



**THE INITIAL ACTUARIAL VALUATION FOR**  
**CITY OF FERGUSON**  
**AS OF NOVEMBER 30, 2015**

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February 1, 2016

City of Ferguson  
Ferguson, 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.

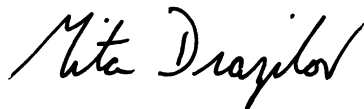
Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing 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 November 30, 2015. 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, reading "Mita Drazilov". The signature is fluid and cursive, with the first name "Mita" and last name "Drazilov" clearly distinguishable.

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.

City of Ferguson

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-12	General	8.30	7.80	0.30	16.40
	Police	13.40	7.70	0.30	21.40
	Fire	22.50	9.30	0.30	32.10
LT-14(65)	General	8.60	8.10	0.30	17.00
	Police	13.90	8.10	0.30	22.30
	Fire	23.70	9.90	0.30	33.90
L-6	General	9.60	9.30	0.30	19.20
	Police	15.40	9.20	0.30	24.90
	Fire	25.80	11.00	0.30	37.10

# 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.

City of Ferguson

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-12	General	8.70	8.10	0.30	17.10
	Police	13.90	8.10	0.30	22.30
	Fire	23.40	9.70	0.30	33.40
LT-14(65)	General	8.90	8.60	0.30	17.80
	Police	14.40	8.60	0.30	23.30
	Fire	24.60	10.40	0.30	35.30
L-6	General	9.90	9.90	0.30	20.10
	Police	16.00	9.70	0.30	26.00
	Fire	26.80	11.60	0.30	38.70

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

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

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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-12	General	8.60	11.40	0.30	20.30
	Police	13.70	11.30	0.30	25.30
	Fire	22.60	13.10	0.30	36.00
LT-14(65)	General	8.90	11.70	0.30	20.90
	Police	14.20	11.70	0.30	26.20
	Fire	23.70	13.80	0.30	37.80
L-6	General	9.80	13.00	0.30	23.10
	Police	15.70	12.80	0.30	28.80
	Fire	25.80	14.90	0.30	41.00

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

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



City of Ferguson

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-12	General	8.90	11.80	0.30	21.00
	Police	14.20	11.70	0.30	26.20
	Fire	23.40	13.60	0.30	37.30
LT-14(65)	General	9.20	12.20	0.30	21.70
	Police	14.70	12.20	0.30	27.20
	Fire	24.60	14.30	0.30	39.20
L-6	General	10.20	13.50	0.30	24.00
	Police	16.30	13.30	0.30	29.90
	Fire	26.80	15.50	0.30	42.60

# 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.

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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	General	Police	Fire
L-12	367,929	569,147	387,355
LT-14(65)	381,389	593,083	409,075
L-6	430,746	662,232	447,690

3 Year FAS			
Benefit Program	General	Police	Fire
L-12	383,633	593,083	403,042
LT-14(65)	399,337	619,679	425,969
L-6	450,937	691,487	466,998

**Non-Contributory Plan**

5 Year FAS			
Benefit Program	General	Police	Fire
L-12	455,424	672,870	434,416
LT-14(65)	468,885	696,806	456,137
L-6	518,241	765,955	494,752

3 Year FAS			
Benefit Program	General	Police	Fire
L-12	471,128	696,806	450,104
LT-14(65)	486,832	723,402	473,031
L-6	538,432	795,210	514,059

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 Ferguson

Employees and Payroll Included in the Valuation

	General	Police	Fire
Number of Employees	52	51	27
Annual Payroll	\$ 2,243,467	\$ 2,659,566	\$ 1,206,712

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

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 Ferguson

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-12	General	3,388,716	3,518,066	3,498,071	3,628,043
	Police	6,468,562	6,717,265	6,615,395	6,865,169
	Fire	4,930,685	5,118,103	4,938,266	5,124,690
LT-14(65)	General	3,490,721	3,623,852	3,599,475	3,733,311
	Police	6,698,826	6,956,418	6,844,488	7,103,180
	Fire	5,176,134	5,372,903	5,182,279	5,378,081
L-6	General	3,886,009	4,033,431	3,997,715	4,146,249
	Police	7,409,546	7,693,306	7,560,374	7,846,080
	Fire	5,638,958	5,852,982	5,643,672	5,856,722

## **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

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	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 During Next Year	
Sample 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 Ages	General Members		Retirement Ages	Police	Fire
	Men	Women			
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 Ages	General Members		Retirement Ages	Police	Fire
	Men	Women			
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



