

THE INITIAL ACTUARIAL VALUATION FOR
PEMISCOT COUNTY PORT AUTHORITY
AS OF JULY 31, 2016

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September 14, 2016

Pemiscot County Port Authority Caruthersville, 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 29, 2016.

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 July 31, 2016. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

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Alternate Plan Provisions Affecting Employer Contribution Rates

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

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

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

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

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

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

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

		Percents of Active Member Payroll			
					Total
		Prior			Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	4.90%	3.40%	0.20%	8.50%
L-3	General	6.20	5.00	0.30	11.50
LT-4(65)	General	5.70	4.10	0.20	10.00
LT-5(65)	General	6.80	5.40	0.30	12.50
L-7	General	7.50	6.50	0.30	14.30
LT-8(65)	General	7.90	6.80	0.30	15.00
L-12	General	8.80	8.00	0.40	17.20
LT-14(65)	General	9.00	8.10	0.40	17.50
L-6	General	10.10	9.50	0.50	20.10

^{*} 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			ayroll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.10%	3.60%	0.20%	8.90%
L-3	General	6.50	5.10	0.30	11.90
LT-4(65)	General	5.90	4.40	0.20	10.50
LT-5(65)	General	7.00	5.80	0.30	13.10
L-7	General	7.80	6.80	0.30	14.90
LT-8(65)	General	8.20	7.20	0.30	15.70
L-12	General	9.20	8.30	0.40	17.90
LT-14(65)	General	9.40	8.40	0.40	18.20
L-6	General	10.50	9.90	0.50	20.90

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

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

		Percents of Active Member Payroll			
		Prior			Total Employer
Benefit Program	Employee Groups	Service Cost *	Current Cost	Disability Cost	Contribution Rate
L-1	General	5.30%	6.90%	0.20%	12.40%
L-3	General	6.70	8.40	0.30	15.40
LT-4(65)	General	6.10	7.60	0.20	13.90
LT-5(65)	General	7.20	8.90	0.30	16.40
L-7	General	8.00	9.90	0.30	18.20
LT-8(65)	General	8.40	10.20	0.30	18.90
L-12	General	9.30	11.40	0.40	21.10
LT-14(65)	General	9.50	11.50	0.40	21.40
L-6	General	10.70	12.80	0.50	24.00

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

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

		Percents of Active Member Payroll			
					Total
		Prior			Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	5.50%	7.10%	0.20%	12.80%
L-3	General	6.90	8.60	0.30	15.80
LT-4(65)	General	6.30	7.90	0.20	14.40
LT-5(65)	General	7.50	9.20	0.30	17.00
L-7	General	8.30	10.20	0.30	18.80
LT-8(65)	General	8.70	10.60	0.30	19.60
L-12	General	9.70	11.70	0.40	21.80
LT-14(65)	General	9.80	11.90	0.40	22.10
L-6	General	11.00	13.30	0.50	24.80

^{*} 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.

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	5.30%	3.80%	0.20%	9.30%
L-3	General	6.70	5.40	0.30	12.40
LT-4(65)	General	6.50	5.00	0.20	11.70
LT-5(65)	General	7.60	6.30	0.30	14.20
L-7	General	8.10	7.10	0.30	15.50
LT-8(65)	General	8.70	7.70	0.30	16.70
L-12	General	9.50	8.70	0.40	18.60
LT-14(65)	General	9.80	9.00	0.40	19.20
L-6	General	10.90	10.20	0.50	21.60

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

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

		Percents of Active Member Payroll			yroll
Benefit	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	5.50%	4.00%	0.20%	9.70%
L-3	General	7.00	5.70	0.30	13.00
LT-4(65)	General	6.70	5.30	0.20	12.20
LT-5(65)	General	7.90	6.60	0.30	14.80
L-7	General	8.40	7.40	0.30	16.10
LT-8(65)	General	9.00	8.00	0.30	17.30
L-12	General	9.90	9.10	0.40	19.40
LT-14(65)	General	10.20	9.40	0.40	20.00
L-6	General	11.30	10.70	0.50	22.50

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

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
	-				
L-1	General	5.70%	7.30%	0.20%	13.20%
L-3	General	7.10	8.90	0.30	16.30
LT-4(65)	General	6.90	8.50	0.20	15.60
LT-5(65)	General	8.00	9.80	0.30	18.10
L-7	General	8.60	10.50	0.30	19.40
LT-8(65)	General	9.20	11.10	0.30	20.60
L-12	General	10.00	12.10	0.40	22.50
LT-14(65)	General	10.30	12.40	0.40	23.10
L-6	General	11.40	13.60	0.50	25.50

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

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

		Percents of Active Member Payroll			yroll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	5.90%	7.50%	0.20%	13.60%
L-3	General	7.40	9.20	0.30	16.90
LT-4(65)	General	7.10	8.80	0.20	16.10
LT-5(65)	General	8.30	10.10	0.30	18.70
L-7	General	8.90	10.80	0.30	20.00
LT-8(65)	General	9.50	11.40	0.30	21.20
L-12	General	10.40	12.50	0.40	23.30
LT-14(65)	General	10.70	12.80	0.40	23.90
L-6	General	11.80	14.10	0.50	26.40

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

Employer Contribution Dollars

Regular Retirement Eligibility

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

Contributory Plan

5 Year	r FAS
Benefit	
Program	General
L-1	\$ 11,517
L-3	15,582
LT-4(65)	13,550
LT-5(65)	16,937
L-7	19,376
LT-8(65)	20,325
L-12	23,306
LT-14(65)	23,712
L-6	27,235

3 Yea	r FAS
Benefit	
Program	General
L-1	\$ 12,059
L-3	16,124
LT-4(65)	14,227
LT-5(65)	17,750
L-7	20,189
LT-8(65)	21,273
L-12	24,254
LT-14(65)	24,661
L-6	28,319

Non-Contributory Plan

5 Year	5 Year FAS				
Benefit					
Program	General				
L-1	\$ 16,802				
L-3	20,867				
LT-4(65)	18,834				
LT-5(65)	22,222				
L-7	24,661				
LT-8(65)	25,609				
L-12	28,590				
LT-14(65)	28,997				
L-6	32,520				

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 17,344			
L-3	21,409			
LT-4(65)	19,512			
LT-5(65)	23,035			
L-7	25,474			
LT-8(65)	26,558			
L-12	29,539			
LT-14(65)	29,945			
L-6	33,604			

