

THE INITIAL ACTUARIAL VALUATION FOR
CITY OF WELLSVILLE
AS OF FEBRUARY 29, 2016

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April 6, 2016

City of Wellsville Wellsville, Missouri

Ladies and Gentlemen:

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

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

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

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

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

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2015.

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

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was February 29, 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			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	6.40%	4.10%	0.20%	10.70%
	Police	3.50	2.50	0.20	6.20
L-3	General	8.00	5.90	0.20	14.10
	Police	4.40	4.00	0.20	8.60
LT-4(65)	General	7.00	4.90	0.20	12.10
	Police	4.60	3.90	0.20	8.70
LT-5(65)	General	8.50	6.50	0.20	15.20
	Police	5.30	5.00	0.20	10.50
L-7	General	9.70	7.70	0.20	17.60
	Police	5.40	5.30	0.20	10.90
LT-8(65)	General	10.00	8.10	0.20	18.30
	Police	6.00	6.00	0.20	12.20
L-12	General	11.30	9.40	0.30	21.00
	Police	6.40	6.70	0.30	13.40
LT-14(65)	General	11.40	9.60	0.30	21.30
	Police	6.70	7.00	0.30	14.00
L-6	General	12.90	11.20	0.30	24.40
	Police	7.30	8.10	0.30	15.70

<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 - 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	6.60%	4.40%	0.20%	11.20%
	Police	3.60	2.80	0.20	6.60
L-3	General	8.30	6.20	0.20	14.70
	Police	4.60	4.20	0.20	9.00
LT-4(65)	General	7.20	5.20	0.20	12.60
	Police	4.80	4.20	0.20	9.20
LT-5(65)	General	8.80	6.80	0.20	15.80
	Police	5.50	5.30	0.20	11.00
L-7	General	10.00	8.00	0.20	18.20
	Police	5.60	5.70	0.20	11.50
LT-8(65)	General	10.30	8.40	0.20	18.90
	Police	6.20	6.40	0.20	12.80
L-12	General	11.70	9.90	0.30	21.90
	Police	6.60	7.10	0.30	14.00
LT-14(65)	General	11.90	10.10	0.30	22.30
	Police	6.90	7.40	0.30	14.60
L-6	General	13.40	11.70	0.30	25.40
	Police	7.60	8.60	0.30	16.50

<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	6.50%	7.50%	0.20%	14.20%
	Police	3.90	6.00	0.20	10.10
L-3	General	8.10	9.30	0.20	17.60
	Police	4.90	7.40	0.20	12.50
LT-4(65)	General	7.00	8.30	0.20	15.50
	Police	5.10	7.30	0.20	12.60
LT-5(65)	General	8.50	9.90	0.20	18.60
	Police	5.80	8.40	0.20	14.40
L-7	General	9.70	11.10	0.20	21.00
	Police	5.90	8.70	0.20	14.80
LT-8(65)	General	10.00	11.50	0.20	21.70
	Police	6.50	9.40	0.20	16.10
L-12	General	11.30	12.80	0.30	24.40
	Police	6.90	10.10	0.30	17.30
LT-14(65)	General	11.50	13.00	0.30	24.80
	Police	7.20	10.40	0.30	17.90
L-6	General	12.90	14.60	0.30	27.80
	Police	7.80	11.50	0.30	19.60

<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	6.70%	7.80%	0.20%	14.70%
	Police	4.10	6.20	0.20	10.50
L-3	General	8.40	9.60	0.20	18.20
	Police	5.10	7.60	0.20	12.90
LT-4(65)	General	7.30	8.60	0.20	16.10
	Police	5.30	7.60	0.20	13.10
LT-5(65)	General	8.80	10.20	0.20	19.20
	Police	6.00	8.70	0.20	14.90
L-7	General	10.10	11.40	0.20	21.70
	Police	6.10	9.10	0.20	15.40
LT-8(65)	General	10.30	11.80	0.20	22.30
	Police	6.70	9.80	0.20	16.70
L-12	General	11.70	13.30	0.30	25.30
	Police	7.10	10.50	0.30	17.90
LT-14(65)	General	11.90	13.50	0.30	25.70
	Police	7.40	10.80	0.30	18.50
L-6	General	13.40	15.10	0.30	28.80
	Police	8.20	11.90	0.30	20.40

<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	6.40%	4.10%	0.20%	10.70%
	Police	3.60	2.90	0.20	6.70
L-3	General	8.00	5.90	0.20	14.10
	Police	4.60	4.40	0.20	9.20
LT-4(65)	General	7.00	4.90	0.20	12.10
	Police	5.00	4.60	0.20	9.80
LT-5(65)	General	8.50	6.50	0.20	15.20
	Police	5.60	5.70	0.20	11.50
L-7	General	9.70	7.70	0.20	17.60
	Police	5.60	5.80	0.20	11.60
LT-8(65)	General	10.00	8.10	0.20	18.30
	Police	6.30	6.70	0.20	13.20
L-12	General	11.30	9.40	0.30	21.00
	Police	6.60	7.30	0.30	14.20
LT-14(65)	General	11.40	9.60	0.30	21.30
	Police	6.90	7.80	0.30	15.00
L-6	General	12.90	11.20	0.30	24.40
	Police	7.60	8.70	0.30	16.60

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

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

		Percents of Active Member Payroll			
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	6.60%	4.40%	0.20%	11.20%
	Police	3.80	3.00	0.20	7.00
L-3	General	8.30	6.20	0.20	14.70
	Police	4.80	4.70	0.20	9.70
LT-4(65)	General	7.20	5.20	0.20	12.60
	Police	5.20	4.90	0.20	10.30
LT-5(65)	General	8.80	6.80	0.20	15.80
	Police	5.90	5.90	0.20	12.00
L-7	General	10.00	8.00	0.20	18.20
	Police	5.80	6.20	0.20	12.20
LT-8(65)	General	10.30	8.40	0.20	18.90
	Police	6.60	7.00	0.20	13.80
L-12	General	11.70	9.90	0.30	21.90
	Police	6.90	7.70	0.30	14.90
LT-14(65)	General	11.90	10.10	0.30	22.30
	Police	7.20	8.20	0.30	15.70
L-6	General	13.40	11.70	0.30	25.40
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### Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (No member contributions)

		Percents of Active Member Payroll			yroll
Benefit Program	Employee Groups	Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	6.50%	7.50%	0.20%	14.20%
	Police	4.10	6.30	0.20	10.60
L-3	General	8.10	9.30	0.20	17.60
	Police	5.10	7.80	0.20	13.10
LT-4(65)	General	7.00	8.30	0.20	15.50
	Police	5.40	8.10	0.20	13.70
LT-5(65)	General	8.50	9.90	0.20	18.60
	Police	6.10	9.10	0.20	15.40
L-7	General	9.70	11.10	0.20	21.00
	Police	6.10	9.20	0.20	15.50
LT-8(65)	General	10.00	11.50	0.20	21.70
	Police	6.80	10.10	0.20	17.10
L-12	General	11.30	12.80	0.30	24.40
	Police	7.10	10.70	0.30	18.10
LT-14(65)	General	11.50	13.00	0.30	24.80
	Police	7.50	11.10	0.30	18.90
L-6	General	12.90	14.60	0.30	27.80
	Police	8.10	12.10	0.30	20.50

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

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	Police	4.20	6.50	0.20	10.90
L-3	General	8.40	9.60	0.20	18.20
	Police	5.30	8.10	0.20	13.60
LT-4(65)	General	7.30	8.60	0.20	16.10
	Police	5.60	8.40	0.20	14.20
LT-5(65)	General	8.80	10.20	0.20	19.20
	Police	6.30	9.40	0.20	15.90
L-7	General	10.10	11.40	0.20	21.70
	Police	6.30	9.60	0.20	16.10
LT-8(65)	General	10.30	11.80	0.20	22.30
	Police	7.00	10.50	0.20	17.70
L-12	General	11.70	13.30	0.30	25.30
	Police	7.40	11.10	0.30	18.80
LT-14(65)	General	11.90	13.50	0.30	25.70
	Police	7.80	11.50	0.30	19.60
L-6	General	13.40	15.10	0.30	28.80
	Police	8.50	12.60	0.30	21.40

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

#### **Employer Contribution Dollars**

#### Regular Retirement Eligibility

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

#### **Contributory Plan**

	5 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 11,713	\$ 7,591				
L-3	15,434	10,530				
LT-4(65)	13,245	10,652				
LT-5(65)	16,639	12,856				
L-7	19,266	13,346				
LT-8(65)	20,032	14,938				
L-12	22,987	16,407				
LT-14(65)	23,316	17,142				
L-6	26,709	19,223				

	3 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 12,260	\$ 8,081				
L-3	16,091	11,020				
LT-4(65)	13,792	11,264				
LT-5(65)	17,295	13,468				
L-7	19,922	14,081				
LT-8(65)	20,689	15,672				
L-12	23,973	17,142				
LT-14(65)	24,410	17,876				
L-6	27,804	20,203				

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

	5 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 15,544	\$ 12,366				
L-3	19,266	15,305				
LT-4(65)	16,967	15,427				
LT-5(65)	20,360	17,631				
L-7	22,987	18,121				
LT-8(65)	23,754	19,713				
L-12	26,709	21,182				
LT-14(65)	27,147	21,917				
L-6	30,431	23,998				

	3 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 16,091	\$ 12,856				
L-3	19,922	15,795				
LT-4(65)	17,624	16,040				
LT-5(65)	21,017	18,244				
L-7	23,754	18,856				
LT-8(65)	24,410	20,447				
L-12	27,694	21,917				
LT-14(65)	28,132	22,651				
L-6	31,526	24,978				

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	\$ 11,713	\$ 8,203				
L-3	15,434	11,264				
LT-4(65)	13,245	11,999				
LT-5(65)	16,639	14,081				
L-7	19,266	14,203				
LT-8(65)	20,032	16,162				
L-12	22,987	17,386				
LT-14(65)	23,316	18,366				
L-6	26,709	20,325				

3 Year FAS					
Benefit					
Program	General	Police			
L-1	\$ 12,260	\$ 8,571			
L-3	16,091	11,877			
LT-4(65)	13,792	12,611			
LT-5(65)	17,295	14,693			
L-7	19,922	14,938			
LT-8(65)	20,689	16,897			
L-12	23,973	18,244			
LT-14(65)	24,410	19,223			
L-6	27,804	21,427			

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

5 Year FAS					
Benefit					
Program	General	Police			
L-1	\$ 15,544	\$ 12,979			
L-3	19,266	16,040			
LT-4(65)	16,967	16,774			
LT-5(65)	20,360	18,856			
L-7	22,987	18,978			
LT-8(65)	23,754	20,937			
L-12	26,709	22,162			
LT-14(65)	27,147	23,141			
L-6	30,431	25,100			

	3 Year FAS					
Benefit						
Program	General	Police				
L-1	\$ 16,091	\$ 13,346				
L-3	19,922	16,652				
LT-4(65)	17,624	17,386				
LT-5(65)	21,017	19,468				
L-7	23,754	19,713				
LT-8(65)	24,410	21,672				
L-12	27,694	23,019				
LT-14(65)	28,132	23,998				
L-6	31,526	26,202				