**Schedule 2. (Continued)**

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

<b>Retirement Ages</b>	<b>General Members</b>		<b>Police</b>	<b>Fire</b>
	<b>Men</b>	<b>Women</b>		
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**

**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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$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:				
\$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:				
\$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>1</sup> "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>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.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$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:				
\$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:				
\$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>1</sup> "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>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.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 875	\$1,663	111%
2,000	1,050	1,020	2,070	104%
2,500	1,313	1,165	2,478	99%
3,000	1,575	1,312	2,887	96%
3,500	1,838	1,457	3,295	94%
4,000	2,100	1,602	3,702	93%
25 Years of Service:				
\$1,500	\$ 563	\$ 875	\$1,438	96%
2,000	750	1,020	1,770	89%
2,500	938	1,165	2,103	84%
3,000	1,125	1,312	2,437	81%
3,500	1,313	1,457	2,770	79%
4,000	1,500	1,602	3,102	78%
15 Years of Service:				
\$1,500	\$338	\$ 875	\$1,213	81%
2,000	450	1,020	1,470	74%
2,500	563	1,165	1,728	69%
3,000	675	1,312	1,987	66%
3,500	788	1,457	2,245	64%
4,000	900	1,602	2,502	63%

<sup>1</sup> "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>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.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$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:				
\$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:				
\$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>1</sup> "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>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.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$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:				
\$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:				
\$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>1</sup> "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>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.

<sup>3</sup> 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 FAS<sup>1</sup> to age 65)  
1.00% of FAS<sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 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 Service:							
\$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 Service:							
\$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>1</sup> "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>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.

<sup>3</sup> 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 FAS<sup>1</sup> to age 65)  
1.25% of FAS<sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 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 Service:

\$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 Service:

\$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>1</sup> "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>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.

<sup>3</sup> 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<sup>1</sup> to age 65)  
1.50% of FAS<sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 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 Service:							
\$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 Service:							
\$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>1</sup> "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>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.

<sup>3</sup> 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)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 875	\$1,050	\$1,794	70%	120%
2,000	1,400	1,225	1,020	1,400	2,245	70%	112%
2,500	1,750	1,531	1,165	1,750	2,696	70%	108%
3,000	2,100	1,838	1,312	2,100	3,150	70%	105%
3,500	2,450	2,144	1,457	2,450	3,601	70%	103%
4,000	2,800	2,450	1,602	2,800	4,052	70%	101%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 875	\$ 750	\$1,531	50%	102%
2,000	1,000	875	1,020	1,000	1,895	50%	95%
2,500	1,250	1,094	1,165	1,250	2,259	50%	90%
3,000	1,500	1,313	1,312	1,500	2,625	50%	88%
3,500	1,750	1,531	1,457	1,750	2,988	50%	85%
4,000	2,000	1,750	1,602	2,000	3,352	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 875	\$ 450	\$1,269	30%	85%
2,000	600	525	1,020	600	1,545	30%	77%
2,500	750	656	1,165	750	1,821	30%	73%
3,000	900	788	1,312	900	2,100	30%	70%
3,500	1,050	919	1,457	1,050	2,376	30%	68%
4,000	1,200	1,050	1,602	1,200	2,652	30%	66%

<sup>1</sup> "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>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.

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

## **APPENDIX V**

### **AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES**



City of Ferguson - General

November 30, 2015

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
<b>Under 20</b>									
<b>20-24</b>									
<b>25-29</b>	3							3	\$ 118,622
<b>30-34</b>	6	2	1					9	\$ 381,285
<b>35-39</b>	3	3		1				7	\$ 281,403
<b>40-44</b>	7	1	3					11	\$ 505,046
<b>45-49</b>	2		1	1				4	\$ 156,354
<b>50-54</b>	1	1				1		3	\$ 98,675
<b>55-59</b>	2	1	2	1		1	1	8	\$ 350,022
<b>60-64</b>	1	1	2	2	1			7	\$ 352,060
<b>65-69</b>									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>25</b>	<b>9</b>	<b>9</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>52</b>	<b>\$ 2,243,467</b>

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

Age: 44.6 years.

Benefit Service: 8.3 years.

Annual Pay: \$43,144.

City of Ferguson - Police

November 30, 2015

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
<b>Under 20</b>									
20-24	2							2	\$ 77,875
25-29	4							4	\$ 183,518
30-34		3						3	\$ 140,026
35-39	3	2	5					10	\$ 474,616
40-44	5	2	1	3				11	\$ 535,351
45-49	2		1	2	2			7	\$ 360,693
50-54	1			1	1	1		4	\$ 234,790
55-59			1					1	\$ 51,979
60-64	3				1	2	3	9	\$ 600,718
65-69									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>20</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>51</b>	<b>\$ 2,659,566</b>

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

Age: 43.7 years.

