

THE INITIAL ACTUARIAL VALUATION FOR
CITY OF HIGHLANDVILLE
AS OF JUNE 30, 2016

#### **Table of Contents**

Page
Actuary's Certification Letter
Alternate Plans Available
Employer Contribution Rates
Regular Eligibility: Contributory Plan
Non-Contributory Plan6
Rule of 80 Eligibility: Contributory Plan
Non-Contributory Plan
Employer Contribution Dollars
Appendix I  Unfunded Actuarial Accrued Liability
Appendix II
Summary of Financial Assumptions
Appendix III
Summary of LAGERS Provisions
Appendix IV
Benefit Illustrations
Appendix V
Age & Service Characteristics of Employees



July 22, 2016

City of Highlandville Highlandville, 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 June 30, 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 Drazilov, ASA, MAAA

#### **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			
		Prior			Total Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	4.60%	3.70%	0.20%	8.50%
	Police	3.60	4.00	0.40	8.00
L-3	General	5.80	5.30	0.30	11.40
	Police	4.60	5.60	0.50	10.70
LT-4(65)	General	5.20	4.50	0.20	9.90
	Police	4.70	5.60	0.40	10.70
LT-5(65)	General	6.30	5.90	0.30	12.50
	Police	5.40	6.80	0.50	12.70
L-7	General	7.00	6.80	0.30	14.10
	Police	5.60	7.30	0.60	13.50
LT-8(65)	General	7.30	7.30	0.30	14.90
	Police	6.10	8.10	0.60	14.80
L-12	General	8.20	8.50	0.40	17.10
	Police	6.60	8.90	0.70	16.20
LT-14(65)	General	8.40	8.60	0.40	17.40
	Police	6.90	9.30	0.70	16.90
L-6	General	9.40	10.10	0.50	20.00
	Police	7.60	10.60	0.80	19.00

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

### Employer Contribution Rates (Contributory Plan - 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	General	4.70%	3.90%	0.20%	8.80%
	Police	3.80	4.20	0.40	8.40
L-3	General	6.00	5.50	0.30	11.80
	Police	4.80	5.90	0.50	11.20
LT-4(65)	General	5.40	4.70	0.20	10.30
	Police	4.80	5.90	0.40	11.10
LT-5(65)	General	6.50	6.20	0.30	13.00
	Police	5.60	7.20	0.50	13.30
L-7	General	7.20	7.30	0.30	14.80
	Police	5.80	7.60	0.60	14.00
LT-8(65)	General	7.60	7.60	0.30	15.50
	Police	6.40	8.50	0.60	15.50
L-12	General	8.50	8.90	0.40	17.80
	Police	6.90	9.40	0.70	17.00
LT-14(65)	General	8.70	9.10	0.40	18.20
	Police	7.10	9.80	0.70	17.60
L-6	General	9.70	10.60	0.50	20.80
	Police	7.90	11.10	0.80	19.80

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

### Employer Contribution Rates (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	5.00%	7.20%	0.20%	12.40%
	Police	4.00	7.50	0.40	11.90
L-3	General	6.20	8.80	0.30	15.30
	Police	5.00	9.10	0.50	14.60
LT-4(65)	General	5.60	8.00	0.20	13.80
	Police	5.00	9.10	0.40	14.50
LT-5(65)	General	6.70	9.40	0.30	16.40
	Police	5.80	10.30	0.50	16.60
L-7	General	7.40	10.30	0.30	18.00
	Police	6.00	10.80	0.60	17.40
LT-8(65)	General	7.80	10.70	0.30	18.80
	Police	6.50	11.60	0.60	18.70
L-12	General	8.70	11.90	0.40	21.00
	Police	7.00	12.40	0.70	20.10
LT-14(65)	General	8.80	12.10	0.40	21.30
	Police	7.30	12.80	0.70	20.80
L-6	General	9.90	13.50	0.50	23.90
	Police	8.00	14.10	0.80	22.90

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

### 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	General	5.10%	7.40%	0.20%	12.70%
	Police	4.20	7.70	0.40	12.30
L-3	General	6.40	9.00	0.30	15.70
	Police	5.20	9.40	0.50	15.10
LT-4(65)	General	5.80	8.20	0.20	14.20
	Police	5.20	9.40	0.40	15.00
LT-5(65)	General	6.90	9.70	0.30	16.90
	Police	6.00	10.70	0.50	17.20
L-7	General	7.70	10.70	0.30	18.70
	Police	6.20	11.10	0.60	17.90
LT-8(65)	General	8.00	11.10	0.30	19.40
	Police	6.80	12.00	0.60	19.40
L-12	General	9.00	12.30	0.40	21.70
	Police	7.30	12.90	0.70	20.90
LT-14(65)	General	9.20	12.50	0.40	22.10
	Police	7.50	13.30	0.70	21.50
L-6	General	10.30	13.90	0.50	24.70
	Police	8.30	14.60	0.80	23.70

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

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	4.70%	3.80%	0.20%	8.70%
	Police	3.60	4.00	0.40	8.00
L-3	General	6.00	5.40	0.30	11.70
	Police	4.60	5.60	0.50	10.70
LT-4(65)	General	5.60	4.80	0.20	10.60
	Police	4.70	5.80	0.40	10.90
LT-5(65)	General	6.60	6.30	0.30	13.20
	Police	5.40	6.80	0.50	12.70
L-7	General	7.20	7.10	0.30	14.60
	Police	5.60	7.30	0.60	13.50
LT-8(65)	General	7.70	7.50	0.30	15.50
	Police	6.10	8.10	0.60	14.80
L-12	General	8.50	8.80	0.40	17.70
	Police	6.60	8.90	0.70	16.20
LT-14(65)	General	8.70	9.00	0.40	18.10
	Police	6.90	9.30	0.70	16.90
L-6	General	9.70	10.50	0.50	20.70
	Police	7.60	10.60	0.80	19.00

- # 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
L-1	General	4.90%	4.10%	0.20%	9.20%
	Police	3.80	4.20	0.40	8.40
L-3	General	6.20	5.70	0.30	12.20
	Police	4.80	5.90	0.50	11.20
LT-4(65)	General	5.80	5.00	0.20	11.00
	Police	4.80	5.90	0.40	11.10
LT-5(65)	General	6.90	6.50	0.30	13.70
	Police	5.60	7.20	0.50	13.30
L-7	General	7.50	7.50	0.30	15.30
	Police	5.80	7.60	0.60	14.00
LT-8(65)	General	8.00	7.90	0.30	16.20
	Police	6.40	8.50	0.60	15.50
L-12	General	8.80	9.20	0.40	18.40
	Police	6.90	9.40	0.70	17.00
LT-14(65)	General	9.00	9.40	0.40	18.80
	Police	7.10	9.80	0.70	17.60
L-6	General	10.10	10.80	0.50	21.40
	Police	7.90	11.10	0.80	19.80

- # The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.
- \* Assumes that credit is granted for 100% of service rendered prior to the membership date. 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	5.10%	7.30%	0.20%	12.60%
	Police	4.00	7.50	0.40	11.90
L-3	General	6.40	8.90	0.30	15.60
	Police	5.00	9.10	0.50	14.60
LT-4(65)	General	6.00	8.30	0.20	14.50
	Police	5.00	9.10	0.40	14.50
LT-5(65)	General	7.10	9.70	0.30	17.10
	Police	5.80	10.30	0.50	16.60
L-7	General	7.70	10.50	0.30	18.50
	Police	6.00	10.80	0.60	17.40
LT-8(65)	General	8.10	11.00	0.30	19.40
	Police	6.50	11.60	0.60	18.70
L-12	General	9.00	12.20	0.40	21.60
	Police	7.00	12.40	0.70	20.10
LT-14(65)	General	9.20	12.40	0.40	22.00
	Police	7.30	12.80	0.70	20.80
L-6	General	10.30	13.80	0.50	24.60
	Police	8.00	14.10	0.80	22.90

- # 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			
		Prior			Total Employer
Benefit	Employee	Service	Current	Disability	Contribution
Program	Groups	Cost *	Cost	Cost	Rate
L-1	General	5.30%	7.60%	0.20%	13.10%
	Police	4.20	7.70	0.40	12.30
L-3	General	6.60	9.20	0.30	16.10
	Police	5.20	9.40	0.50	15.10
LT-4(65)	General	6.20	8.50	0.20	14.90
	Police	5.20	9.40	0.40	15.00
LT-5(65)	General	7.30	10.00	0.30	17.60
	Police	6.00	10.70	0.50	17.20
L-7	General	8.00	10.90	0.30	19.20
	Police	6.20	11.10	0.60	17.90
LT-8(65)	General	8.40	11.40	0.30	20.10
	Police	6.80	12.00	0.60	19.40
L-12	General	9.30	12.60	0.40	22.30
	Police	7.30	12.90	0.70	20.90
LT-14(65)	General	9.50	12.80	0.40	22.70
	Police	7.50	13.30	0.70	21.50
L-6	General	10.60	14.20	0.50	25.30
	Police	8.30	14.60	0.80	23.70

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

#### **Employer Contribution 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 FAS					
Benefit						
Program	General	Police				
L-1	\$ 5,233	\$ 3,526				
L-3	7,018	4,715				
LT-4(65)	6,094	4,715				
LT-5(65)	7,695	5,597				
L-7	8,680	5,949				
LT-8(65)	9,172	6,522				
L-12	10,527	7,139				
LT-14(65)	10,711	7,448				
L-6	12,312	8,373				

	3 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 5,417	\$ 3,702				
L-3	7,264	4,936				
LT-4(65)	6,341	4,892				
LT-5(65)	8,003	5,861				
L-7	9,111	6,170				
LT-8(65)	9,542	6,831				
L-12	10,958	7,492				
LT-14(65)	11,204	7,756				
L-6	12,804	8,726				

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

	5 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 7,633	\$ 5,244				
L-3	9,419	6,434				
LT-4(65)	8,495	6,390				
LT-5(65)	10,096	7,316				
L-7	11,081	7,668				
LT-8(65)	11,573	8,241				
L-12	12,928	8,858				
LT-14(65)	13,112	9,167				
L-6	14,713	10,092				

	3 Year FAS						
Benefit							
Program	General	Police					
L-1	\$ 7,818	\$ 5,421					
L-3	9,665	6,655					
LT-4(65)	8,742	6,611					
LT-5(65)	10,404	7,580					
L-7	11,512	7,889					
LT-8(65)	11,943	8,550					
L-12	13,359	9,211					
LT-14(65)	13,605	9,475					
L-6	15,205	10,445					

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	Police				
L-1	\$ 5,356	\$ 3,526				
L-3	7,203	4,715				
LT-4(65)	6,525	4,804				
LT-5(65)	8,126	5,597				
L-7	8,988	5,949				
LT-8(65)	9,542	6,522				
L-12	10,896	7,139				
LT-14(65)	11,142	7,448				
L-6	12,743	8,373				