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 Wellsville

Employees and Payroll Included in the Valuation

	General	Police
Number of Employees	4	4
Annual Payroll	\$ 109,464	\$ 122,440

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 Wellsville 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	\$ 127,128	\$ 131,743	\$ 128,411	\$ 132,975
	Police	76,855	80,226	87,071	90,506
L-3	General	159,532	165,295	160,514	166,212
	Police	98,417	102,642	108,861	113,128
LT-4(65)	General	138,275	143,298	139,434	144,400
	Police	102,869	107,254	112,949	117,384
LT-5(65)	General	167,892	173,957	168,784	174,782
	Police	117,949	122,900	128,274	133,294
L-7	General	191,922	198,833	192,604	199,471
	Police	119,891	124,846	130,638	135,727
LT-8(65)	General	197,486	204,611	198,112	205,183
	Police	132,905	138,377	143,586	149,176
L-12	General	224,315	232,388	224,715	232,717
	Police	141,111	146,798	152,388	158,372
LT-14(65)	General	227,095	235,283	227,470	235,571
	Police	147,640	153,548	158,863	165,078
L-6	General	256,724	265,934	256,808	265,963
	Police	162,178	168,610	174,204	180,977

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

		Contri	butory	Non-Cor	tributory
Benefit	Employee	UAAL	UAAL	UAAL	UAAL
Group	Group	(5 Year FAS)	(3 Year FAS)	(5 Year FAS)	(3 Year FAS)
L-1	General	\$ 127,128	\$ 131,743	\$ 128,411	\$ 132,975
	Police	80,069	83,567	90,206	93,775
L-3	General	159,532	165,295	160,514	166,212
	Police	102,407	106,782	112,802	117,236
LT-4(65)	General	138,275	143,298	139,434	144,400
	Police	110,555	115,247	120,559	125,311
LT-5(65)	General	167,892	173,957	168,784	174,782
	Police	125,267	130,530	135,567	140,898
L-7	General	191,922	198,833	192,604	199,471
	Police	124,620	129,799	135,359	140,694
LT-8(65)	General	197,486	204,611	198,112	205,183
	Police	139,858	145,625	150,549	156,461
L-12	General	224,315	232,388	224,715	232,717
	Police	146,586	152,516	157,903	164,133
LT-14(65)	General	227,095	235,283	227,470	235,571
	Police	154,210	160,428	165,495	172,019
L-6	General	256,724	265,934	256,808	265,963
	Police	168,368	175,116	180,480	187,570

#### **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, 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. Considering other financial assumptions, the 7.25% investment return rate translates to an assumed real rate of return of 3.75%. Adopted 2011.
- 2. The mortality table used to evaluate mortality among active members was 75% of the RP-2000 Combined Healthy Table set back 0 years for men and 0 years for women. It was assumed that 50% of pre-retirement deaths would be duty related. Adopted 2011.
- 3. The mortality table used in evaluating allowances to be paid was 105% of the 1994 Group Annuity Mortality Table, set back 0 years for men and 0 years for women. The disability post-retirement rates were equal to the standard rates set forward 10 years. Adopted 2011.
- 4. The probabilities of withdrawal from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2011.
- 5. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2011.
- 6. Total active member payroll is assumed to increase 3.50% 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 2011.
- 7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
- 8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.
- 9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

Schedule 1.

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

	Percent of Active Members Separating Within Next Year					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
All	0	18.00%	21.00%	18.00%	8.00%	
	1	16.00	20.00	17.00	7.00	
	2	14.00	16.00	16.00	6.00	
	3	11.00	13.00	13.00	6.00	
	4	9.00	12.00	12.00	5.00	
25	5 & Over	7.50	10.70	10.10	5.00	6.8%
30		6.50	9.40	8.00	4.00	6.0
35		5.10	7.20	6.10	2.80	5.5
40		3.80	5.50	4.70	2.20	5.0
45		3.00	4.20	3.60	1.80	4.5
50		2.40	3.40	1.80	1.00	4.1
55		1.80	2.50	1.00	0.50	3.9
60		1.00	1.20	0.00	0.00	3.8
65		0.00	0.00	0.00	0.00	3.5

	Percent Increase in Individual's Pay
Sample	<b>During Next Year</b>
Ages	Fire
25	8.6%
30	6.7
35	5.4
40	4.7
45	4.4
50	4.1
55	3.9
60	3.8
65	3.5

Schedule 2.

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

#### **Early Retirement**

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

#### **Normal Retirement**

Retirement_	General Members		Retirement		
Ages	Men	Women	Ages	Police	Fire
60	10%	10%	55	10%	15%
61	10	10	56	10	15
62	25	15	57	10	10
63	25	15	58	10	15
64	20	15	59	10	15
65	25	20	60	10	20
66	25	25	61	10	10
67	20	20	62	25	30
68	20	20	63	20	30
69	20	15	64	20	25
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	15	
52	15	15	15	15	
53	15	15	15	15	
54	15	15	15	15	
55	15	15	15	15	
56	15	15	15	15	
57	15	15	15	15	
58	15	15	15	15	
59	15	15	15	20	
60	15	15	15	30	
61	15	15	25	30	
62	30	15	30	45	
63	30	15	30	45	
64	30	20	30	45	
65	30	25	100	100	
66	30	25			
67	30	25			
68	30	25			
69	30	25			
70	100	100			

#### APPENDIX III

## SUMMARY OF LAGERS PROVISIONS

#### Missouri LocAl Government Employees Retirement System Brief Summary of LAGERS

## Benefits and Conditions Evaluated and/or Considered as of February 28, 2015

(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	\$ 875	\$1,400	93%
2,000	700	1,020	1,720	86%
2,500	875	1,165	2,040	82%
3,000	1,050	1,312	2,362	79%
3,500	1,225	1,457	2,682	77%
4,000	1,400	1,602	3,002	75%
25 Years of Service	ce:			
\$1,500	\$ 375	\$ 875	\$1,250	83%
2,000	500	1,020	1,520	76%
2,500	625	1,165	1,790	72%
3,000	750	1,312	2,062	69%
3,500	875	1,457	2,332	67%
4,000	1,000	1,602	2,602	65%
15 Years of Service	ce:			
\$1,500	\$225	\$ 875	\$1,100	73%
2,000	300	1,020	1,320	66%
2,500	375	1,165	1,540	62%
3,000	450	1,312	1,762	59%
3,500	525	1,457	1,982	57%
4,000	600	1,602	2,202	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 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	Estin	nated
Average	<b>LAGERS</b>	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	\$ 875	\$1,531	102%
2,000	875	1,020	1,895	95%
2,500	1,094	1,165	2,259	90%
3,000	1,313	1,312	2,625	88%
3,500	1,531	1,457	2,988	85%
4,000	1,750	1,602	3,352	84%
25 Years of Service	ce:			
\$1,500	\$ 469	\$ 875	\$1,344	90%
2,000	625	1,020	1,645	82%
2,500	781	1,165	1,946	78%
3,000	938	1,312	2,250	75%
3,500	1,094	1,457	2,551	73%
4,000	1,250	1,602	2,852	71%
15 Years of Service	ce:			
\$1,500	\$281	\$ 875	\$1,156	77%
2,000	375	1,020	1,395	70%
2,500	469	1,165	1,634	65%
3,000	563	1,312	1,875	63%
3,500	656	1,457	2,113	60%
4,000	750	1,602	2,352	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 2015 - 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  $^{I}$  )

	Estimated	Estin	nated
LAGERS	Social	Month	ly Total
BENEFIT <sup>3</sup>	Security <sup>2</sup>	\$	% of FAS
e:			
\$ 788	\$ 875	\$1,663	111%
1,050	1,020	2,070	104%
1,313	1,165	2,478	99%
1,575	1,312	2,887	96%
1,838	1,457	3,295	94%
2,100	1,602	3,702	93%
e:			
\$ 563	\$ 875	\$1,438	96%
750	1,020	1,770	89%
938	1,165	2,103	84%
1,125	1,312	2,437	81%
1,313	1,457	2,770	79%
1,500	1,602	3,102	78%
e:			
\$338	\$ 875	\$1,213	81%
450	1,020	1,470	74%
563	1,165	1,728	69%
675	1,312	1,987	66%
788	1,457	2,245	64%
900	1,602	2,502	63%
	e:  \$ 788 1,050 1,313 1,575 1,838 2,100 e:  \$ 563 750 938 1,125 1,313 1,500 e:  \$ \$338 450 563 675 788	LAGERS BENEFIT 3 Security 2  e:  \$ 788 \$ 875 1,050 1,020 1,313 1,165 1,575 1,312 1,838 1,457 2,100 1,602  e:  \$ 563 \$ 875 750 1,020 938 1,165 1,125 1,312 1,313 1,457 1,500 1,602  e:  \$ 338 \$ 875 450 1,020 563 1,165 675 1,312 788 1,457	LAGERS BENEFIT 3       Social Security 2       Month         e:       \$         \$ 788       \$ 875       \$ 1,663         1,050       1,020       2,070         1,313       1,165       2,478         1,575       1,312       2,887         1,838       1,457       3,295         2,100       1,602       3,702         e:         \$ 563       \$ 875       \$ 1,438         750       1,020       1,770         938       1,165       2,103         1,125       1,312       2,437         1,313       1,457       2,770         1,500       1,602       3,102         e:         \$ 338       \$ 875       \$ 1,213         450       1,020       1,470         563       1,165       1,728         675       1,312       1,987         788       1,457       2,245

<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 2015 - 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	e:			
\$1,500	\$ 919	\$ 875	\$1,794	120%
2,000	1,225	1,020	2,245	112%
2,500	1,531	1,165	2,696	108%
3,000	1,838	1,312	3,150	105%
3,500	2,144	1,457	3,601	103%
4,000	2,450	1,602	4,052	101%
25 Years of Service	ee:			
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,020	1,895	95%
2,500	1,094	1,165	2,259	90%
3,000	1,313	1,312	2,625	88%
3,500	1,531	1,457	2,988	85%
4,000	1,750	1,602	3,352	84%
15 Years of Service	ee:			
\$1,500	\$ 394	\$ 875	\$1,269	85%
2,000	525	1,020	1,545	77%
2,500	656	1,165	1,821	73%
3,000	788	1,312	2,100	70%
3,500	919	1,457	2,376	68%
4,000	1,050	1,602	2,652	66%

<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 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final		Estimated	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	\$1,050	\$ 875	\$1,925	128%
2,000	1,400	1,020	2,420	121%
2,500	1,750	1,165	2,915	117%
3,000	2,100	1,312	3,412	114%
3,500	2,450	1,457	3,907	112%
4,000	2,800	1,602	4,402	110%
25 Years of Service	ce:			
\$1,500	\$ 750	\$ 875	\$1,625	108%
2,000	1,000	1,020	2,020	101%
2,500	1,250	1,165	2,415	97%
3,000	1,500	1,312	2,812	94%
3,500	1,750	1,457	3,207	92%
4,000	2,000	1,602	3,602	90%
15 Years of Service	ce:			
\$1,500	\$ 450	\$ 875	\$1,325	88%
2,000	600	1,020	1,620	81%
2,500	750	1,165	1,915	77%
3,000	900	1,312	2,212	74%
3,500	1,050	1,457	2,507	72%
4,000	1,200	1,602	2,802	70%

