
2025	111,925	31.2	34,921	371,927	31.7	35,480	377,093	36.1	40,405	425,404
2026	115,563	31.2	36,056	373,365	31.7	36,633	378,551	36.1	41,718	427,049
2027	119,319	31.2	37,228	374,078	31.7	37,824	379,274	36.1	43,074	427,864

- 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.
- 1) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

Rule of 80 Retirement Eligibility

		L-1	L Benefit Pro	gram	L-3	Benefit Pro	gram	LT-4(65) Benefit P	rogram
		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 89,474	17.3%	\$15,479	\$ 204,095	22.4%	\$20,042	\$ 255,682	19.4%	\$17,358	\$ 224,064
2019	92,382	17.3	15,982	206,891	22.4	20,694	259,185	19.4	17,922	227,134
2020	95,384	17.3	16,501	209,500	22.4	21,366	262,453	19.4	18,504	229,998
2021	98,484	17.3	17,038	211,895	22.4	22,060	265,454	19.4	19,106	232,628
2022	101,685	17.3	17,592	214,048	22.4	22,777	268,151	19.4	19,727	234,992
2023	104,990	17.3	18,163	215,928	22.4	23,518	270,506	19.4	20,368	237,056
2024	108,402	17.3	18,754	217,501	22.4	24,282	272,476	19.4	21,030	238,783
2025	111,925	17.3	19,363	218,730	22.4	25,071	274,016	19.4	21,713	240,133
2026	115,563	17.3	19,992	219,576	22.4	25,886	275,076	19.4	22,419	241,062
2027	119,319	17.3	20,642	219,995	22.4	26,727	275,601	19.4	23,148	241,522

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		l Employer ibution	Unfunded Actuarial		l Employer bution	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	
2018	\$ 89,474	24.0%	\$21,474	\$ 270,655	27.3%	\$24,426	\$ 307,273	28.3%	\$25,321	\$ 317,255	
2019	92,382	24.0	22,172	274,363	27.3	25,220	311,483	28.3	26,144	321,601	
2020	95,384	24.0	22,892	277,823	27.3	26,040	315,411	28.3	26,994	325,656	
2021	98,484	24.0	23,636	280,999	27.3	26,886	319,017	28.3	27,871	329,379	
2022	101,685	24.0	24,404	283,854	27.3	27,760	322,259	28.3	28,777	332,726	
2023	104,990	24.0	25,198	286,347	27.3	28,662	325,089	28.3	29,712	335,648	
2024	108,402	24.0	26,016	288,433	27.3	29,594	327,457	28.3	30,678	338,093	
2025	111,925	24.0	26,862	290,063	27.3	30,556	329,308	28.3	31,675	340,004	
2026	115,563	24.0	27,735	291,185	27.3	31,549	330,581	28.3	32,704	341,319	
2027	119 319	24.0	28 637	291 7/11	27.3	32 574	331 212	28.3	33 767	3/1 971	

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Estimated Employer Contribution			l Employer bution	Unfunded Actuarial		l Employer ibution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Actuarial Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 89,474	32.4%	\$28,990	\$ 358,850	32.9%	\$29,437	\$ 363,840	37.4%	\$33,463	\$ 410,429
2019	92,382	32.4	29,932	363,766	32.9	30,394	368,825	37.4	34,551	416,052
2020	95,384	32.4	30,904	368,353	32.9	31,381	373,476	37.4	35,674	421,298
2021	98,484	32.4	31,909	372,564	32.9	32,401	377,746	37.4	36,833	426,115
2022	101,685	32.4	32,946	376,350	32.9	33,454	381,584	37.4	38,030	430,445
2023	104,990	32.4	34,017	379,655	32.9	34,542	384,935	37.4	39,266	434,225
2024	108,402	32.4	35,122	382,421	32.9	35,664	387,739	37.4	40,542	437,388
2025	111,925	32.4	36,264	384,582	32.9	36,823	389,930	37.4	41,860	439,860
2026	115,563	32.4	37,442	386,069	32.9	38,020	391,438	37.4	43,221	441,561
2027	119,319	32.4	38,659	386,806	32.9	39,256	392,185	37.4	44,625	442,404

- 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 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program			
		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2018	\$ 89,474	20.3%	\$18,163	\$ 198,586	25.2%	\$22,547	\$ 248,228	22.3%	\$19,953	\$ 217,754	
2019	92,382	20.3	18,754	201,307	25.2	23,280	251,629	22.3	20,601	220,737	
2020	95,384	20.3	19,363	203,845	25.2	24,037	254,802	22.3	21,271	223,520	
2021	98,484	20.3	19,992	206,176	25.2	24,818	257,715	22.3	21,962	226,075	
2022	101,685	20.3	20,642	208,271	25.2	25,625	260,334	22.3	22,676	228,372	
2023	104,990	20.3	21,313	210,100	25.2	26,457	262,620	22.3	23,413	230,378	
2024	108,402	20.3	22,006	211,630	25.2	27,317	264,533	22.3	24,174	232,056	
2025	111,925	20.3	22,721	212,826	25.2	28,205	266,028	22.3	24,959	233,368	
2026	115,563	20.3	23,459	213,649	25.2	29,122	267,057	22.3	25,771	234,270	
2027	119,319	20.3	24,222	214,057	25.2	30,068	267,567	22.3	26,608	234,717	