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

Employer Contribution Dollars

Rule of 80 Retirement Eligibility

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

Contributory Plan

5 Year FAS				
Benefit				
Program	General			
L-1	\$ 12,601			
L-3	16,802			
LT-4(65)	15,853			
LT-5(65)	19,241			
L-7	21,002			
LT-8(65)	22,628			
L-12	25,203			
LT-14(65)	26,016			
L-6	29,268			

3 Year FAS				
Benefit				
Program	General			
L-1	\$ 13,143			
L-3	17,615			
LT-4(65)	16,531			
LT-5(65)	20,054			
L-7	21,815			
LT-8(65)	23,441			
L-12	26,287			
LT-14(65)	27,100			
L-6	30,487			

Non-Contributory Plan

5 Year FAS			
Benefit			
Program	General		
L-1	\$ 17,886		
L-3	22,086		
LT-4(65)	21,138		
LT-5(65)	24,525		
L-7	26,287		
LT-8(65)	27,913		
L-12	30,487		
LT-14(65)	31,300		
L-6	34,552		

3 Year FAS			
Benefit			
Program	General		
L-1	\$ 18,428		
L-3	22,899		
LT-4(65)	21,815		
LT-5(65)	25,338		
L-7	27,100		
LT-8(65)	28,726		
L-12	31,571		
LT-14(65)	32,384		
L-6	35,771		

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	2
Annual Payroll	\$ 135,498

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

APPENDIX I

UNFUNDED ACTUARIAL ACCRUED LIABILITY

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

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

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

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

Pemiscot County Port Authority

		Contri	butory	Non-Con	tributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS) (3 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 117,393	\$ 121,751	\$ 127,249	\$ 131,648
L-3	General	148,795	154,172	159,054	164,570
LT-4(65)	General	135,376	140,379	145,122	150,150
LT-5(65)	General	162,296	168,145	172,463	178,444
L-7	General	179,893	186,348	190,874	197,491
LT-8(65)	General	188,880	195,656	199,805	206,744
L-12	General	211,013	218,519	222,687	230,412
LT-14(65)	General	215,504	223,183	227,163	235,028
L-6	General	242,105	250,693	254,496	263,322

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

		Contri	butory	Non-Cor	ntributory
Benefit Group	Employee Group	UAAL UAAL (5 Year FAS) (3 Year FAS)		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 126,777	\$ 131,497	\$ 136,488	\$ 141,267
L-3	General	160,424	166,277	170,629	176,583
LT-4(65)	General	155,313	161,052	164,879	170,650
LT-5(65)	General	181,845	188,444	191,901	198,623
L-7	General	193,825	200,820	204,732	211,914
LT-8(65)	General	208,083	215,592	218,932	226,606
L-12	General	227,186	235,362	238,872	247,231
LT-14(65)	General	234,320	242,737	245,961	254,572
L-6	General	260,576	269,887	272,989	282,546

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

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

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

Schedule 1.

Withdrawal From Active Employment Before Age & Service Retirement and Individual Pay Increase Assumptions

		P Se	Percent Increase in Individual's Pay			
Sample	Years of	General Members				During Next Year
Ages	Service	Men	Women	Police	Fire	Excluding Fire
A 11	0	10.000/	22 000/	10.000/	10.000/	
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	7.30	10.80	9.80	5.00	6.6%
30		6.50	8.90	7.80	4.00	5.8
35		5.00	7.40	6.10	2.80	5.3
40		3.70	5.70	4.40	2.20	4.8
45		3.00	4.20	3.20	1.80	4.3
50		2.40	3.30	1.80	1.00	3.9
55		1.80	2.50	1.00	0.50	3.7
60		1.00	1.20	0.00	0.00	3.6
65		0.00	0.00	0.00	0.00	3.3

Percent Increase in					
	Individual's Pay				
Sample	During Next Year				
Ages Fire					
25	7.2%				
30	6.1				
35	5.2				
40	4.5				
45	4.2				
50	3.9				
55	3.7				
60	3.3				
65	3.3				

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

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

Schedule 2. (Continued)

