

THE INITIAL ACTUARIAL VALUATION FOR CITY OF PLATTE WOODS AS OF JULY 31, 2017

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August 10, 2017

City of Platte Woods Platte Woods, 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 July 31, 2017. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

Mita Drazilov is a member of the American Academy of Actuaries and meets the Qualification Standards of the Academy of Actuaries to render the actuarial 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	Police	0.00%	5.20%	0.40%	5.60%
L-3	Police	0.00	7.00	0.50	7.50
LT-4(65)	Police	0.00	6.10	0.40	6.50
LT-5(65)	Police	0.00	7.70	0.50	8.20
L-7	Police	0.00	8.90	0.60	9.50
LT-8(65)	Police	0.00	9.40	0.60	10.00
L-12	Police	0.00	10.80	0.70	11.50
LT-14(65)	Police	0.00	10.90	0.70	11.60
L-6	Police	0.00	12.70	0.80	13.50

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

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Police	0.00%	5.40%	0.40%	5.80%
L-3	Police	0.00	7.30	0.50	7.80
LT-4(65)	Police	0.00	6.30	0.40	6.70
LT-5(65)	Police	0.00	8.00	0.50	8.50
L-7	Police	0.00	9.30	0.60	9.90
LT-8(65)	Police	0.00	9.70	0.60	10.30
L-12	Police	0.00	11.20	0.70	11.90
LT-14(65)	Police	0.00	11.40	0.70	12.10
L-6	Police	0.00	13.10	0.80	13.90

^{*} 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			
		·			Total
Benefit	Employee	Prior Service	Current	Disability	Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	Police	0.00%	8.50%	0.40%	8.90%
L-3	Police	0.00	10.40	0.50	10.90
LT-4(65)	Police	0.00	9.40	0.40	9.80
LT-5(65)	Police	0.00	11.00	0.50	11.50
L-7	Police	0.00	12.20	0.60	12.80
LT-8(65)	Police	0.00	12.70	0.60	13.30
L-12	Police	0.00	14.10	0.70	14.80
LT-14(65)	Police	0.00	14.40	0.70	15.10
L-6	Police	0.00	16.00	0.80	16.80

^{*} 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 (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	Police	0.00%	8.70%	0.40%	9.10%
L-3	Police	0.00	10.60	0.50	11.10
LT-4(65)	Police	0.00	9.60	0.40	10.00
LT-5(65)	Police	0.00	11.30	0.50	11.80
L-7	Police	0.00	12.60	0.60	13.20
LT-8(65)	Police	0.00	13.10	0.60	13.70
L-12	Police	0.00	14.50	0.70	15.20
LT-14(65)	Police	0.00	14.80	0.70	15.50
L-6	Police	0.00	16.50	0.80	17.30

^{*} 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	Employee	Prior Service	Current	Disability	Total Employer Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	Police	0.00%	5.20%	0.40%	5.60%
L-3	Police	0.00	7.00	0.50	7.50
LT-4(65)	Police	0.00	6.10	0.40	6.50
LT-5(65)	Police	0.00	7.70	0.50	8.20
L-7	Police	0.00	8.90	0.60	9.50
LT-8(65)	Police	0.00	9.40	0.60	10.00
L-12	Police	0.00	10.80	0.70	11.50
LT-14(65)	Police	0.00	11.00	0.70	11.70
L-6	Police	0.00	12.70	0.80	13.50

- # 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 (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
Tiugiaili	Groups	Cust	Cost	Cost	Nauc
L-1	Police	0.00%	5.40%	0.40%	5.80%
L-3	Police	0.00	7.30	0.50	7.80
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LT-5(65)	Police	0.00	8.00	0.50	8.50
L-7	Police	0.00	9.30	0.60	9.90
LT-8(65)	Police	0.00	9.70	0.60	10.30
L-12	Police	0.00	11.20	0.70	11.90
LT-14(65)	Police	0.00	11.40	0.70	12.10
L-6	Police	0.00	13.10	0.80	13.90

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Employer Contribution Rates (Non-Contributory Plan - 5 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
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L-7	Police	0.00	12.20	0.60	12.80
LT-8(65)	Police	0.00	12.70	0.60	13.30
L-12	Police	0.00	14.10	0.70	14.80
LT-14(65)	Police	0.00	14.40	0.70	15.10
L-6	Police	0.00	16.00	0.80	16.80

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Police	0.00%	8.70%	0.40%	9.10%
L-3	Police	0.00	10.60	0.50	11.10
LT-4(65)	Police	0.00	9.60	0.40	10.00
LT-5(65)	Police	0.00	11.30	0.50	11.80
L-7	Police	0.00	12.60	0.60	13.20
LT-8(65)	Police	0.00	13.10	0.60	13.70
L-12	Police	0.00	14.50	0.70	15.20
LT-14(65)	Police	0.00	14.80	0.70	15.50
L-6	Police	0.00	16.50	0.80	17.30

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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. <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	Police
L-1	\$ 5,152
L-3	6,900
LT-4(65)	5,980
LT-5(65)	7,544
L-7	8,740
LT-8(65)	9,200
L-12	10,580
LT-14(65)	10,672
L-6	12,420

3 Yea	r FAS
Benefit	
Program	Police
L-1	\$ 5,336
L-3	7,176
LT-4(65)	6,164
LT-5(65)	7,820
L-7	9,108
LT-8(65)	9,476
L-12	10,948
LT-14(65)	11,132
L-6	12,788