3 Year FAS					
Benefit					
Program	General	Police			
L-1	\$ 5,664	\$ 3,702			
L-3	7,510	4,936			
LT-4(65)	6,772	4,892			
LT-5(65)	8,434	5,861			
L-7	9,419	6,170			
LT-8(65)	9,973	6,831			
L-12	11,327	7,492			
LT-14(65)	11,573	7,756			
L-6	13,174	8,726			

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

5 Year FAS						
Benefit						
Program	General	Police				
L-1	\$ 7,757	\$ 5,244				
L-3	9,603	6,434				
LT-4(65)	8,926	6,390				
LT-5(65)	10,527	7,316				
L-7	11,389	7,668				
LT-8(65)	11,943	8,241				
L-12	13,297	8,858				
LT-14(65)	13,543	9,167				
L-6	15,144	10,092				

3 Year FAS					
Benefit					
Program	General	Police			
L-1	\$ 8,064	\$ 5,421			
L-3	9,911	6,655			
LT-4(65)	9,172	6,611			
LT-5(65)	10,835	7,580			
L-7	11,820	7,889			
LT-8(65)	12,374	8,550			
L-12	13,728	9,211			
LT-14(65)	13,974	9,475			
L-6	15,575	10,445			

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 Highlandville

Employees and Payroll Included in the Valuation

	General	Police
Number of Employees	2	2
Annual Payroll	\$ 61,560	\$ 44,070

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 Highlandville

Regular Retirement Eligibility

		Contri	butory	Non-Con	tributory
Benefit	Employee	UAAL	UAAL	UAAL	UAAL
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)
L-1	General	\$ 49,534	\$ 51,336	\$ 53,792	\$ 55,672
	Police	28,193	29,295	31,163	32,314
L-3	General	\$ 62,660	\$ 64,907	\$ 67,239	\$ 69,581
	Police	35,897	37,299	38,961	40,393
LT-4(65)	General	56,803	58,886	61,034	63,172
	Police	36,108	37,531	39,064	40,488
LT-5(65)	General	68,113	70,587	72,666	75,199
	Police	41,850	43,459	44,872	46,511
L-7	General	75,786	78,476	80,718	83,483
	Police	43,580	45,264	46,742	48,465
LT-8(65)	General	79,448	82,240	84,319	87,239
	Police	47,542	49,369	50,704	52,546
L-12	General	88,906	92,069	94,132	97,409
	Police	51,287	53,230	54,542	56,526
LT-14(65)	General	90,730	93,941	95,949	99,294
	Police	53,262	55,284	56,522	58,574
L-6	General	102,012	105,634	107,587	111,310
	Police	58,981	61,223	62,336	64,590

## City of Highlandville <u>UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</u>

		Contri		Non-Cor	ntributory
Benefit	Employee	UAAL	UAAL	UAAL	UAAL
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)
L-1	General	\$ 51,361	\$ 53,248	\$ 55,586	\$ 57,552
	Police	28,193	29,295	31,163	32,314
L-3	General	\$ 64,929	\$ 67,274	\$ 69,489	\$ 71,909
	Police	35,897	37,299	38,961	40,393
LT-4(65)	General	60,867	63,100	65,045	67,346
	Police	36,108	37,531	39,064	40,488
LT-5(65)	General	72,065	74,663	76,583	79,259
	Police	41,850	43,459	44,872	46,511
L-7	General	78,500	81,310	83,406	86,283
	Police	43,580	45,264	46,742	48,465
LT-8(65)	General	83,257	86,230	88,140	91,190
	Police	47,542	49,369	50,704	52,546
L-12	General	92,065	95,361	97,296	100,682
	Police	51,287	53,230	54,542	56,526
LT-14(65)	General	94,435	97,815	99,665	103,135
	Police	53,262	55,284	56,522	58,574
L-6	General	105,608	109,371	111,181	115,064
	Police	58,981	61,223	62,336	64,590

#### **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 7.25% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.00%. Adopted 2011 and 2016.
- 2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The pre-retirement mortality tables used were the RP-2014 employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. 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 3.25% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2016.
- 7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
- 8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.

Schedule 1.

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

			Percent of Acti eparating With	Percent Increase in Individual's Pay		
Sample	Years of	General 1	Members			<b>During Next Year</b>
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	<b>During Next Year</b>				
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		irement General Members Retireme		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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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 Service	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%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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		<b>Estimated</b>	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
35 Years of Service	e:			
\$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	ee:			
\$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	ee:			
\$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%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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	Estin	nated
Average	LAGERS	Social	Month	ly Total
Salary (FAS) <sup>1</sup>	BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% 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%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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  $^{I}$  )

	Estimated	Estin	nated
LAGERS	Social	Month	ly Total
BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
ee:			
\$1,050	\$ 882	\$1,932	129%
1,400	1,028	2,428	121%
1,750	1,174	2,924	117%
2,100	1,320	3,420	114%
2,450	1,465	3,915	112%
2,800	1,611	4,411	110%
ee:			
\$ 750	\$ 882	\$1,632	109%
1,000	1,028	2,028	101%
1,250	1,174	2,424	97%
1,500	1,320	2,820	94%
1,750	1,465	3,215	92%
2,000	1,611	3,611	90%
ee:			
\$ 450	\$ 882	\$1,332	89%
600	1,028	1,628	81%
750	1,174	1,924	77%
900	1,320	2,220	74%
1,050	1,465	2,515	72%
1,200	1,611	2,811	70%
	## SENEFIT 3  ##	LAGERS BENEFIT 3 Security 2  Tee:  \$1,050 \$882 1,400 1,028 1,750 1,174 2,100 1,320 2,450 1,465 2,800 1,611  Tee:  \$750 \$882 1,000 1,028 1,250 1,174 1,500 1,320 1,750 1,465 2,000 1,611  Tee:  \$450 \$882 600 1,028 750 1,174 900 1,320 1,050 1,320 1,050 1,320	LAGERS BENEFIT 3       Social Security 2       Month         see:       \$1,050       \$ 882       \$1,932         1,400       1,028       2,428         1,750       1,174       2,924         2,100       1,320       3,420         2,450       1,465       3,915         2,800       1,611       4,411         see:         \$ 750       \$ 882       \$1,632         1,000       1,028       2,028         1,250       1,174       2,424         1,500       1,320       2,820         1,750       1,465       3,215         2,000       1,611       3,611         see:         \$ 450       \$ 882       \$1,332         600       1,028       1,628         750       1,174       1,924         900       1,320       2,220         1,050       1,465       2,515

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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)

		Estimated			Per	
BEN	EFIT '	Social	Montl	aly Total	of I	FAS
To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
ce:						
\$1,050	\$ 525	\$ 882	\$1,050	\$1,407	70%	94%
1,400	700	1,028	1,400	1,728	70%	86%
1,750	875	1,174	1,750	2,049	70%	82%
2,100	1,050	1,320	2,100	2,370	70%	79%
2,450	1,225	1,465	2,450	2,690	70%	77%
2,800	1,400	1,611	2,800	3,011	70%	75%
ce:						
\$ 750	\$ 375	\$ 882	\$ 750	\$1,257	50%	84%
1,000	500	1,028	1,000	1,528	50%	76%
1,250	625	1,174	1,250	1,799	50%	72%
1,500	750	1,320	1,500	2,070	50%	69%
1,750	875	1,465	1,750	2,340	50%	67%
2,000	1,000	1,611	2,000	2,611	50%	65%
ce:						
\$ 450	\$225	\$ 882	\$ 450	\$1,107	30%	74%
600	300	1,028	600	1,328	30%	66%
750	375	1,174	750	1,549	30%	62%
900	450	1,320	900	1,770	30%	59%
1,050	525	1,465	1,050	1,990	30%	57%
1,200	600	1,611	1,200	2,211	30%	55%
	## To 65  To 65  ce:  \$1,050 1,400 1,750 2,100 2,450 2,800  ce:  \$750 1,000 1,250 1,500 1,750 2,000  ce:  \$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 ce: \$ 750 \$ 375 1,000 500 1,250 625 1,500 750 1,750 875 2,000 1,000 ce: \$ 450 \$225 600 300 750 375 900 450 1,050 525	BENEFIT 3         Social           To 65         At 65         Security 2           ce:           \$1,050         \$ 525         \$ 882           1,400         700         1,028           1,750         875         1,174           2,100         1,050         1,320           2,450         1,225         1,465           2,800         1,400         1,611           ce:           \$ 750         \$ 375         \$ 882           1,000         500         1,028           1,250         625         1,174           1,500         750         1,320           1,750         875         1,465           2,000         1,000         1,611           ce:           \$ 450         \$225         \$ 882           600         300         1,028           750         375         1,174           900         450         1,320           1,050         525         1,465	BENEFIT 3         Social Security 2         Month To 65           To 65         At 65         Security 2         To 65           ce:           \$1,050         \$1,050         \$1,050         \$1,400           1,750         875         1,174         1,750         \$2,100         \$2,450         \$2,100         \$2,450         \$2,450         \$2,450         \$2,450         \$2,800         \$1,400         \$1,611         \$2,800         \$2,800         \$2,450         \$2,800         \$2,450         \$2,800         \$2,900         \$2,500         \$2,500         \$2,500	BENEFIT 3         Social Security 2         Monthly Total To 65           To 65         At 65         Security 2         To 65         At 65           Security 2         To 65         At 65           Cee:           \$1,050         \$1,407           1,400         700         1,028         1,400         1,728           1,750         875         1,174         1,750         2,049           2,100         1,050         1,320         2,100         2,370           2,450         1,225         1,465         2,450         2,690           2,800         1,400         1,611         2,800         3,011           Sec:           \$ 375         \$ 882         \$ 750         \$1,257           1,000         500         1,028         1,000         1,528           1,250         625         1,174         1,250         1,799           1,500         750         1,320         1,500         2,070           1,750         875         1,465         1,750         2,340           2,000         1,000         1,611         2,000         2,611           Sec:	BENEFIT 3         Social To 65         Monthly Total         of B           ce:         \$1,050         \$ 525         \$ 882         \$1,050         \$1,407         70%           1,400         700         1,028         1,400         1,728         70%           1,750         875         1,174         1,750         2,049         70%           2,100         1,050         1,320         2,100         2,370         70%           2,450         1,225         1,465         2,450         2,690         70%           2,800         1,400         1,611         2,800         3,011         70%           ce:         \$ 750         \$ 375         \$ 882         \$ 750         \$ 1,257         50%           1,000         500         1,028         1,000         1,528         50%           1,250         625         1,174         1,250         1,799         50%           1,500         750         1,320         1,500         2,070         50%           1,750         875         1,465         1,750         2,340         50%           2,000         1,000         1,611         2,000         2,611         50% <td< td=""></td<>