		LT-5	(65) Benefit P	rogram	ogram L-7 Benefit Pro			LT-8(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
2018	\$ 89,474	26.7%	\$23,890	\$ 262,606	30.0%	\$26,842	\$ 297,875	31.0%	\$27,737	\$ 307,460
2019	92,382	26.7	24,666	266,204	30.0	27,715	301,956	31.0	28,638	311,672
2020	95,384	26.7	25,468	269,561	30.0	28,615	305,763	31.0	29,569	315,602
2021	98,484	26.7	26,295	272,643	30.0	29,545	309,259	31.0	30,530	319,210
2022	101,685	26.7	27,150	275,413	30.0	30,506	312,401	31.0	31,522	322,453
2023	104,990	26.7	28,032	277,832	30.0	31,497	315,145	31.0	32,547	325,285
2024	108,402	26.7	28,943	279,856	30.0	32,521	317,441	31.0	33,605	327,654
2025	111,925	26.7	29,884	281,438	30.0	33,578	319,235	31.0	34,697	329,506
2026	115,563	26.7	30,855	282,526	30.0	34,669	320,469	31.0	35,825	330,780
2027	119 319	26.7	31.858	283 065	30.0	35 796	321 081	31.0	36 989	331 412

		L-12 Benefit Program			LT-14	(65) Benefit I	Program	L-6 Benefit Program		
	Estimated		Employer	Unfunded Actuarial		l Employer bution	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
2018	\$ 89,474	34.9%	\$31,226	\$ 347,525	35.5%	\$31,763	\$ 352,318	39.8%	\$35,611	\$ 397,165
2019	92,382	34.9	32,241	352,286	35.5	32,796	357,145	39.8	36,768	402,606
2020	95,384	34.9	33,289	356,728	35.5	33,861	361,648	39.8	37,963	407,683
2021	98,484	34.9	34,371	360,806	35.5	34,962	365,783	39.8	39,197	412,344
2022	101,685	34.9	35,488	364,472	35.5	36,098	369,500	39.8	40,471	416,534
2023	104,990	34.9	36,642	367,673	35.5	37,271	372,745	39.8	41,786	420,192
2024	108,402	34.9	37,832	370,351	35.5	38,483	375,460	39.8	43,144	423,253
2025	111,925	34.9	39,062	372,444	35.5	39,733	377,582	39.8	44,546	425,645
2026	115,563	34.9	40,331	373,884	35.5	41,025	379,042	39.8	45,994	427,291
2027	119,319	34.9	41,642	374,598	35.5	42,358	379,766	39.8	47,489	428,107

- 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 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

	Estimated Projected	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
Valuation		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2018	\$ 89,474	20.9%	\$18,700	\$ 205,293	26.1%	\$23,353	\$ 256,620	23.0%	\$20,579	\$ 225,125
2019	92,382	20.9	19,308	208,105	26.1	24,112	260,136	23.0	21,248	228,209
2020	95,384	20.9	19,935	210,729	26.1	24,895	263,416	23.0	21,938	231,087
2021	98,484	20.9	20,583	213,138	26.1	25,704	266,428	23.0	22,651	233,729
2022	101,685	20.9	21,252	215,304	26.1	26,540	269,135	23.0	23,388	236,104
2023	104,990	20.9	21,943	217,195	26.1	27,402	271,499	23.0	24,148	238,178
2024	108,402	20.9	22,656	218,777	26.1	28,293	273,477	23.0	24,932	239,913
2025	111,925	20.9	23,392	220,013	26.1	29,212	275,023	23.0	25,743	241,269
2026	115,563	20.9	24,153	220,864	26.1	30,162	276,087	23.0	26,579	242,202
2027	119,319	20.9	24,938	221,286	26.1	31,142	276,614	23.0	27,443	242,664

	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation Year		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2018	\$ 89,474	27.5%	\$24,605	\$ 271,494	31.0%	\$27,737	\$ 307,940	32.1%	\$28,721	\$ 317,857
2019	92,382	27.5	25,405	275,213	31.0	28,638	312,159	32.1	29,655	322,212
2020	95,384	27.5	26,231	278,683	31.0	29,569	316,095	32.1	30,618	326,275
2021	98,484	27.5	27,083	281,869	31.0	30,530	319,709	32.1	31,613	330,005
2022	101,685	27.5	27,963	284,733	31.0	31,522	322,958	32.1	32,641	333,358
2023	104,990	27.5	28,872	287,234	31.0	32,547	325,794	32.1	33,702	336,286
2024	108,402	27.5	29,811	289,326	31.0	33,605	328,167	32.1	34,797	338,736
2025	111,925	27.5	30,779	290,961	31.0	34,697	330,022	32.1	35,928	340,650
2026	115,563	27.5	31,780	292,086	31.0	35,825	331,298	32.1	37,096	341,967
2027	119 319	27 5	32 813	292 644	31.0	36 989	331 931	32 1	38 301	342 620

		L-1	2 Benefit Pro	gram	LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
Estimated		Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2018	\$ 89,474	36.1%	\$32,300	\$ 359,270	36.6%	\$32,747	\$ 364,223	41.1%	\$36,774	\$ 410,593
2019	92,382	36.1	33,350	364,192	36.6	33,812	369,213	41.1	37,969	416,218
2020	95,384	36.1	34,434	368,784	36.6	34,911	373,869	41.1	39,203	421,466
2021	98,484	36.1	35,553	373,000	36.6	36,045	378,143	41.1	40,477	426,285
2022	101,685	36.1	36,708	376,790	36.6	37,217	381,985	41.1	41,793	430,616
2023	104,990	36.1	37,901	380,099	36.6	38,426	385,340	41.1	43,151	434,398
2024	108,402	36.1	39,133	382,868	36.6	39,675	388,147	41.1	44,553	437,562
2025	111,925	36.1	40,405	385,032	36.6	40,965	390,341	41.1	46,001	440,035
2026	115,563	36.1	41,718	386,521	36.6	42,296	391,850	41.1	47,496	441,737
2027	119,319	36.1	43,074	387,259	36.6	43,671	392,598	41.1	49,040	442,580

- 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 28th 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.