<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 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final	LAC	GERS	Estimated	Esti	mated	Pen	cent
Average	BEN	EFIT <sup>3</sup>	Social	Montl	ıly Total	of I	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	\$ 525	\$ 875	\$1,050	\$1,400	70%	93%
2,000	1,400	700	1,020	1,400	1,720	70%	86%
2,500	1,750	875	1,165	1,750	2,040	70%	82%
3,000	2,100	1,050	1,312	2,100	2,362	70%	79%
3,500	2,450	1,225	1,457	2,450	2,682	70%	77%
4,000	2,800	1,400	1,602	2,800	3,002	70%	75%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 375	\$ 875	\$ 750	\$1,250	50%	83%
2,000	1,000	500	1,020	1,000	1,520	50%	76%
2,500	1,250	625	1,165	1,250	1,790	50%	72%
3,000	1,500	750	1,312	1,500	2,062	50%	69%
3,500	1,750	875	1,457	1,750	2,332	50%	67%
4,000	2,000	1,000	1,602	2,000	2,602	50%	65%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$225	\$ 875	\$ 450	\$1,100	30%	73%
2,000	600	300	1,020	600	1,320	30%	66%
2,500	750	375	1,165	750	1,540	30%	62%
3,000	900	450	1,312	900	1,762	30%	59%
3,500	1,050	525	1,457	1,050	1,982	30%	57%
4,000	1,200	600	1,602	1,200	2,202	30%	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 2015 - 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	ıly 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	\$ 875	\$1,050	\$1,531	70%	102%
2,000	1,400	875	1,020	1,400	1,895	70%	95%
2,500	1,750	1,094	1,165	1,750	2,259	70%	90%
3,000	2,100	1,313	1,312	2,100	2,625	70%	88%
3,500	2,450	1,531	1,457	2,450	2,988	70%	85%
4,000	2,800	1,750	1,602	2,800	3,352	70%	84%
25 Years of Serv	ice:						
\$1,500	\$ 750	\$ 469	\$ 875	\$ 750	\$1,344	50%	90%
2,000	1,000	625	1,020	1,000	1,645	50%	82%
2,500	1,250	781	1,165	1,250	1,946	50%	78%
3,000	1,500	938	1,312	1,500	2,250	50%	75%
3,500	1,750	1,094	1,457	1,750	2,551	50%	73%
4,000	2,000	1,250	1,602	2,000	2,852	50%	71%
15 Years of Serv	ice:						
\$1,500	\$ 450	\$281	\$ 875	\$ 450	\$1,156	30%	77%
2,000	600	375	1,020	600	1,395	30%	70%
2,500	750	469	1,165	750	1,634	30%	65%
3,000	900	563	1,312	900	1,875	30%	63%
3,500	1,050	656	1,457	1,050	2,113	30%	60%
4,000	1,200	750	1,602	1,200	2,352	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 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

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

Final	LAGERS Estimated Estimated		mated	Percent			
Average	BEN	EFIT <sup>3</sup>	Social	Month	ıly 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	rice:						
\$1,500	\$1,050	\$ 788	\$ 875	\$1,050	\$1,663	70%	111%
2,000	1,400	1,050	1,020	1,400	2,070	70%	104%
2,500	1,750	1,313	1,165	1,750	2,478	70%	99%
3,000	2,100	1,575	1,312	2,100	2,887	70%	96%
3,500	2,450	1,838	1,457	2,450	3,295	70%	94%
4,000	2,800	2,100	1,602	2,800	3,702	70%	93%
25 Years of Serv	rice:						
\$1,500	\$ 750	\$ 563	\$ 875	\$ 750	\$1,438	50%	96%
2,000	1,000	750	1,020	1,000	1,770	50%	89%
2,500	1,250	938	1,165	1,250	2,103	50%	84%
3,000	1,500	1,125	1,312	1,500	2,437	50%	81%
3,500	1,750	1,313	1,457	1,750	2,770	50%	79%
4,000	2,000	1,500	1,602	2,000	3,102	50%	78%
15 Years of Serv	rice:						
\$1,500	\$ 450	\$338	\$ 875	\$ 450	\$1,213	30%	81%
2,000	600	450	1,020	600	1,470	30%	74%
2,500	750	563	1,165	750	1,728	30%	69%
3,000	900	675	1,312	900	1,987	30%	66%
3,500	1,050	788	1,457	1,050	2,245	30%	64%
4,000	1,200	900	1,602	1,200	2,502	30%	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 2015 - 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)

					Percent		
BEN	EFIT <sup>3</sup>		Month	ıly Total	of l	FAS	
To 65	At 65	Security <sup>2</sup>	To 65	At 65	To 65	At 65	
ice:							
\$1,050	\$ 919	\$ 875	\$1,050	\$1,794	70%	120%	
1,400	1,225	1,020	1,400	2,245	70%	112%	
1,750	1,531	1,165	1,750	2,696	70%	108%	
2,100	1,838	1,312	2,100	3,150	70%	105%	
2,450	2,144	1,457	2,450	3,601	70%	103%	
2,800	2,450	1,602	2,800	4,052	70%	101%	
ice:							
\$ 750	\$ 656	\$ 875	\$ 750	\$1,531	50%	102%	
1,000	875	1,020	1,000	1,895	50%	95%	
1,250	1,094	1,165	1,250	2,259	50%	90%	
1,500	1,313	1,312	1,500	2,625	50%	88%	
1,750	1,531	1,457	1,750	2,988	50%	85%	
2,000	1,750	1,602	2,000	3,352	50%	84%	
ice:							
\$ 450	\$ 394	\$ 875	\$ 450	\$1,269	30%	85%	
600	525	1,020	600	1,545	30%	77%	
750	656	1,165	750	1,821	30%	73%	
900	788	1,312	900	2,100	30%	70%	
1,050	919	1,457	1,050	2,376	30%	68%	
1,200	1,050	1,602	1,200	2,652	30%	66%	
	## 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 \$ 919 1,400 1,225 1,750 1,531 2,100 1,838 2,450 2,144 2,800 2,450  ce:  \$ 750 \$ 656 1,000 875 1,250 1,094 1,500 1,313 1,750 1,531 2,000 1,750  ce:  \$ 450 \$ 394 600 525 750 656 900 788 1,050 919	BENEFIT 3         Social           To 65         At 65         Security 2           ce:         \$1,050         \$ 919         \$ 875           1,400         1,225         1,020           1,750         1,531         1,165           2,100         1,838         1,312           2,450         2,144         1,457           2,800         2,450         1,602           ce:         \$ 750         \$ 656         \$ 875           1,000         875         1,020           1,250         1,094         1,165           1,500         1,313         1,312           1,750         1,531         1,457           2,000         1,750         1,602           ce:         \$ 450         \$ 394         \$ 875           600         525         1,020           750         656         1,165           900         788         1,312           1,050         919         1,457	BENEFIT 3         Social Security 2         Month To 65           To 65         At 65         Security 2         To 65           ce:           \$1,050           \$1,050         \$919         \$875         \$1,050           \$1,400         \$1,225         \$1,020         \$1,400           \$1,750         \$1,531         \$1,165         \$1,750           \$2,100         \$1,838         \$1,312         \$2,100           \$2,450         \$2,144         \$1,457         \$2,450           \$2,800         \$2,450         \$1,602         \$2,800           ce:           \$\frac{5}{6}66         \$875         \$750           \$1,000         \$875         \$1,020         \$1,000           \$1,250         \$1,094         \$1,165         \$1,250           \$1,500         \$1,313         \$1,312         \$1,500           \$1,750         \$1,531         \$1,457         \$1,750           \$2,000         \$1,750         \$1,602         \$2,000           ce:    \$\$\frac{450}{5} \tag{5}	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         \$1,794           1,400         1,225         1,020         1,400         2,245           2,100         1,838         1,312         2,100         3,150         2,696           2,100         1,838         1,312         2,450         3,601         2,450         3,601         2,800         4,052         2,800         4,052         3,601         2,800         4,052         3,601         2,800         4,052         3,601         2,800         1,531         1,050         1,250         2,259         1,531         1,050         2,259         1,500         2,625         1,750         2,988         2,000         1,750         2,988         2,000 </td <td>BENEFIT 3         Social To 65         Monthly Total         of 1           ce:         1,050         \$ 919         \$ 875         \$ 1,050         \$ 1,794         70%           1,400         1,225         1,020         1,400         2,245         70%           1,750         1,531         1,165         1,750         2,696         70%           2,100         1,838         1,312         2,100         3,150         70%           2,450         2,144         1,457         2,450         3,601         70%           2,800         2,450         1,602         2,800         4,052         70%           3,000         875         1,020         1,000         1,895         50%           1,250         1,094         1,165         1,250         2,259         50%           1,500         1,313         1,312         1,500         2,625         50%           1,750         1,531         1,457         1,750         2,988         50%           2,000         1,750         1,602         2,000         3,352         50%           2,000         1,750         1,602         2,000         3,352         50%           600</td>	BENEFIT 3         Social To 65         Monthly Total         of 1           ce:         1,050         \$ 919         \$ 875         \$ 1,050         \$ 1,794         70%           1,400         1,225         1,020         1,400         2,245         70%           1,750         1,531         1,165         1,750         2,696         70%           2,100         1,838         1,312         2,100         3,150         70%           2,450         2,144         1,457         2,450         3,601         70%           2,800         2,450         1,602         2,800         4,052         70%           3,000         875         1,020         1,000         1,895         50%           1,250         1,094         1,165         1,250         2,259         50%           1,500         1,313         1,312         1,500         2,625         50%           1,750         1,531         1,457         1,750         2,988         50%           2,000         1,750         1,602         2,000         3,352         50%           2,000         1,750         1,602         2,000         3,352         50%           600	

<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 2015 - 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

## February 29, 2016

## By Attained Age and Years of Service

		Year	s of Sei	vice 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									
50-54									
55-59	1	1		1				3	\$ 75,921
60-64									
65-69									
70 & Over				1				1	\$ 33,543
Totals	1	1		2				4	\$ 109,464

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

Age: 61.4 years.

Benefit Service: 11.3 years.

Annual Pay: \$27,366.

## February 29, 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	1	1						2	\$ 55,939
30-34		1						1	\$ 31,047
35-39									
40-44									
45-49			1					1	\$ 35,454
50-54									
55-59									
60-64									
65-69									
70 & Over									
Totals	1	2	1					4	\$ 122,440

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

Age: 33.4 years.

Benefit Service: 7.4 years. Annual Pay: \$30,610.



April 6, 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 February 29, 2016 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Wellsville

Sincerely,

Mita D. Drazilov

MDD:adh



April 6, 2016

City of Wellsville Wellsville, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the February 29, 2016 Initial Valuation for the City of Wellsville dated April 6, 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 28, 2015.