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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	LAC	GERS	Estimated	Esti	mated	Per	cent
Average	BEN	EFIT <sup>3</sup>	Social	Montl	aly Total	of l	FAS
Salary (FAS) <sup>1</sup>	To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65
35 Years of Serv	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 Serv	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 Serv	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%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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 Average BENEFIT <sup>3</sup>					Percent of FAS		
				•			
To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65	
ice:							
\$1,050	\$ 788	\$ 882	\$1,050	\$1,670	70%	111%	
1,400	1,050	1,028	1,400	2,078	70%	104%	
1,750	1,313	1,174	1,750	2,487	70%	99%	
2,100	1,575	1,320	2,100	2,895	70%	97%	
2,450	1,838	1,465	2,450	3,303	70%	94%	
2,800	2,100	1,611	2,800	3,711	70%	93%	
ice:							
\$ 750	\$ 563	\$ 882	\$ 750	\$1,445	50%	96%	
1,000	750	1,028	1,000	1,778	50%	89%	
1,250	938	1,174	1,250	2,112	50%	84%	
1,500	1,125	1,320	1,500	2,445	50%	82%	
1,750	1,313	1,465	1,750	2,778	50%	79%	
2,000	1,500	1,611	2,000	3,111	50%	78%	
ice:							
\$ 450	\$338	\$ 882	\$ 450	\$1,220	30%	81%	
600	450	1,028	600	1,478	30%	74%	
750	563	1,174	750	1,737	30%	69%	
900	675	1,320	900	1,995	30%	67%	
1,050	788	1,465	1,050	2,253	30%	64%	
1,200	900	1,611	1,200	2,511	30%	63%	
	## To 65  To 65  fice:  \$1,050 1,400 1,750 2,100 2,450 2,800  fice:  \$750 1,000 1,250 1,500 1,750 2,000  fice:  \$450 600 750 900 1,050	BENEFIT 3           To 65         At 65           sice:         \$ 788           1,400         1,050           1,750         1,313           2,100         1,575           2,450         1,838           2,800         2,100           sice:         \$ 750         \$ 563           1,000         750           1,250         938           1,500         1,125           1,750         1,313           2,000         1,500           sice:         \$ 450           \$ 450         \$ 338           600         450           750         563           900         675           1,050         788	BENEFIT 3         Social           To 65         At 65         Security 2           ice:         \$1,050         \$788         \$882           1,400         1,050         1,028           1,750         1,313         1,174           2,100         1,575         1,320           2,450         1,838         1,465           2,800         2,100         1,611           ice:         \$750         \$563         \$882           1,000         750         1,028           1,250         938         1,174           1,500         1,125         1,320           1,750         1,313         1,465           2,000         1,500         1,611           ice:         \$450         \$338         \$882           600         450         1,028           750         563         1,174           900         675         1,320           1,050         788         1,465	BENEFIT 3         Social Security 2         Month To 65           To 65         At 65         Security 2         To 65           Social Security 2         Month To 65           To 65           Security 2         \$1,050           1,400         1,050         1,028         1,400           1,750         1,313         1,465         2,450           2,800         2,100         1,611         2,800           Sec:           \$ 750         1,028         1,000           1,250         938         1,174         1,250           1,500         1,125         1,320         1,500           1,750         1,313         1,465         1,750           2,000         1,500         1,611         2,000           Sec:    **To 65  **To 65	BENEFIT 3         Social Security 2         Monthly Total To 65           To 65         At 65         Security 2         To 65         At 65           Security 2         To 65         At 65           Security 2         To 65         At 65           Security 2         To 65         At 65           Security 2         To 65         At 65           Security 2         To 65         At 65           Security 2         To 65         At 65           \$1,050         \$1,670           1,400         1,050         1,028         1,400         2,078           1,750         1,338         1,465         2,450         3,303           2,800         2,100         1,611         2,800         3,711           Sec:           \$\$\frac{563}{3}\$         \$882         \$750         \$1,445           1,000         750         1,028         1,000         1,778           1,250         938         1,174         1,250         2,112           1,500         1,125         1,320         1,500         2,445           1,750         1,313         1,465         1,	BENEFIT 3         Social To 65         Monthly Total         of I To 65           At 65         Security 2         To 65         At 65         To 65           Sice:         \$1,050         \$1,670         70%           \$1,400         \$1,050         \$1,028         \$1,400         \$2,078         70%           \$1,750         \$1,313         \$1,174         \$1,750         \$2,487         70%         70%         2,100         \$2,895         70%         2,487         70%         2,2450         \$3,303         70%         2,2450         \$3,303         70%         2,2450         \$3,303         70%         2,2800         \$2,100         \$1,611         \$2,800         \$3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         30%         3,711         70%         3,711	

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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 <sup>1</sup> to age 65)
1.75% of FAS <sup>1</sup> at age 65)

35 Years of Service:  \$1,500 \$2,000 \$2,500 \$3,000 \$2,500 \$	BEN To 65	EFIT <sup>3</sup> At 65	_ Social	<u> Mo</u> ntl	ıly Total	of I	7 A C
35 Years of Service: \$1,500 \$1,2,000 \$1,2,500 \$1,3,000 \$2,3,500 \$2,500	To 65	At 65	3		, = = = ====	<u> </u>	FAS
\$1,500 \$1 2,000 1 2,500 1 3,000 2 3,500 2		110 00	Security <sup>2</sup>	To 65	At 65	To 65	At 65
2,000 1 2,500 1 3,000 2 3,500 2							
2,500 3,000 2 3,500 2	1,050	\$ 919	\$ 882	\$1,050	\$1,801	70%	120%
3,000 2 3,500 2	1,400	1,225	1,028	1,400	2,253	70%	113%
3,500	1,750	1,531	1,174	1,750	2,705	70%	108%
•	2,100	1,838	1,320	2,100	3,158	70%	105%
4,000	2,450	2,144	1,465	2,450	3,609	70%	103%
	2,800	2,450	1,611	2,800	4,061	70%	102%
25 Years of Service:							
\$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 Service:							
\$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		67%

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

<sup>&</sup>lt;sup>2</sup> "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 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

### June 30, 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									
45-49		1	1					2	\$ 61,560
50-54									
55-59									
60-64									
65-69									
70 & Over									
Totals		1	1					2	\$ 61,560

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

Age: 46.5 years.

Benefit Service: 9.4 years.

Annual Pay: \$30,780.

# June 30, 2016

# By Attained Age and Years of Service

		Year	s of Se	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	\$ 19,000
40-44		1						1	\$ 25,070
45-49									
50-54									
55-59									
60-64									
65-69									
70 & Over									
Totals	1	1						2	\$ 44,070

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

Age: 40.1 years.

Benefit Service: 6.3 years.

Annual Pay: \$22,035.



July 22, 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 June 30, 2016 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Highlandville

Sincerely,

Mita D. Drazilov

MDD:adh



July 22, 2016

City of Highlandville Highlandville, 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 June 30, 2016 Initial Valuation for the City of Highlandville dated July 22, 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			gram	L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
			l Employer	Unfunded		l Employer	Unfunded		l Employer	Unfunded	
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 61,560	8.5%	\$5,233	\$ 49,534	11.4%	\$7,018	\$ 62,660	9.9%	\$6,094	\$ 56,803	
2017	63,561	8.5	5,403	50,213	11.4	7,246	63,518	9.9	6,293	57,581	
2018	65,627	8.5	5,578	50,846	11.4	7,481	64,319	9.9	6,497	58,307	
2019	67,760	8.5	5,760	51,427	11.4	7,725	65,054	9.9	6,708	58,974	
2020	69,962	8.5	5,947	51,950	11.4	7,976	65,715	9.9	6,926	59,573	
2021	72,236	8.5	6,140	52,406	11.4	8,235	66,292	9.9	7,151	60,096	
2022	74,584	8.5	6,340	52,788	11.4	8,503	66,775	9.9	7,384	60,534	
2023	77,008	8.5	6,546	53,086	11.4	8,779	67,152	9.9	7,624	60,876	
2024	79,511	8.5	6,758	53,291	11.4	9,064	67,412	9.9	7,872	61,111	
2025	82.095	8.5	6.978	53,393	11.4	9.359	67.541	9.9	8.127	61.228	

		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	
2016	\$ 61,560	12.5%	\$7,695	\$ 68,113	14.1%	\$8,680	\$ 75,786	14.9%	\$9,172	\$ 79,448	
2017	63,561	12.5	7,945	69,046	14.1	8,962	76,824	14.9	9,471	80,536	
2018	65,627	12.5	8,203	69,917	14.1	9,253	77,793	14.9	9,778	81,552	
2019	67,760	12.5	8,470	70,716	14.1	9,554	78,682	14.9	10,096	82,484	
2020	69,962	12.5	8,745	71,435	14.1	9,865	79,481	14.9	10,424	83,322	
2021	72,236	12.5	9,030	72,062	14.1	10,185	80,179	14.9	10,763	84,054	
2022	74,584	12.5	9,323	72,587	14.1	10,516	80,763	14.9	11,113	84,666	
2023	77,008	12.5	9,626	72,997	14.1	10,858	81,219	14.9	11,474	85,145	
2024	79,511	12.5	9,939	73,279	14.1	11,211	81,533	14.9	11,847	85,474	
2025	82,095	12.5	10,262	73,419	14.1	11,575	81,689	14.9	12,232	85,637	

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
			Estimated Employer		nded Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	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	\$ 61,560	17.1%	\$10,527	\$ 88,906	17.4%	\$10,711	\$ 90,730	20.0%	\$12,312	\$ 102,012
2017	63,561	17.1	10,869	90,124	17.4	11,060	91,973	20.0	12,712	103,410
2018	65,627	17.1	11,222	91,260	17.4	11,419	93,133	20.0	13,125	104,714
2019	67,760	17.1	11,587	92,303	17.4	11,790	94,198	20.0	13,552	105,911
2020	69,962	17.1	11,964	93,241	17.4	12,173	95,155	20.0	13,992	106,987
2021	72,236	17.1	12,352	94,060	17.4	12,569	95,991	20.0	14,447	107,927
2022	74,584	17.1	12,754	94,745	17.4	12,978	96,690	20.0	14,917	108,713
2023	77,008	17.1	13,168	95,280	17.4	13,399	97,236	20.0	15,402	109,327
2024	79,511	17.1	13,596	95,648	17.4	13,835	97,612	20.0	15,902	109,750
2025	82,095	17.1	14,038	95,831	17.4	14,285	97,798	20.0	16,419	109,960