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS

Benefits and Conditions Evaluated and/or Considered as of February 29, 2016

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$ 525	\$ 882	\$1,407	94%
2,000	700	1,028	1,728	86%
2,500	875	1,174	2,049	82%
3,000	1,050	1,320	2,370	79%
3,500	1,225	1,465	2,690	77%
4,000	1,400	1,611	3,011	75%
25 Years of Service	ce:			
\$1,500	\$ 375	\$ 882	\$1,257	84%
2,000	500	1,028	1,528	76%
2,500	625	1,174	1,799	72%
3,000	750	1,320	2,070	69%
3,500	875	1,465	2,340	67%
4,000	1,000	1,611	2,611	65%
15 Years of Servio	ce:			
\$1,500	\$225	\$ 882	\$1,107	74%
2,000	300	1,028	1,328	66%
2,500	375	1,174	1,549	62%
3,000	450	1,320	1,770	59%
3,500	525	1,465	1,990	57%
4,000	600	1,611	2,211	55%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$ 656	\$ 882	\$1,538	103%
2,000	875	1,028	1,903	95%
2,500	1,094	1,174	2,268	91%
3,000	1,313	1,320	2,633	88%
3,500	1,531	1,465	2,996	86%
4,000	1,750	1,611	3,361	84%
25 Years of Service	ce:			
\$1,500	\$ 469	\$ 882	\$1,351	90%
2,000	625	1,028	1,653	83%
2,500	781	1,174	1,955	78%
3,000	938	1,320	2,258	75%
3,500	1,094	1,465	2,559	73%
4,000	1,250	1,611	2,861	72%
15 Years of Service	ce:			
\$1,500	\$281	\$ 882	\$1,163	78%
2,000	375	1,028	1,403	70%
2,500	469	1,174	1,643	66%
3,000	563	1,320	1,883	63%
3,500	656	1,465	2,121	61%
4,000	750	1,611	2,361	59%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Servi	ce:			
\$1,500	\$ 788	\$ 882	\$1,670	111%
2,000	1,050	1,028	2,078	104%
2,500	1,313	1,174	2,487	99%
3,000	1,575	1,320	2,895	97%
3,500	1,838	1,465	3,303	94%
4,000	2,100	1,611	3,711	93%
25 Years of Service	ce:			
\$1,500	\$ 563	\$ 882	\$1,445	96%
2,000	750	1,028	1,778	89%
2,500	938	1,174	2,112	84%
3,000	1,125	1,320	2,445	82%
3,500	1,313	1,465	2,778	79%
4,000	1,500	1,611	3,111	78%
15 Years of Service	ce:			
\$1,500	\$338	\$ 882	\$1,220	81%
2,000	450	1,028	1,478	74%
2,500	563	1,174	1,737	69%
3,000	675	1,320	1,995	67%
3,500	788	1,465	2,253	64%
4,000	900	1,611	2,511	63%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ee:			
\$1,500	\$ 919	\$ 882	\$1,801	120%
2,000	1,225	1,028	2,253	113%
2,500	1,531	1,174	2,705	108%
3,000	1,838	1,320	3,158	105%
3,500	2,144	1,465	3,609	103%
4,000	2,450	1,611	4,061	102%
25 Years of Service	ee:			
\$1,500	\$ 656	\$ 882	\$1,538	103%
2,000	875	1,028	1,903	95%
2,500	1,094	1,174	2,268	91%
3,000	1,313	1,320	2,633	88%
3,500	1,531	1,465	2,996	86%
4,000	1,750	1,611	3,361	84%
15 Years of Service	e:			
\$1,500	\$ 394	\$ 882	\$1,276	85%
2,000	525	1,028	1,553	78%
2,500	656	1,174	1,830	73%
3,000	788	1,320	2,108	70%
3,500	919	1,465	2,384	68%
4,000	1,050	1,611	2,661	67%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	Estimated	
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$1,050	\$ 882	\$1,932	129%
2,000	1,400	1,028	2,428	121%
2,500	1,750	1,174	2,924	117%
3,000	2,100	1,320	3,420	114%
3,500	2,450	1,465	3,915	112%
4,000	2,800	1,611	4,411	110%
25 Years of Service	ce:			
\$1,500	\$ 750	\$ 882	\$1,632	109%
2,000	1,000	1,028	2,028	101%
2,500	1,250	1,174	2,424	97%
3,000	1,500	1,320	2,820	94%
3,500	1,750	1,465	3,215	92%
4,000	2,000	1,611	3,611	90%
15 Years of Service	ce:			
\$1,500	\$ 450	\$ 882	\$1,332	89%
2,000	600	1,028	1,628	81%
2,500	750	1,174	1,924	77%
3,000	900	1,320	2,220	74%
3,500	1,050	1,465	2,515	72%
4,000	1,200	1,611	2,811	70%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final	LAC	GERS	Estimated	Esti	mated	Per	cent
Average	BEN	EFIT ³	Social	Montl	ıly Total	of I	FAS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Serv	ice:						
\$1,500	\$1,050	\$ 525	\$ 882	\$1,050	\$1,407	70%	94%
2,000	1,400	700	1,028	1,400	1,728	70%	86%
2,500	1,750	875	1,174	1,750	2,049	70%	82%
3,000	2,100	1,050	1,320	2,100	2,370	70%	79%
3,500	2,450	1,225	1,465	2,450	2,690	70%	77%
4,000	2,800	1,400	1,611	2,800	3,011	70%	75%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 375	\$ 882	\$ 750	\$1,257	50%	84%
2,000	1,000	500	1,028	1,000	1,528	50%	76%
2,500	1,250	625	1,174	1,250	1,799	50%	72%
3,000	1,500	750	1,320	1,500	2,070	50%	69%
3,500	1,750	875	1,465	1,750	2,340	50%	67%
4,000	2,000	1,000	1,611	2,000	2,611	50%	65%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$225	\$ 882	\$ 450	\$1,107	30%	74%
2,000	600	300	1,028	600	1,328	30%	66%
2,500	750	375	1,174	750	1,549	30%	62%
3,000	900	450	1,320	900	1,770	30%	59%
3,500	1,050	525	1,465	1,050	1,990	30%	57%
4,000	1,200	600	1,611	1,200	2,211	30%	55%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final	LAG	GERS	Estimated	Esti	mated	Per	cent
Average	BEN	EFIT ³	Social	Montl	ıly Total	of l	FAS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Servi	ice:						
\$1,500	\$1,050	\$ 656	\$ 882	\$1,050	\$1,538	70%	103%
2,000	1,400	875	1,028	1,400	1,903	70%	95%
2,500	1,750	1,094	1,174	1,750	2,268	70%	91%
3,000	2,100	1,313	1,320	2,100	2,633	70%	88%
3,500	2,450	1,531	1,465	2,450	2,996	70%	86%
4,000	2,800	1,750	1,611	2,800	3,361	70%	84%
25 Years of Servi	ice:						
\$1,500	\$ 750	\$ 469	\$ 882	\$ 750	\$1,351	50%	90%
2,000	1,000	625	1,028	1,000	1,653	50%	83%
2,500	1,250	781	1,174	1,250	1,955	50%	78%
3,000	1,500	938	1,320	1,500	2,258	50%	75%
3,500	1,750	1,094	1,465	1,750	2,559	50%	73%
4,000	2,000	1,250	1,611	2,000	2,861	50%	72%
15 Years of Servi	ice:						
\$1,500	\$ 450	\$281	\$ 882	\$ 450	\$1,163	30%	78%
2,000	600	375	1,028	600	1,403	30%	70%
2,500	750	469	1,174	750	1,643	30%	66%
3,000	900	563	1,320	900	1,883	30%	63%
3,500	1,050	656	1,465	1,050	2,121	30%	61%
4,000	1,200	750	1,611	1,200	2,361	30%	59%
1	~ 1 "						

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

Final LAGERS		GERS	Estimated	Esti	mated	Percent		
Average	BEN	EFIT ³	Social	Montl	ıly Total	of l	FAS	
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65	
35 Years of Serv	ice:							
\$1,500	\$1,050	\$ 788	\$ 882	\$1,050	\$1,670	70%	111%	
2,000	1,400	1,050	1,028	1,400	2,078	70%	104%	
2,500	1,750	1,313	1,174	1,750	2,487	70%	99%	
3,000	2,100	1,575	1,320	2,100	2,895	70%	97%	
3,500	2,450	1,838	1,465	2,450	3,303	70%	94%	
4,000	2,800	2,100	1,611	2,800	3,711	70%	93%	
25 Years of Serv	ice:							
\$1,500	\$ 750	\$ 563	\$ 882	\$ 750	\$1,445	50%	96%	
2,000	1,000	750	1,028	1,000	1,778	50%	89%	
2,500	1,250	938	1,174	1,250	2,112	50%	84%	
3,000	1,500	1,125	1,320	1,500	2,445	50%	82%	
3,500	1,750	1,313	1,465	1,750	2,778	50%	79%	
4,000	2,000	1,500	1,611	2,000	3,111	50%	78%	
15 Years of Serv	ice:							
\$1,500	\$ 450	\$338	\$ 882	\$ 450	\$1,220	30%	81%	
2,000	600	450	1,028	600	1,478	30%	74%	
2,500	750	563	1,174	750	1,737	30%	69%	
3,000	900	675	1,320	900	1,995	30%	67%	
3,500	1,050	788	1,465	1,050	2,253	30%	64%	
4,000	1,200	900	1,611	1,200	2,511	30%	63%	