Non-Contributory Plan

5 Year	5 Year FAS			
Benefit				
Program	Police			
L-1	\$ 8,188			
L-3	10,028			
LT-4(65)	9,016			
LT-5(65)	10,580			
L-7	11,776			
LT-8(65)	12,236			
L-12	13,616			
LT-14(65)	13,892			
L-6	15,456			

3 Year FAS			
Benefit			
Program	Police		
L-1	\$ 8,372		
L-3	10,212		
LT-4(65)	9,200		
LT-5(65)	10,856		
L-7	12,144		
LT-8(65)	12,604		
L-12	13,984		
LT-14(65)	14,260		
L-6	15,916		

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	Police		
L-1	\$ 5,152		
L-3	6,900		
LT-4(65)	5,980		
LT-5(65)	7,544		
L-7	8,740		
LT-8(65)	9,200		
L-12	10,580		
LT-14(65)	10,764		
L-6	12,420		

3 Year FAS				
Benefit				
Program	Police			
L-1	\$ 5,336			
L-3	7,176			
LT-4(65)	6,164			
LT-5(65)	7,820			
L-7	9,108			
LT-8(65)	9,476			
L-12	10,948			
LT-14(65)	11,132			
L-6	12,788			

Non-Contributory Plan

5 Year FAS			
Benefit			
Program	Police		
L-1	\$ 8,188		
L-3	10,028		
LT-4(65)	9,016		
LT-5(65)	10,580		
L-7	11,776		
LT-8(65)	12,236		
L-12	13,616		
LT-14(65)	13,892		
L-6	15,456		

3 Year FAS			
Benefit			
Program	Police		
L-1	\$ 8,372		
L-3	10,212		
LT-4(65)	9,200		
LT-5(65)	10,856		
L-7	12,144		
LT-8(65)	12,604		
L-12	13,984		
LT-14(65)	14,260		
L-6	15,916		

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.

City of Platte Woods

Employees and Payroll Included in the Valuation

	Police
Number of Employees	2
Annual Payroll	\$ 92,000

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:

City of Platte Woods Regular Retirement Eligibility

		Contri	butory	Non-Cor	ntributory
Benefit Group	Employee Group	UAAL UAAL UAAL (5 Year FAS) (3 Year FAS) (5 Year FAS)			UAAL (3 Year FAS)
L-1	Police	\$ 1	\$ 14	\$ -	\$ -
L-3	Police	-	1	-	-
LT-4(65)	Police	-	8	7	-
LT-5(65)	Police	-	4	8	5
L-7	Police	-	-	3	-
LT-8(65)	Police	-	-	3	-
L-12	Police	-	2	-	-
LT-14(65)	Police	-	-	-	-
L-6	Police	-	-	-	14

City of Platte Woods <u>UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</u>

		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	Police	\$ 1	\$ 14	\$ -	\$ -
L-3	Police	-	1	-	-
LT-4(65)	Police	-	8	7	-
LT-5(65)	Police	-	4	8	5
L-7	Police	-	-	3	-
LT-8(65)	Police	-	-	3	-
L-12	Police	-	2	-	-
LT-14(65)	Police	-	-	-	-
L-6	Police	-	-	-	14

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 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: 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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$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	ce:			
\$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	ce:			
\$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.

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.

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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,016	1,891	95%
2,500	1,094	1,157	2,251	90%
3,000	1,313	1,297	2,610	87%
3,500	1,531	1,438	2,969	85%
4,000	1,750	1,579	3,329	83%
25 Years of Service	ce:			
\$1,500	\$ 469	\$ 875	\$1,344	90%
2,000	625	1,016	1,641	82%
2,500	781	1,157	1,938	78%
3,000	938	1,297	2,235	75%
3,500	1,094	1,438	2,532	72%
4,000	1,250	1,579	2,829	71%
15 Years of Service	ce:			
\$1,500	\$281	\$ 875	\$1,156	77%
2,000	375	1,016	1,391	70%
2,500	469	1,157	1,626	65%
3,000	563	1,297	1,860	62%
3,500	656	1,438	2,094	60%
4,000	750	1,579	2,329	58%

[&]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 2017 - 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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service	ce:			
\$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	ce:			
\$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	ce:			
\$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.

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.

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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Servi	ce:			
\$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 Servi	ce:			
\$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 Servi	ce:			
\$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.

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.

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)

	Estimated	Estin	nated
LAGERS	Social	Month	ly Total
BENEFIT ³	Security ²	\$	% of FAS
ee:			
\$1,050	\$ 875	\$1,925	128%
1,400	1,016	2,416	121%
1,750	1,157	2,907	116%
2,100	1,297	3,397	113%
2,450	1,438	3,888	111%
2,800	1,579	4,379	109%
ee:			
\$ 750	\$ 875	\$1,625	108%
1,000	1,016	2,016	101%
1,250	1,157	2,407	96%
1,500	1,297	2,797	93%
1,750	1,438	3,188	91%
2,000	1,579	3,579	89%
ee:			
\$ 450	\$ 875	\$1,325	88%
600	1,016	1,616	81%
750	1,157	1,907	76%
900	1,297	2,197	73%
1,050	1,438	2,488	71%
1,200	1,579	2,779	69%
	### SENEFIT 3 ### SE	LAGERS BENEFIT 3 Security 2 Tel: \$1,050 \$875 1,400 1,016 1,750 1,157 2,100 1,297 2,450 1,438 2,800 1,579 Tel: \$750 \$875 1,000 1,016 1,250 1,157 1,500 1,297 1,750 1,438 2,000 1,579 Tel: \$450 \$875 600 1,016 750 1,157 900 1,297 1,050 1,297 1,050 1,438	LAGERS BENEFIT 3 Social Security 2 Month Month Security 3 See: \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