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded	Estimated 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	
2016	\$ 61,560	8.8%	\$5,417	\$ 51,336	11.8%	\$7,264	\$ 64,907	10.3%	\$6,341	\$ 58,886	
2017	63,561	8.8	5,593	52,039	11.8	7,500	65,796	10.3	6,547	59,693	
2018	65,627	8.8	5,775	52,695	11.8	7,744	66,626	10.3	6,760	60,446	
2019	67,760	8.8	5,963	53,297	11.8	7,996	67,388	10.3	6,979	61,137	
2020	69,962	8.8	6,157	53,839	11.8	8,256	68,073	10.3	7,206	61,758	
2021	72,236	8.8	6,357	54,312	11.8	8,524	68,671	10.3	7,440	62,300	
2022	74,584	8.8	6,563	54,708	11.8	8,801	69,171	10.3	7,682	62,754	
2023	77,008	8.8	6,777	55,017	11.8	9,087	69,562	10.3	7,932	63,109	
2024	79,511	8.8	6,997	55,230	11.8	9,382	69,831	10.3	8,190	63,353	
2025	82,095	8.8	7,224	55,335	11.8	9,687	69,964	10.3	8,456	63,474	

		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	
2016	\$ 61,560	13.0%	\$8,003	\$ 70,587	14.8%	\$9,111	\$ 78,476	15.5%	\$9,542	\$ 82,240	
2017	63,561	13.0	8,263	71,554	14.8	9,407	79,551	15.5	9,852	83,367	
2018	65,627	13.0	8,532	72,456	14.8	9,713	80,554	15.5	10,172	84,418	
2019	67,760	13.0	8,809	73,284	14.8	10,028	81,475	15.5	10,503	85,383	
2020	69,962	13.0	9,095	74,029	14.8	10,354	82,303	15.5	10,844	86,251	
2021	72,236	13.0	9,391	74,679	14.8	10,691	83,026	15.5	11,197	87,008	
2022	74,584	13.0	9,696	75,223	14.8	11,038	83,631	15.5	11,561	87,642	
2023	77,008	13.0	10,011	75,648	14.8	11,397	84,104	15.5	11,936	88,137	
2024	79,511	13.0	10,336	75,941	14.8	11,768	84,429	15.5	12,324	88,478	
2025	82,095	13.0	10,672	76,086	14.8	12,150	84,590	15.5	12,725	88,647	

		L-12 Benefit Program			LT-14(	(65) Benefit F	Program	L-6 Benefit Program		
			Estimated Employer Contribution			Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	Actuarial	Contribution		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	\$ 61,560	17.8%	\$10,958	\$ 92,069	18.2%	\$11,204	\$ 93,941	20.8%	\$12,804	\$ 105,634
2017	63,561	17.8	11,314	93,330	18.2	11,568	95,228	20.8	13,221	107,081
2018	65,627	17.8	11,682	94,507	18.2	11,944	96,429	20.8	13,650	108,431
2019	67,760	17.8	12,061	95,587	18.2	12,332	97,531	20.8	14,094	109,671
2020	69,962	17.8	12,453	96,558	18.2	12,733	98,522	20.8	14,552	110,785
2021	72,236	17.8	12,858	97,406	18.2	13,147	99,387	20.8	15,025	111,758
2022	74,584	17.8	13,276	98,116	18.2	13,574	100,111	20.8	15,513	112,572
2023	77,008	17.8	13,707	98,671	18.2	14,015	100,677	20.8	16,018	113,208
2024	79,511	17.8	14,153	99,053	18.2	14,471	101,066	20.8	16,538	113,646
2025	82,095	17.8	14,613	99,242	18.2	14,941	101,259	20.8	17,076	113,863

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	l Employer	Unfunded	Estimated 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	
2016	\$ 61,560	12.4%	\$7,633	\$ 53,792	15.3%	\$9,419	\$ 67,239	13.8%	\$8,495	\$ 61,034	
2017	63,561	12.4	7,882	54,529	15.3	9,725	68,160	13.8	8,771	61,870	
2018	65,627	12.4	8,138	55,217	15.3	10,041	69,019	13.8	9,057	62,650	
2019	67,760	12.4	8,402	55,848	15.3	10,367	69,808	13.8	9,351	63,366	
2020	69,962	12.4	8,675	56,415	15.3	10,704	70,517	13.8	9,655	64,010	
2021	72,236	12.4	8,957	56,910	15.3	11,052	71,136	13.8	9,969	64,572	
2022	74,584	12.4	9,248	57,325	15.3	11,411	71,654	13.8	10,293	65,042	
2023	77,008	12.4	9,549	57,649	15.3	11,782	72,059	13.8	10,627	65,410	
2024	79,511	12.4	9,859	57,872	15.3	12,165	72,338	13.8	10,973	65,663	
2025	82.095	12.4	10.180	57,983	15.3	12,561	72,476	13.8	11.329	65,788	

		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	
2016	\$ 61,560	16.4%	\$10,096	\$ 72,666	18.0%	\$11,081	\$ 80,718	18.8%	\$11,573	\$ 84,319	
2017	63,561	16.4	10,424	73,662	18.0	11,441	81,824	18.8	11,949	85,474	
2018	65,627	16.4	10,763	74,591	18.0	11,813	82,856	18.8	12,338	86,552	
2019	67,760	16.4	11,113	75,444	18.0	12,197	83,803	18.8	12,739	87,542	
2020	69,962	16.4	11,474	76,211	18.0	12,593	84,655	18.8	13,153	88,432	
2021	72,236	16.4	11,847	76,880	18.0	13,002	85,398	18.8	13,580	89,209	
2022	74,584	16.4	12,232	77,440	18.0	13,425	86,020	18.8	14,022	89,859	
2023	77,008	16.4	12,629	77,878	18.0	13,861	86,506	18.8	14,478	90,367	
2024	79,511	16.4	13,040	78,179	18.0	14,312	86,841	18.8	14,948	90,716	
2025	82,095	16.4	13,464	78,328	18.0	14,777	87,007	18.8	15,434	90,889	

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated		Unfunded	Estimated		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	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	\$ 61,560	21.0%	\$12,928	\$ 94,132	21.3%	\$13,112	\$ 95,949	23.9%	\$14,713	\$ 107,587
2017	63,561	21.0	13,348	95,422	21.3	13,538	97,263	23.9	15,191	109,061
2018	65,627	21.0	13,782	96,625	21.3	13,979	98,489	23.9	15,685	110,436
2019	67,760	21.0	14,230	97,730	21.3	14,433	99,615	23.9	16,195	111,699
2020	69,962	21.0	14,692	98,723	21.3	14,902	100,627	23.9	16,721	112,834
2021	72,236	21.0	15,170	99,590	21.3	15,386	101,511	23.9	17,264	113,825
2022	74,584	21.0	15,663	100,315	21.3	15,886	102,250	23.9	17,826	114,654
2023	77,008	21.0	16,172	100,882	21.3	16,403	102,828	23.9	18,405	115,302
2024	79,511	21.0	16,697	101,272	21.3	16,936	103,226	23.9	19,003	115,748
2025	82,095	21.0	17,240	101,465	21.3	17,486	103,423	23.9	19,621	115,969

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

## Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program		
		Estimated 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
2016	\$ 61,560	12.7%	\$7,818	\$ 55,672	15.7%	\$9,665	\$ 69,581	14.2%	\$8,742	\$ 63,172
2017	63,561	12.7	8,072	56,435	15.7	9,979	70,534	14.2	9,026	64,037
2018	65,627	12.7	8,335	57,147	15.7	10,303	71,423	14.2	9,319	64,844
2019	67,760	12.7	8,606	57,800	15.7	10,638	72,240	14.2	9,622	65,585
2020	69,962	12.7	8,885	58,387	15.7	10,984	72,974	14.2	9,935	66,251
2021	72,236	12.7	9,174	58,900	15.7	11,341	73,615	14.2	10,258	66,833
2022	74,584	12.7	9,472	59,329	15.7	11,710	74,151	14.2	10,591	67,320
2023	77,008	12.7	9,780	59,664	15.7	12,090	74,570	14.2	10,935	67,700
2024	79,511	12.7	10,098	59,895	15.7	12,483	74,858	14.2	11,291	67,962
2025	82,095	12.7	10,426	60,009	15.7	12,889	75,001	14.2	11,657	68,092

		LT-5(65) Benefit Program Estimated Employer Unfunded			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		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
2016	\$ 61,560	16.9%	\$10,404	\$ 75,199	18.7%	\$11,512	\$ 83,483	19.4%	\$11,943	\$ 87,239
2017	63,561	16.9	10,742	76,229	18.7	11,886	84,627	19.4	12,331	88,434
2018	65,627	16.9	11,091	77,190	18.7	12,272	85,694	19.4	12,732	89,549
2019	67,760	16.9	11,451	78,073	18.7	12,671	86,674	19.4	13,145	90,573
2020	69,962	16.9	11,824	78,866	18.7	13,083	87,555	19.4	13,573	91,493
2021	72,236	16.9	12,208	79,559	18.7	13,508	88,324	19.4	14,014	92,297
2022	74,584	16.9	12,605	80,139	18.7	13,947	88,967	19.4	14,469	92,969
2023	77,008	16.9	13,014	80,592	18.7	14,400	89,470	19.4	14,940	93,494
2024	79,511	16.9	13,437	80,904	18.7	14,869	89,816	19.4	15,425	93,856
2025	82,095	16.9	13,874	81,058	18.7	15,352	89,988	19.4	15,926	94,035

		L-12 Benefit Program			LT-14(	(65) Benefit I	Program	L-6 Benefit Program			
		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	\$ 61,560	21.7%	\$13,359	\$ 97,409	22.1%	\$13,605	\$ 99,294	24.7%	\$15,205	\$ 111,310	
2017	63,561	21.7	13,793	98,743	22.1	14,047	100,654	24.7	15,700	112,835	
2018	65,627	21.7	14,241	99,988	22.1	14,504	101,923	24.7	16,210	114,258	
2019	67,760	21.7	14,704	101,131	22.1	14,975	103,088	24.7	16,737	115,564	
2020	69,962	21.7	15,182	102,159	22.1	15,462	104,135	24.7	17,281	116,738	
2021	72,236	21.7	15,675	103,056	22.1	15,964	105,050	24.7	17,842	117,763	
2022	74,584	21.7	16,185	103,807	22.1	16,483	105,815	24.7	18,422	118,621	
2023	77,008	21.7	16,711	104,394	22.1	17,019	106,413	24.7	19,021	119,291	
2024	79,511	21.7	17,254	104,798	22.1	17,572	106,825	24.7	19,639	119,752	
2025	82,095	21.7	17,815	104,998	22.1	18,143	107,029	24.7	20,277	119,981	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
			imated Employer Unf		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 61,560	8.7%	\$5,356	\$ 51,361	11.7%	\$7,203	\$ 64,929	10.6%	\$6,525	\$ 60,867
2017	63,561	8.7	5,530	52,065	11.7	7,437	65,819	10.6	6,737	61,701
2018	65,627	8.7	5,710	52,722	11.7	7,678	66,649	10.6	6,956	62,479
2019	67,760	8.7	5,895	53,325	11.7	7,928	67,411	10.6	7,183	63,193
2020	69,962	8.7	6,087	53,867	11.7	8,186	68,096	10.6	7,416	63,835
2021	72,236	8.7	6,285	54,340	11.7	8,452	68,694	10.6	7,657	64,396
2022	74,584	8.7	6,489	54,736	11.7	8,726	69,194	10.6	7,906	64,865
2023	77,008	8.7	6,700	55,045	11.7	9,010	69,585	10.6	8,163	65,232
2024	79,511	8.7	6,917	55,258	11.7	9,303	69,854	10.6	8,428	65,484
2025	82,095	8.7	7,142	55,364	11.7	9,605	69,987	10.6	8,702	65,609