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

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

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

(4% member contributions are additional)

#### Regular Retirement Eligibility

		L-1 Benefit Program			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	stimated Employer		Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contr	Contribution A		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	\$ 109,464	10.7%	\$11,713	\$ 127,128	14.1%	\$15,434	\$ 159,532	12.1%	\$13,245	\$ 138,275	
2017	113,295	10.7	12,123	129,080	14.1	15,975	161,981	12.1	13,709	140,398	
2018	117,260	10.7	12,547	130,919	14.1	16,534	164,289	12.1	14,188	142,398	
2019	121,364	10.7	12,986	132,628	14.1	17,112	166,434	12.1	14,685	144,257	
2020	125,612	10.7	13,440	134,189	14.1	17,711	168,393	12.1	15,199	145,955	
2021	130,008	10.7	13,911	135,581	14.1	18,331	170,140	12.1	15,731	147,469	
2022	134,558	10.7	14,398	136,782	14.1	18,973	171,647	12.1	16,282	148,776	
2023	139,268	10.7	14,902	137,768	14.1	19,637	172,885	12.1	16,851	149,849	
2024	144,142	10.7	15,423	138,513	14.1	20,324	173,820	12.1	17,441	150,660	
2025	149.187	10.7	15,963	138,989	14.1	21.035	174.417	12.1	18.052	151.178	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded Estimated l		Employer Unfunded	
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Contri	ibution Actuaria	
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	\$ 109,464	15.2%	\$16,639	\$ 167,892	17.6%	\$19,266	\$ 191,922	18.3%	\$20,032	\$ 197,486
2017	113,295	15.2	17,221	170,470	17.6	19,940	194,869	18.3	20,733	200,518
2018	117,260	15.2	17,824	172,899	17.6	20,638	197,645	18.3	21,459	203,375
2019	121,364	15.2	18,447	175,156	17.6	21,360	200,225	18.3	22,210	206,030
2020	125,612	15.2	19,093	177,217	17.6	22,108	202,581	18.3	22,987	208,455
2021	130,008	15.2	19,761	179,055	17.6	22,881	204,683	18.3	23,791	210,618
2022	134,558	15.2	20,453	180,641	17.6	23,682	206,496	18.3	24,624	212,484
2023	139,268	15.2	21,169	181,944	17.6	24,511	207,985	18.3	25,486	214,016
2024	144,142	15.2	21,910	182,928	17.6	25,369	209,110	18.3	26,378	215,174
2025	149,187	15.2	22,676	183,556	17.6	26,257	209,828	18.3	27,301	215,913

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
			Estimated Employer Contribution			Employer	Unfunded	Estimated Employer Contribution		Unfunded
	Estimated		bution	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	\$ 109,464	21.0%	\$22,987	\$ 224,315	21.3%	\$23,316	\$ 227,095	24.4%	\$26,709	\$ 256,724
2017	113,295	21.0	23,792	227,759	21.3	24,132	230,582	24.4	27,644	260,666
2018	117,260	21.0	24,625	231,004	21.3	24,976	233,867	24.4	28,611	264,380
2019	121,364	21.0	25,486	234,020	21.3	25,851	236,920	24.4	29,613	267,832
2020	125,612	21.0	26,379	236,774	21.3	26,755	239,708	24.4	30,649	270,984
2021	130,008	21.0	27,302	239,230	21.3	27,692	242,195	24.4	31,722	273,795
2022	134,558	21.0	28,257	241,350	21.3	28,661	244,341	24.4	32,832	276,221
2023	139,268	21.0	29,246	243,090	21.3	29,664	246,103	24.4	33,981	278,213
2024	144,142	21.0	30,270	244,405	21.3	30,702	247,434	24.4	35,171	279,718
2025	149,187	21.0	31,329	245,245	21.3	31,777	248,284	24.4	36,402	280,679

- 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 3.50%.
- 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	\$ 109,464	11.2%	\$12,260	\$ 131,743	14.7%	\$16,091	\$ 165,295	12.6%	\$13,792	\$ 143,298	
2017	113,295	11.2	12,689	133,766	14.7	16,654	167,833	12.6	14,275	145,498	
2018	117,260	11.2	13,133	135,672	14.7	17,237	170,224	12.6	14,775	147,571	
2019	121,364	11.2	13,593	137,443	14.7	17,841	172,446	12.6	15,292	149,498	
2020	125,612	11.2	14,069	139,061	14.7	18,465	174,475	12.6	15,827	151,257	
2021	130,008	11.2	14,561	140,504	14.7	19,111	176,285	12.6	16,381	152,826	
2022	134,558	11.2	15,070	141,749	14.7	19,780	177,847	12.6	16,954	154,180	
2023	139,268	11.2	15,598	142,771	14.7	20,472	179,129	12.6	17,548	155,292	
2024	144,142	11.2	16,144	143,543	14.7	21,189	180,098	12.6	18,162	156,132	
2025	149.187	11.2	16,709	144.036	14.7	21.930	180.717	12.6	18,798	156,668	

		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	\$ 109,464	15.8%	\$17,295	\$ 173,957	18.2%	\$19,922	\$ 198,833	18.9%	\$20,689	\$ 204,611	
2017	113,295	15.8	17,901	176,628	18.2	20,620	201,886	18.9	21,413	207,753	
2018	117,260	15.8	18,527	179,145	18.2	21,341	204,762	18.9	22,162	210,713	
2019	121,364	15.8	19,176	181,484	18.2	22,088	207,435	18.9	22,938	213,464	
2020	125,612	15.8	19,847	183,620	18.2	22,861	209,876	18.9	23,741	215,976	
2021	130,008	15.8	20,541	185,525	18.2	23,661	212,053	18.9	24,572	218,217	
2022	134,558	15.8	21,260	187,169	18.2	24,490	213,932	18.9	25,431	220,150	
2023	139,268	15.8	22,004	188,519	18.2	25,347	215,475	18.9	26,322	221,737	
2024	144,142	15.8	22,774	189,539	18.2	26,234	216,641	18.9	27,243	222,937	
2025	149,187	15.8	23,572	190,190	18.2	27,152	217,385	18.9	28,196	223,703	

		L-12 Benefit Program			LT-14(	65) Benefit F	rogram	L-6 Benefit Program			
					funded Estimated Employer		Unfunded Estimated		Employer	Unfunded	
	Estimated	Contri	Contribution		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	\$ 109,464	21.9%	\$23,973	\$ 232,388	22.3%	\$24,410	\$ 235,283	25.4%	\$27,804	\$ 265,934	
2017	113,295	21.9	24,812	235,956	22.3	25,265	238,895	25.4	28,777	270,017	
2018	117,260	21.9	25,680	239,318	22.3	26,149	242,299	25.4	29,784	273,864	
2019	121,364	21.9	26,579	242,443	22.3	27,064	245,463	25.4	30,826	277,440	
2020	125,612	21.9	27,509	245,296	22.3	28,011	248,352	25.4	31,905	280,705	
2021	130,008	21.9	28,472	247,841	22.3	28,992	250,928	25.4	33,022	283,617	
2022	134,558	21.9	29,468	250,037	22.3	30,006	253,151	25.4	34,178	286,130	
2023	139,268	21.9	30,500	251,840	22.3	31,057	254,976	25.4	35,374	288,193	
2024	144,142	21.9	31,567	253,202	22.3	32,144	256,355	25.4	36,612	289,752	
2025	149,187	21.9	32,672	254,072	22.3	33,269	257,236	25.4	37,893	290,747	

- 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 3.50%.
- 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 Estima		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	\$ 109,464	14.2%	\$15,544	\$ 128,411	17.6%	\$19,266	\$ 160,514	15.5%	\$16,967	\$ 139,434	
2017	113,295	14.2	16,088	130,383	17.6	19,940	162,979	15.5	17,561	141,575	
2018	117,260	14.2	16,651	132,241	17.6	20,638	165,301	15.5	18,175	143,592	
2019	121,364	14.2	17,234	133,968	17.6	21,360	167,459	15.5	18,811	145,467	
2020	125,612	14.2	17,837	135,545	17.6	22,108	169,430	15.5	19,470	147,179	
2021	130,008	14.2	18,461	136,951	17.6	22,881	171,188	15.5	20,151	148,706	
2022	134,558	14.2	19,107	138,164	17.6	23,682	172,705	15.5	20,856	150,024	
2023	139,268	14.2	19,776	139,160	17.6	24,511	173,950	15.5	21,587	151,106	
2024	144,142	14.2	20,468	139,913	17.6	25,369	174,891	15.5	22,342	151,923	
2025	149,187	14.2	21,185	140,394	17.6	26,257	175,492	15.5	23,124	152,445	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program			
	Estimated	Estimated Employer ated 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	\$ 109,464	18.6%	\$20,360	\$ 168,784	21.0%	\$22,987	\$ 192,604	21.7%	\$23,754	\$ 198,112	
2017	113,295	18.6	21,073	171,375	21.0	23,792	195,561	21.7	24,585	201,154	
2018	117,260	18.6	21,810	173,817	21.0	24,625	198,347	21.7	25,445	204,020	
2019	121,364	18.6	22,574	176,086	21.0	25,486	200,937	21.7	26,336	206,684	
2020	125,612	18.6	23,364	178,158	21.0	26,379	203,302	21.7	27,258	209,116	
2021	130,008	18.6	24,181	180,006	21.0	27,302	205,411	21.7	28,212	211,285	
2022	134,558	18.6	25,028	181,601	21.0	28,257	207,231	21.7	29,199	213,157	
2023	139,268	18.6	25,904	182,911	21.0	29,246	208,725	21.7	30,221	214,694	
2024	144,142	18.6	26,810	183,900	21.0	30,270	209,854	21.7	31,279	215,855	
2025	149,187	18.6	27,749	184,532	21.0	31,329	210,575	21.7	32,374	216,596	

		L-12	2 Benefit Pro	gram	LT-14(	65) Benefit F	Program	L-6	gram	
		Estimated Employer		Unfunded		Employer	Unfunded		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	\$ 109,464	24.4%	\$26,709	\$ 224,715	24.8%	\$27,147	\$ 227,470	27.8%	\$30,431	\$ 256,808
2017	113,295	24.4	27,644	228,165	24.8	28,097	230,963	27.8	31,496	260,751
2018	117,260	24.4	28,611	231,416	24.8	29,080	234,254	27.8	32,598	264,466
2019	121,364	24.4	29,613	234,437	24.8	30,098	237,312	27.8	33,739	267,919
2020	125,612	24.4	30,649	237,196	24.8	31,152	240,105	27.8	34,920	271,072
2021	130,008	24.4	31,722	239,657	24.8	32,242	242,596	27.8	36,142	273,884
2022	134,558	24.4	32,832	241,780	24.8	33,370	244,745	27.8	37,407	276,311
2023	139,268	24.4	33,981	243,523	24.8	34,538	246,510	27.8	38,717	278,303
2024	144,142	24.4	35,171	244,840	24.8	35,747	247,844	27.8	40,071	279,809
2025	149,187	24.4	36,402	245,681	24.8	36,998	248,695	27.8	41,474	280,770

- 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 3.50%.
- 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 Prog	gram	L-3	Benefit Prog	gram	LT-4(	65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	Contribution Actuarial		Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 109,464	14.7%	\$16,091	\$ 132,975	18.2%	\$19,922	\$ 166,212	16.1%	\$17,624	\$ 144,400
2017	113,295	14.7	16,654	135,017	18.2	20,620	168,764	16.1	18,240	146,617
2018	117,260	14.7	17,237	136,941	18.2	21,341	171,169	16.1	18,879	148,706
2019	121,364	14.7	17,841	138,729	18.2	22,088	173,404	16.1	19,540	150,648
2020	125,612	14.7	18,465	140,362	18.2	22,861	175,445	16.1	20,224	152,421
2021	130,008	14.7	19,111	141,818	18.2	23,661	177,265	16.1	20,931	154,002
2022	134,558	14.7	19,780	143,074	18.2	24,490	178,836	16.1	21,664	155,366
2023	139,268	14.7	20,472	144,106	18.2	25,347	180,126	16.1	22,422	156,486
2024	144,142	14.7	21,189	144,886	18.2	26,234	181,100	16.1	23,207	157,333
2025	149,187	14.7	21,930	145,384	18.2	27,152	181,722	16.1	24,019	157,873