[&]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 2017 - 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)

		Estimated			Per	
BEN	EFIT 3	Social	Montl	aly Total	of I	FAS
To 65	At 65	Security ²	To 65	At 65	To 65	At 65
ice:						
\$1,050	\$ 525	\$ 875	\$1,050	\$1,400	70%	93%
1,400	700	1,016	1,400	1,716	70%	86%
1,750	875	1,157	1,750	2,032	70%	81%
2,100	1,050	1,297	2,100	2,347	70%	78%
2,450	1,225	1,438	2,450	2,663	70%	76%
2,800	1,400	1,579	2,800	2,979	70%	74%
ice:						
\$ 750	\$ 375	\$ 875	\$ 750	\$1,250	50%	83%
1,000	500	1,016	1,000	1,516	50%	76%
1,250	625	1,157	1,250	1,782	50%	71%
1,500	750	1,297	1,500	2,047	50%	68%
1,750	875	1,438	1,750	2,313	50%	66%
2,000	1,000	1,579	2,000	2,579	50%	64%
ice:						
\$ 450	\$225	\$ 875	\$ 450	\$1,100	30%	73%
600	300	1,016	600	1,316	30%	66%
750	375	1,157	750	1,532	30%	61%
900	450	1,297	900	1,747	30%	58%
1,050	525	1,438	1,050	1,963	30%	56%
1,200	600	1,579	1,200	2,179	30%	54%
	## To 65 To 65 ice: \$1,050 1,400 1,750 2,100 2,450 2,800 ice: \$ 750 1,000 1,250 1,500 1,750 2,000 ice: \$ 450 600 750 900 1,050	\$1,050 \$ 525 1,400 700 1,750 875 2,100 1,050 2,450 1,225 2,800 1,400 ice: \$ 750 \$ 375 1,000 500 1,250 625 1,500 750 1,750 875 2,000 1,000 ice: \$ 450 \$225 600 300 750 375 900 450 1,050 525	BENEFIT 3 Social To 65 At 65 Security 2 ice: \$1,050 \$525 \$875 1,400 700 1,016 1,750 875 1,157 2,100 1,050 1,297 2,450 1,225 1,438 2,800 1,400 1,579 ice: \$750 \$375 \$875 1,000 500 1,016 1,250 625 1,157 1,500 750 1,297 1,750 875 1,438 2,000 1,000 1,579 ice: \$450 \$225 \$875 600 300 1,016 750 375 1,157 900 450 1,297 1,050 525 1,438	BENEFIT 3 Social Security 2 Month To 65 To 65 At 65 Security 2 To 65 Social Security 2 Month To 65 To 65 Social Security 2 To 65 To 65 Security 2 To 65 Security 2 To 65 To 65 \$1,050 1,400 1,016 1,400 1,750 2,100 1,579 2,800 1,000 1,001 1,000 1,250 1,250 625 1,157 1,250 1,500 750 1,297 1,500 1,750 875 1,438 1,750 2,000 1,000 1,579 2,000 Sec: **A 50	BENEFIT 3 Social Security 2 Monthly Total To 65 At 65 Security 2 To 65 At 65 size: \$1,050 \$1,400 1,400 700 1,016 1,400 1,716 1,750 875 1,157 1,750 2,032 2,100 1,050 1,297 2,100 2,347 2,450 1,225 1,438 2,450 2,663 2,800 1,400 1,579 2,800 2,979 ice: \$750 \$ 375 \$ 875 \$ 750 \$ 1,250 1,000 500 1,016 1,000 1,516 1,250 625 1,157 1,250 1,782 1,500 750 1,297 1,500 2,047 1,750 875 1,438 1,750 2,313 2,000 1,000 1,579 2,000 2,579 ice: \$450 \$225	BENEFIT 3 Social To 65 Monthly Total of B To 65 At 65 Security 2 To 65 At 65 To 65 sice: \$1,050 \$ 525 \$ 875 \$1,050 \$1,400 70% 1,400 700 1,016 1,400 1,716 70% 1,750 875 1,157 1,750 2,032 70% 2,100 1,050 1,297 2,100 2,347 70% 2,450 1,225 1,438 2,450 2,663 70% 2,800 1,400 1,579 2,800 2,979 70% ice: \$ 750 \$ 375 \$ 875 \$ 750 \$ 1,250 50% 1,000 500 1,016 1,000 1,516 50% 1,250 625 1,157 1,250 1,782 50% 1,500 750 1,297 1,500 2,047 50% 1,750 875 1,438 1,750 2,313 50%

[&]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 2017 - 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	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	\$ 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 Serv	ice:						
\$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 Serv	ice:						
\$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%

[&]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 2017 - 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		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 Servi	ice:						
\$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 Servi	ice:						
\$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 Servi	ice:						
\$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 "						

[&]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 2017 - 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		Estimated	Esti	mated	Percent		
Average	BEN	EFIT ³	Social	Montl	aly 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	\$ 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 Serv	ice:						
\$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 Serv	ice:						
\$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%

[&]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 2017 - 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

City of Platte Woods

July 31, 2017

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	1							1	\$ 46,000
40-44									
45-49									
50-54									
55-59									
60-64	1							1	\$ 46,000
65-69									·
70 & Over									
Totals	2							2	\$ 92,000

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

Age: 48.7 years.