Benefit Service: 11.3 years.

Annual Pay: \$52,148.

City of Ferguson - Fire

November 30, 2015

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
<b>Under 20</b>									
<b>20-24</b>									
<b>25-29</b>	2	1						3	\$ 101,275
<b>30-34</b>	1							1	\$ 33,758
<b>35-39</b>		1	1					2	\$ 77,459
<b>40-44</b>		1	3					4	\$ 143,312
<b>45-49</b>		1		3	3			7	\$ 327,164
<b>50-54</b>						4		4	\$ 167,502
<b>55-59</b>					2	1	2	5	\$ 272,751
<b>60-64</b>							1	1	\$ 83,491
<b>65-69</b>									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>27</b>	<b>\$ 1,206,712</b>

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

Age: 45.7 years.

Benefit Service: 18.8 years.

Annual Pay: \$44,693.

February 1, 2016 E-mail

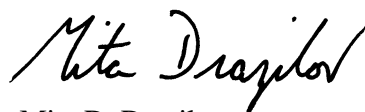
Mr. Keith Hughes, Executive Secretary  
Missouri Local Government  
Employees Retirement System  
P.O. Box 1665  
Jefferson City, Missouri 65102

Dear Keith:

Enclosed is the report of the November 30, 2015 Initial Actuarial  
Valuation of LAGERS benefits for the employees of

City of Ferguson

Sincerely,



Mita D. Drazilov

MDD:rmg

February 1, 2016

City of Ferguson  
Ferguson, Missouri

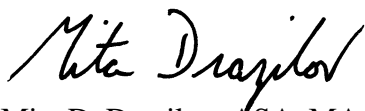
Ladies and Gentlemen:

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 November 30, 2015 Initial Valuation for the City of Ferguson dated February 1, 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

City of Ferguson - General

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

Rule of 80 Retirement Eligibility

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
2015	\$ 2,243,467	16.4%	\$367,929	\$ 3,388,716	17.0%	\$381,389	\$ 3,490,721	19.2%	\$430,746	\$ 3,886,009
2016	2,321,988	16.4	380,806	3,440,746	17.0	394,738	3,544,317	19.2	445,822	3,945,674
2017	2,403,258	16.4	394,134	3,489,770	17.0	408,554	3,594,816	19.2	461,426	4,001,892
2018	2,487,372	16.4	407,929	3,535,333	17.0	422,853	3,641,751	19.2	477,575	4,054,142
2019	2,574,430	16.4	422,207	3,576,939	17.0	437,653	3,684,609	19.2	494,291	4,101,853
2020	2,664,535	16.4	436,984	3,614,047	17.0	452,971	3,722,834	19.2	511,591	4,144,406
2021	2,757,794	16.4	452,278	3,646,067	17.0	468,825	3,755,818	19.2	529,496	4,181,125
2022	2,854,317	16.4	468,108	3,672,359	17.0	485,234	3,782,901	19.2	548,029	4,211,275
2023	2,954,218	16.4	484,492	3,692,225	17.0	502,217	3,803,365	19.2	567,210	4,234,056
2024	3,057,616	16.4	501,449	3,704,908	17.0	519,795	3,816,430	19.2	587,062	4,248,600

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 3.50%.
- 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.

# City of Ferguson - General

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

### Rule of 80 Retirement Eligibility

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
2015	\$ 2,243,467	17.1%	\$383,633	\$ 3,518,066	17.8%	\$399,337	\$ 3,623,852	20.1%	\$450,937	\$ 4,033,431
2016	2,321,988	17.1	397,060	3,572,082	17.8	413,314	3,679,492	20.1	466,720	4,095,359
2017	2,403,258	17.1	410,957	3,622,977	17.8	427,780	3,731,917	20.1	483,055	4,153,710
2018	2,487,372	17.1	425,341	3,670,279	17.8	442,752	3,780,642	20.1	499,962	4,207,942
2019	2,574,430	17.1	440,228	3,713,473	17.8	458,249	3,825,135	20.1	517,460	4,257,463
2020	2,664,535	17.1	455,635	3,751,997	17.8	474,287	3,864,818	20.1	535,572	4,301,631
2021	2,757,794	17.1	471,583	3,785,239	17.8	490,887	3,899,060	20.1	554,317	4,339,743
2022	2,854,317	17.1	488,088	3,812,534	17.8	508,068	3,927,176	20.1	573,718	4,371,037
2023	2,954,218	17.1	505,171	3,833,158	17.8	525,851	3,948,421	20.1	593,798	4,394,683
2024	3,057,616	17.1	522,852	3,846,325	17.8	544,256	3,961,984	20.1	614,581	4,409,779

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 3.50%.
- 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.