		LT-5(	65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(	65) Benefit P	rogram
	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	\$ 109,464	19.2%	\$21,017	\$ 174,782	21.7%	\$23,754	\$ 199,471	22.3%	\$24,410	\$ 205,183
2017	113,295	19.2	21,753	177,466	21.7	24,585	202,534	22.3	25,265	208,333
2018	117,260	19.2	22,514	179,995	21.7	25,445	205,420	22.3	26,149	211,301
2019	121,364	19.2	23,302	182,345	21.7	26,336	208,102	22.3	27,064	214,060
2020	125,612	19.2	24,118	184,491	21.7	27,258	210,551	22.3	28,011	216,579
2021	130,008	19.2	24,962	186,405	21.7	28,212	212,735	22.3	28,992	218,826
2022	134,558	19.2	25,835	188,057	21.7	29,199	214,620	22.3	30,006	220,765
2023	139,268	19.2	26,739	189,413	21.7	30,221	216,168	22.3	31,057	222,357
2024	144,142	19.2	27,675	190,438	21.7	31,279	217,337	22.3	32,144	223,560
2025	149,187	19.2	28,644	191,092	21.7	32,374	218,084	22.3	33,269	224,328

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program			
	Estimated Emp		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	\$ 109,464	25.3%	\$27,694	\$ 232,717	25.7%	\$28,132	\$ 235,571	28.8%	\$31,526	\$ 265,963	
2017	113,295	25.3	28,664	236,290	25.7	29,117	239,188	28.8	32,629	270,047	
2018	117,260	25.3	29,667	239,657	25.7	30,136	242,596	28.8	33,771	273,895	
2019	121,364	25.3	30,705	242,786	25.7	31,191	245,763	28.8	34,953	277,471	
2020	125,612	25.3	31,780	245,643	25.7	32,282	248,655	28.8	36,176	280,736	
2021	130,008	25.3	32,892	248,191	25.7	33,412	251,235	28.8	37,442	283,648	
2022	134,558	25.3	34,043	250,390	25.7	34,581	253,461	28.8	38,753	286,161	
2023	139,268	25.3	35,235	252,196	25.7	35,792	255,289	28.8	40,109	288,225	
2024	144,142	25.3	36,468	253,560	25.7	37,044	256,670	28.8	41,513	289,784	
2025	149,187	25.3	37,744	254,431	25.7	38,341	257,552	28.8	42,966	290,779	

- 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 3.50%.
- 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 Prog	gram	LT-4(65) Benefit Program			
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	
	Estimated	Contr	Contribution		Contri	ibution	Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2016	\$ 109,464	10.7%	\$11,713	\$ 127,128	14.1%	\$15,434	\$ 159,532	12.1%	\$13,245	\$ 138,275	
2017	113,295	10.7	12,123	129,080	14.1	15,975	161,981	12.1	13,709	140,398	
2018	117,260	10.7	12,547	130,919	14.1	16,534	164,289	12.1	14,188	142,398	
2019	121,364	10.7	12,986	132,628	14.1	17,112	166,434	12.1	14,685	144,257	
2020	125,612	10.7	13,440	134,189	14.1	17,711	168,393	12.1	15,199	145,955	
2021	130,008	10.7	13,911	135,581	14.1	18,331	170,140	12.1	15,731	147,469	
2022	134,558	10.7	14,398	136,782	14.1	18,973	171,647	12.1	16,282	148,776	
2023	139,268	10.7	14,902	137,768	14.1	19,637	172,885	12.1	16,851	149,849	
2024	144,142	10.7	15,423	138,513	14.1	20,324	173,820	12.1	17,441	150,660	
2025	149,187	10.7	15,963	138,989	14.1	21,035	174,417	12.1	18,052	151,178	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program			
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Actuarial Contribu		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	\$ 109,464	15.2%	\$16,639	\$ 167,892	17.6%	\$19,266	\$ 191,922	18.3%	\$20,032	\$ 197,486	
2017	113,295	15.2	17,221	170,470	17.6	19,940	194,869	18.3	20,733	200,518	
2018	117,260	15.2	17,824	172,899	17.6	20,638	197,645	18.3	21,459	203,375	
2019	121,364	15.2	18,447	175,156	17.6	21,360	200,225	18.3	22,210	206,030	
2020	125,612	15.2	19,093	177,217	17.6	22,108	202,581	18.3	22,987	208,455	
2021	130,008	15.2	19,761	179,055	17.6	22,881	204,683	18.3	23,791	210,618	
2022	134,558	15.2	20,453	180,641	17.6	23,682	206,496	18.3	24,624	212,484	
2023	139,268	15.2	21,169	181,944	17.6	24,511	207,985	18.3	25,486	214,016	
2024	144,142	15.2	21,910	182,928	17.6	25,369	209,110	18.3	26,378	215,174	
2025	149,187	15.2	22,676	183,556	17.6	26,257	209,828	18.3	27,301	215,913	

		L-12	2 Benefit Pro	gram	LT-14(	65) Benefit F	Program	L-6	gram	
		Estimated Employer		Unfunded		Employer	Unfunded		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	\$ 109,464	21.0%	\$22,987	\$ 224,315	21.3%	\$23,316	\$ 227,095	24.4%	\$26,709	\$ 256,724
2017	113,295	21.0	23,792	227,759	21.3	24,132	230,582	24.4	27,644	260,666
2018	117,260	21.0	24,625	231,004	21.3	24,976	233,867	24.4	28,611	264,380
2019	121,364	21.0	25,486	234,020	21.3	25,851	236,920	24.4	29,613	267,832
2020	125,612	21.0	26,379	236,774	21.3	26,755	239,708	24.4	30,649	270,984
2021	130,008	21.0	27,302	239,230	21.3	27,692	242,195	24.4	31,722	273,795
2022	134,558	21.0	28,257	241,350	21.3	28,661	244,341	24.4	32,832	276,221
2023	139,268	21.0	29,246	243,090	21.3	29,664	246,103	24.4	33,981	278,213
2024	144,142	21.0	30,270	244,405	21.3	30,702	247,434	24.4	35,171	279,718
2025	149,187	21.0	31,329	245,245	21.3	31,777	248,284	24.4	36,402	280,679

- 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 3.50%.
- 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 Prog	gram	L-3	Benefit Prog	gram	LT-4(	65) Benefit P	rogram
		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	Contribution 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	\$ 109,464	11.2%	\$12,260	\$ 131,743	14.7%	\$16,091	\$ 165,295	12.6%	\$13,792	\$ 143,298
2017	113,295	11.2	12,689	133,766	14.7	16,654	167,833	12.6	14,275	145,498
2018	117,260	11.2	13,133	135,672	14.7	17,237	170,224	12.6	14,775	147,571
2019	121,364	11.2	13,593	137,443	14.7	17,841	172,446	12.6	15,292	149,498
2020	125,612	11.2	14,069	139,061	14.7	18,465	174,475	12.6	15,827	151,257
2021	130,008	11.2	14,561	140,504	14.7	19,111	176,285	12.6	16,381	152,826
2022	134,558	11.2	15,070	141,749	14.7	19,780	177,847	12.6	16,954	154,180
2023	139,268	11.2	15,598	142,771	14.7	20,472	179,129	12.6	17,548	155,292
2024	144,142	11.2	16,144	143,543	14.7	21,189	180,098	12.6	18,162	156,132
2025	149,187	11.2	16,709	144,036	14.7	21,930	180,717	12.6	18,798	156,668

		LT-5(	65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(	65) Benefit P	rogram
	Estimated	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 109,464	15.8%	\$17,295	\$ 173,957	18.2%	\$19,922	\$ 198,833	18.9%	\$20,689	\$ 204,611
2017	113,295	15.8	17,901	176,628	18.2	20,620	201,886	18.9	21,413	207,753
2018	117,260	15.8	18,527	179,145	18.2	21,341	204,762	18.9	22,162	210,713
2019	121,364	15.8	19,176	181,484	18.2	22,088	207,435	18.9	22,938	213,464
2020	125,612	15.8	19,847	183,620	18.2	22,861	209,876	18.9	23,741	215,976
2021	130,008	15.8	20,541	185,525	18.2	23,661	212,053	18.9	24,572	218,217
2022	134,558	15.8	21,260	187,169	18.2	24,490	213,932	18.9	25,431	220,150
2023	139,268	15.8	22,004	188,519	18.2	25,347	215,475	18.9	26,322	221,737
2024	144,142	15.8	22,774	189,539	18.2	26,234	216,641	18.9	27,243	222,937
2025	149,187	15.8	23,572	190,190	18.2	27,152	217,385	18.9	28,196	223,703

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
			Employer	Unfunded		Employer	Unfunded		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	\$ 109,464	21.9%	\$23,973	\$ 232,388	22.3%	\$24,410	\$ 235,283	25.4%	\$27,804	\$ 265,934	
2017	113,295	21.9	24,812	235,956	22.3	25,265	238,895	25.4	28,777	270,017	
2018	117,260	21.9	25,680	239,318	22.3	26,149	242,299	25.4	29,784	273,864	
2019	121,364	21.9	26,579	242,443	22.3	27,064	245,463	25.4	30,826	277,440	
2020	125,612	21.9	27,509	245,296	22.3	28,011	248,352	25.4	31,905	280,705	
2021	130,008	21.9	28,472	247,841	22.3	28,992	250,928	25.4	33,022	283,617	
2022	134,558	21.9	29,468	250,037	22.3	30,006	253,151	25.4	34,178	286,130	
2023	139,268	21.9	30,500	251,840	22.3	31,057	254,976	25.4	35,374	288,193	
2024	144,142	21.9	31,567	253,202	22.3	32,144	256,355	25.4	36,612	289,752	
2025	149,187	21.9	32,672	254,072	22.3	33,269	257,236	25.4	37,893	290,747	

- 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 3.50%.
- 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	l Employer	Unfunded	Unfunded Estimated E		Unfunded	Estimated	Employer	Unfunded
	Estimated	Contr	Contribution Actuarial		Contri	ibution	Actuarial	Contr	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 109,464	14.2%	\$15,544	\$ 128,411	17.6%	\$19,266	\$ 160,514	15.5%	\$16,967	\$ 139,434
2017	113,295	14.2	16,088	130,383	17.6	19,940	162,979	15.5	17,561	141,575
2018	117,260	14.2	16,651	132,241	17.6	20,638	165,301	15.5	18,175	143,592
2019	121,364	14.2	17,234	133,968	17.6	21,360	167,459	15.5	18,811	145,467
2020	125,612	14.2	17,837	135,545	17.6	22,108	169,430	15.5	19,470	147,179
2021	130,008	14.2	18,461	136,951	17.6	22,881	171,188	15.5	20,151	148,706
2022	134,558	14.2	19,107	138,164	17.6	23,682	172,705	15.5	20,856	150,024
2023	139,268	14.2	19,776	139,160	17.6	24,511	173,950	15.5	21,587	151,106
2024	144,142	14.2	20,468	139,913	17.6	25,369	174,891	15.5	22,342	151,923
2025	149,187	14.2	21,185	140,394	17.6	26,257	175,492	15.5	23,124	152,445

		LT-5(	65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(	65) Benefit P	rogram
	Estimated E		Estimated Employer Unfunde Contribution Actuaria		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	\$ 109,464	18.6%	\$20,360	\$ 168,784	21.0%	\$22,987	\$ 192,604	21.7%	\$23,754	\$ 198,112
2017	113,295	18.6	21,073	171,375	21.0	23,792	195,561	21.7	24,585	201,154
2018	117,260	18.6	21,810	173,817	21.0	24,625	198,347	21.7	25,445	204,020
2019	121,364	18.6	22,574	176,086	21.0	25,486	200,937	21.7	26,336	206,684
2020	125,612	18.6	23,364	178,158	21.0	26,379	203,302	21.7	27,258	209,116
2021	130,008	18.6	24,181	180,006	21.0	27,302	205,411	21.7	28,212	211,285
2022	134,558	18.6	25,028	181,601	21.0	28,257	207,231	21.7	29,199	213,157
2023	139,268	18.6	25,904	182,911	21.0	29,246	208,725	21.7	30,221	214,694
2024	144,142	18.6	26,810	183,900	21.0	30,270	209,854	21.7	31,279	215,855
2025	149,187	18.6	27,749	184,532	21.0	31,329	210,575	21.7	32,374	216,596