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

Final	LAGERS BENEFIT ³		Estimated		mated	Percent	
Average	BEN	EFIT 3	Social	Montl	ıly Total	of l	FAS
Salary (FAS) ¹	To 65	At 65	Security ²	To 65	At 65	To 65	At 65
35 Years of Servi	ice:						
\$1,500	\$1,050	\$ 919	\$ 882	\$1,050	\$1,801	70%	120%
2,000	1,400	1,225	1,028	1,400	2,253	70%	113%
2,500	1,750	1,531	1,174	1,750	2,705	70%	108%
3,000	2,100	1,838	1,320	2,100	3,158	70%	105%
3,500	2,450	2,144	1,465	2,450	3,609	70%	103%
4,000	2,800	2,450	1,611	2,800	4,061	70%	102%
25 Years of Servi	ice:						
\$1,500	\$ 750	\$ 656	\$ 882	\$ 750	\$1,538	50%	103%
2,000	1,000	875	1,028	1,000	1,903	50%	95%
2,500	1,250	1,094	1,174	1,250	2,268	50%	91%
3,000	1,500	1,313	1,320	1,500	2,633	50%	88%
3,500	1,750	1,531	1,465	1,750	2,996	50%	86%
4,000	2,000	1,750	1,611	2,000	3,361	50%	84%
15 Years of Servi	ice:						
\$1,500	\$ 450	\$ 394	\$ 882	\$ 450	\$1,276	30%	85%
2,000	600	525	1,028	600	1,553	30%	78%
2,500	750	656	1,174	750	1,830	30%	73%
3,000	900	788	1,320	900	2,108	30%	70%
3,500	1,050	919	1,465	1,050	2,384	30%	68%
4,000	1,200	1,050	1,611	1,200	2,661	30%	67%

[&]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.

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 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Pemiscot County Port Authority

July 31, 2016

By Attained Age and Years of Service

		Year	s of Sei	rvice to		Totals			
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20									
20-24									
25-29									
30-34									
35-39									
40-44			1					1	\$ 102,360
45-49									
50-54		1						1	\$ 33,138
55-59									
60-64									
65-69									
70 & Over									
Totals		1	1					2	\$ 135,498

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

Age: 47.2 years.

Benefit Service: 10.1 years.

Annual Pay: \$67,749.



September 14, 2016 E-mail

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

Dear Keith:

Enclosed is the report of the July 31, 2016 Initial Actuarial Valuation of LAGERS benefits for the employees of

Pemiscot County Port Authority

Sincerely,

Mita D. Drazilov

MDD:adh



September 14, 2016

Pemiscot County Port Authority Caruthersville, 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 July 31, 2016 Initial Valuation for the Pemiscot County Port Authority dated September 14, 2016.

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, 2016.

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

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded	
	Estimated	Contr	Contribution		Contr	ibution	Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 135,498	8.5%	\$11,517	\$ 117,393	11.5%	\$15,582	\$ 148,795	10.0%	\$13,550	\$ 135,376	
2017	139,902	8.5	11,892	119,001	11.5	16,089	150,833	10.0	13,990	137,231	
2018	144,449	8.5	12,278	120,502	11.5	16,612	152,735	10.0	14,445	138,961	
2019	149,144	8.5	12,677	121,880	11.5	17,152	154,481	10.0	14,914	140,550	
2020	153,991	8.5	13,089	123,118	11.5	17,709	156,051	10.0	15,399	141,978	
2021	158,996	8.5	13,515	124,199	11.5	18,285	157,421	10.0	15,900	143,225	
2022	164,163	8.5	13,954	125,104	11.5	18,879	158,568	10.0	16,416	144,268	
2023	169,498	8.5	14,407	125,811	11.5	19,492	159,464	10.0	16,950	145,083	
2024	175,007	8.5	14,876	126,298	11.5	20,126	160,081	10.0	17,501	145,644	
2025	180.695	8.5	15.359	126,539	11.5	20,780	160.387	10.0	18.070	145,922	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
	Estimated Employer Estimated Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	12.5%	\$16,937	\$ 162,296	14.3%	\$19,376	\$ 179,893	15.0%	\$20,325	\$ 188,880
2017	139,902	12.5	17,488	164,519	14.3	20,006	182,358	15.0	20,985	191,468
2018	144,449	12.5	18,056	166,593	14.3	20,656	184,657	15.0	21,667	193,882
2019	149,144	12.5	18,643	168,498	14.3	21,328	186,768	15.0	22,372	196,099
2020	153,991	12.5	19,249	170,210	14.3	22,021	188,666	15.0	23,099	198,092
2021	158,996	12.5	19,875	171,705	14.3	22,736	190,323	15.0	23,849	199,832
2022	164,163	12.5	20,520	172,956	14.3	23,475	191,709	15.0	24,624	201,288
2023	169,498	12.5	21,187	173,933	14.3	24,238	192,792	15.0	25,425	202,426
2024	175,007	12.5	21,876	174,606	14.3	25,026	193,538	15.0	26,251	203,209
2025	180,695	12.5	22,587	174,939	14.3	25,839	193,908	15.0	27,104	203,597

		L-12 Benefit Program			LT-14(65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated	Contribution		Actuarial		bution	Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	17.2%	\$23,306	\$ 211,013	17.5%	\$23,712	\$ 215,504	20.1%	\$27,235	\$ 242,105
2017	139,902	17.2	24,063	213,904	17.5	24,483	218,456	20.1	28,120	245,422
2018	144,449	17.2	24,845	216,601	17.5	25,279	221,211	20.1	29,034	248,517
2019	149,144	17.2	25,653	219,077	17.5	26,100	223,740	20.1	29,978	251,358
2020	153,991	17.2	26,486	221,303	17.5	26,948	226,013	20.1	30,952	253,912
2021	158,996	17.2	27,347	223,247	17.5	27,824	227,998	20.1	31,958	256,142
2022	164,163	17.2	28,236	224,873	17.5	28,729	229,659	20.1	32,997	258,008
2023	169,498	17.2	29,154	226,144	17.5	29,662	230,957	20.1	34,069	259,466
2024	175,007	17.2	30,101	227,019	17.5	30,626	231,850	20.1	35,176	260,469
2025	180,695	17.2	31,080	227,452	17.5	31,622	232,293	20.1	36,320	260,966