Benefit Service: 0.1 years. Annual Pay: \$46,000.



August 10, 2017 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 July 31, 2017 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Platte Woods

Sincerely,

Mita D. Drazilov

MDD:adh



August 10, 2017

City of Platte Woods Platte Woods, 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, 2017 Initial Valuation for the City of Platte Woods dated August 10, 2017.

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 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 Pro	gram	L-3	Benefit Pro	gram	LT-4(65) Benefit Program			
	Estimated		Estimated Employer			Estimated Employer		Estimated Employer Contribution		Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 92,000	5.6%	\$5,152	\$ 1	7.5%	\$6,900	\$ -	6.5%	\$5,980	\$ -	
2018	94,990	5.6	5,319	1	7.5	7,124	-	6.5	6,174	-	
2019	98,077	5.6	5,492	1	7.5	7,356	-	6.5	6,375	-	
2020	101,265	5.6	5,671	1	7.5	7,595	-	6.5	6,582	-	
2021	104,556	5.6	5,855	1	7.5	7,842	-	6.5	6,796	-	
2022	107,954	5.6	6,045	1	7.5	8,097	-	6.5	7,017	-	
2023	111,463	5.6	6,242	1	7.5	8,360	-	6.5	7,245	-	
2024	115,086	5.6	6,445	1	7.5	8,631	-	6.5	7,481	-	
2025	118,826	5.6	6,654	1	7.5	8,912	-	6.5	7,724	-	
2026	122,688	5.6	6.871	1	7.5	9,202	_	6.5	7,975	_	

		LT-5(65) Benefit I	Program	L-7	Benefit Pro	gram	LT-8(65) Benefit Program			
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		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	
2017	\$ 92,000	8.2%	\$7,544	\$ -	9.5%	\$8,740	\$ -	10.0%	\$9,200	\$ -	
2018	94,990	8.2	7,789	-	9.5	9,024	-	10.0	9,499	-	
2019	98,077	8.2	8,042	-	9.5	9,317	-	10.0	9,808	-	
2020	101,265	8.2	8,304	-	9.5	9,620	-	10.0	10,127	-	
2021	104,556	8.2	8,574	-	9.5	9,933	-	10.0	10,456	-	
2022	107,954	8.2	8,852	-	9.5	10,256	-	10.0	10,795	-	
2023	111,463	8.2	9,140	-	9.5	10,589	-	10.0	11,146	-	
2024	115,086	8.2	9,437	-	9.5	10,933	-	10.0	11,509	-	
2025	118,826	8.2	9,744	-	9.5	11,288	-	10.0	11,883	-	
2026	122,688	8.2	10,060	_	9.5	11,655	-	10.0	12,269	-	

		L-12 Benefit Program			LT-14((65) Benefit l	Program	L-6 Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	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
2017	\$ 92,000	11.5%	\$10,580	\$ -	11.7%	\$10,764	\$ -	13.5%	\$12,420	\$ -
2018	94,990	11.5	10,924	-	11.7	11,114	-	13.5	12,824	-
2019	98,077	11.5	11,279	-	11.7	11,475	-	13.5	13,240	-
2020	101,265	11.5	11,645	-	11.7	11,848	-	13.5	13,671	-
2021	104,556	11.5	12,024	-	11.7	12,233	-	13.5	14,115	-
2022	107,954	11.5	12,415	-	11.7	12,631	-	13.5	14,574	-
2023	111,463	11.5	12,818	-	11.7	13,041	-	13.5	15,048	-
2024	115,086	11.5	13,235	-	11.7	13,465	-	13.5	15,537	-
2025	118,826	11.5	13,665	-	11.7	13,903	-	13.5	16,042	-
2026	122,688	11.5	14,109	-	11.7	14,354	-	13.5	16,563	-

- 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		
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contribution		Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 92,000	5.8%	\$5,336	\$ 14	7.8%	\$7,176	\$ 1	6.7%	\$6,164	\$8
2018	94,990	5.8	5,509	14	7.8	7,409	1	6.7	6,364	8
2019	98,077	5.8	5,688	14	7.8	7,650	1	6.7	6,571	8
2020	101,265	5.8	5,873	14	7.8	7,899	1	6.7	6,785	8
2021	104,556	5.8	6,064	14	7.8	8,155	1	6.7	7,005	8
2022	107,954	5.8	6,261	14	7.8	8,420	1	6.7	7,233	8
2023	111,463	5.8	6,465	14	7.8	8,694	1	6.7	7,468	8
2024	115,086	5.8	6,675	14	7.8	8,977	1	6.7	7,711	8
2025	118,826	5.8	6,892	14	7.8	9,268	1	6.7	7,961	8
2026	122,688	5.8	7.116	14	7.8	9.570	1	6.7	8.220	8

