



**THE INITIAL ACTUARIAL VALUATION FOR
HEMATITE FIRE PROTECTION DISTRICT
AS OF JUNE 30, 2016**

Table of Contents

	Page
Actuary's Certification Letter	1
Alternate Plans Available	3
Employer Contribution Rates	
Regular Eligibility:	
Contributory Plan	4
Non-Contributory Plan	6
Rule of 80 Eligibility:	
Contributory Plan	8
Non-Contributory Plan	10
Employer Contribution Dollars	12
Appendix I	
Unfunded Actuarial Accrued Liability	15
Appendix II	
Summary of Financial Assumptions	17
Appendix III	
Summary of LAGERS Provisions	21
Appendix IV	
Benefit Illustrations	24
Appendix V	
Age & Service Characteristics of Employees	33

October 14, 2016

Hematite Fire Protection District
Festus, Missouri

Ladies and Gentlemen:

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

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

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

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

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

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 29, 2016.

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

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

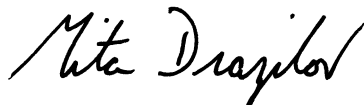
Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was June 30, 2016. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

Respectfully submitted,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive, flowing style.

Mita D. 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.

Hematite Fire Protection District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	5.90%	4.30%	0.60%	10.80%
L-3	Fire	7.40	6.20	0.70	14.30
LT-4(65)	Fire	7.70	6.30	0.60	14.60
LT-5(65)	Fire	8.80	7.50	0.70	17.00
L-7	Fire	8.90	8.00	0.80	17.70
LT-8(65)	Fire	9.90	8.80	0.80	19.50
L-12	Fire	10.40	9.80	0.90	21.10
LT-14(65)	Fire	10.90	10.10	0.90	21.90
L-6	Fire	11.90	11.50	1.00	24.40

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

Hematite Fire Protection District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.10%	4.60%	0.60%	11.30%
L-3	Fire	7.70	6.40	0.70	14.80
LT-4(65)	Fire	8.00	6.60	0.60	15.20
LT-5(65)	Fire	9.10	7.90	0.70	17.70
L-7	Fire	9.20	8.40	0.80	18.40
LT-8(65)	Fire	10.20	9.20	0.80	20.20
L-12	Fire	10.80	10.10	0.90	21.80
LT-14(65)	Fire	11.30	10.60	0.90	22.80
L-6	Fire	12.40	12.00	1.00	25.40

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

Hematite Fire Protection District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.00%	8.10%	0.60%	14.70%
L-3	Fire	7.60	9.90	0.70	18.20
LT-4(65)	Fire	7.90	10.00	0.60	18.50
LT-5(65)	Fire	8.90	11.30	0.70	20.90
L-7	Fire	9.10	11.70	0.80	21.60
LT-8(65)	Fire	10.00	12.60	0.80	23.40
L-12	Fire	10.60	13.50	0.90	25.00
LT-14(65)	Fire	11.00	13.90	0.90	25.80
L-6	Fire	12.10	15.20	1.00	28.30

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

Hematite Fire Protection District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.30%	8.30%	0.60%	15.20%
L-3	Fire	7.80	10.20	0.70	18.70
LT-4(65)	Fire	8.20	10.30	0.60	19.10
LT-5(65)	Fire	9.20	11.70	0.70	21.60
L-7	Fire	9.40	12.10	0.80	22.30
LT-8(65)	Fire	10.30	13.00	0.80	24.10
L-12	Fire	10.90	13.90	0.90	25.70
LT-14(65)	Fire	11.40	14.40	0.90	26.70
L-6	Fire	12.50	15.80	1.00	29.30

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

Hematite Fire Protection District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.00%	4.80%	0.60%	11.40%
L-3	Fire	7.60	6.70	0.70	15.00
LT-4(65)	Fire	8.00	7.40	0.60	16.00
LT-5(65)	Fire	9.10	8.60	0.70	18.40
L-7	Fire	9.10	8.60	0.80	18.50
LT-8(65)	Fire	10.10	9.80	0.80	20.70
L-12	Fire	10.60	10.60	0.90	22.10
LT-14(65)	Fire	11.10	11.20	0.90	23.20
L-6	Fire	12.20	12.40	1.00	25.60

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.

Hematite Fire Protection District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.20%	5.10%	0.60%	11.90%
L-3	Fire	7.80	7.10	0.70	15.60
LT-4(65)	Fire	8.30	7.70	0.60	16.60
LT-5(65)	Fire	9.40	9.00	0.70	19.10
L-7	Fire	9.40	9.10	0.80	19.30
LT-8(65)	Fire	10.50	10.30	0.80	21.60
L-12	Fire	11.00	11.10	0.90	23.00
LT-14(65)	Fire	11.50	11.70	0.90	24.10
L-6	Fire	12.60	13.00	1.00	26.60

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.

Hematite Fire Protection District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.20%	8.50%	0.60%	15.30%
L-3	Fire	7.70	10.50	0.70	18.90
LT-4(65)	Fire	8.20	11.10	0.60	19.90
LT-5(65)	Fire	9.20	12.40	0.70	22.30
L-7	Fire	9.20	12.40	0.80	22.40
LT-8(65)	Fire	10.20	13.60	0.80	24.60
L-12	Fire	10.80	14.30	0.90	26.00
LT-14(65)	Fire	11.30	14.90	0.90	27.10
L-6	Fire	12.30	16.20	1.00	29.50

The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.