		L-12 Benefit Program Estimated Employer Unfunded			LT-14(	(65) Benefit F	Program	L-6 Benefit Program			
	E-dd-1		Estimated Employer Contribution		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	
Valuation	Estimated Projected	As a % of	Annual	Actuarial Accrued	As a % of	Annual	Actuarial Accrued	As a % of	Annual	Actuarial Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 109,464	24.4%	\$26,709	\$ 224,715	24.8%	\$27,147	\$ 227,470	27.8%	\$30,431	\$ 256,808	
2017	113,295	24.4	27,644	228,165	24.8	28,097	230,963	27.8	31,496	260,751	
2018	117,260	24.4	28,611	231,416	24.8	29,080	234,254	27.8	32,598	264,466	
2019	121,364	24.4	29,613	234,437	24.8	30,098	237,312	27.8	33,739	267,919	
2020	125,612	24.4	30,649	237,196	24.8	31,152	240,105	27.8	34,920	271,072	
2021	130,008	24.4	31,722	239,657	24.8	32,242	242,596	27.8	36,142	273,884	
2022	134,558	24.4	32,832	241,780	24.8	33,370	244,745	27.8	37,407	276,311	
2023	139,268	24.4	33,981	243,523	24.8	34,538	246,510	27.8	38,717	278,303	
2024	144,142	24.4	35,171	244,840	24.8	35,747	247,844	27.8	40,071	279,809	
2025	149,187	24.4	36,402	245,681	24.8	36,998	248,695	27.8	41,474	280,770	

- 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 3.50%.
- 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 Prog	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contri	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	\$ 109,464	14.7%	\$16,091	\$ 132,975	18.2%	\$19,922	\$ 166,212	16.1%	\$17,624	\$ 144,400
2017	113,295	14.7	16,654	135,017	18.2	20,620	168,764	16.1	18,240	146,617
2018	117,260	14.7	17,237	136,941	18.2	21,341	171,169	16.1	18,879	148,706
2019	121,364	14.7	17,841	138,729	18.2	22,088	173,404	16.1	19,540	150,648
2020	125,612	14.7	18,465	140,362	18.2	22,861	175,445	16.1	20,224	152,421
2021	130,008	14.7	19,111	141,818	18.2	23,661	177,265	16.1	20,931	154,002
2022	134,558	14.7	19,780	143,074	18.2	24,490	178,836	16.1	21,664	155,366
2023	139,268	14.7	20,472	144,106	18.2	25,347	180,126	16.1	22,422	156,486
2024	144,142	14.7	21,189	144,886	18.2	26,234	181,100	16.1	23,207	157,333
2025	149,187	14.7	21,930	145,384	18.2	27,152	181,722	16.1	24,019	157,873

		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	\$ 109,464	19.2%	\$21,017	\$ 174,782	21.7%	\$23,754	\$ 199,471	22.3%	\$24,410	\$ 205,183	
2017	113,295	19.2	21,753	177,466	21.7	24,585	202,534	22.3	25,265	208,333	
2018	117,260	19.2	22,514	179,995	21.7	25,445	205,420	22.3	26,149	211,301	
2019	121,364	19.2	23,302	182,345	21.7	26,336	208,102	22.3	27,064	214,060	
2020	125,612	19.2	24,118	184,491	21.7	27,258	210,551	22.3	28,011	216,579	
2021	130,008	19.2	24,962	186,405	21.7	28,212	212,735	22.3	28,992	218,826	
2022	134,558	19.2	25,835	188,057	21.7	29,199	214,620	22.3	30,006	220,765	
2023	139,268	19.2	26,739	189,413	21.7	30,221	216,168	22.3	31,057	222,357	
2024	144,142	19.2	27,675	190,438	21.7	31,279	217,337	22.3	32,144	223,560	
2025	149,187	19.2	28,644	191,092	21.7	32,374	218,084	22.3	33,269	224,328	

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program				
	T 4 1	Estimated Employer Contribution		1 0				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	\$ 109,464	25.3%	\$27,694	\$ 232,717	25.7%	\$28,132	\$ 235,571	28.8%	\$31,526	\$ 265,963		
2017	113,295	25.3	28,664	236,290	25.7	29,117	239,188	28.8	32,629	270,047		
2018	117,260	25.3	29,667	239,657	25.7	30,136	242,596	28.8	33,771	273,895		
2019	121,364	25.3	30,705	242,786	25.7	31,191	245,763	28.8	34,953	277,471		
2020	125,612	25.3	31,780	245,643	25.7	32,282	248,655	28.8	36,176	280,736		
2021	130,008	25.3	32,892	248,191	25.7	33,412	251,235	28.8	37,442	283,648		
2022	134,558	25.3	34,043	250,390	25.7	34,581	253,461	28.8	38,753	286,161		
2023	139,268	25.3	35,235	252,196	25.7	35,792	255,289	28.8	40,109	288,225		
2024	144,142	25.3	36,468	253,560	25.7	37,044	256,670	28.8	41,513	289,784		
2025	149,187	25.3	37,744	254,431	25.7	38,341	257,552	28.8	42,966	290,779		

- 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 3.50%.
- 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	l Employer	Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	Contribution		Contri	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	\$ 122,440	6.2%	\$7,591	\$ 76,855	8.6%	\$10,530	\$ 98,417	8.7%	\$10,652	\$ 102,869
2017	126,725	6.2	7,857	78,035	8.6	10,898	99,928	8.7	11,025	104,448
2018	131,160	6.2	8,132	79,147	8.6	11,280	101,352	8.7	11,411	105,936
2019	135,751	6.2	8,417	80,180	8.6	11,675	102,675	8.7	11,810	107,319
2020	140,502	6.2	8,711	81,124	8.6	12,083	103,883	8.7	12,224	108,582
2021	145,420	6.2	9,016	81,966	8.6	12,506	104,961	8.7	12,652	109,708
2022	150,510	6.2	9,332	82,692	8.6	12,944	105,891	8.7	13,094	110,680
2023	155,778	6.2	9,658	83,288	8.6	13,397	106,655	8.7	13,553	111,478
2024	161,230	6.2	9,996	83,739	8.6	13,866	107,232	8.7	14,027	112,081
2025	166,873	6.2	10,346	84,027	8.6	14,351	107,600	8.7	14,518	112,466

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
			Employer	Unfunded	Estimated	l 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	\$ 122,440	10.5%	\$12,856	\$ 117,949	10.9%	\$13,346	\$ 119,891	12.2%	\$14,938	\$ 132,905
2017	126,725	10.5	13,306	119,760	10.9	13,813	121,732	12.2	15,460	134,946
2018	131,160	10.5	13,772	121,466	10.9	14,296	123,466	12.2	16,002	136,869
2019	135,751	10.5	14,254	123,052	10.9	14,797	125,078	12.2	16,562	138,656
2020	140,502	10.5	14,753	124,500	10.9	15,315	126,550	12.2	17,141	140,288
2021	145,420	10.5	15,269	125,792	10.9	15,851	127,863	12.2	17,741	141,743
2022	150,510	10.5	15,804	126,907	10.9	16,406	128,996	12.2	18,362	142,999
2023	155,778	10.5	16,357	127,822	10.9	16,980	129,926	12.2	19,005	144,030
2024	161,230	10.5	16,929	128,513	10.9	17,574	130,629	12.2	19,670	144,809
2025	166,873	10.5	17,522	128,954	10.9	18,189	131,078	12.2	20,359	145,306

		L-12	2 Benefit Pro	8			rogram	L-6	L-6 Benefit Program	
	Estimated Empl		Employer	1		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	\$ 122,440	13.4%	\$16,407	\$ 141,111	14.0%	\$17,142	\$ 147,640	15.7%	\$19,223	\$ 162,178
2017	126,725	13.4	16,981	143,278	14.0	17,742	149,907	15.7	19,896	164,668
2018	131,160	13.4	17,575	145,319	14.0	18,362	152,043	15.7	20,592	167,014
2019	135,751	13.4	18,191	147,216	14.0	19,005	154,028	15.7	21,313	169,195
2020	140,502	13.4	18,827	148,949	14.0	19,670	155,841	15.7	22,059	171,186
2021	145,420	13.4	19,486	150,494	14.0	20,359	157,458	15.7	22,831	172,962
2022	150,510	13.4	20,168	151,827	14.0	21,071	158,853	15.7	23,630	174,494
2023	155,778	13.4	20,874	152,922	14.0	21,809	159,998	15.7	24,457	175,752
2024	161,230	13.4	21,605	153,749	14.0	22,572	160,864	15.7	25,313	176,703
2025	166,873	13.4	22,361	154,277	14.0	23,362	161,417	15.7	26,199	177,310

- 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 3.50%.
- 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 Progra			gram	LT-4(65) Benefit Program				
	Fatimata J		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	\$ 122,440	6.6%	\$8,081	\$ 80,226	9.0%	\$11,020	\$ 102,642	9.2%	\$11,264	\$ 107,254
2017	126,725	6.6	8,364	81,458	9.0	11,405	104,218	9.2	11,659	108,901
2018	131,160	6.6	8,657	82,619	9.0	11,804	105,703	9.2	12,067	110,453
2019	135,751	6.6	8,960	83,698	9.0	12,218	107,083	9.2	12,489	111,895
2020	140,502	6.6	9,273	84,683	9.0	12,645	108,343	9.2	12,926	113,212
2021	145,420	6.6	9,598	85,562	9.0	13,088	109,467	9.2	13,379	114,386
2022	150,510	6.6	9,934	86,320	9.0	13,546	110,437	9.2	13,847	115,399
2023	155,778	6.6	10,281	86,942	9.0	14,020	111,233	9.2	14,332	116,231
2024	161,230	6.6	10,641	87,412	9.0	14,511	111,835	9.2	14,833	116,860
2025	166,873	6.6	11.014	87.712	9.0	15.019	112,219	9.2	15,352	117,261

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated Est					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	\$ 122,440	11.0%	\$13,468	\$ 122,900	11.5%	\$14,081	\$ 124,846	12.8%	\$15,672	\$ 138,377	
2017	126,725	11.0	13,940	124,787	11.5	14,573	126,763	12.8	16,221	140,502	
2018	131,160	11.0	14,428	126,565	11.5	15,083	128,569	12.8	16,788	142,504	
2019	135,751	11.0	14,933	128,217	11.5	15,611	130,248	12.8	17,376	144,365	
2020	140,502	11.0	15,455	129,726	11.5	16,158	131,781	12.8	17,984	146,064	
2021	145,420	11.0	15,996	131,072	11.5	16,723	133,148	12.8	18,614	147,579	
2022	150,510	11.0	16,556	132,233	11.5	17,309	134,328	12.8	19,265	148,887	
2023	155,778	11.0	17,136	133,187	11.5	17,914	135,297	12.8	19,940	149,961	
2024	161,230	11.0	17,735	133,907	11.5	18,541	136,029	12.8	20,637	150,772	
2025	166,873	11.0	18,356	134,367	11.5	19,190	136,496	12.8	21,360	151,290	