City of Ferguson - General

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-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
2015	\$ 2,243,467	20.3%	\$455,424	\$ 3,498,071	20.9%	\$468,885	\$ 3,599,475	23.1%	\$518,241	\$ 3,997,715
2016	2,321,988	20.3	471,364	3,551,780	20.9	485,295	3,654,741	23.1	536,379	4,059,095
2017	2,403,258	20.3	487,861	3,602,386	20.9	502,281	3,706,814	23.1	555,153	4,116,929
2018	2,487,372	20.3	504,937	3,649,419	20.9	519,861	3,755,211	23.1	574,583	4,170,680
2019	2,574,430	20.3	522,609	3,692,367	20.9	538,056	3,799,404	23.1	594,693	4,219,763
2020	2,664,535	20.3	540,901	3,730,672	20.9	556,888	3,838,820	23.1	615,508	4,263,539
2021	2,757,794	20.3	559,832	3,763,725	20.9	576,379	3,872,832	23.1	637,050	4,301,314
2022	2,854,317	20.3	579,426	3,790,865	20.9	596,552	3,900,759	23.1	659,347	4,332,331
2023	2,954,218	20.3	599,706	3,811,372	20.9	617,432	3,921,861	23.1	682,424	4,355,767
2024	3,057,616	20.3	620,696	3,824,464	20.9	639,042	3,935,333	23.1	706,309	4,370,729

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.
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City of Ferguson - General

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-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
2015	\$ 2,243,467	21.0%	\$471,128	\$ 3,628,043	21.7%	\$486,832	\$ 3,733,311	24.0%	\$538,432	\$ 4,146,249
2016	2,321,988	21.0	487,617	3,683,747	21.7	503,871	3,790,632	24.0	557,277	4,209,910
2017	2,403,258	21.0	504,684	3,736,233	21.7	521,507	3,844,641	24.0	576,782	4,269,893
2018	2,487,372	21.0	522,348	3,785,014	21.7	539,760	3,894,837	24.0	596,969	4,325,642
2019	2,574,430	21.0	540,630	3,829,558	21.7	558,651	3,940,674	24.0	617,863	4,376,549
2020	2,664,535	21.0	559,552	3,869,286	21.7	578,204	3,981,555	24.0	639,488	4,421,952
2021	2,757,794	21.0	579,137	3,903,568	21.7	598,441	4,016,831	24.0	661,871	4,461,130
2022	2,854,317	21.0	599,407	3,931,717	21.7	619,387	4,045,796	24.0	685,036	4,493,299
2023	2,954,218	21.0	620,386	3,952,986	21.7	641,065	4,067,682	24.0	709,012	4,517,606
2024	3,057,616	21.0	642,099	3,966,565	21.7	663,503	4,081,655	24.0	733,828	4,533,124

Notes regarding the above projections:

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# City of Ferguson - Police

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

### Rule of 80 Retirement Eligibility

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
2015	\$ 2,659,566	21.4%	\$569,147	\$ 6,468,562	22.3%	\$593,083	\$ 6,698,826	24.9%	\$662,232	\$ 7,409,546
2016	2,752,651	21.4	589,067	6,567,879	22.3	613,841	6,801,678	24.9	685,410	7,523,311
2017	2,848,994	21.4	609,685	6,661,458	22.3	635,326	6,898,588	24.9	709,400	7,630,503
2018	2,948,709	21.4	631,024	6,748,431	22.3	657,562	6,988,657	24.9	734,229	7,730,128
2019	3,051,914	21.4	653,110	6,827,850	22.3	680,577	7,070,904	24.9	759,927	7,821,101
2020	3,158,731	21.4	675,968	6,898,683	22.3	704,397	7,144,259	24.9	786,524	7,902,238
2021	3,269,287	21.4	699,627	6,959,805	22.3	729,051	7,207,557	24.9	814,052	7,972,251
2022	3,383,712	21.4	724,114	7,009,992	22.3	754,568	7,259,531	24.9	842,544	8,029,739
2023	3,502,142	21.4	749,458	7,047,913	22.3	780,978	7,298,802	24.9	872,033	8,073,177
2024	3,624,717	21.4	775,689	7,072,123	22.3	808,312	7,323,874	24.9	902,555	8,100,909