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

Hematite Fire Protection District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	Fire	6.40%	8.80%	0.60%	15.80%
L-3	Fire	8.00	10.80	0.70	19.50
LT-4(65)	Fire	8.40	11.50	0.60	20.50
LT-5(65)	Fire	9.50	12.80	0.70	23.00
L-7	Fire	9.60	12.80	0.80	23.20
LT-8(65)	Fire	10.60	14.10	0.80	25.50
L-12	Fire	11.20	14.80	0.90	26.90
LT-14(65)	Fire	11.70	15.40	0.90	28.00
L-6	Fire	12.70	16.80	1.00	30.50

The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.

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

Hematite Fire Protection District

Employer Contribution Dollars

Regular Retirement Eligibility

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

Contributory Plan

5 Year FAS	
Benefit Program	Fire
L-1	\$ 11,359
L-3	15,040
LT-4(65)	15,356
LT-5(65)	17,880
L-7	18,616
LT-8(65)	20,509
L-12	22,192
LT-14(65)	23,033
L-6	25,663

3 Year FAS	
Benefit Program	Fire
L-1	\$ 11,885
L-3	15,566
LT-4(65)	15,987
LT-5(65)	18,616
L-7	19,352
LT-8(65)	21,245
L-12	22,928
LT-14(65)	23,980
L-6	26,714

Non-Contributory Plan

5 Year FAS	
Benefit Program	Fire
L-1	\$ 15,461
L-3	19,142
LT-4(65)	19,457
LT-5(65)	21,982
L-7	22,718
LT-8(65)	24,611
L-12	26,294
LT-14(65)	27,135
L-6	29,765

3 Year FAS	
Benefit Program	Fire
L-1	\$ 15,987
L-3	19,668
LT-4(65)	20,088
LT-5(65)	22,718
L-7	23,454
LT-8(65)	25,347
L-12	27,030
LT-14(65)	28,082
L-6	30,816

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.

Hematite Fire Protection District

Employer Contribution Dollars

Rule of 80 Retirement Eligibility

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

Contributory Plan

5 Year FAS	
Benefit Program	Fire
L-1	\$ 11,990
L-3	15,776
LT-4(65)	16,828
LT-5(65)	19,352
L-7	19,457
LT-8(65)	21,771
L-12	23,244
LT-14(65)	24,401
L-6	26,925

3 Year FAS	
Benefit Program	Fire
L-1	\$ 12,516
L-3	16,407
LT-4(65)	17,459
LT-5(65)	20,088
L-7	20,299
LT-8(65)	22,718
L-12	24,190
LT-14(65)	25,347
L-6	27,977

Non-Contributory Plan

5 Year FAS	
Benefit Program	Fire
L-1	\$ 16,092
L-3	19,878
LT-4(65)	20,930
LT-5(65)	23,454
L-7	23,559
LT-8(65)	25,873
L-12	27,346
LT-14(65)	28,502
L-6	31,027

3 Year FAS	
Benefit Program	Fire
L-1	\$ 16,618
L-3	20,509
LT-4(65)	21,561
LT-5(65)	24,190
L-7	24,401
LT-8(65)	26,820
L-12	28,292
LT-14(65)	29,449
L-6	32,078

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.

Hematite Fire Protection District

Employees and Payroll Included in the Valuation

	Fire
Number of Employees	3
Annual Payroll	\$ 105,175

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:

Hematite Fire Protection District

Regular Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	Fire	\$ 109,290	\$ 113,265	\$ 112,006	\$ 115,917
L-3	Fire	137,468	142,394	139,962	144,878
LT-4(65)	Fire	143,571	148,770	146,095	151,231
LT-5(65)	Fire	163,167	169,000	165,566	171,363
L-7	Fire	165,547	171,361	167,976	173,842
LT-8(65)	Fire	182,655	189,104	185,053	191,508
L-12	Fire	193,500	200,289	195,968	202,838
LT-14(65)	Fire	202,053	209,169	204,519	211,667
L-6	Fire	221,388	229,104	223,983	231,795

Hematite Fire Protection District

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	Fire	\$ 111,420	\$ 115,479	\$ 114,079	\$ 118,106
L-3	Fire	140,078	145,134	142,606	147,609
LT-4(65)	Fire	148,598	153,994	151,083	156,447
LT-5(65)	Fire	167,949	174,034	170,358	176,363
L-7	Fire	168,664	174,679	171,134	177,160
LT-8(65)	Fire	187,265	193,924	189,639	196,335
L-12	Fire	197,125	204,090	199,678	206,674
LT-14(65)	Fire	206,416	213,717	208,919	216,250
L-6	Fire	225,557	233,457	228,189	236,189