		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		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	\$ 122,440	14.0%	\$17,142	\$ 146,798	14.6%	\$17,876	\$ 153,548	16.5%	\$20,203	\$ 168,610	
2017	126,725	14.0	17,742	149,052	14.6	18,502	155,906	16.5	20,910	171,199	
2018	131,160	14.0	18,362	151,176	14.6	19,149	158,127	16.5	21,641	173,638	
2019	135,751	14.0	19,005	153,150	14.6	19,820	160,192	16.5	22,399	175,905	
2020	140,502	14.0	19,670	154,952	14.6	20,513	162,077	16.5	23,183	177,975	
2021	145,420	14.0	20,359	156,559	14.6	21,231	163,758	16.5	23,994	179,821	
2022	150,510	14.0	21,071	157,946	14.6	21,974	165,209	16.5	24,834	181,414	
2023	155,778	14.0	21,809	159,085	14.6	22,744	166,400	16.5	25,703	182,722	
2024	161,230	14.0	22,572	159,946	14.6	23,540	167,300	16.5	26,603	183,710	
2025	166,873	14.0	23,362	160,495	14.6	24,363	167,875	16.5	27,534	184,341	

- 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 3.50%.
- 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			
			ated Employer 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	\$ 122,440	10.1%	\$12,366	\$ 87,071	12.5%	\$15,305	\$ 108,861	12.6%	\$15,427	\$ 112,949	
2017	126,725	10.1	12,799	88,408	12.5	15,841	110,532	12.6	15,967	114,683	
2018	131,160	10.1	13,247	89,668	12.5	16,395	112,107	12.6	16,526	116,317	
2019	135,751	10.1	13,711	90,839	12.5	16,969	113,571	12.6	17,105	117,836	
2020	140,502	10.1	14,191	91,908	12.5	17,563	114,908	12.6	17,703	119,223	
2021	145,420	10.1	14,687	92,861	12.5	18,178	116,100	12.6	18,323	120,460	
2022	150,510	10.1	15,202	93,684	12.5	18,814	117,129	12.6	18,964	121,527	
2023	155,778	10.1	15,734	94,360	12.5	19,472	117,974	12.6	19,628	122,403	
2024	161,230	10.1	16,284	94,870	12.5	20,154	118,612	12.6	20,315	123,065	
2025	166,873	10.1	16.854	95,196	12.5	20,859	119.019	12.6	21.026	123,488	

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employ		. I .J .		Estimated Employer Contribution			Employer bution	Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 122,440	14.4%	\$17,631	\$ 128,274	14.8%	\$18,121	\$ 130,638	16.1%	\$19,713	\$ 143,586	
2017	126,725	14.4	18,248	130,243	14.8	18,755	132,644	16.1	20,403	145,791	
2018	131,160	14.4	18,887	132,099	14.8	19,412	134,534	16.1	21,117	147,868	
2019	135,751	14.4	19,548	133,824	14.8	20,091	136,291	16.1	21,856	149,799	
2020	140,502	14.4	20,232	135,399	14.8	20,794	137,895	16.1	22,621	151,562	
2021	145,420	14.4	20,940	136,804	14.8	21,522	139,326	16.1	23,413	153,134	
2022	150,510	14.4	21,673	138,016	14.8	22,275	140,560	16.1	24,232	154,491	
2023	155,778	14.4	22,432	139,011	14.8	23,055	141,574	16.1	25,080	155,605	
2024	161,230	14.4	23,217	139,763	14.8	23,862	142,340	16.1	25,958	156,447	
2025	166,873	14.4	24,030	140,243	14.8	24,697	142,829	16.1	26,867	156,984	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
		Estimated Employer		Unfunded		Employer	Unfunded	Estimated		Unfunded	
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 122,440	17.3%	\$21,182	\$ 152,388	17.9%	\$21,917	\$ 158,863	19.6%	\$23,998	\$ 174,204	
2017	126,725	17.3	21,923	154,728	17.9	22,684	161,302	19.6	24,838	176,879	
2018	131,160	17.3	22,691	156,933	17.9	23,478	163,600	19.6	25,707	179,399	
2019	135,751	17.3	23,485	158,982	17.9	24,299	165,736	19.6	26,607	181,741	
2020	140,502	17.3	24,307	160,853	17.9	25,150	167,686	19.6	27,538	183,880	
2021	145,420	17.3	25,158	162,522	17.9	26,030	169,426	19.6	28,502	185,788	
2022	150,510	17.3	26,038	163,962	17.9	26,941	170,927	19.6	29,500	187,434	
2023	155,778	17.3	26,950	165,144	17.9	27,884	172,160	19.6	30,532	188,786	
2024	161,230	17.3	27,893	166,037	17.9	28,860	173,091	19.6	31,601	189,807	
2025	166,873	17.3	28,869	166,607	17.9	29,870	173,686	19.6	32,707	190,459	

- 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 3.50%.
- 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 Prog	gram	L-3 Benefit Prog		ram LT-		65) Benefit P	rogram
		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	\$ 122,440	10.5%	\$12,856	\$ 90,506	12.9%	\$15,795	\$ 113,128	13.1%	\$16,040	\$ 117,384
2017	126,725	10.5	13,306	91,896	12.9	16,348	114,865	13.1	16,601	119,186
2018	131,160	10.5	13,772	93,205	12.9	16,920	116,502	13.1	17,182	120,884
2019	135,751	10.5	14,254	94,422	12.9	17,512	118,023	13.1	17,783	122,462
2020	140,502	10.5	14,753	95,533	12.9	18,125	119,412	13.1	18,406	123,903
2021	145,420	10.5	15,269	96,524	12.9	18,759	120,651	13.1	19,050	125,188
2022	150,510	10.5	15,804	97,379	12.9	19,416	121,720	13.1	19,717	126,297
2023	155,778	10.5	16,357	98,081	12.9	20,095	122,598	13.1	20,407	127,208
2024	161,230	10.5	16,929	98,612	12.9	20,799	123,261	13.1	21,121	127,896
2025	166,873	10.5	17.522	98,951	12.9	21,527	123.684	13.1	21.860	128,335

		LT-5(	65) Benefit P	rogram	L-7	L-7 Benefit Program LT-8(65) I			LT-8(65) Benefit Program	
	Estimated	Estimated Employer		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	\$ 122,440	14.9%	\$18,244	\$ 133,294	15.4%	\$18,856	\$ 135,727	16.7%	\$20,447	\$ 149,176
2017	126,725	14.9	18,882	135,341	15.4	19,516	137,811	16.7	21,163	151,466
2018	131,160	14.9	19,543	137,269	15.4	20,199	139,775	16.7	21,904	153,624
2019	135,751	14.9	20,227	139,061	15.4	20,906	141,600	16.7	22,670	155,630
2020	140,502	14.9	20,935	140,698	15.4	21,637	143,266	16.7	23,464	157,462
2021	145,420	14.9	21,668	142,158	15.4	22,395	144,752	16.7	24,285	159,096
2022	150,510	14.9	22,426	143,418	15.4	23,179	146,034	16.7	25,135	160,506
2023	155,778	14.9	23,211	144,452	15.4	23,990	147,087	16.7	26,015	161,663
2024	161,230	14.9	24,023	145,233	15.4	24,829	147,883	16.7	26,925	162,538
2025	166,873	14.9	24,864	145,732	15.4	25,698	148,391	16.7	27,868	163,096

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	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	\$ 122,440	17.9%	\$21,917	\$ 158,372	18.5%	\$22,651	\$ 165,078	20.4%	\$24,978	\$ 180,977
2017	126,725	17.9	22,684	160,804	18.5	23,444	167,613	20.4	25,852	183,756
2018	131,160	17.9	23,478	163,095	18.5	24,265	170,001	20.4	26,757	186,374
2019	135,751	17.9	24,299	165,224	18.5	25,114	172,221	20.4	27,693	188,807
2020	140,502	17.9	25,150	167,168	18.5	25,993	174,248	20.4	28,662	191,029
2021	145,420	17.9	26,030	168,902	18.5	26,903	176,056	20.4	29,666	193,011
2022	150,510	17.9	26,941	170,398	18.5	27,844	177,616	20.4	30,704	194,721
2023	155,778	17.9	27,884	171,627	18.5	28,819	178,897	20.4	31,779	196,125
2024	161,230	17.9	28,860	172,555	18.5	29,828	179,865	20.4	32,891	197,186
2025	166,873	17.9	29,870	173,148	18.5	30,872	180,483	20.4	34,042	197,863

- 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 3.50%.
- 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 Pr		rogram
		Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	Estimated 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	\$ 122,440	6.7%	\$8,203	\$ 80,069	9.2%	\$11,264	\$ 102,407	9.8%	\$11,999	\$ 110,555
2017	126,725	6.7	8,491	81,298	9.2	11,659	103,979	9.8	12,419	112,252
2018	131,160	6.7	8,788	82,456	9.2	12,067	105,460	9.8	12,854	113,851
2019	135,751	6.7	9,095	83,533	9.2	12,489	106,837	9.8	13,304	115,337
2020	140,502	6.7	9,414	84,516	9.2	12,926	108,094	9.8	13,769	116,694
2021	145,420	6.7	9,743	85,393	9.2	13,379	109,215	9.8	14,251	117,905
2022	150,510	6.7	10,084	86,150	9.2	13,847	110,183	9.8	14,750	118,950
2023	155,778	6.7	10,437	86,771	9.2	14,332	110,978	9.8	15,266	119,808
2024	161,230	6.7	10,802	87,240	9.2	14,833	111,578	9.8	15,801	120,456
2025	166,873	6.7	11,180	87,540	9.2	15,352	111,961	9.8	16,354	120,870

		LT-5(	65) Benefit P	rogram	am L-7 Benefit Program LT-8(65)				-8(65) Benefit Program	
	Estimated	Estimated Employer		Unfunded Actuarial		Estimated Employer Contribution		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	\$ 122,440	11.5%	\$14,081	\$ 125,267	11.6%	\$14,203	\$ 124,620	13.2%	\$16,162	\$ 139,858
2017	126,725	11.5	14,573	127,190	11.6	14,700	126,533	13.2	16,728	142,005
2018	131,160	11.5	15,083	129,002	11.6	15,215	128,336	13.2	17,313	144,028
2019	135,751	11.5	15,611	130,686	11.6	15,747	130,012	13.2	17,919	145,908
2020	140,502	11.5	16,158	132,224	11.6	16,298	131,542	13.2	18,546	147,625
2021	145,420	11.5	16,723	133,596	11.6	16,869	132,907	13.2	19,195	149,156
2022	150,510	11.5	17,309	134,780	11.6	17,459	134,085	13.2	19,867	150,478
2023	155,778	11.5	17,914	135,752	11.6	18,070	135,052	13.2	20,563	151,563
2024	161,230	11.5	18,541	136,486	11.6	18,703	135,783	13.2	21,282	152,383
2025	166,873	11.5	19,190	136,955	11.6	19,357	136,249	13.2	22,027	152,906

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
		Estimated Employer		Unfunded		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	\$ 122,440	14.2%	\$17,386	\$ 146,586	15.0%	\$18,366	\$ 154,210	16.6%	\$20,325	\$ 168,368	
2017	126,725	14.2	17,995	148,837	15.0	19,009	156,578	16.6	21,036	170,953	
2018	131,160	14.2	18,625	150,958	15.0	19,674	158,809	16.6	21,773	173,389	
2019	135,751	14.2	19,277	152,929	15.0	20,363	160,882	16.6	22,535	175,653	
2020	140,502	14.2	19,951	154,729	15.0	21,075	162,775	16.6	23,323	177,720	
2021	145,420	14.2	20,650	156,334	15.0	21,813	164,464	16.6	24,140	179,564	
2022	150,510	14.2	21,372	157,719	15.0	22,577	165,921	16.6	24,985	181,155	
2023	155,778	14.2	22,120	158,856	15.0	23,367	167,117	16.6	25,859	182,461	
2024	161,230	14.2	22,895	159,715	15.0	24,185	168,021	16.6	26,764	183,448	
2025	166,873	14.2	23,696	160,264	15.0	25,031	168,598	16.6	27,701	184,078	