		LT-5(65) Benefit Program Estimated Employer Unfunded			L-7 Benefit Program			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	
2016	\$ 61,560	13.2%	\$8,126	\$ 72,065	14.6%	\$8,988	\$ 78,500	15.5%	\$9,542	\$ 83,257	
2017	63,561	13.2	8,390	73,052	14.6	9,280	79,575	15.5	9,852	84,398	
2018	65,627	13.2	8,663	73,973	14.6	9,582	80,578	15.5	10,172	85,462	
2019	67,760	13.2	8,944	74,819	14.6	9,893	81,499	15.5	10,503	86,439	
2020	69,962	13.2	9,235	75,579	14.6	10,214	82,327	15.5	10,844	87,317	
2021	72,236	13.2	9,535	76,243	14.6	10,546	83,050	15.5	11,197	88,084	
2022	74,584	13.2	9,845	76,798	14.6	10,889	83,655	15.5	11,561	88,726	
2023	77,008	13.2	10,165	77,232	14.6	11,243	84,128	15.5	11,936	89,227	
2024	79,511	13.2	10,495	77,531	14.6	11,609	84,453	15.5	12,324	89,572	
2025	82,095	13.2	10,837	77,679	14.6	11,986	84,614	15.5	12,725	89,743	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	T 4 1	Estimated Employer Estimated Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	
	Estimated			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	\$ 61,560	17.7%	\$10,896	\$ 92,065	18.1%	\$11,142	\$ 94,435	20.7%	\$12,743	\$ 105,608	
2017	63,561	17.7	11,250	93,326	18.1	11,505	95,729	20.7	13,157	107,055	
2018	65,627	17.7	11,616	94,503	18.1	11,878	96,936	20.7	13,585	108,405	
2019	67,760	17.7	11,994	95,583	18.1	12,265	98,044	20.7	14,026	109,644	
2020	69,962	17.7	12,383	96,554	18.1	12,663	99,040	20.7	14,482	110,758	
2021	72,236	17.7	12,786	97,402	18.1	13,075	99,910	20.7	14,953	111,731	
2022	74,584	17.7	13,201	98,112	18.1	13,500	100,638	20.7	15,439	112,545	
2023	77,008	17.7	13,630	98,666	18.1	13,938	101,207	20.7	15,941	113,181	
2024	79,511	17.7	14,073	99,048	18.1	14,391	101,598	20.7	16,459	113,619	
2025	82,095	17.7	14,531	99,237	18.1	14,859	101,792	20.7	16,994	113,836	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program			
	Estimated Emplo		Employer Unfunded		Estimated	Estimated Employer		Estimated Employer		Unfunded	
	Estimated	Contr	ibution	Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 61,560	9.2%	\$5,664	\$ 53,248	12.2%	\$7,510	\$ 67,274	11.0%	\$6,772	\$ 63,100	
2017	63,561	9.2	5,848	53,977	12.2	7,754	68,196	11.0	6,992	63,964	
2018	65,627	9.2	6,038	54,658	12.2	8,006	69,056	11.0	7,219	64,771	
2019	67,760	9.2	6,234	55,283	12.2	8,267	69,846	11.0	7,454	65,512	
2020	69,962	9.2	6,437	55,845	12.2	8,535	70,556	11.0	7,696	66,178	
2021	72,236	9.2	6,646	56,335	12.2	8,813	71,176	11.0	7,946	66,759	
2022	74,584	9.2	6,862	56,745	12.2	9,099	71,694	11.0	8,204	67,245	
2023	77,008	9.2	7,085	57,066	12.2	9,395	72,099	11.0	8,471	67,625	
2024	79,511	9.2	7,315	57,287	12.2	9,700	72,378	11.0	8,746	67,887	
2025	82,095	9.2	7,553	57,396	12.2	10,016	72,516	11.0	9,030	68,017	

		LT-5(65) Benefit Program			L-7 Benefit Program			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	
2016	\$ 61,560	13.7%	\$8,434	\$ 74,663	15.3%	\$9,419	\$ 81,310	16.2%	\$9,973	\$ 86,230	
2017	63,561	13.7	8,708	75,686	15.3	9,725	82,424	16.2	10,297	87,411	
2018	65,627	13.7	8,991	76,640	15.3	10,041	83,463	16.2	10,632	88,513	
2019	67,760	13.7	9,283	77,516	15.3	10,367	84,417	16.2	10,977	89,525	
2020	69,962	13.7	9,585	78,304	15.3	10,704	85,275	16.2	11,334	90,435	
2021	72,236	13.7	9,896	78,992	15.3	11,052	86,024	16.2	11,702	91,229	
2022	74,584	13.7	10,218	79,567	15.3	11,411	86,651	16.2	12,083	91,894	
2023	77,008	13.7	10,550	80,017	15.3	11,782	87,141	16.2	12,475	92,413	
2024	79,511	13.7	10,893	80,326	15.3	12,165	87,478	16.2	12,881	92,770	
2025	82,095	13.7	11,247	80,479	15.3	12,561	87,645	16.2	13,299	92,947	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	Estimated Employer Estimated Contribution			Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated	Contri	bution	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	\$ 61,560	18.4%	\$11,327	\$ 95,361	18.8%	\$11,573	\$ 97,815	21.4%	\$13,174	\$ 109,371	
2017	63,561	18.4	11,695	96,667	18.8	11,949	99,155	21.4	13,602	110,869	
2018	65,627	18.4	12,075	97,886	18.8	12,338	100,405	21.4	14,044	112,267	
2019	67,760	18.4	12,468	99,005	18.8	12,739	101,553	21.4	14,501	113,551	
2020	69,962	18.4	12,873	100,011	18.8	13,153	102,585	21.4	14,972	114,705	
2021	72,236	18.4	13,291	100,889	18.8	13,580	103,486	21.4	15,459	115,712	
2022	74,584	18.4	13,723	101,624	18.8	14,022	104,240	21.4	15,961	116,555	
2023	77,008	18.4	14,169	102,198	18.8	14,478	104,829	21.4	16,480	117,214	
2024	79,511	18.4	14,630	102,593	18.8	14,948	105,234	21.4	17,015	117,667	
2025	82,095	18.4	15,105	102,789	18.8	15,434	105,435	21.4	17,568	117,892	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Program Estimated Employer Unfunded			L-3 Benefit Program			LT-4(65) Benefit Program		
			Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	ibution Actuarial		Contri	bution	Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 61,560	12.6%	\$7,757	\$ 55,586	15.6%	\$9,603	\$ 69,489	14.5%	\$8,926	\$ 65,045
2017	63,561	12.6	8,009	56,348	15.6	9,916	70,441	14.5	9,216	65,936
2018	65,627	12.6	8,269	57,059	15.6	10,238	71,329	14.5	9,516	66,767
2019	67,760	12.6	8,538	57,711	15.6	10,571	72,144	14.5	9,825	67,530
2020	69,962	12.6	8,815	58,297	15.6	10,914	72,877	14.5	10,144	68,216
2021	72,236	12.6	9,102	58,809	15.6	11,269	73,517	14.5	10,474	68,815
2022	74,584	12.6	9,398	59,237	15.6	11,635	74,053	14.5	10,815	69,316
2023	77,008	12.6	9,703	59,572	15.6	12,013	74,472	14.5	11,166	69,708
2024	79,511	12.6	10,018	59,802	15.6	12,404	74,760	14.5	11,529	69,978
2025	82,095	12.6	10,344	59,916	15.6	12,807	74,903	14.5	11,904	70,112

		LT-5(65) Benefit Program Estimated Employer Unfunded			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated					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	\$ 61,560	17.1%	\$10,527	\$ 76,583	18.5%	\$11,389	\$ 83,406	19.4%	\$11,943	\$ 88,140	
2017	63,561	17.1	10,869	77,632	18.5	11,759	84,549	19.4	12,331	89,348	
2018	65,627	17.1	11,222	78,611	18.5	12,141	85,615	19.4	12,732	90,475	
2019	67,760	17.1	11,587	79,510	18.5	12,536	86,594	19.4	13,145	91,509	
2020	69,962	17.1	11,964	80,318	18.5	12,943	87,474	19.4	13,573	92,439	
2021	72,236	17.1	12,352	81,023	18.5	13,364	88,242	19.4	14,014	93,251	
2022	74,584	17.1	12,754	81,613	18.5	13,798	88,885	19.4	14,469	93,930	
2023	77,008	17.1	13,168	82,074	18.5	14,246	89,387	19.4	14,940	94,461	
2024	79,511	17.1	13,596	82,391	18.5	14,710	89,733	19.4	15,425	94,826	
2025	82,095	17.1	14,038	82,548	18.5	15,188	89,904	19.4	15,926	95,007	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded		Employer	Unfunded	
	Estimated		bution	Actuarial		bution	Actuarial	Contri		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	\$ 61,560	21.6%	\$13,297	\$ 97,296	22.0%	\$13,543	\$ 99,665	24.6%	\$15,144	\$ 111,181	
2017	63,561	21.6	13,729	98,629	22.0	13,983	101,030	24.6	15,636	112,704	
2018	65,627	21.6	14,175	99,873	22.0	14,438	102,304	24.6	16,144	114,125	
2019	67,760	21.6	14,636	101,015	22.0	14,907	103,474	24.6	16,669	115,430	
2020	69,962	21.6	15,112	102,041	22.0	15,392	104,525	24.6	17,211	116,603	
2021	72,236	21.6	15,603	102,937	22.0	15,892	105,443	24.6	17,770	117,627	
2022	74,584	21.6	16,110	103,687	22.0	16,408	106,211	24.6	18,348	118,484	
2023	77,008	21.6	16,634	104,273	22.0	16,942	106,811	24.6	18,944	119,154	
2024	79,511	21.6	17,174	104,676	22.0	17,492	107,224	24.6	19,560	119,615	
2025	82,095	21.6	17,733	104,876	22.0	18,061	107,429	24.6	20,195	119,843	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Pro			m L-3 Benefit Program			LT-4(65) Benefit Program		
			l Employer	Unfunded	Estimated Employer		Unfunded	Estimated	l 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	\$ 61,560	13.1%	\$8,064	\$ 57,552	16.1%	\$9,911	\$ 71,909	14.9%	\$9,172	\$ 67,346
2017	63,561	13.1	8,326	58,340	16.1	10,233	72,894	14.9	9,471	68,269
2018	65,627	13.1	8,597	59,076	16.1	10,566	73,813	14.9	9,778	69,130
2019	67,760	13.1	8,877	59,751	16.1	10,909	74,657	14.9	10,096	69,920
2020	69,962	13.1	9,165	60,358	16.1	11,264	75,416	14.9	10,424	70,630
2021	72,236	13.1	9,463	60,888	16.1	11,630	76,078	14.9	10,763	71,250
2022	74,584	13.1	9,771	61,332	16.1	12,008	76,632	14.9	11,113	71,769
2023	77,008	13.1	10,088	61,679	16.1	12,398	77,065	14.9	11,474	72,175
2024	79,511	13.1	10,416	61,918	16.1	12,801	77,363	14.9	11,847	72,454
2025	82.095	13.1	10,754	62,036	16.1	13.217	77.511	14.9	12,232	72,592