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

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

Sample Ages	Years of Service	Percent of Active Members Separating Within Next Year				Percent Increase in Individual's Pay During Next Year Excluding Fire
		General Members		Police	Fire	
		Men	Women			
All	0	19.00%	22.00%	18.00%	10.00%	
	1	17.00	20.00	17.00	8.00	
	2	15.00	17.00	16.00	7.00	
	3	13.00	14.00	13.00	6.00	
	4	11.00	13.00	12.00	6.00	
25	5 & Over	7.30	10.80	9.80	5.00	6.6%
30		6.50	8.90	7.80	4.00	5.8
35		5.00	7.40	6.10	2.80	5.3
40		3.70	5.70	4.40	2.20	4.8
45		3.00	4.20	3.20	1.80	4.3
50		2.40	3.30	1.80	1.00	3.9
55		1.80	2.50	1.00	0.50	3.7
60		1.00	1.20	0.00	0.00	3.6
65		0.00	0.00	0.00	0.00	3.3

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

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Continued)

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

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

APPENDIX III

**SUMMARY OF
LAGERS PROVISIONS**

Missouri Local Government Employees Retirement System
Brief Summary of LAGERS
Benefits and Conditions Evaluated and/or Considered
as of February 29, 2016
(Section references are to RSMo)

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

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

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

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

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4(65) Benefit Program:	1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Program:	1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Program:	1.50% for life, plus 0.50% to age 65
LT-14(65) Benefit Program:	1.75% for life, plus 0.25% to age 65

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

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

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

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

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

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

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

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

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

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

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

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

(a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.

(b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death.

(c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

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

(a) Subject to the maximum in (b), the redetermined amount is the amount other-wise payable multiplied by: 100% plus up to 4%, as determined by the LAGERS Board of Trustees, for each full year of retirement.

(b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement.

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

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

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

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

APPENDIX IV

**BENEFIT
ILLUSTRATIONS**

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-1 Benefit Program is Years of Credited Service
times: 1.00% of FAS ¹)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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
(L-7 Benefit Program is Years of Credited Service
times: 1.50% of FAS ¹)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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
(L-12 Benefit Program is Years of Credited Service
times: 1.75% of FAS ¹)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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
(L-6 Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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-4(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.00% of FAS¹ at age 65)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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-5(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.25% of FAS¹ at age 65)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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 FAS¹ to age 65)
1.50% of FAS¹ at age 65)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

³ 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 FAS¹ to age 65)
1.75% of FAS¹ at age 65)

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

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2016 - it does not include any amounts which might be payable to an eligible spouse or children.

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

APPENDIX V

**AGE AND SERVICE
CHARACTERISTICS OF
EMPLOYEES**

Hematite Fire Protection District

June 30, 2016

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29	2							2	\$ 54,789
30-34									
35-39									
40-44									
45-49									
50-54				1				1	\$ 50,386
55-59									
60-64									
65-69									
70 & Over									
Totals	2			1				3	\$ 105,175

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

Age: 34.6 years.

Benefit Service: 8.4 years.

Annual Pay: \$35,058.

October 14, 2016 E-mail

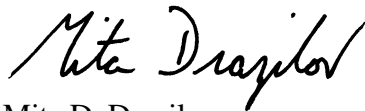
Mr. Keith Hughes, Executive Secretary
Missouri Local Government
Employees Retirement System
P.O. Box 1665
Jefferson City, Missouri 65102

Dear Keith:

Enclosed is the report of the June 30, 2016 Initial Actuarial
Valuation of LAGERS benefits for the employees of

Hematite Fire Protection District

Sincerely,



Mita D. Drazilov

MDD:adh

October 14, 2016

Hematite Fire Protection District
Festus, Missouri

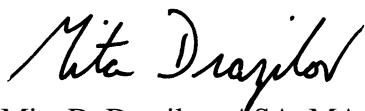
Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the June 30, 2016 Initial Valuation for the Hematite Fire Protection District dated October 14, 2016.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 29, 2016.

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

Respectfully submitted,



Mita D. Drazilov, ASA, MAAA

Hematite Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	10.8%	\$11,359	\$ 109,290	14.3%	\$15,040	\$ 137,468	14.6%	\$15,356	\$ 143,571
2017	108,593	10.8	11,728	110,787	14.3	15,529	139,351	14.6	15,855	145,538
2018	112,122	10.8	12,109	112,184	14.3	16,033	141,108	14.6	16,370	147,373
2019	115,766	10.8	12,503	113,467	14.3	16,555	142,721	14.6	16,902	149,058
2020	119,528	10.8	12,909	114,620	14.3	17,093	144,171	14.6	17,451	150,573
2021	123,413	10.8	13,329	115,627	14.3	17,648	145,437	14.6	18,018	151,895
2022	127,424	10.8	13,762	116,469	14.3	18,222	146,496	14.6	18,604	153,001
2023	131,565	10.8	14,209	117,127	14.3	18,814	147,324	14.6	19,208	153,866
2024	135,841	10.8	14,671	117,580	14.3	19,425	147,894	14.6	19,833	154,461
2025	140,256	10.8	15,148	117,805	14.3	20,057	148,176	14.6	20,477	154,756