- 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 3.50%.
- 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	L-1 Benefit Program L-3			Benefit Prog	gram	LT-4(65) Benefit Program		
	T 4 . 1	Estimated Employer Contribution		Unfunded			Unfunded		Employer	Unfunded
	Estimated		bution	Actuarial			Actuarial		bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 122,440	7.0%	\$8,571	\$ 83,567	9.7%	\$11,877	\$ 106,782	10.3%	\$12,611	\$ 115,247
2017	126,725	7.0	8,871	84,850	9.7	12,292	108,422	10.3	13,053	117,016
2018	131,160	7.0	9,181	86,059	9.7	12,723	109,967	10.3	13,509	118,683
2019	135,751	7.0	9,503	87,183	9.7	13,168	111,403	10.3	13,982	120,233
2020	140,502	7.0	9,835	88,209	9.7	13,629	112,714	10.3	14,472	121,648
2021	145,420	7.0	10,179	89,124	9.7	14,106	113,883	10.3	14,978	122,910
2022	150,510	7.0	10,536	89,914	9.7	14,599	114,892	10.3	15,503	123,999
2023	155,778	7.0	10,904	90,562	9.7	15,110	115,720	10.3	16,045	124,893
2024	161,230	7.0	11,286	91,052	9.7	15,639	116,346	10.3	16,607	125,569
2025	166,873	7.0	11,681	91,365	9.7	16,187	116,746	10.3	17,188	126,000

		LT-5(	T-5(65) Benefit Program L-7 E			Benefit Prog	gram	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	\$ 122,440	12.0%	\$14,693	\$ 130,530	12.2%	\$14,938	\$ 129,799	13.8%	\$16,897	\$ 145,625	
2017	126,725	12.0	15,207	132,534	12.2	15,460	131,792	13.8	17,488	147,861	
2018	131,160	12.0	15,739	134,422	12.2	16,002	133,670	13.8	18,100	149,968	
2019	135,751	12.0	16,290	136,177	12.2	16,562	135,415	13.8	18,734	151,926	
2020	140,502	12.0	16,860	137,780	12.2	17,141	137,009	13.8	19,389	153,714	
2021	145,420	12.0	17,450	139,209	12.2	17,741	138,430	13.8	20,068	155,309	
2022	150,510	12.0	18,061	140,442	12.2	18,362	139,656	13.8	20,770	156,685	
2023	155,778	12.0	18,693	141,455	12.2	19,005	140,663	13.8	21,497	157,815	
2024	161,230	12.0	19,348	142,220	12.2	19,670	141,424	13.8	22,250	158,669	
2025	166,873	12.0	20,025	142,709	12.2	20,359	141,910	13.8	23,028	159,214	

		L-12 Benefit Program			LT-14(	(65) Benefit F	Program	L-6 Benefit Program		
	E-do-		Estimated Employer Contribution		Estimated	1 - 3 -	Unfunded	Estimated Employer Contribution		Unfunded
Valuation	Estimated Projected	As a % of	Annual	Actuarial Accrued	Contri As a % of	Annual	Actuarial Accrued	As a % of	Annual	Actuarial Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 122,440	14.9%	\$18,244	\$ 152,516	15.7%	\$19,223	\$ 160,428	17.5%	\$21,427	\$ 175,116
2017	126,725	14.9	18,882	154,858	15.7	19,896	162,891	17.5	22,177	177,805
2018	131,160	14.9	19,543	157,064	15.7	20,592	165,212	17.5	22,953	180,338
2019	135,751	14.9	20,227	159,115	15.7	21,313	167,369	17.5	23,756	182,693
2020	140,502	14.9	20,935	160,988	15.7	22,059	169,339	17.5	24,588	184,843
2021	145,420	14.9	21,668	162,658	15.7	22,831	171,096	17.5	25,449	186,761
2022	150,510	14.9	22,426	164,099	15.7	23,630	172,612	17.5	26,339	188,416
2023	155,778	14.9	23,211	165,282	15.7	24,457	173,857	17.5	27,261	189,775
2024	161,230	14.9	24,023	166,176	15.7	25,313	174,798	17.5	28,215	190,802
2025	166,873	14.9	24,864	166,747	15.7	26,199	175,398	17.5	29,203	191,457

- 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 3.50%.
- 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			L-3	Benefit Prog	gram	LT-4(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	ibution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2016	\$ 122,440	10.6%	\$12,979	\$ 90,206	13.1%	\$16,040	\$ 112,802	13.7%	\$16,774	\$ 120,559
2017	126,725	10.6	13,433	91,591	13.1	16,601	114,534	13.7	17,361	122,410
2018	131,160	10.6	13,903	92,896	13.1	17,182	116,166	13.7	17,969	124,154
2019	135,751	10.6	14,390	94,109	13.1	17,783	117,683	13.7	18,598	125,775
2020	140,502	10.6	14,893	95,217	13.1	18,406	119,068	13.7	19,249	127,255
2021	145,420	10.6	15,415	96,205	13.1	19,050	120,303	13.7	19,923	128,575
2022	150,510	10.6	15,954	97,057	13.1	19,717	121,369	13.7	20,620	129,714
2023	155,778	10.6	16,512	97,757	13.1	20,407	122,244	13.7	21,342	130,649
2024	161,230	10.6	17,090	98,286	13.1	21,121	122,905	13.7	22,089	131,356
2025	166,873	10.6	17,689	98,624	13.1	21,860	123,327	13.7	22,862	131,807

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		1 · V		Employer bution	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2016	\$ 122,440	15.4%	\$18,856	\$ 135,567	15.5%	\$18,978	\$ 135,359	17.1%	\$20,937	\$ 150,549	
2017	126,725	15.4	19,516	137,648	15.5	19,642	137,437	17.1	21,670	152,860	
2018	131,160	15.4	20,199	139,609	15.5	20,330	139,395	17.1	22,428	155,038	
2019	135,751	15.4	20,906	141,432	15.5	21,041	141,215	17.1	23,213	157,062	
2020	140,502	15.4	21,637	143,096	15.5	21,778	142,877	17.1	24,026	158,910	
2021	145,420	15.4	22,395	144,581	15.5	22,540	144,359	17.1	24,867	160,559	
2022	150,510	15.4	23,179	145,862	15.5	23,329	145,638	17.1	25,737	161,982	
2023	155,778	15.4	23,990	146,914	15.5	24,146	146,688	17.1	26,638	163,150	
2024	161,230	15.4	24,829	147,709	15.5	24,991	147,482	17.1	27,570	164,033	
2025	166,873	15.4	25,698	148,216	15.5	25,865	147,989	17.1	28,535	164,596	

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 122,440	18.1%	\$22,162	\$ 157,903	18.9%	\$23,141	\$ 165,495	20.5%	\$25,100	\$ 180,480
2017	126,725	18.1	22,937	160,327	18.9	23,951	168,036	20.5	25,979	183,251
2018	131,160	18.1	23,740	162,611	18.9	24,789	170,430	20.5	26,888	185,862
2019	135,751	18.1	24,571	164,734	18.9	25,657	172,655	20.5	27,829	188,289
2020	140,502	18.1	25,431	166,673	18.9	26,555	174,687	20.5	28,803	190,505
2021	145,420	18.1	26,321	168,402	18.9	27,484	176,499	20.5	29,811	192,481
2022	150,510	18.1	27,242	169,894	18.9	28,446	178,063	20.5	30,855	194,186
2023	155,778	18.1	28,196	171,119	18.9	29,442	179,347	20.5	31,934	195,586
2024	161,230	18.1	29,183	172,045	18.9	30,472	180,317	20.5	33,052	196,644
2025	166,873	18.1	30,204	172,636	18.9	31,539	180,936	20.5	34,209	197,319

- 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 3.50%.
- 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	\$ 122,440	10.9%	\$13,346	\$ 93,775	13.6%	\$16,652	\$ 117,236	14.2%	\$17,386	\$ 125,311
2017	126,725	10.9	13,813	95,215	13.6	17,235	119,036	14.2	17,995	127,235
2018	131,160	10.9	14,296	96,572	13.6	17,838	120,732	14.2	18,625	129,048
2019	135,751	10.9	14,797	97,833	13.6	18,462	122,308	14.2	19,277	130,733
2020	140,502	10.9	15,315	98,984	13.6	19,108	123,747	14.2	19,951	132,272
2021	145,420	10.9	15,851	100,011	13.6	19,777	125,031	14.2	20,650	133,644
2022	150,510	10.9	16,406	100,897	13.6	20,469	126,139	14.2	21,372	134,828
2023	155,778	10.9	16,980	101,625	13.6	21,186	127,049	14.2	22,120	135,800
2024	161,230	10.9	17,574	102,175	13.6	21,927	127,736	14.2	22,895	136,535
2025	166,873	10.9	18,189	102,526	13.6	22,695	128,175	14.2	23,696	137,004

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	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	\$ 122,440	15.9%	\$19,468	\$ 140,898	16.1%	\$19,713	\$ 140,694	17.7%	\$21,672	\$ 156,461
2017	126,725	15.9	20,149	143,061	16.1	20,403	142,854	17.7	22,430	158,863
2018	131,160	15.9	20,854	145,099	16.1	21,117	144,889	17.7	23,215	161,126
2019	135,751	15.9	21,584	146,993	16.1	21,856	146,781	17.7	24,028	163,230
2020	140,502	15.9	22,340	148,723	16.1	22,621	148,508	17.7	24,869	165,151
2021	145,420	15.9	23,122	150,266	16.1	23,413	150,049	17.7	25,739	166,864
2022	150,510	15.9	23,931	151,597	16.1	24,232	151,378	17.7	26,640	168,342
2023	155,778	15.9	24,769	152,690	16.1	25,080	152,470	17.7	27,573	169,556
2024	161,230	15.9	25,636	153,516	16.1	25,958	153,295	17.7	28,538	170,473
2025	166,873	15.9	26,533	154,043	16.1	26,867	153,822	17.7	29,537	171,059

		L-12 Benefit Program			LT-14(	65) Benefit F	Program	L-6 Benefit Program		
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2016	\$ 122,440	18.8%	\$23,019	\$ 164,133	19.6%	\$23,998	\$ 172,019	21.4%	\$26,202	\$ 187,570
2017	126,725	18.8	23,824	166,653	19.6	24,838	174,660	21.4	27,119	190,450
2018	131,160	18.8	24,658	169,027	19.6	25,707	177,149	21.4	28,068	193,164
2019	135,751	18.8	25,521	171,234	19.6	26,607	179,462	21.4	29,051	195,686
2020	140,502	18.8	26,414	173,249	19.6	27,538	181,574	21.4	30,067	197,989
2021	145,420	18.8	27,339	175,046	19.6	28,502	183,458	21.4	31,120	200,043
2022	150,510	18.8	28,296	176,597	19.6	29,500	185,083	21.4	32,209	201,815
2023	155,778	18.8	29,286	177,870	19.6	30,532	186,418	21.4	33,336	203,270
2024	161,230	18.8	30,311	178,832	19.6	31,601	187,426	21.4	34,503	204,370
2025	166,873	18.8	31,372	179,446	19.6	32,707	188,070	21.4	35,711	205,072

- 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 3.50%.
- 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.