- 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	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded	
	Estimated	Contr	Contribution		Contr	ibution	Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 135,498	8.9%	\$12,059	\$ 121,751	11.9%	\$16,124	\$ 154,172	10.5%	\$14,227	\$ 140,379	
2017	139,902	8.9	12,451	123,419	11.9	16,648	156,284	10.5	14,690	142,302	
2018	144,449	8.9	12,856	124,975	11.9	17,189	158,255	10.5	15,167	144,096	
2019	149,144	8.9	13,274	126,404	11.9	17,748	160,064	10.5	15,660	145,743	
2020	153,991	8.9	13,705	127,688	11.9	18,325	161,690	10.5	16,169	147,224	
2021	158,996	8.9	14,151	128,809	11.9	18,921	163,110	10.5	16,695	148,517	
2022	164,163	8.9	14,611	129,747	11.9	19,535	164,298	10.5	17,237	149,599	
2023	169,498	8.9	15,085	130,480	11.9	20,170	165,227	10.5	17,797	150,444	
2024	175,007	8.9	15,576	130,985	11.9	20,826	165,866	10.5	18,376	151,026	
2025	180,695	8.9	16.082	131.235	11.9	21,503	166,183	10.5	18.973	151.314	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	13.1%	\$17,750	\$ 168,145	14.9%	\$20,189	\$ 186,348	15.7%	\$21,273	\$ 195,656
2017	139,902	13.1	18,327	170,449	14.9	20,845	188,901	15.7	21,965	198,336
2018	144,449	13.1	18,923	172,598	14.9	21,523	191,283	15.7	22,678	200,837
2019	149,144	13.1	19,538	174,571	14.9	22,222	193,470	15.7	23,416	203,133
2020	153,991	13.1	20,173	176,345	14.9	22,945	195,436	15.7	24,177	205,197
2021	158,996	13.1	20,828	177,894	14.9	23,690	197,152	15.7	24,962	206,999
2022	164,163	13.1	21,505	179,190	14.9	24,460	198,588	15.7	25,774	208,507
2023	169,498	13.1	22,204	180,203	14.9	25,255	199,710	15.7	26,611	209,685
2024	175,007	13.1	22,926	180,900	14.9	26,076	200,482	15.7	27,476	210,496
2025	180,695	13.1	23,671	181,245	14.9	26,924	200,865	15.7	28,369	210,898

		L-12 Benefit Program			LT-14(65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	17.9%	\$24,254	\$ 218,519	18.2%	\$24,661	\$ 223,183	20.9%	\$28,319	\$ 250,693
2017	139,902	17.9	25,042	221,513	18.2	25,462	226,241	20.9	29,240	254,127
2018	144,449	17.9	25,856	224,306	18.2	26,290	229,094	20.9	30,190	257,331
2019	149,144	17.9	26,697	226,870	18.2	27,144	231,713	20.9	31,171	260,273
2020	153,991	17.9	27,564	229,175	18.2	28,026	234,067	20.9	32,184	262,918
2021	158,996	17.9	28,460	231,188	18.2	28,937	236,123	20.9	33,230	265,227
2022	164,163	17.9	29,385	232,872	18.2	29,878	237,843	20.9	34,310	267,159
2023	169,498	17.9	30,340	234,188	18.2	30,849	239,187	20.9	35,425	268,669
2024	175,007	17.9	31,326	235,094	18.2	31,851	240,112	20.9	36,576	269,708
2025	180,695	17.9	32,344	235,543	18.2	32,886	240,570	20.9	37,765	270,223

- 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)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded	
	Estimated	Contr	Contribution		Contri	bution	Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 135,498	12.4%	\$16,802	\$ 127,249	15.4%	\$20,867	\$ 159,054	13.9%	\$18,834	\$ 145,122	
2017	139,902	12.4	17,348	128,992	15.4	21,545	161,233	13.9	19,446	147,110	
2018	144,449	12.4	17,912	130,619	15.4	22,245	163,266	13.9	20,078	148,965	
2019	149,144	12.4	18,494	132,112	15.4	22,968	165,133	13.9	20,731	150,668	
2020	153,991	12.4	19,095	133,454	15.4	23,715	166,811	13.9	21,405	152,199	
2021	158,996	12.4	19,716	134,626	15.4	24,485	168,276	13.9	22,100	153,536	
2022	164,163	12.4	20,356	135,607	15.4	25,281	169,502	13.9	22,819	154,654	
2023	169,498	12.4	21,018	136,373	15.4	26,103	170,460	13.9	23,560	155,528	
2024	175,007	12.4	21,701	136,900	15.4	26,951	171,119	13.9	24,326	156,129	
2025	180,695	12.4	22,406	137,161	15.4	27,827	171,446	13.9	25,117	156,427	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	16.4%	\$22,222	\$ 172,463	18.2%	\$24,661	\$ 190,874	18.9%	\$25,609	\$ 199,805
2017	139,902	16.4	22,944	174,826	18.2	25,462	193,489	18.9	26,441	202,542
2018	144,449	16.4	23,690	177,030	18.2	26,290	195,929	18.9	27,301	205,096
2019	149,144	16.4	24,460	179,054	18.2	27,144	198,169	18.9	28,188	207,441
2020	153,991	16.4	25,255	180,873	18.2	28,026	200,183	18.9	29,104	209,549
2021	158,996	16.4	26,075	182,461	18.2	28,937	201,941	18.9	30,050	211,389
2022	164,163	16.4	26,923	183,790	18.2	29,878	203,412	18.9	31,027	212,929
2023	169,498	16.4	27,798	184,829	18.2	30,849	204,562	18.9	32,035	214,132
2024	175,007	16.4	28,701	185,544	18.2	31,851	205,353	18.9	33,076	214,960
2025	180,695	16.4	29,634	185,898	18.2	32,886	205,745	18.9	34,151	215,370