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	17.0%	\$17,880	\$ 163,167	17.7%	\$18,616	\$ 165,547	19.5%	\$20,509	\$ 182,655
2017	108,593	17.0	18,461	165,402	17.7	19,221	167,815	19.5	21,176	185,157
2018	112,122	17.0	19,061	167,488	17.7	19,846	169,931	19.5	21,864	187,492
2019	115,766	17.0	19,680	169,403	17.7	20,491	171,874	19.5	22,574	189,636
2020	119,528	17.0	20,320	171,124	17.7	21,156	173,620	19.5	23,308	191,563
2021	123,413	17.0	20,980	172,627	17.7	21,844	175,145	19.5	24,066	193,245
2022	127,424	17.0	21,662	173,884	17.7	22,554	176,421	19.5	24,848	194,653
2023	131,565	17.0	22,366	174,867	17.7	23,287	177,418	19.5	25,655	195,753
2024	135,841	17.0	23,093	175,543	17.7	24,044	178,104	19.5	26,489	196,510
2025	140,256	17.0	23,844	175,878	17.7	24,825	178,444	19.5	27,350	196,885

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	21.1%	\$22,192	\$ 193,500	21.9%	\$23,033	\$ 202,053	24.4%	\$25,663	\$ 221,388
2017	108,593	21.1	22,913	196,151	21.9	23,782	204,821	24.4	26,497	224,421
2018	112,122	21.1	23,658	198,624	21.9	24,555	207,404	24.4	27,358	227,251
2019	115,766	21.1	24,427	200,895	21.9	25,353	209,775	24.4	28,247	229,849
2020	119,528	21.1	25,220	202,936	21.9	26,177	211,907	24.4	29,165	232,184
2021	123,413	21.1	26,040	204,718	21.9	27,027	213,768	24.4	30,113	234,223
2022	127,424	21.1	26,886	206,209	21.9	27,906	215,325	24.4	31,091	235,929
2023	131,565	21.1	27,760	207,374	21.9	28,813	216,542	24.4	32,102	237,262
2024	135,841	21.1	28,662	208,176	21.9	29,749	217,379	24.4	33,145	238,180
2025	140,256	21.1	29,594	208,574	21.9	30,716	217,794	24.4	34,222	238,635

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	11.3%	\$11,885	\$ 113,265	14.8%	\$15,566	\$ 142,394	15.2%	\$15,987	\$ 148,770
2017	108,593	11.3	12,271	114,817	14.8	16,072	144,345	15.2	16,506	150,808
2018	112,122	11.3	12,670	116,265	14.8	16,594	146,165	15.2	17,043	152,710
2019	115,766	11.3	13,082	117,594	14.8	17,133	147,836	15.2	17,596	154,456
2020	119,528	11.3	13,507	118,789	14.8	17,690	149,338	15.2	18,168	156,025
2021	123,413	11.3	13,946	119,832	14.8	18,265	150,650	15.2	18,759	157,395
2022	127,424	11.3	14,399	120,705	14.8	18,859	151,747	15.2	19,368	158,542
2023	131,565	11.3	14,867	121,387	14.8	19,472	152,605	15.2	19,998	159,438
2024	135,841	11.3	15,350	121,856	14.8	20,104	153,195	15.2	20,648	160,055
2025	140,256	11.3	15,849	122,089	14.8	20,758	153,488	15.2	21,319	160,361

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	17.7%	\$18,616	\$ 169,000	18.4%	\$19,352	\$ 171,361	20.2%	\$21,245	\$ 189,104
2017	108,593	17.7	19,221	171,315	18.4	19,981	173,709	20.2	21,936	191,695
2018	112,122	17.7	19,846	173,475	18.4	20,630	175,899	20.2	22,649	194,112
2019	115,766	17.7	20,491	175,458	18.4	21,301	177,910	20.2	23,385	196,331
2020	119,528	17.7	21,156	177,241	18.4	21,993	179,718	20.2	24,145	198,326
2021	123,413	17.7	21,844	178,798	18.4	22,708	181,296	20.2	24,929	200,068
2022	127,424	17.7	22,554	180,100	18.4	23,446	182,617	20.2	25,740	201,525
2023	131,565	17.7	23,287	181,118	18.4	24,208	183,649	20.2	26,576	202,664
2024	135,841	17.7	24,044	181,818	18.4	24,995	184,359	20.2	27,440	203,448
2025	140,256	17.7	24,825	182,165	18.4	25,807	184,711	20.2	28,332	203,836

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	21.8%	\$22,928	\$ 200,289	22.8%	\$23,980	\$ 209,169	25.4%	\$26,714	\$ 229,104
2017	108,593	21.8	23,673	203,033	22.8	24,759	212,035	25.4	27,583	232,243
2018	112,122	21.8	24,443	205,593	22.8	25,564	214,709	25.4	28,479	235,171
2019	115,766	21.8	25,237	207,944	22.8	26,395	217,164	25.4	29,405	237,860
2020	119,528	21.8	26,057	210,057	22.8	27,252	219,371	25.4	30,360	240,277
2021	123,413	21.8	26,904	211,902	22.8	28,138	221,298	25.4	31,347	242,387
2022	127,424	21.8	27,778	213,446	22.8	29,053	222,910	25.4	32,366	244,153
2023	131,565	21.8	28,681	214,652	22.8	29,997	224,170	25.4	33,418	245,533
2024	135,841	21.8	29,613	215,482	22.8	30,972	225,037	25.4	34,504	246,482
2025	140,256	21.8	30,576	215,893	22.8	31,978	225,467	25.4	35,625	246,953