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	1 0		Estimated Employer Unfunded Contribution Actuarial		Estimated Employer Unfunded Contribution 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	\$ 61,560	17.6%	\$10,835	\$ 79,259	19.2%	\$11,820	\$ 86,283	20.1%	\$12,374	\$ 91,190	
2017	63,561	17.6	11,187	80,345	19.2	12,204	87,465	20.1	12,776	92,439	
2018	65,627	17.6	11,550	81,358	19.2	12,600	88,568	20.1	13,191	93,605	
2019	67,760	17.6	11,926	82,288	19.2	13,010	89,581	20.1	13,620	94,675	
2020	69,962	17.6	12,313	83,124	19.2	13,433	90,491	20.1	14,062	95,637	
2021	72,236	17.6	12,714	83,854	19.2	13,869	91,286	20.1	14,519	96,477	
2022	74,584	17.6	13,127	84,465	19.2	14,320	91,951	20.1	14,991	97,180	
2023	77,008	17.6	13,553	84,942	19.2	14,786	92,471	20.1	15,479	97,729	
2024	79,511	17.6	13,994	85,270	19.2	15,266	92,829	20.1	15,982	98,107	
2025	82,095	17.6	14,449	85,433	19.2	15,762	93,006	20.1	16,501	98,294	

		L-12 Benefit Program			LT-14(	65) Benefit F	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	\$ 61,560	22.3%	\$13,728	\$ 100,682	22.7%	\$13,974	\$ 103,135	25.3%	\$15,575	\$ 115,064	
2017	63,561	22.3	14,174	102,061	22.7	14,428	104,548	25.3	16,081	116,640	
2018	65,627	22.3	14,635	103,348	22.7	14,897	105,866	25.3	16,604	118,111	
2019	67,760	22.3	15,110	104,530	22.7	15,382	107,076	25.3	17,143	119,461	
2020	69,962	22.3	15,602	105,592	22.7	15,881	108,164	25.3	17,700	120,675	
2021	72,236	22.3	16,109	106,519	22.7	16,398	109,114	25.3	18,276	121,735	
2022	74,584	22.3	16,632	107,295	22.7	16,931	109,909	25.3	18,870	122,622	
2023	77,008	22.3	17,173	107,901	22.7	17,481	110,530	25.3	19,483	123,315	
2024	79,511	22.3	17,731	108,318	22.7	18,049	110,957	25.3	20,116	123,792	
2025	82,095	22.3	18,307	108,525	22.7	18,636	111,169	25.3	20,770	124,028	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Regular Retirement Eligibility

		L-1	Benefit Program		L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated		Unfunded	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	\$ 44,070	8.0%	\$3,526	\$ 28,193	10.7%	\$4,715	\$ 35,897	10.7%	\$4,715	\$ 36,108
2017	45,502	8.0	3,640	28,579	10.7	4,869	36,389	10.7	4,869	36,603
2018	46,981	8.0	3,758	28,939	10.7	5,027	36,848	10.7	5,027	37,065
2019	48,508	8.0	3,881	29,270	10.7	5,190	37,269	10.7	5,190	37,489
2020	50,085	8.0	4,007	29,567	10.7	5,359	37,648	10.7	5,359	37,870
2021	51,713	8.0	4,137	29,827	10.7	5,533	37,979	10.7	5,533	38,203
2022	53,394	8.0	4,272	30,044	10.7	5,713	38,256	10.7	5,713	38,481
2023	55,129	8.0	4,410	30,214	10.7	5,899	38,472	10.7	5,899	38,698
2024	56,921	8.0	4,554	30,331	10.7	6,091	38,621	10.7	6,091	38,848
2025	58,771	8.0	4,702	30,389	10.7	6,288	38,695	10.7	6,288	38,922

		LT-5(	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
			Employer	Unfunded		l Employer	Unfunded		Employer	Unfunded	
	Estimated	Contribution		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	\$ 44,070	12.7%	\$5,597	\$ 41,850	13.5%	\$5,949	\$ 43,580	14.8%	\$6,522	\$ 47,542	
2017	45,502	12.7	5,779	42,423	13.5	6,143	44,177	14.8	6,734	48,193	
2018	46,981	12.7	5,967	42,958	13.5	6,342	44,734	14.8	6,953	48,801	
2019	48,508	12.7	6,161	43,449	13.5	6,549	45,245	14.8	7,179	49,359	
2020	50,085	12.7	6,361	43,890	13.5	6,761	45,705	14.8	7,413	49,861	
2021	51,713	12.7	6,568	44,275	13.5	6,981	46,106	14.8	7,654	50,299	
2022	53,394	12.7	6,781	44,598	13.5	7,208	46,442	14.8	7,902	50,665	
2023	55,129	12.7	7,001	44,850	13.5	7,442	46,704	14.8	8,159	50,951	
2024	56,921	12.7	7,229	45,023	13.5	7,684	46,885	14.8	8,424	51,148	
2025	58,771	12.7	7,464	45,109	13.5	7,934	46,975	14.8	8,698	51,246	

		L-12 Benefit Program Estimated Employer Unfu			LT-14(	65) Benefit F	Program	L-6 Benefit Program			
	Estimated		Estimated Employer Contribution			Employer	Unfunded		Employer	Unfunded	
				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	\$ 44,070	16.2%	\$7,139	\$ 51,287	16.9%	\$7,448	\$ 53,262	19.0%	\$8,373	\$ 58,981	
2017	45,502	16.2	7,371	51,990	16.9	7,690	53,992	19.0	8,645	59,789	
2018	46,981	16.2	7,611	52,646	16.9	7,940	54,673	19.0	8,926	60,543	
2019	48,508	16.2	7,858	53,248	16.9	8,198	55,298	19.0	9,217	61,235	
2020	50,085	16.2	8,114	53,789	16.9	8,464	55,860	19.0	9,516	61,857	
2021	51,713	16.2	8,378	54,261	16.9	8,739	56,351	19.0	9,825	62,400	
2022	53,394	16.2	8,650	54,656	16.9	9,024	56,761	19.0	10,145	62,855	
2023	55,129	16.2	8,931	54,965	16.9	9,317	57,082	19.0	10,475	63,210	
2024	56,921	16.2	9,221	55,178	16.9	9,620	57,303	19.0	10,815	63,454	
2025	58,771	16.2	9,521	55,283	16.9	9,932	57,412	19.0	11,166	63,575	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

## Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	Estimated	l 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	\$ 44,070	8.4%	\$3,702	\$ 29,295	11.2%	\$4,936	\$ 37,299	11.1%	\$4,892	\$ 37,531	
2017	45,502	8.4	3,822	29,696	11.2	5,096	37,810	11.1	5,051	38,045	
2018	46,981	8.4	3,946	30,070	11.2	5,262	38,287	11.1	5,215	38,525	
2019	48,508	8.4	4,075	30,414	11.2	5,433	38,725	11.1	5,384	38,965	
2020	50,085	8.4	4,207	30,723	11.2	5,610	39,118	11.1	5,559	39,361	
2021	51,713	8.4	4,344	30,993	11.2	5,792	39,462	11.1	5,740	39,707	
2022	53,394	8.4	4,485	31,219	11.2	5,980	39,749	11.1	5,927	39,996	
2023	55,129	8.4	4,631	31,395	11.2	6,174	39,974	11.1	6,119	40,222	
2024	56,921	8.4	4,781	31,516	11.2	6,375	40,129	11.1	6,318	40,378	
2025	58,771	8.4	4,937	31,576	11.2	6,582	40,206	11.1	6,524	40,455	

		LT-5(65) Benefit Program			L-7 Benefit Program			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
2016	\$ 44,070	13.3%	\$5,861	\$ 43,459	14.0%	\$6,170	\$ 45,264	15.5%	\$6,831	\$ 49,369
2017	45,502	13.3	6,052	44,054	14.0	6,370	45,884	15.5	7,053	50,045
2018	46,981	13.3	6,248	44,609	14.0	6,577	46,463	15.5	7,282	50,676
2019	48,508	13.3	6,452	45,119	14.0	6,791	46,994	15.5	7,519	51,255
2020	50,085	13.3	6,661	45,577	14.0	7,012	47,472	15.5	7,763	51,776
2021	51,713	13.3	6,878	45,977	14.0	7,240	47,889	15.5	8,016	52,231
2022	53,394	13.3	7,101	46,312	14.0	7,475	48,238	15.5	8,276	52,611
2023	55,129	13.3	7,332	46,574	14.0	7,718	48,511	15.5	8,545	52,908
2024	56,921	13.3	7,570	46,754	14.0	7,969	48,699	15.5	8,823	53,113
2025	58,771	13.3	7,817	46,843	14.0	8,228	48,792	15.5	9,110	53,214