		L-12 Benefit Program			LT-14(65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded		Employer	Unfunded	Estimated		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	21.1%	\$28,590	\$ 222,687	21.4%	\$28,997	\$ 227,163	24.0%	\$32,520	\$ 254,496
2017	139,902	21.1	29,519	225,738	21.4	29,939	230,275	24.0	33,576	257,983
2018	144,449	21.1	30,479	228,584	21.4	30,912	233,179	24.0	34,668	261,236
2019	149,144	21.1	31,469	231,197	21.4	31,917	235,845	24.0	35,795	264,223
2020	153,991	21.1	32,492	233,546	21.4	32,954	238,241	24.0	36,958	266,908
2021	158,996	21.1	33,548	235,597	21.4	34,025	240,333	24.0	38,159	269,252
2022	164,163	21.1	34,638	237,313	21.4	35,131	242,084	24.0	39,399	271,213
2023	169,498	21.1	35,764	238,654	21.4	36,273	243,452	24.0	40,680	272,746
2024	175,007	21.1	36,926	239,577	21.4	37,451	244,393	24.0	42,002	273,801
2025	180,695	21.1	38,127	240,034	21.4	38,669	244,860	24.0	43,367	274,324

- 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	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(65) Benefit Program		rogram
		Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contribution		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
2016	\$ 135,498	12.8%	\$17,344	\$ 131,648	15.8%	\$21,409	\$ 164,570	14.4%	\$19,512	\$ 150,150
2017	139,902	12.8	17,907	133,452	15.8	22,105	166,825	14.4	20,146	152,207
2018	144,449	12.8	18,489	135,135	15.8	22,823	168,929	14.4	20,801	154,126
2019	149,144	12.8	19,090	136,680	15.8	23,565	170,860	14.4	21,477	155,888
2020	153,991	12.8	19,711	138,069	15.8	24,331	172,596	14.4	22,175	157,472
2021	158,996	12.8	20,351	139,282	15.8	25,121	174,112	14.4	22,895	158,855
2022	164,163	12.8	21,013	140,297	15.8	25,938	175,380	14.4	23,639	160,012
2023	169,498	12.8	21,696	141,090	15.8	26,781	176,371	14.4	24,408	160,916
2024	175,007	12.8	22,401	141,636	15.8	27,651	177,053	14.4	25,201	161,538
2025	180,695	12.8	23,129	141,906	15.8	28,550	177,391	14.4	26,020	161,846

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(65) Benefit P	rogram
	Estimated		Estimated Employer Contribution			Estimated Employer Contribution			Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	17.0%	\$23,035	\$ 178,444	18.8%	\$25,474	\$ 197,491	19.6%	\$26,558	\$ 206,744
2017	139,902	17.0	23,783	180,889	18.8	26,302	200,197	19.6	27,421	209,576
2018	144,449	17.0	24,556	183,170	18.8	27,156	202,721	19.6	28,312	212,219
2019	149,144	17.0	25,354	185,264	18.8	28,039	205,039	19.6	29,232	214,645
2020	153,991	17.0	26,178	187,146	18.8	28,950	207,122	19.6	30,182	216,826
2021	158,996	17.0	27,029	188,790	18.8	29,891	208,941	19.6	31,163	218,730
2022	164,163	17.0	27,908	190,165	18.8	30,863	210,463	19.6	32,176	220,323
2023	169,498	17.0	28,815	191,240	18.8	31,866	211,652	19.6	33,222	221,568
2024	175,007	17.0	29,751	191,980	18.8	32,901	212,470	19.6	34,301	222,425
2025	180,695	17.0	30,718	192,347	18.8	33,971	212,876	19.6	35,416	222,850

		L-12	2 Benefit Pro	gram	LT-14(65) Benefit Program			L-6 Benefit Program			
	-		Estimated Employer Unfunded			Employer	Unfunded		Employer	Unfunded	
	Estimated	Contribution		Actuarial		bution	Actuarial		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 135,498	21.8%	\$29,539	\$ 230,412	22.1%	\$29,945	\$ 235,028	24.8%	\$33,604	\$ 263,322	
2017	139,902	21.8	30,499	233,569	22.1	30,918	238,248	24.8	34,696	266,929	
2018	144,449	21.8	31,490	236,514	22.1	31,923	241,252	24.8	35,823	270,295	
2019	149,144	21.8	32,513	239,218	22.1	32,961	244,010	24.8	36,988	273,385	
2020	153,991	21.8	33,570	241,649	22.1	34,032	246,489	24.8	38,190	276,163	
2021	158,996	21.8	34,661	243,771	22.1	35,138	248,654	24.8	39,431	278,588	
2022	164,163	21.8	35,788	245,547	22.1	36,280	250,465	24.8	40,712	280,617	
2023	169,498	21.8	36,951	246,935	22.1	37,459	251,881	24.8	42,036	282,203	
2024	175,007	21.8	38,152	247,890	22.1	38,677	252,855	24.8	43,402	283,294	
2025	180,695	21.8	39,392	248,363	22.1	39,934	253,338	24.8	44,812	283,835	

- 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 - 5 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1	Benefit Prog			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contri	ibution	Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 135,498	9.3%	\$12,601	\$ 126,777	12.4%	\$16,802	\$ 160,424	11.7%	\$15,853	\$ 155,313	
2017	139,902	9.3	13,011	128,514	12.4	17,348	162,622	11.7	16,369	157,441	
2018	144,449	9.3	13,434	130,134	12.4	17,912	164,673	11.7	16,901	159,426	
2019	149,144	9.3	13,870	131,622	12.4	18,494	166,556	11.7	17,450	161,249	
2020	153,991	9.3	14,321	132,959	12.4	19,095	168,248	11.7	18,017	162,887	
2021	158,996	9.3	14,787	134,127	12.4	19,716	169,726	11.7	18,603	164,318	
2022	164,163	9.3	15,267	135,104	12.4	20,356	170,962	11.7	19,207	165,515	
2023	169,498	9.3	15,763	135,868	12.4	21,018	171,928	11.7	19,831	166,450	
2024	175,007	9.3	16,276	136,393	12.4	21,701	172,593	11.7	20,476	167,094	
2025	180,695	9.3	16,805	136,653	12.4	22,406	172,923	11.7	21,141	167,413	