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)
(0% member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	14.7%	\$15,461	\$ 112,006	18.2%	\$19,142	\$ 139,962	18.5%	\$19,457	\$ 146,095
2017	108,593	14.7	15,963	113,540	18.2	19,764	141,879	18.5	20,090	148,096
2018	112,122	14.7	16,482	114,972	18.2	20,406	143,668	18.5	20,743	149,963
2019	115,766	14.7	17,018	116,286	18.2	21,069	145,311	18.5	21,417	151,678
2020	119,528	14.7	17,571	117,468	18.2	21,754	146,787	18.5	22,113	153,219
2021	123,413	14.7	18,142	118,500	18.2	22,461	148,076	18.5	22,831	154,565
2022	127,424	14.7	18,731	119,363	18.2	23,191	149,155	18.5	23,573	155,691
2023	131,565	14.7	19,340	120,038	18.2	23,945	149,998	18.5	24,340	156,571
2024	135,841	14.7	19,969	120,502	18.2	24,723	150,578	18.5	25,131	157,176
2025	140,256	14.7	20,618	120,732	18.2	25,527	150,866	18.5	25,947	157,476

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	20.9%	\$21,982	\$ 165,566	21.6%	\$22,718	\$ 167,976	23.4%	\$24,611	\$ 185,053
2017	108,593	20.9	22,696	167,834	21.6	23,456	170,277	23.4	25,411	187,588
2018	112,122	20.9	23,433	169,950	21.6	24,218	172,424	23.4	26,237	189,953
2019	115,766	20.9	24,195	171,893	21.6	25,005	174,395	23.4	27,089	192,125
2020	119,528	20.9	24,981	173,640	21.6	25,818	176,167	23.4	27,970	194,077
2021	123,413	20.9	25,793	175,165	21.6	26,657	177,714	23.4	28,879	195,781
2022	127,424	20.9	26,632	176,441	21.6	27,524	179,009	23.4	29,817	197,207
2023	131,565	20.9	27,497	177,438	21.6	28,418	180,021	23.4	30,786	198,322
2024	135,841	20.9	28,391	178,124	21.6	29,342	180,717	23.4	31,787	199,089
2025	140,256	20.9	29,314	178,464	21.6	30,295	181,062	23.4	32,820	199,469

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	25.0%	\$26,294	\$ 195,968	25.8%	\$27,135	\$ 204,519	28.3%	\$29,765	\$ 223,983
2017	108,593	25.0	27,148	198,653	25.8	28,017	207,321	28.3	30,732	227,052
2018	112,122	25.0	28,031	201,158	25.8	28,927	209,935	28.3	31,731	229,915
2019	115,766	25.0	28,942	203,458	25.8	29,868	212,335	28.3	32,762	232,544
2020	119,528	25.0	29,882	205,525	25.8	30,838	214,493	28.3	33,826	234,907
2021	123,413	25.0	30,853	207,330	25.8	31,841	216,377	28.3	34,926	236,970
2022	127,424	25.0	31,856	208,840	25.8	32,875	217,953	28.3	36,061	238,696
2023	131,565	25.0	32,891	210,020	25.8	33,944	219,185	28.3	37,233	240,045
2024	135,841	25.0	33,960	210,832	25.8	35,047	220,033	28.3	38,443	240,973
2025	140,256	25.0	35,064	211,235	25.8	36,186	220,453	28.3	39,692	241,433

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)
(0% member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	15.2%	\$15,987	\$ 115,917	18.7%	\$19,668	\$ 144,878	19.1%	\$20,088	\$ 151,231
2017	108,593	15.2	16,506	117,505	18.7	20,307	146,863	19.1	20,741	153,303
2018	112,122	15.2	17,043	118,987	18.7	20,967	148,715	19.1	21,415	155,236
2019	115,766	15.2	17,596	120,347	18.7	21,648	150,415	19.1	22,111	157,011
2020	119,528	15.2	18,168	121,570	18.7	22,352	151,943	19.1	22,830	158,606
2021	123,413	15.2	18,759	122,638	18.7	23,078	153,277	19.1	23,572	159,999
2022	127,424	15.2	19,368	123,531	18.7	23,828	154,394	19.1	24,338	161,164
2023	131,565	15.2	19,998	124,229	18.7	24,603	155,267	19.1	25,129	162,075
2024	135,841	15.2	20,648	124,709	18.7	25,402	155,867	19.1	25,946	162,702
2025	140,256	15.2	21,319	124,947	18.7	26,228	156,165	19.1	26,789	163,013