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	T 4 . 1	Estimated Employer Contribution		Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated			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	\$ 44,070	17.0%	\$7,492	\$ 53,230	17.6%	\$7,756	\$ 55,284	19.8%	\$8,726	\$ 61,223	
2017	45,502	17.0	7,735	53,959	17.6	8,008	56,041	19.8	9,009	62,062	
2018	46,981	17.0	7,987	54,639	17.6	8,269	56,748	19.8	9,302	62,845	
2019	48,508	17.0	8,246	55,264	17.6	8,537	57,397	19.8	9,605	63,564	
2020	50,085	17.0	8,514	55,826	17.6	8,815	57,980	19.8	9,917	64,210	
2021	51,713	17.0	8,791	56,316	17.6	9,101	58,489	19.8	10,239	64,774	
2022	53,394	17.0	9,077	56,726	17.6	9,397	58,915	19.8	10,572	65,246	
2023	55,129	17.0	9,372	57,047	17.6	9,703	59,248	19.8	10,916	65,615	
2024	56,921	17.0	9,677	57,268	17.6	10,018	59,477	19.8	11,270	65,869	
2025	58,771	17.0	9,991	57,377	17.6	10,344	59,591	19.8	11,637	65,995	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Regular Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(	65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	nated Contribution		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
2016	\$ 44,070	11.9%	\$5,244	\$ 31,163	14.6%	\$6,434	\$ 38,961	14.5%	\$6,390	\$ 39,064
2017	45,502	11.9	5,415	31,590	14.6	6,643	39,495	14.5	6,598	39,599
2018	46,981	11.9	5,591	31,988	14.6	6,859	39,993	14.5	6,812	40,098
2019	48,508	11.9	5,772	32,354	14.6	7,082	40,450	14.5	7,034	40,556
2020	50,085	11.9	5,960	32,683	14.6	7,312	40,861	14.5	7,262	40,968
2021	51,713	11.9	6,154	32,970	14.6	7,550	41,220	14.5	7,498	41,328
2022	53,394	11.9	6,354	33,210	14.6	7,796	41,520	14.5	7,742	41,629
2023	55,129	11.9	6,560	33,398	14.6	8,049	41,755	14.5	7,994	41,864
2024	56,921	11.9	6,774	33,527	14.6	8,310	41,916	14.5	8,254	42,026
2025	58,771	11.9	6,994	33,591	14.6	8,581	41.996	14.5	8.522	42,106

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program			
	Estimated I Estimated Contrib		1 - 0 -	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	\$ 44,070	16.6%	\$7,316	\$ 44,872	17.4%	\$7,668	\$ 46,742	18.7%	\$8,241	\$ 50,704	
2017	45,502	16.6	7,553	45,487	17.4	7,917	47,382	18.7	8,509	51,399	
2018	46,981	16.6	7,799	46,061	17.4	8,175	47,979	18.7	8,785	52,047	
2019	48,508	16.6	8,052	46,588	17.4	8,440	48,528	18.7	9,071	52,642	
2020	50,085	16.6	8,314	47,061	17.4	8,715	49,021	18.7	9,366	53,177	
2021	51,713	16.6	8,584	47,474	17.4	8,998	49,452	18.7	9,670	53,644	
2022	53,394	16.6	8,863	47,820	17.4	9,291	49,812	18.7	9,985	54,035	
2023	55,129	16.6	9,151	48,090	17.4	9,592	50,094	18.7	10,309	54,340	
2024	56,921	16.6	9,449	48,276	17.4	9,904	50,288	18.7	10,644	54,550	
2025	58,771	16.6	9,756	48,368	17.4	10,226	50,384	18.7	10,990	54,654	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	Estimated Emp			Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated			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	\$ 44,070	20.1%	\$8,858	\$ 54,542	20.8%	\$9,167	\$ 56,522	22.9%	\$10,092	\$ 62,336	
2017	45,502	20.1	9,146	55,289	20.8	9,464	57,296	22.9	10,420	63,190	
2018	46,981	20.1	9,443	55,986	20.8	9,772	58,018	22.9	10,759	63,987	
2019	48,508	20.1	9,750	56,626	20.8	10,090	58,681	22.9	11,108	64,719	
2020	50,085	20.1	10,067	57,201	20.8	10,418	59,277	22.9	11,469	65,377	
2021	51,713	20.1	10,394	57,703	20.8	10,756	59,798	22.9	11,842	65,951	
2022	53,394	20.1	10,732	58,123	20.8	11,106	60,234	22.9	12,227	66,431	
2023	55,129	20.1	11,081	58,451	20.8	11,467	60,574	22.9	12,625	66,806	
2024	56,921	20.1	11,441	58,677	20.8	11,840	60,808	22.9	13,035	67,064	
2025	58,771	20.1	11,813	58,789	20.8	12,224	60,924	22.9	13,459	67,192	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Regular 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	Estimated Contributi		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	\$ 44,070	12.3%	\$5,421	\$ 32,314	15.1%	\$6,655	\$ 40,393	15.0%	\$6,611	\$ 40,488	
2017	45,502	12.3	5,597	32,757	15.1	6,871	40,946	15.0	6,825	41,043	
2018	46,981	12.3	5,779	33,170	15.1	7,094	41,462	15.0	7,047	41,561	
2019	48,508	12.3	5,966	33,549	15.1	7,325	41,936	15.0	7,276	42,036	
2020	50,085	12.3	6,160	33,890	15.1	7,563	42,362	15.0	7,513	42,463	
2021	51,713	12.3	6,361	34,188	15.1	7,809	42,734	15.0	7,757	42,836	
2022	53,394	12.3	6,567	34,437	15.1	8,062	43,045	15.0	8,009	43,148	
2023	55,129	12.3	6,781	34,632	15.1	8,324	43,288	15.0	8,269	43,392	
2024	56,921	12.3	7,001	34,766	15.1	8,595	43,455	15.0	8,538	43,560	
2025	58.771	12.3	7.229	34.832	15.1	8.874	43.538	15.0	8.816	43.643	

		LT-5(	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution			Estimated Employer Contribution			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	
2016	\$ 44,070	17.2%	\$7,580	\$ 46,511	17.9%	\$7,889	\$ 48,465	19.4%	\$8,550	\$ 52,546	
2017	45,502	17.2	7,826	47,148	17.9	8,145	49,129	19.4	8,827	53,266	
2018	46,981	17.2	8,081	47,743	17.9	8,410	49,748	19.4	9,114	53,938	
2019	48,508	17.2	8,343	48,289	17.9	8,683	50,317	19.4	9,411	54,555	
2020	50,085	17.2	8,615	48,780	17.9	8,965	50,828	19.4	9,716	55,109	
2021	51,713	17.2	8,895	49,208	17.9	9,257	51,274	19.4	10,032	55,593	
2022	53,394	17.2	9,184	49,566	17.9	9,558	51,647	19.4	10,358	55,998	
2023	55,129	17.2	9,482	49,846	17.9	9,868	51,939	19.4	10,695	56,314	
2024	56,921	17.2	9,790	50,039	17.9	10,189	52,140	19.4	11,043	56,532	
2025	58,771	17.2	10,109	50,135	17.9	10,520	52,240	19.4	11,402	56,640	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	Estimated Contr		Employer	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	Actuariai	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 44,070	20.9%	\$9,211	\$ 56,526	21.5%	\$9,475	\$ 58,574	23.7%	\$10,445	\$ 64,590	
2017	45,502	20.9	9,510	57,300	21.5	9,783	59,376	23.7	10,784	65,475	
2018	46,981	20.9	9,819	58,023	21.5	10,101	60,125	23.7	11,134	66,301	
2019	48,508	20.9	10,138	58,686	21.5	10,429	60,812	23.7	11,496	67,059	
2020	50,085	20.9	10,468	59,282	21.5	10,768	61,430	23.7	11,870	67,740	
2021	51,713	20.9	10,808	59,803	21.5	11,118	61,969	23.7	12,256	68,335	
2022	53,394	20.9	11,159	60,239	21.5	11,480	62,420	23.7	12,654	68,833	
2023	55,129	20.9	11,522	60,579	21.5	11,853	62,773	23.7	13,066	69,222	
2024	56,921	20.9	11,896	60,813	21.5	12,238	63,016	23.7	13,490	69,490	
2025	58,771	20.9	12,283	60,929	21.5	12,636	63,136	23.7	13,929	69,623	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(	65) Benefit P	rogram	
		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contribution		oution Actuarial		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	\$ 44,070	8.0%	\$3,526	\$ 28,193	10.7%	\$4,715	\$ 35,897	10.7%	\$4,715	\$ 36,108	
2017	45,502	8.0	3,640	28,579	10.7	4,869	36,389	10.7	4,869	36,603	
2018	46,981	8.0	3,758	28,939	10.7	5,027	36,848	10.7	5,027	37,065	
2019	48,508	8.0	3,881	29,270	10.7	5,190	37,269	10.7	5,190	37,489	
2020	50,085	8.0	4,007	29,567	10.7	5,359	37,648	10.7	5,359	37,870	
2021	51,713	8.0	4,137	29,827	10.7	5,533	37,979	10.7	5,533	38,203	
2022	53,394	8.0	4,272	30,044	10.7	5,713	38,256	10.7	5,713	38,481	
2023	55,129	8.0	4,410	30,214	10.7	5,899	38,472	10.7	5,899	38,698	
2024	56,921	8.0	4,554	30,331	10.7	6,091	38,621	10.7	6,091	38,848	
2025	58,771	8.0	4,702	30,389	10.7	6.288	38,695	10.7	6.288	38,922	

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Contribution A		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	\$ 44,070	12.7%	\$5,597	\$ 41,850	13.5%	\$5,949	\$ 43,580	14.8%	\$6,522	\$ 47,542	
2017	45,502	12.7	5,779	42,423	13.5	6,143	44,177	14.8	6,734	48,193	
2018	46,981	12.7	5,967	42,958	13.5	6,342	44,734	14.8	6,953	48,801	
2019	48,508	12.7	6,161	43,449	13.5	6,549	45,245	14.8	7,179	49,359	
2020	50,085	12.7	6,361	43,890	13.5	6,761	45,705	14.8	7,413	49,861	
2021	51,713	12.7	6,568	44,275	13.5	6,981	46,106	14.8	7,654	50,299	
2022	53,394	12.7	6,781	44,598	13.5	7,208	46,442	14.8	7,902	50,665	
2023	55,129	12.7	7,001	44,850	13.5	7,442	46,704	14.8	8,159	50,951	
2024	56,921	12.7	7,229	45,023	13.5	7,684	46,885	14.8	8,424	51,148	
2025	58,771	12.7	7,464	45,109	13.5	7,934	46,975	14.8	8,698	51,246	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer		Unfunded		Employer	Unfunded	Estimated	1 - 3 -	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	\$ 44,070	16.2%	\$7,139	\$ 51,287	16.9%	\$7,448	\$ 53,262	19.0%	\$8,373	\$ 58,981
2017	45,502	16.2	7,371	51,990	16.9	7,690	53,992	19.0	8,645	59,789
2018	46,981	16.2	7,611	52,646	16.9	7,940	54,673	19.0	8,926	60,543
2019	48,508	16.2	7,858	53,248	16.9	8,198	55,298	19.0	9,217	61,235
2020	50,085	16.2	8,114	53,789	16.9	8,464	55,860	19.0	9,516	61,857
2021	51,713	16.2	8,378	54,261	16.9	8,739	56,351	19.0	9,825	62,400
2022	53,394	16.2	8,650	54,656	16.9	9,024	56,761	19.0	10,145	62,855
2023	55,129	16.2	8,931	54,965	16.9	9,317	57,082	19.0	10,475	63,210
2024	56,921	16.2	9,221	55,178	16.9	9,620	57,303	19.0	10,815	63,454
2025	58,771	16.2	9,521	55,283	16.9	9,932	57,412	19.0	11,166	63,575