	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		Unfunded Actuarial		Employer ibution	Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	14.2%	\$19,241	\$ 181,845	15.5%	\$21,002	\$ 193,825	16.7%	\$22,628	\$ 208,083
2017	139,902	14.2	19,866	184,336	15.5	21,685	196,480	16.7	23,364	210,934
2018	144,449	14.2	20,512	186,660	15.5	22,390	198,957	16.7	24,123	213,594
2019	149,144	14.2	21,178	188,794	15.5	23,117	201,232	16.7	24,907	216,036
2020	153,991	14.2	21,867	190,712	15.5	23,869	203,277	16.7	25,716	218,231
2021	158,996	14.2	22,577	192,387	15.5	24,644	205,062	16.7	26,552	220,148
2022	164,163	14.2	23,311	193,788	15.5	25,445	206,556	16.7	27,415	221,752
2023	169,498	14.2	24,069	194,883	15.5	26,272	207,723	16.7	28,306	223,005
2024	175,007	14.2	24,851	195,637	15.5	27,126	208,526	16.7	29,226	223,867
2025	180,695	14.2	25,659	196,011	15.5	28,008	208,924	16.7	30,176	224,294

		L-12	2 Benefit Pro	gram	LT-14(65) Benefit F	Program	L-6	gram	
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	18.6%	\$25,203	\$ 227,186	19.2%	\$26,016	\$ 234,320	21.6%	\$29,268	\$ 260,576
2017	139,902	18.6	26,022	230,298	19.2	26,861	237,530	21.6	30,219	264,146
2018	144,449	18.6	26,868	233,202	19.2	27,734	240,525	21.6	31,201	267,477
2019	149,144	18.6	27,741	235,868	19.2	28,636	243,275	21.6	32,215	270,535
2020	153,991	18.6	28,642	238,265	19.2	29,566	245,747	21.6	33,262	273,284
2021	158,996	18.6	29,573	240,358	19.2	30,527	247,905	21.6	34,343	275,684
2022	164,163	18.6	30,534	242,109	19.2	31,519	249,711	21.6	35,459	277,692
2023	169,498	18.6	31,527	243,477	19.2	32,544	251,122	21.6	36,612	279,261
2024	175,007	18.6	32,551	244,419	19.2	33,601	252,093	21.6	37,802	280,341
2025	180,695	18.6	33,609	244,886	19.2	34,693	252,574	21.6	39,030	280,876

- 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)

Rule of 80 Retirement Eligibility

		L-1	gram	L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial Cont		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
2016	\$ 135,498	9.7%	\$13,143	\$ 131,497	13.0%	\$17,615	\$ 166,277	12.2%	\$16,531	\$ 161,052
2017	139,902	9.7	13,570	133,298	13.0	18,187	168,555	12.2	17,068	163,258
2018	144,449	9.7	14,012	134,979	13.0	18,778	170,680	12.2	17,623	165,317
2019	149,144	9.7	14,467	136,522	13.0	19,389	172,631	12.2	18,196	167,207
2020	153,991	9.7	14,937	137,909	13.0	20,019	174,385	12.2	18,787	168,906
2021	158,996	9.7	15,423	139,120	13.0	20,669	175,917	12.2	19,398	170,389
2022	164,163	9.7	15,924	140,133	13.0	21,341	177,198	12.2	20,028	171,630
2023	169,498	9.7	16,441	140,925	13.0	22,035	178,199	12.2	20,679	172,600
2024	175,007	9.7	16,976	141,470	13.0	22,751	178,888	12.2	21,351	173,267
2025	180,695	9.7	17,527	141,740	13.0	23,490	179,230	12.2	22,045	173,598

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(65) Benefit P	rogram
			Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	14.8%	\$20,054	\$ 188,444	16.1%	\$21,815	\$ 200,820	17.3%	\$23,441	\$ 215,592
2017	139,902	14.8	20,705	191,026	16.1	22,524	203,571	17.3	24,203	218,546
2018	144,449	14.8	21,378	193,435	16.1	23,256	206,138	17.3	24,990	221,302
2019	149,144	14.8	22,073	195,647	16.1	24,012	208,495	17.3	25,802	223,832
2020	153,991	14.8	22,791	197,635	16.1	24,793	210,613	17.3	26,640	226,106
2021	158,996	14.8	23,531	199,371	16.1	25,598	212,463	17.3	27,506	228,092
2022	164,163	14.8	24,296	200,823	16.1	26,430	214,011	17.3	28,400	229,754
2023	169,498	14.8	25,086	201,958	16.1	27,289	215,221	17.3	29,323	231,052
2024	175,007	14.8	25,901	202,739	16.1	28,176	216,053	17.3	30,276	231,945
2025	180,695	14.8	26,743	203,126	16.1	29,092	216,466	17.3	31,260	232,388

		L-12 Benefit Program			LT-14(65) Benefit F	Program	L-6 Benefit Program			
	T 4 1	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded		Employer	Unfunded	
	Estimated			Actuarial			Actuarial		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 135,498	19.4%	\$26,287	\$ 235,362	20.0%	\$27,100	\$ 242,737	22.5%	\$30,487	\$ 269,887	
2017	139,902	19.4	27,141	238,586	20.0	27,980	246,062	22.5	31,478	273,584	
2018	144,449	19.4	28,023	241,594	20.0	28,890	249,165	22.5	32,501	277,034	
2019	149,144	19.4	28,934	244,356	20.0	29,829	252,014	22.5	33,557	280,201	
2020	153,991	19.4	29,874	246,839	20.0	30,798	254,575	22.5	34,648	283,048	
2021	158,996	19.4	30,845	249,007	20.0	31,799	256,811	22.5	35,774	285,534	
2022	164,163	19.4	31,848	250,821	20.0	32,833	258,682	22.5	36,937	287,614	
2023	169,498	19.4	32,883	252,239	20.0	33,900	260,144	22.5	38,137	289,240	
2024	175,007	19.4	33,951	253,214	20.0	35,001	261,150	22.5	39,377	290,359	
2025	180,695	19.4	35,055	253,698	20.0	36,139	261,649	22.5	40,656	290,913	

- 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 Prog	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
			l Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contr	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
2016	\$ 135,498	13.2%	\$17,886	\$ 136,488	16.3%	\$22,086	\$ 170,629	15.6%	\$21,138	\$ 164,879
2017	139,902	13.2	18,467	138,358	16.3	22,804	172,967	15.6	21,825	167,138
2018	144,449	13.2	19,067	140,103	16.3	23,545	175,148	15.6	22,534	169,246
2019	149,144	13.2	19,687	141,705	16.3	24,310	177,150	15.6	23,266	171,181
2020	153,991	13.2	20,327	143,145	16.3	25,101	178,950	15.6	24,023	172,920
2021	158,996	13.2	20,987	144,402	16.3	25,916	180,522	15.6	24,803	174,439
2022	164,163	13.2	21,670	145,454	16.3	26,759	181,837	15.6	25,609	175,710
2023	169,498	13.2	22,374	146,276	16.3	27,628	182,865	15.6	26,442	176,703
2024	175,007	13.2	23,101	146,842	16.3	28,526	183,572	15.6	27,301	177,386
2025	180,695	13.2	23,852	147,122	16.3	29,453	183,923	15.6	28,188	177,725