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	21.6%	\$22,718	\$ 171,363	22.3%	\$23,454	\$ 173,842	24.1%	\$25,347	\$ 191,508
2017	108,593	21.6	23,456	173,711	22.3	24,216	176,224	24.1	26,171	194,132
2018	112,122	21.6	24,218	175,901	22.3	25,003	178,446	24.1	27,021	196,580
2019	115,766	21.6	25,005	177,912	22.3	25,816	180,486	24.1	27,900	198,827
2020	119,528	21.6	25,818	179,720	22.3	26,655	182,320	24.1	28,806	200,847
2021	123,413	21.6	26,657	181,298	22.3	27,521	183,921	24.1	29,743	202,611
2022	127,424	21.6	27,524	182,619	22.3	28,416	185,261	24.1	30,709	204,087
2023	131,565	21.6	28,418	183,651	22.3	29,339	186,308	24.1	31,707	205,240
2024	135,841	21.6	29,342	184,361	22.3	30,293	187,028	24.1	32,738	206,034
2025	140,256	21.6	30,295	184,713	22.3	31,277	187,385	24.1	33,802	206,427

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	25.7%	\$27,030	\$ 202,838	26.7%	\$28,082	\$ 211,667	29.3%	\$30,816	\$ 231,795
2017	108,593	25.7	27,908	205,617	26.7	28,994	214,567	29.3	31,818	234,971
2018	112,122	25.7	28,815	208,210	26.7	29,937	217,273	29.3	32,852	237,934
2019	115,766	25.7	29,752	210,590	26.7	30,910	219,757	29.3	33,919	240,654
2020	119,528	25.7	30,719	212,730	26.7	31,914	221,990	29.3	35,022	243,099
2021	123,413	25.7	31,717	214,598	26.7	32,951	223,940	29.3	36,160	245,234
2022	127,424	25.7	32,748	216,161	26.7	34,022	225,571	29.3	37,335	247,020
2023	131,565	25.7	33,812	217,383	26.7	35,128	226,846	29.3	38,549	248,416
2024	135,841	25.7	34,911	218,224	26.7	36,270	227,723	29.3	39,801	249,377
2025	140,256	25.7	36,046	218,641	26.7	37,448	228,158	29.3	41,095	249,853

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	11.4%	\$11,990	\$ 111,420	15.0%	\$15,776	\$ 140,078	16.0%	\$16,828	\$ 148,598
2017	108,593	11.4	12,380	112,946	15.0	16,289	141,997	16.0	17,375	150,634
2018	112,122	11.4	12,782	114,370	15.0	16,818	143,787	16.0	17,940	152,533
2019	115,766	11.4	13,197	115,678	15.0	17,365	145,431	16.0	18,523	154,277
2020	119,528	11.4	13,626	116,853	15.0	17,929	146,909	16.0	19,124	155,845
2021	123,413	11.4	14,069	117,879	15.0	18,512	148,199	16.0	19,746	157,214
2022	127,424	11.4	14,526	118,738	15.0	19,114	149,279	16.0	20,388	158,359
2023	131,565	11.4	14,998	119,409	15.0	19,735	150,123	16.0	21,050	159,254
2024	135,841	11.4	15,486	119,871	15.0	20,376	150,704	16.0	21,735	159,870
2025	140,256	11.4	15,989	120,100	15.0	21,038	150,992	16.0	22,441	160,175

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	18.4%	\$19,352	\$ 167,949	18.5%	\$19,457	\$ 168,664	20.7%	\$21,771	\$ 187,265
2017	108,593	18.4	19,981	170,250	18.5	20,090	170,975	20.7	22,479	189,831
2018	112,122	18.4	20,630	172,397	18.5	20,743	173,131	20.7	23,209	192,225
2019	115,766	18.4	21,301	174,368	18.5	21,417	175,110	20.7	23,964	194,423
2020	119,528	18.4	21,993	176,140	18.5	22,113	176,889	20.7	24,742	196,399
2021	123,413	18.4	22,708	177,687	18.5	22,831	178,443	20.7	25,546	198,124
2022	127,424	18.4	23,446	178,981	18.5	23,573	179,743	20.7	26,377	199,567
2023	131,565	18.4	24,208	179,993	18.5	24,340	180,759	20.7	27,234	200,695
2024	135,841	18.4	24,995	180,689	18.5	25,131	181,458	20.7	28,119	201,471
2025	140,256	18.4	25,807	181,034	18.5	25,947	181,804	20.7	29,033	201,856

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	22.1%	\$23,244	\$ 197,125	23.2%	\$24,401	\$ 206,416	25.6%	\$26,925	\$ 225,557
2017	108,593	22.1	23,999	199,826	23.2	25,194	209,244	25.6	27,800	228,647
2018	112,122	22.1	24,779	202,346	23.2	26,012	211,882	25.6	28,703	231,530
2019	115,766	22.1	25,584	204,659	23.2	26,858	214,304	25.6	29,636	234,177
2020	119,528	22.1	26,416	206,739	23.2	27,730	216,482	25.6	30,599	236,556
2021	123,413	22.1	27,274	208,555	23.2	28,632	218,383	25.6	31,594	238,634
2022	127,424	22.1	28,161	210,074	23.2	29,562	219,974	25.6	32,621	240,372
2023	131,565	22.1	29,076	211,261	23.2	30,523	221,217	25.6	33,681	241,731
2024	135,841	22.1	30,021	212,078	23.2	31,515	222,072	25.6	34,775	242,666
2025	140,256	22.1	30,997	212,483	23.2	32,539	222,496	25.6	35,906	243,129