		LT-5(65) Benefit P	rogram	L-7	Benefit Pro	gram	LT-8(65) Benefit Program			
Estimated			l Employer ibution	Unfunded Actuarial	Estimated Employer Contribution		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	
2017	\$ 92,000	8.5%	\$7,820	\$4	9.9%	\$9,108	\$ -	10.3%	\$9,476	\$ -	
2018	94,990	8.5	8,074	4	9.9	9,404	-	10.3	9,784	-	
2019	98,077	8.5	8,337	4	9.9	9,710	-	10.3	10,102	-	
2020	101,265	8.5	8,608	4	9.9	10,025	-	10.3	10,430	-	
2021	104,556	8.5	8,887	4	9.9	10,351	-	10.3	10,769	-	
2022	107,954	8.5	9,176	4	9.9	10,687	-	10.3	11,119	-	
2023	111,463	8.5	9,474	4	9.9	11,035	-	10.3	11,481	-	
2024	115,086	8.5	9,782	4	9.9	11,394	-	10.3	11,854	-	
2025	118,826	8.5	10,100	4	9.9	11,764	-	10.3	12,239	-	
2026	122.688	8.5	10 428	4	99	12.146	_	10.3	12.637	_	

		L-12 Benefit Program			LT-14((65) Benefit l	Program	L-6 Benefit Program		
	Estimated	Estimated Employer mated Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		Estimated Employer Contribution	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 92,000	11.9%	\$10,948	\$ 2	12.1%	\$11,132	\$ -	13.9%	\$12,788	\$ -
2018	94,990	11.9	11,304	2	12.1	11,494	-	13.9	13,204	-
2019	98,077	11.9	11,671	2	12.1	11,867	-	13.9	13,633	-
2020	101,265	11.9	12,051	2	12.1	12,253	-	13.9	14,076	-
2021	104,556	11.9	12,442	2	12.1	12,651	-	13.9	14,533	-
2022	107,954	11.9	12,847	2	12.1	13,062	-	13.9	15,006	-
2023	111,463	11.9	13,264	2	12.1	13,487	-	13.9	15,493	-
2024	115,086	11.9	13,695	2	12.1	13,925	-	13.9	15,997	-
2025	118,826	11.9	14,140	2	12.1	14,378	-	13.9	16,517	-
2026	122,688	11.9	14,600	2	12.1	14,845	-	13.9	17,054	-

- 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				gram	L-3	Benefit Pro	gram	LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contr	Contribution		Contribution		Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 92,000	8.9%	\$8,188	\$ -	10.9%	\$10,028	\$ -	9.8%	\$9,016	\$ 7	
2018	94,990	8.9	8,454	-	10.9	10,354	-	9.8	9,309	7	
2019	98,077	8.9	8,729	-	10.9	10,690	-	9.8	9,612	7	
2020	101,265	8.9	9,013	-	10.9	11,038	-	9.8	9,924	7	
2021	104,556	8.9	9,305	-	10.9	11,397	-	9.8	10,246	7	
2022	107,954	8.9	9,608	-	10.9	11,767	-	9.8	10,579	7	
2023	111,463	8.9	9,920	-	10.9	12,149	-	9.8	10,923	7	
2024	115,086	8.9	10,243	-	10.9	12,544	-	9.8	11,278	7	
2025	118,826	8.9	10,576	-	10.9	12,952	-	9.8	11,645	7	
2026	122,688	8.9	10.919	_	10.9	13,373	-	9.8	12.023	7	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
Estimated		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 92,000	11.5%	\$10,580	\$8	12.8%	\$11,776	\$3	13.3%	\$12,236	\$ 3
2018	94,990	11.5	10,924	8	12.8	12,159	3	13.3	12,634	3
2019	98,077	11.5	11,279	8	12.8	12,554	3	13.3	13,044	3
2020	101,265	11.5	11,645	8	12.8	12,962	3	13.3	13,468	3
2021	104,556	11.5	12,024	8	12.8	13,383	3	13.3	13,906	3
2022	107,954	11.5	12,415	8	12.8	13,818	3	13.3	14,358	3
2023	111,463	11.5	12,818	8	12.8	14,267	3	13.3	14,825	3
2024	115,086	11.5	13,235	8	12.8	14,731	3	13.3	15,306	3
2025	118,826	11.5	13,665	8	12.8	15,210	3	13.3	15,804	3
2026	122,688	11.5	14,109	8	12.8	15,704	3	13.3	16,318	3

		L-12 Benefit Program			LT-14(65) Benefit l	Program	L-6 Benefit Program		
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 92,000	14.8%	\$13,616	\$ -	15.1%	\$13,892	\$ -	16.8%	\$15,456	\$ -
2018	94,990	14.8	14,059	-	15.1	14,343	-	16.8	15,958	-
2019	98,077	14.8	14,515	-	15.1	14,810	-	16.8	16,477	-
2020	101,265	14.8	14,987	-	15.1	15,291	-	16.8	17,013	-
2021	104,556	14.8	15,474	-	15.1	15,788	-	16.8	17,565	-
2022	107,954	14.8	15,977	-	15.1	16,301	-	16.8	18,136	-
2023	111,463	14.8	16,497	-	15.1	16,831	-	16.8	18,726	-
2024	115,086	14.8	17,033	-	15.1	17,378	-	16.8	19,334	-
2025	118,826	14.8	17,586	-	15.1	17,943	-	16.8	19,963	-
2026	122,688	14.8	18,158	-	15.1	18,526	-	16.8	20,612	-