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated		Estimated Employer Contribution			Estimated Employer Contribution			Employer bution	Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 135,498	18.1%	\$24,525	\$ 191,901	19.4%	\$26,287	\$ 204,732	20.6%	\$27,913	\$ 218,932	
2017	139,902	18.1	25,322	194,530	19.4	27,141	207,537	20.6	28,820	221,931	
2018	144,449	18.1	26,145	196,983	19.4	28,023	210,154	20.6	29,756	224,729	
2019	149,144	18.1	26,995	199,235	19.4	28,934	212,557	20.6	30,724	227,298	
2020	153,991	18.1	27,872	201,259	19.4	29,874	214,717	20.6	31,722	229,608	
2021	158,996	18.1	28,778	203,027	19.4	30,845	216,603	20.6	32,753	231,624	
2022	164,163	18.1	29,714	204,506	19.4	31,848	218,181	20.6	33,818	233,311	
2023	169,498	18.1	30,679	205,662	19.4	32,883	219,414	20.6	34,917	234,630	
2024	175,007	18.1	31,676	206,457	19.4	33,951	220,262	20.6	36,051	235,537	
2025	180,695	18.1	32,706	206,851	19.4	35,055	220,683	20.6	37,223	235,987	

		L-12	2 Benefit Pro	gram	LT-14(65) Benefit Program			L-6 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 % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 135,498	22.5%	\$30,487	\$ 238,872	23.1%	\$31,300	\$ 245,961	25.5%	\$34,552	\$ 272,989	
2017	139,902	22.5	31,478	242,145	23.1	32,317	249,331	25.5	35,675	276,729	
2018	144,449	22.5	32,501	245,198	23.1	33,368	252,475	25.5	36,834	280,218	
2019	149,144	22.5	33,557	248,001	23.1	34,452	255,362	25.5	38,032	283,422	
2020	153,991	22.5	34,648	250,521	23.1	35,572	257,957	25.5	39,268	286,302	
2021	158,996	22.5	35,774	252,721	23.1	36,728	260,222	25.5	40,544	288,816	
2022	164,163	22.5	36,937	254,562	23.1	37,922	262,118	25.5	41,862	290,920	
2023	169,498	22.5	38,137	256,001	23.1	39,154	263,599	25.5	43,222	292,564	
2024	175,007	22.5	39,377	256,991	23.1	40,427	264,618	25.5	44,627	293,695	
2025	180,695	22.5	40,656	257,482	23.1	41,741	265,123	25.5	46,077	294,256	

- 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

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	l 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
2016	\$ 135,498	13.6%	\$18,428	\$ 141,267	16.9%	\$22,899	\$ 176,583	16.1%	\$21,815	\$ 170,650
2017	139,902	13.6	19,027	143,202	16.9	23,643	179,002	16.1	22,524	172,988
2018	144,449	13.6	19,645	145,008	16.9	24,412	181,259	16.1	23,256	175,169
2019	149,144	13.6	20,284	146,666	16.9	25,205	183,331	16.1	24,012	177,172
2020	153,991	13.6	20,943	148,156	16.9	26,024	185,194	16.1	24,793	178,972
2021	158,996	13.6	21,623	149,457	16.9	26,870	186,820	16.1	25,598	180,544
2022	164,163	13.6	22,326	150,546	16.9	27,744	188,181	16.1	26,430	181,859
2023	169,498	13.6	23,052	151,397	16.9	28,645	189,245	16.1	27,289	182,887
2024	175,007	13.6	23,801	151,982	16.9	29,576	189,977	16.1	28,176	183,594
2025	180,695	13.6	24,575	152,272	16.9	30,537	190,340	16.1	29,092	183,945

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated	Employer	ployer Unfunded		Estimated Employer		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
2016	\$ 135,498	18.7%	\$25,338	\$ 198,623	20.0%	\$27,100	\$ 211,914	21.2%	\$28,726	\$ 226,606
2017	139,902	18.7	26,162	201,344	20.0	27,980	214,817	21.2	29,659	229,710
2018	144,449	18.7	27,012	203,883	20.0	28,890	217,526	21.2	30,623	232,606
2019	149,144	18.7	27,890	206,214	20.0	29,829	220,013	21.2	31,619	235,265
2020	153,991	18.7	28,796	208,309	20.0	30,798	222,249	21.2	32,646	237,656
2021	158,996	18.7	29,732	210,138	20.0	31,799	224,201	21.2	33,707	239,743
2022	164,163	18.7	30,698	211,669	20.0	32,833	225,834	21.2	34,803	241,489
2023	169,498	18.7	31,696	212,865	20.0	33,900	227,110	21.2	35,934	242,854
2024	175,007	18.7	32,726	213,688	20.0	35,001	227,988	21.2	37,101	243,793
2025	180,695	18.7	33,790	214,096	20.0	36,139	228,423	21.2	38,307	244,259

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 135,498	23.3%	\$31,571	\$ 247,231	23.9%	\$32,384	\$ 254,572	26.4%	\$35,771	\$ 282,546
2017	139,902	23.3	32,597	250,618	23.9	33,437	258,060	26.4	36,934	286,417
2018	144,449	23.3	33,657	253,778	23.9	34,523	261,314	26.4	38,135	290,029
2019	149,144	23.3	34,751	256,679	23.9	35,645	264,302	26.4	39,374	293,345
2020	153,991	23.3	35,880	259,287	23.9	36,804	266,988	26.4	40,654	296,326
2021	158,996	23.3	37,046	261,564	23.9	38,000	269,333	26.4	41,975	298,928
2022	164,163	23.3	38,250	263,469	23.9	39,235	271,295	26.4	43,339	301,105
2023	169,498	23.3	39,493	264,958	23.9	40,510	272,828	26.4	44,747	302,807
2024	175,007	23.3	40,777	265,983	23.9	41,827	273,883	26.4	46,202	303,978
2025	180,695	23.3	42,102	266,491	23.9	43,186	274,406	26.4	47,703	304,558

- 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.