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	11.9%	\$12,516	\$ 115,479	15.6%	\$16,407	\$ 145,134	16.6%	\$17,459	\$ 153,994
2017	108,593	11.9	12,923	117,061	15.6	16,941	147,122	16.6	18,026	156,104
2018	112,122	11.9	13,343	118,537	15.6	17,491	148,977	16.6	18,612	158,072
2019	115,766	11.9	13,776	119,892	15.6	18,059	150,680	16.6	19,217	159,879
2020	119,528	11.9	14,224	121,110	15.6	18,646	152,211	16.6	19,842	161,504
2021	123,413	11.9	14,686	122,174	15.6	19,252	153,548	16.6	20,487	162,922
2022	127,424	11.9	15,163	123,064	15.6	19,878	154,666	16.6	21,152	164,109
2023	131,565	11.9	15,656	123,760	15.6	20,524	155,540	16.6	21,840	165,036
2024	135,841	11.9	16,165	124,239	15.6	21,191	156,141	16.6	22,550	165,674
2025	140,256	11.9	16,690	124,476	15.6	21,880	156,439	16.6	23,282	165,990

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	19.1%	\$20,088	\$ 174,034	19.3%	\$20,299	\$ 174,679	21.6%	\$22,718	\$ 193,924
2017	108,593	19.1	20,741	176,418	19.3	20,958	177,072	21.6	23,456	196,581
2018	112,122	19.1	21,415	178,643	19.3	21,640	179,305	21.6	24,218	199,060
2019	115,766	19.1	22,111	180,685	19.3	22,343	181,355	21.6	25,005	201,336
2020	119,528	19.1	22,830	182,521	19.3	23,069	183,198	21.6	25,818	203,382
2021	123,413	19.1	23,572	184,124	19.3	23,819	184,807	21.6	26,657	205,168
2022	127,424	19.1	24,338	185,465	19.3	24,593	186,153	21.6	27,524	206,663
2023	131,565	19.1	25,129	186,513	19.3	25,392	187,205	21.6	28,418	207,831
2024	135,841	19.1	25,946	187,234	19.3	26,217	187,929	21.6	29,342	208,635
2025	140,256	19.1	26,789	187,592	19.3	27,069	188,288	21.6	30,295	209,033

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	23.0%	\$24,190	\$ 204,090	24.1%	\$25,347	\$ 213,717	26.6%	\$27,977	\$ 233,457
2017	108,593	23.0	24,976	206,886	24.1	26,171	216,645	26.6	28,886	236,655
2018	112,122	23.0	25,788	209,495	24.1	27,021	219,377	26.6	29,824	239,639
2019	115,766	23.0	26,626	211,890	24.1	27,900	221,885	26.6	30,794	242,379
2020	119,528	23.0	27,491	214,043	24.1	28,806	224,140	26.6	31,794	244,842
2021	123,413	23.0	28,385	215,923	24.1	29,743	226,108	26.6	32,828	246,992
2022	127,424	23.0	29,308	217,496	24.1	30,709	227,755	26.6	33,895	248,791
2023	131,565	23.0	30,260	218,725	24.1	31,707	229,042	26.6	34,996	250,197
2024	135,841	23.0	31,243	219,571	24.1	32,738	229,928	26.6	36,134	251,165
2025	140,256	23.0	32,259	219,990	24.1	33,802	230,367	26.6	37,308	251,645

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)
(0% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	15.3%	\$16,092	\$ 114,079	18.9%	\$19,878	\$ 142,606	19.9%	\$20,930	\$ 151,083
2017	108,593	15.3	16,615	115,642	18.9	20,524	144,560	19.9	21,610	153,153
2018	112,122	15.3	17,155	117,100	18.9	21,191	146,383	19.9	22,312	155,084
2019	115,766	15.3	17,712	118,439	18.9	21,880	148,057	19.9	23,037	156,857
2020	119,528	15.3	18,288	119,642	18.9	22,591	149,561	19.9	23,786	158,451
2021	123,413	15.3	18,882	120,693	18.9	23,325	150,874	19.9	24,559	159,843
2022	127,424	15.3	19,496	121,572	18.9	24,083	151,973	19.9	25,357	161,007
2023	131,565	15.3	20,129	122,259	18.9	24,866	152,832	19.9	26,181	161,917
2024	135,841	15.3	20,784	122,732	18.9	25,674	153,423	19.9	27,032	162,543
2025	140,256	15.3	21,459	122,966	18.9	26,508	153,716	19.9	27,911	162,853

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	22.3%	\$23,454	\$ 170,358	22.4%	\$23,559	\$ 171,134	24.6%	\$25,873	\$ 189,639
2017	108,593	22.3	24,216	172,692	22.4	24,325	173,479	24.6	26,714	192,237
2018	112,122	22.3	25,003	174,870	22.4	25,115	175,666	24.6	27,582	194,661
2019	115,766	22.3	25,816	176,869	22.4	25,932	177,674	24.6	28,478	196,887
2020	119,528	22.3	26,655	178,666	22.4	26,774	179,479	24.6	29,404	198,888
2021	123,413	22.3	27,521	180,235	22.4	27,645	181,055	24.6	30,360	200,635
2022	127,424	22.3	28,416	181,548	22.4	28,543	182,374	24.6	31,346	202,096
2023	131,565	22.3	29,339	182,574	22.4	29,471	183,405	24.6	32,365	203,238
2024	135,841	22.3	30,293	183,280	22.4	30,428	184,114	24.6	33,417	204,024
2025	140,256	22.3	31,277	183,630	22.4	31,417	184,466	24.6	34,503	204,414