- 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 Program			gram	L-3 Benefit Program			LT-4(65) Benefit Program		
	Estimated		ed Employer Unfunded tribution 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
2017	\$ 92,000	9.1%	\$8,372	\$ -	11.1%	\$10,212	\$ -	10.0%	\$9,200	\$ -
2018	94,990	9.1	8,644	-	11.1	10,544	-	10.0	9,499	-
2019	98,077	9.1	8,925	-	11.1	10,887	-	10.0	9,808	-
2020	101,265	9.1	9,215	-	11.1	11,240	-	10.0	10,127	-
2021	104,556	9.1	9,515	-	11.1	11,606	-	10.0	10,456	-
2022	107,954	9.1	9,824	-	11.1	11,983	-	10.0	10,795	-
2023	111,463	9.1	10,143	-	11.1	12,372	-	10.0	11,146	-
2024	115,086	9.1	10,473	-	11.1	12,775	-	10.0	11,509	-
2025	118,826	9.1	10,813	-	11.1	13,190	-	10.0	11,883	-
2026	122,688	9.1	11.165	_	11.1	13.618	_	10.0	12.269	_

		LT-5(65) Benefit P	rogram	L-7	Benefit Pro	gram	LT-8(65) Benefit Program		
	Estimated		l Employer ibution	Unfunded Actuarial		l 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
2017	\$ 92,000	11.8%	\$10,856	\$ 5	13.2%	\$12,144	\$ -	13.7%	\$12,604	\$ -
2018	94,990	11.8	11,209	5	13.2	12,539	-	13.7	13,014	-
2019	98,077	11.8	11,573	5	13.2	12,946	-	13.7	13,437	-
2020	101,265	11.8	11,949	5	13.2	13,367	-	13.7	13,873	-
2021	104,556	11.8	12,338	5	13.2	13,801	-	13.7	14,324	-
2022	107,954	11.8	12,739	5	13.2	14,250	-	13.7	14,790	-
2023	111,463	11.8	13,153	5	13.2	14,713	-	13.7	15,270	-
2024	115,086	11.8	13,580	5	13.2	15,191	-	13.7	15,767	-
2025	118,826	11.8	14,021	5	13.2	15,685	-	13.7	16,279	-
2026	122.688	11.8	14 477	5	13.2	16 195	_	13.7	16 808	_

		L-12	2 Benefit Pro	ogram	LT-14((65) Benefit l	Program	L-6	gram	
			Estimated Employer Unfunded Contribution Actuarial			Employer	Unfunded	Estimated Employer Contribution		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	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
2017	\$ 92,000	15.2%	\$13,984	\$ -	15.5%	\$14,260	\$ -	17.3%	\$15,916	\$ 14
2018	94,990	15.2	14,438	-	15.5	14,723	-	17.3	16,433	14
2019	98,077	15.2	14,908	-	15.5	15,202	-	17.3	16,967	14
2020	101,265	15.2	15,392	-	15.5	15,696	-	17.3	17,519	14
2021	104,556	15.2	15,893	-	15.5	16,206	-	17.3	18,088	14
2022	107,954	15.2	16,409	-	15.5	16,733	-	17.3	18,676	14
2023	111,463	15.2	16,942	-	15.5	17,277	-	17.3	19,283	14
2024	115,086	15.2	17,493	-	15.5	17,838	-	17.3	19,910	14
2025	118,826	15.2	18,062	-	15.5	18,418	-	17.3	20,557	14
2026	122,688	15.2	18,649	-	15.5	19,017	-	17.3	21,225	14

- 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 Program			L-3	Benefit Pro	gram	LT-4(65) Benefit Program		
			d Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded
	Estimated			Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 92,000	5.6%	\$5,152	\$ 1	7.5%	\$6,900	\$ -	6.5%	\$5,980	\$ -
2018	94,990	5.6	5,319	1	7.5	7,124	-	6.5	6,174	-
2019	98,077	5.6	5,492	1	7.5	7,356	-	6.5	6,375	-
2020	101,265	5.6	5,671	1	7.5	7,595	-	6.5	6,582	-
2021	104,556	5.6	5,855	1	7.5	7,842	-	6.5	6,796	-
2022	107,954	5.6	6,045	1	7.5	8,097	-	6.5	7,017	-
2023	111,463	5.6	6,242	1	7.5	8,360	-	6.5	7,245	-
2024	115,086	5.6	6,445	1	7.5	8,631	-	6.5	7,481	-
2025	118,826	5.6	6,654	1	7.5	8,912	-	6.5	7,724	-
2026	122,688	5.6	6.871	1	7.5	9,202	_	6.5	7,975	_

		LT-5(65) Benefit I	Program	L-7	Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		Estimated Employer Contribution			Employer	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 92,000	8.2%	\$7,544	\$ -	9.5%	\$8,740	\$ -	10.0%	\$9,200	\$ -	
2018	94,990	8.2	7,789	-	9.5	9,024	-	10.0	9,499	-	
2019	98,077	8.2	8,042	-	9.5	9,317	-	10.0	9,808	-	
2020	101,265	8.2	8,304	-	9.5	9,620	-	10.0	10,127	-	
2021	104,556	8.2	8,574	-	9.5	9,933	-	10.0	10,456	-	
2022	107,954	8.2	8,852	-	9.5	10,256	-	10.0	10,795	-	
2023	111,463	8.2	9,140	-	9.5	10,589	-	10.0	11,146	-	
2024	115,086	8.2	9,437	-	9.5	10,933	-	10.0	11,509	-	
2025	118,826	8.2	9,744	-	9.5	11,288	-	10.0	11,883	-	
2026	122,688	8.2	10,060	_	9.5	11,655	-	10.0	12,269	-	