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(4% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		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	
2016	\$ 44,070	8.4%	\$3,702	\$ 29,295	11.2%	\$4,936	\$ 37,299	11.1%	\$4,892	\$ 37,531	
2017	45,502	8.4	3,822	29,696	11.2	5,096	37,810	11.1	5,051	38,045	
2018	46,981	8.4	3,946	30,070	11.2	5,262	38,287	11.1	5,215	38,525	
2019	48,508	8.4	4,075	30,414	11.2	5,433	38,725	11.1	5,384	38,965	
2020	50,085	8.4	4,207	30,723	11.2	5,610	39,118	11.1	5,559	39,361	
2021	51,713	8.4	4,344	30,993	11.2	5,792	39,462	11.1	5,740	39,707	
2022	53,394	8.4	4,485	31,219	11.2	5,980	39,749	11.1	5,927	39,996	
2023	55,129	8.4	4,631	31,395	11.2	6,174	39,974	11.1	6,119	40,222	
2024	56,921	8.4	4,781	31,516	11.2	6,375	40,129	11.1	6,318	40,378	
2025	58,771	8.4	4,937	31,576	11.2	6,582	40,206	11.1	6,524	40,455	

		LT-5(65) Benefit Program			L-7 Benefit Program			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	
2016	\$ 44,070	13.3%	\$5,861	\$ 43,459	14.0%	\$6,170	\$ 45,264	15.5%	\$6,831	\$ 49,369	
2017	45,502	13.3	6,052	44,054	14.0	6,370	45,884	15.5	7,053	50,045	
2018	46,981	13.3	6,248	44,609	14.0	6,577	46,463	15.5	7,282	50,676	
2019	48,508	13.3	6,452	45,119	14.0	6,791	46,994	15.5	7,519	51,255	
2020	50,085	13.3	6,661	45,577	14.0	7,012	47,472	15.5	7,763	51,776	
2021	51,713	13.3	6,878	45,977	14.0	7,240	47,889	15.5	8,016	52,231	
2022	53,394	13.3	7,101	46,312	14.0	7,475	48,238	15.5	8,276	52,611	
2023	55,129	13.3	7,332	46,574	14.0	7,718	48,511	15.5	8,545	52,908	
2024	56,921	13.3	7,570	46,754	14.0	7,969	48,699	15.5	8,823	53,113	
2025	58,771	13.3	7,817	46,843	14.0	8,228	48,792	15.5	9,110	53,214	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
	T 4 . 1	Estimated Employer Contribution		Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated			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	\$ 44,070	17.0%	\$7,492	\$ 53,230	17.6%	\$7,756	\$ 55,284	19.8%	\$8,726	\$ 61,223	
2017	45,502	17.0	7,735	53,959	17.6	8,008	56,041	19.8	9,009	62,062	
2018	46,981	17.0	7,987	54,639	17.6	8,269	56,748	19.8	9,302	62,845	
2019	48,508	17.0	8,246	55,264	17.6	8,537	57,397	19.8	9,605	63,564	
2020	50,085	17.0	8,514	55,826	17.6	8,815	57,980	19.8	9,917	64,210	
2021	51,713	17.0	8,791	56,316	17.6	9,101	58,489	19.8	10,239	64,774	
2022	53,394	17.0	9,077	56,726	17.6	9,397	58,915	19.8	10,572	65,246	
2023	55,129	17.0	9,372	57,047	17.6	9,703	59,248	19.8	10,916	65,615	
2024	56,921	17.0	9,677	57,268	17.6	10,018	59,477	19.8	11,270	65,869	
2025	58,771	17.0	9,991	57,377	17.6	10,344	59,591	19.8	11,637	65,995	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(	65) Benefit P	rogram
			Estimated Employer		Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	Contribution Actuarial		Contri	bution	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	\$ 44,070	11.9%	\$5,244	\$ 31,163	14.6%	\$6,434	\$ 38,961	14.5%	\$6,390	\$ 39,064
2017	45,502	11.9	5,415	31,590	14.6	6,643	39,495	14.5	6,598	39,599
2018	46,981	11.9	5,591	31,988	14.6	6,859	39,993	14.5	6,812	40,098
2019	48,508	11.9	5,772	32,354	14.6	7,082	40,450	14.5	7,034	40,556
2020	50,085	11.9	5,960	32,683	14.6	7,312	40,861	14.5	7,262	40,968
2021	51,713	11.9	6,154	32,970	14.6	7,550	41,220	14.5	7,498	41,328
2022	53,394	11.9	6,354	33,210	14.6	7,796	41,520	14.5	7,742	41,629
2023	55,129	11.9	6,560	33,398	14.6	8,049	41,755	14.5	7,994	41,864
2024	56,921	11.9	6,774	33,527	14.6	8,310	41,916	14.5	8,254	42,026
2025	58,771	11.9	6,994	33,591	14.6	8,581	41,996	14.5	8,522	42,106

		LT-5(	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated		Estimated Employer Contribution		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	
2016	\$ 44,070	16.6%	\$7,316	\$ 44,872	17.4%	\$7,668	\$ 46,365	18.7%	\$8,241	\$ 50,704	
2017	45,502	16.6	7,553	45,487	17.4	7,917	47,000	18.7	8,509	51,399	
2018	46,981	16.6	7,799	46,061	17.4	8,175	47,593	18.7	8,785	52,047	
2019	48,508	16.6	8,052	46,588	17.4	8,440	48,137	18.7	9,071	52,642	
2020	50,085	16.6	8,314	47,061	17.4	8,715	48,626	18.7	9,366	53,177	
2021	51,713	16.6	8,584	47,474	17.4	8,998	49,053	18.7	9,670	53,644	
2022	53,394	16.6	8,863	47,820	17.4	9,291	49,410	18.7	9,985	54,035	
2023	55,129	16.6	9,151	48,090	17.4	9,592	49,689	18.7	10,309	54,340	
2024	56,921	16.6	9,449	48,276	17.4	9,904	49,881	18.7	10,644	54,550	
2025	58,771	16.6	9,756	48,368	17.4	10,226	49,976	18.7	10,990	54,654	

		L-12 Benefit Program			LT-14(	(65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer				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	\$ 44,070	20.1%	\$8,858	\$ 54,542	20.8%	\$9,167	\$ 56,522	22.9%	\$10,092	\$ 62,336
2017	45,502	20.1	9,146	55,289	20.8	9,464	57,296	22.9	10,420	63,190
2018	46,981	20.1	9,443	55,986	20.8	9,772	58,018	22.9	10,759	63,987
2019	48,508	20.1	9,750	56,626	20.8	10,090	58,681	22.9	11,108	64,719
2020	50,085	20.1	10,067	57,201	20.8	10,418	59,277	22.9	11,469	65,377
2021	51,713	20.1	10,394	57,703	20.8	10,756	59,798	22.9	11,842	65,951
2022	53,394	20.1	10,732	58,123	20.8	11,106	60,234	22.9	12,227	66,431
2023	55,129	20.1	11,081	58,451	20.8	11,467	60,574	22.9	12,625	66,806
2024	56,921	20.1	11,441	58,677	20.8	11,840	60,808	22.9	13,035	67,064
2025	58,771	20.1	11,813	58,789	20.8	12,224	60,924	22.9	13,459	67,192

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

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

(0% member contributions are additional)

#### Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 44,070	12.3%	\$5,421	\$ 32,314	15.1%	\$6,655	\$ 40,393	15.0%	\$6,611	\$ 40,488
2017	45,502	12.3	5,597	32,757	15.1	6,871	40,946	15.0	6,825	41,043
2018	46,981	12.3	5,779	33,170	15.1	7,094	41,462	15.0	7,047	41,561
2019	48,508	12.3	5,966	33,549	15.1	7,325	41,936	15.0	7,276	42,036
2020	50,085	12.3	6,160	33,890	15.1	7,563	42,362	15.0	7,513	42,463
2021	51,713	12.3	6,361	34,188	15.1	7,809	42,734	15.0	7,757	42,836
2022	53,394	12.3	6,567	34,437	15.1	8,062	43,045	15.0	8,009	43,148
2023	55,129	12.3	6,781	34,632	15.1	8,324	43,288	15.0	8,269	43,392
2024	56,921	12.3	7,001	34,766	15.1	8,595	43,455	15.0	8,538	43,560
2025	58,771	12.3	7,229	34,832	15.1	8,874	43,538	15.0	8,816	43,643

		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
2016	\$ 44,070	17.2%	\$7,580	\$ 46,511	17.9%	\$7,889	\$ 48,465	19.4%	\$8,550	\$ 52,546
2017	45,502	17.2	7,826	47,148	17.9	8,145	49,129	19.4	8,827	53,266
2018	46,981	17.2	8,081	47,743	17.9	8,410	49,748	19.4	9,114	53,938
2019	48,508	17.2	8,343	48,289	17.9	8,683	50,317	19.4	9,411	54,555
2020	50,085	17.2	8,615	48,780	17.9	8,965	50,828	19.4	9,716	55,109
2021	51,713	17.2	8,895	49,208	17.9	9,257	51,274	19.4	10,032	55,593
2022	53,394	17.2	9,184	49,566	17.9	9,558	51,647	19.4	10,358	55,998
2023	55,129	17.2	9,482	49,846	17.9	9,868	51,939	19.4	10,695	56,314
2024	56,921	17.2	9,790	50,039	17.9	10,189	52,140	19.4	11,043	56,532
2025	58 771	17.2	10 109	50 135	17 9	10.520	52.240	194	11 402	56 640

		L-12 Benefit Program			LT-14(	(65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer				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	\$ 44,070	20.9%	\$9,211	\$ 56,526	21.5%	\$9,475	\$ 58,574	23.7%	\$10,445	\$ 64,590
2017	45,502	20.9	9,510	57,300	21.5	9,783	59,376	23.7	10,784	65,475
2018	46,981	20.9	9,819	58,023	21.5	10,101	60,125	23.7	11,134	66,301
2019	48,508	20.9	10,138	58,686	21.5	10,429	60,812	23.7	11,496	67,059
2020	50,085	20.9	10,468	59,282	21.5	10,768	61,430	23.7	11,870	67,740
2021	51,713	20.9	10,808	59,803	21.5	11,118	61,969	23.7	12,256	68,335
2022	53,394	20.9	11,159	60,239	21.5	11,480	62,420	23.7	12,654	68,833
2023	55,129	20.9	11,522	60,579	21.5	11,853	62,773	23.7	13,066	69,222
2024	56,921	20.9	11,896	60,813	21.5	12,238	63,016	23.7	13,490	69,490
2025	58,771	20.9	12,283	60,929	21.5	12,636	63,136	23.7	13,929	69,623

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.