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	26.0%	\$27,346	\$ 199,678	27.1%	\$28,502	\$ 208,919	29.5%	\$31,027	\$ 228,189
2017	108,593	26.0	28,234	202,414	27.1	29,429	211,781	29.5	32,035	231,315
2018	112,122	26.0	29,152	204,966	27.1	30,385	214,451	29.5	33,076	234,232
2019	115,766	26.0	30,099	207,309	27.1	31,373	216,903	29.5	34,151	236,910
2020	119,528	26.0	31,077	209,415	27.1	32,392	219,107	29.5	35,261	239,317
2021	123,413	26.0	32,087	211,254	27.1	33,445	221,031	29.5	36,407	241,419
2022	127,424	26.0	33,130	212,793	27.1	34,532	222,641	29.5	37,590	243,178
2023	131,565	26.0	34,207	213,996	27.1	35,654	223,899	29.5	38,812	244,552
2024	135,841	26.0	35,319	214,824	27.1	36,813	224,765	29.5	40,073	245,498
2025	140,256	26.0	36,467	215,234	27.1	38,009	225,194	29.5	41,376	245,967

Notes regarding the above projections:

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

Hematite Fire Protection District - Fire

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

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	15.8%	\$16,618	\$ 118,106	19.5%	\$20,509	\$ 147,609	20.5%	\$21,561	\$ 156,447
2017	108,593	15.8	17,158	119,724	19.5	21,176	149,631	20.5	22,262	158,590
2018	112,122	15.8	17,715	121,234	19.5	21,864	151,518	20.5	22,985	160,590
2019	115,766	15.8	18,291	122,620	19.5	22,574	153,250	20.5	23,732	162,426
2020	119,528	15.8	18,885	123,866	19.5	23,308	154,807	20.5	24,503	164,076
2021	123,413	15.8	19,499	124,954	19.5	24,066	156,167	20.5	25,300	165,517
2022	127,424	15.8	20,133	125,864	19.5	24,848	157,305	20.5	26,122	166,723
2023	131,565	15.8	20,787	126,575	19.5	25,655	158,194	20.5	26,971	167,665
2024	135,841	15.8	21,463	127,064	19.5	26,489	158,806	20.5	27,847	168,313
2025	140,256	15.8	22,160	127,307	19.5	27,350	159,109	20.5	28,752	168,634

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	23.0%	\$24,190	\$ 176,363	23.2%	\$24,401	\$ 177,160	25.5%	\$26,820	\$ 196,335
2017	108,593	23.0	24,976	178,779	23.2	25,194	179,587	25.5	27,691	199,025
2018	112,122	23.0	25,788	181,033	23.2	26,012	181,851	25.5	28,591	201,535
2019	115,766	23.0	26,626	183,103	23.2	26,858	183,930	25.5	29,520	203,839
2020	119,528	23.0	27,491	184,963	23.2	27,730	185,799	25.5	30,480	205,910
2021	123,413	23.0	28,385	186,587	23.2	28,632	187,431	25.5	31,470	207,718
2022	127,424	23.0	29,308	187,946	23.2	29,562	188,796	25.5	32,493	209,231
2023	131,565	23.0	30,260	189,008	23.2	30,523	189,863	25.5	33,549	210,414
2024	135,841	23.0	31,243	189,739	23.2	31,515	190,597	25.5	34,639	211,228
2025	140,256	23.0	32,259	190,101	23.2	32,539	190,961	25.5	35,765	211,631

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 105,175	26.9%	\$28,292	\$ 206,674	28.0%	\$29,449	\$ 216,250	30.5%	\$32,078	\$ 236,189
2017	108,593	26.9	29,212	209,505	28.0	30,406	219,213	30.5	33,121	239,425
2018	112,122	26.9	30,161	212,147	28.0	31,394	221,977	30.5	34,197	242,444
2019	115,766	26.9	31,141	214,572	28.0	32,414	224,515	30.5	35,309	245,216
2020	119,528	26.9	32,153	216,752	28.0	33,468	226,796	30.5	36,456	247,708
2021	123,413	26.9	33,198	218,656	28.0	34,556	228,788	30.5	37,641	249,883
2022	127,424	26.9	34,277	220,249	28.0	35,679	230,455	30.5	38,864	251,703
2023	131,565	26.9	35,391	221,494	28.0	36,838	231,757	30.5	40,127	253,126
2024	135,841	26.9	36,541	222,351	28.0	38,035	232,653	30.5	41,432	254,105
2025	140,256	26.9	37,729	222,776	28.0	39,272	233,097	30.5	42,778	254,590

Notes regarding the above projections:

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