		L-12 Benefit Program			LT-14((65) Benefit l	Program	L-6 Benefit Program			
	Estimated			Unfunded Actuarial	Estimated Contri		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 92,000	11.5%	\$10,580	\$ -	11.7%	\$10,764	\$ -	13.5%	\$12,420	\$ -	
2018	94,990	11.5	10,924	-	11.7	11,114	-	13.5	12,824	-	
2019	98,077	11.5	11,279	-	11.7	11,475	-	13.5	13,240	-	
2020	101,265	11.5	11,645	-	11.7	11,848	-	13.5	13,671	-	
2021	104,556	11.5	12,024	-	11.7	12,233	-	13.5	14,115	-	
2022	107,954	11.5	12,415	-	11.7	12,631	-	13.5	14,574	-	
2023	111,463	11.5	12,818	-	11.7	13,041	-	13.5	15,048	-	
2024	115,086	11.5	13,235	-	11.7	13,465	-	13.5	15,537	-	
2025	118,826	11.5	13,665	-	11.7	13,903	-	13.5	16,042	-	
2026	122,688	11.5	14,109	-	11.7	14,354	-	13.5	16,563	-	

- 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 Benefit Program			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	Contribution		Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 92,000	5.8%	\$5,336	\$ 14	7.8%	\$7,176	\$ 1	6.7%	\$6,164	\$8
2018	94,990	5.8	5,509	14	7.8	7,409	1	6.7	6,364	8
2019	98,077	5.8	5,688	14	7.8	7,650	1	6.7	6,571	8
2020	101,265	5.8	5,873	14	7.8	7,899	1	6.7	6,785	8
2021	104,556	5.8	6,064	14	7.8	8,155	1	6.7	7,005	8
2022	107,954	5.8	6,261	14	7.8	8,420	1	6.7	7,233	8
2023	111,463	5.8	6,465	14	7.8	8,694	1	6.7	7,468	8
2024	115,086	5.8	6,675	14	7.8	8,977	1	6.7	7,711	8
2025	118,826	5.8	6,892	14	7.8	9,268	1	6.7	7,961	8
2026	122,688	5.8	7.116	14	7.8	9,570	1	6.7	8.220	8

		LT-5(65) Benefit P	rogram	L-7	Benefit Pro	gram	LT-8(65) Benefit Program			
	Estimated		Estimated Employer Contribution			Employer	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 92,000	8.5%	\$7,820	\$4	9.9%	\$9,108	\$ -	10.3%	\$9,476	\$ -	
2018	94,990	8.5	8,074	4	9.9	9,404	-	10.3	9,784	-	
2019	98,077	8.5	8,337	4	9.9	9,710	-	10.3	10,102	-	
2020	101,265	8.5	8,608	4	9.9	10,025	-	10.3	10,430	-	
2021	104,556	8.5	8,887	4	9.9	10,351	-	10.3	10,769	-	
2022	107,954	8.5	9,176	4	9.9	10,687	-	10.3	11,119	-	
2023	111,463	8.5	9,474	4	9.9	11,035	-	10.3	11,481	-	
2024	115,086	8.5	9,782	4	9.9	11,394	-	10.3	11,854	-	
2025	118,826	8.5	10,100	4	9.9	11,764	-	10.3	12,239	-	
2026	122,688	8.5	10,428	4	9.9	12,146	-	10.3	12,637	-	

		L-12	2 Benefit Pro	gram	LT-14((65) Benefit l	Program	L-6 Benefit Program			
	Estimated Emp Estimated Contribution		1 - 3 -	Unfunded Actuarial	Estimated Contri	1 - 0	Unfunded Actuarial		Employer bution	Unfunded Actuarial	
Valuation Year	Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	
2017	\$ 92,000	11.9%	\$10,948	\$2	12.1%	\$11,132	\$ -	13.9%	\$12,788	\$ -	
2018	94,990	11.9	11,304	2	12.1	11,494	-	13.9	13,204	_	
2019	98,077	11.9	11,671	2	12.1	11,867	-	13.9	13,633	-	
2020	101,265	11.9	12,051	2	12.1	12,253	-	13.9	14,076	-	
2021	104,556	11.9	12,442	2	12.1	12,651	-	13.9	14,533	-	
2022	107,954	11.9	12,847	2	12.1	13,062	-	13.9	15,006	-	
2023	111,463	11.9	13,264	2	12.1	13,487	-	13.9	15,493	-	
2024	115,086	11.9	13,695	2	12.1	13,925	-	13.9	15,997	-	
2025	118,826	11.9	14,140	2	12.1	14,378	-	13.9	16,517	-	
2026	122,688	11.9	14,600	2	12.1	14,845	-	13.9	17,054	-	

- 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 Pro	gram	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	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	
2017	\$ 92,000	8.9%	\$8,188	\$ -	10.9%	\$10,028	\$ -	9.8%	\$9,016	\$7	
2018	94,990	8.9	8,454	-	10.9	10,354	-	9.8	9,309	7	
2019	98,077	8.9	8,729	-	10.9	10,690	-	9.8	9,612	7	
2020	101,265	8.9	9,013	-	10.9	11,038	-	9.8	9,924	7	
2021	104,556	8.9	9,305	-	10.9	11,397	-	9.8	10,246	7	
2022	107,954	8.9	9,608	-	10.9	11,767	-	9.8	10,579	7	
2023	111,463	8.9	9,920	-	10.9	12,149	-	9.8	10,923	7	
2024	115,086	8.9	10,243	-	10.9	12,544	-	9.8	11,278	7	
2025	118,826	8.9	10,576	-	10.9	12,952	-	9.8	11,645	7	
2026	122,688	8.9	10,919	_	10.9	13,373	-	9.8	12,023	7	

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution			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
2017	\$ 92,000	11.5%	\$10,580	\$8	12.8%	\$11,776	\$3	13.3%	\$12,236	\$3
2018	94,990	11.5	10,924	8	12.8	12,159	3	13.3	12,634	3
2019	98,077	11.5	11,279	8	12.8	12,554	3	13.3	13,044	3
2020	101,265	11.5	11,645	8	12.8	12,962	3	13.3	13,468	3
2021	104,556	11.5	12,024	8	12.8	13,383	3	13.3	13,906	3
2022	107,954	11.5	12,415	8	12.8	13,818	3	13.3	14,358	3
2023	111,463	11.5	12,818	8	12.8	14,267	3	13.3	14,825	3
2024	115,086	11.5	13,235	8	12.8	14,731	3	13.3	15,306	3
2025	118,826	11.5	13,665	8	12.8	15,210	3	13.3	15,804	3
2026	122,688	11.5	14,109	8	12.8	15,704	3	13.3	16,318	3

		L-12 Benefit Program			LT-14((65) Benefit l	Program	L-6 Benefit Program		
	Estimated		Estimated Employer Contribution		Estimated	Employer bution	Unfunded Actuarial	Estimated Employer Contribution		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
2017	\$ 92,000	14.8%	\$13,616	\$ -	15.1%	\$13,892	\$ -	16.8%	\$15,456	\$ -
2018	94,990	14.8	14,059	-	15.1	14,343	-	16.8	15,958	-
2019	98,077	14.8	14,515	-	15.1	14,810	-	16.8	16,477	-
2020	101,265	14.8	14,987	-	15.1	15,291	-	16.8	17,013	-
2021	104,556	14.8	15,474	-	15.1	15,788	-	16.8	17,565	-
2022	107,954	14.8	15,977	-	15.1	16,301	-	16.8	18,136	-
2023	111,463	14.8	16,497	-	15.1	16,831	-	16.8	18,726	-
2024	115,086	14.8	17,033	-	15.1	17,378	-	16.8	19,334	-
2025	118,826	14.8	17,586	-	15.1	17,943	-	16.8	19,963	-
2026	122,688	14.8	18,158	-	15.1	18,526	-	16.8	20,612	-

- 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 Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial Contr		ribution Actuarial		Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 92,000	9.1%	\$8,372	\$ -	11.1%	\$10,212	\$ -	10.0%	\$9,200	\$ -
2018	94,990	9.1	8,644	-	11.1	10,544	-	10.0	9,499	-
2019	98,077	9.1	8,925	-	11.1	10,887	-	10.0	9,808	-
2020	101,265	9.1	9,215	-	11.1	11,240	-	10.0	10,127	-
2021	104,556	9.1	9,515	-	11.1	11,606	-	10.0	10,456	-
2022	107,954	9.1	9,824	-	11.1	11,983	-	10.0	10,795	-
2023	111,463	9.1	10,143	-	11.1	12,372	-	10.0	11,146	-
2024	115,086	9.1	10,473	-	11.1	12,775	-	10.0	11,509	-
2025	118,826	9.1	10,813	-	11.1	13,190	-	10.0	11,883	-
2026	122,688	9.1	11,165	_	11.1	13,618	_	10.0	12,269	-

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) 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
2017	\$ 92,000	11.8%	\$10,856	\$ 5	13.2%	\$12,144	\$ -	13.7%	\$12,604	\$ -
2018	94,990	11.8	11,209	5	13.2	12,539	-	13.7	13,014	-
2019	98,077	11.8	11,573	5	13.2	12,946	-	13.7	13,437	-
2020	101,265	11.8	11,949	5	13.2	13,367	-	13.7	13,873	-
2021	104,556	11.8	12,338	5	13.2	13,801	-	13.7	14,324	-
2022	107,954	11.8	12,739	5	13.2	14,250	-	13.7	14,790	-
2023	111,463	11.8	13,153	5	13.2	14,713	-	13.7	15,270	-
2024	115,086	11.8	13,580	5	13.2	15,191	-	13.7	15,767	-
2025	118,826	11.8	14,021	5	13.2	15,685	-	13.7	16,279	-
2026	122,688	11.8	14,477	5	13.2	16,195	-	13.7	16,808	-

		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
2017	\$ 92,000	15.2%	\$13,984	\$ -	15.5%	\$14,260	\$ -	17.3%	\$15,916	\$ 14
2018	94,990	15.2	14,438	-	15.5	14,723	-	17.3	16,433	14
2019	98,077	15.2	14,908	-	15.5	15,202	-	17.3	16,967	14
2020	101,265	15.2	15,392	-	15.5	15,696	-	17.3	17,519	14
2021	104,556	15.2	15,893	-	15.5	16,206	-	17.3	18,088	14
2022	107,954	15.2	16,409	-	15.5	16,733	-	17.3	18,676	14
2023	111,463	15.2	16,942	-	15.5	17,277	-	17.3	19,283	14
2024	115,086	15.2	17,493	-	15.5	17,838	-	17.3	19,910	14
2025	118,826	15.2	18,062	-	15.5	18,418	-	17.3	20,557	14
2026	122,688	15.2	18,649	-	15.5	19,017	-	17.3	21,225	14

- 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.