Notes regarding the above projections:

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# City of Ferguson - Police

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

(4% member contributions are additional)

### Rule of 80 Retirement Eligibility

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
2015	\$ 2,659,566	22.3%	\$593,083	\$ 6,717,265	23.3%	\$619,679	\$ 6,956,418	26.0%	\$691,487	\$ 7,693,306
2016	2,752,651	22.3	613,841	6,820,401	23.3	641,368	7,063,225	26.0	715,689	7,811,427
2017	2,848,994	22.3	635,326	6,917,578	23.3	663,816	7,163,862	26.0	740,738	7,922,724
2018	2,948,709	22.3	657,562	7,007,895	23.3	687,049	7,257,395	26.0	766,664	8,026,165
2019	3,051,914	22.3	680,577	7,090,368	23.3	711,096	7,342,804	26.0	793,498	8,120,622
2020	3,158,731	22.3	704,397	7,163,925	23.3	735,984	7,418,979	26.0	821,270	8,204,867
2021	3,269,287	22.3	729,051	7,227,397	23.3	761,744	7,484,711	26.0	850,015	8,277,561
2022	3,383,712	22.3	754,568	7,279,514	23.3	788,405	7,538,683	26.0	879,765	8,337,250
2023	3,502,142	22.3	780,978	7,318,893	23.3	815,999	7,579,464	26.0	910,557	8,382,351
2024	3,624,717	22.3	808,312	7,344,034	23.3	844,559	7,605,500	26.0	942,426	8,411,145

Notes regarding the above projections:

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# City of Ferguson - Police

## 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-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	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2015	\$ 2,659,566	25.3%	\$672,870	\$ 6,615,395	26.2%	\$696,806	\$ 6,844,488	28.8%	\$765,955	\$ 7,560,374
2016	2,752,651	25.3	696,421	6,716,966	26.2	721,195	6,949,577	28.8	792,763	7,676,454
2017	2,848,994	25.3	720,795	6,812,669	26.2	746,436	7,048,595	28.8	820,510	7,785,828
2018	2,948,709	25.3	746,023	6,901,617	26.2	772,562	7,140,623	28.8	849,228	7,887,481
2019	3,051,914	25.3	772,134	6,982,839	26.2	799,601	7,224,658	28.8	878,951	7,980,305
2020	3,158,731	25.3	799,159	7,055,280	26.2	827,588	7,299,608	28.8	909,715	8,063,094
2021	3,269,287	25.3	827,130	7,117,789	26.2	856,553	7,364,282	28.8	941,555	8,134,532
2022	3,383,712	25.3	856,079	7,169,115	26.2	886,533	7,417,386	28.8	974,509	8,193,190
2023	3,502,142	25.3	886,042	7,207,897	26.2	917,561	7,457,511	28.8	1,008,617	8,237,512
2024	3,624,717	25.3	917,053	7,232,657	26.2	949,676	7,483,128	28.8	1,043,918	8,265,808

Notes regarding the above projections:

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# City of Ferguson - Police

## 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-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	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2015	\$ 2,659,566	26.2%	\$696,806	\$ 6,865,169	27.2%	\$723,402	\$ 7,103,180	29.9%	\$795,210	\$ 7,846,080
2016	2,752,651	26.2	721,195	6,970,575	27.2	748,721	7,212,241	29.9	823,043	7,966,547
2017	2,848,994	26.2	746,436	7,069,892	27.2	774,926	7,315,001	29.9	851,849	8,080,055
2018	2,948,709	26.2	772,562	7,162,198	27.2	802,049	7,410,507	29.9	881,664	8,185,550
2019	3,051,914	26.2	799,601	7,246,487	27.2	830,121	7,497,718	29.9	912,522	8,281,882
2020	3,158,731	26.2	827,588	7,321,663	27.2	859,175	7,575,500	29.9	944,461	8,367,800
2021	3,269,287	26.2	856,553	7,386,532	27.2	889,246	7,642,618	29.9	977,517	8,441,938
2022	3,383,712	26.2	886,533	7,439,796	27.2	920,370	7,697,729	29.9	1,011,730	8,502,813
2023	3,502,142	26.2	917,561	7,480,043	27.2	952,583	7,739,371	29.9	1,047,140	8,548,810
2024	3,624,717	26.2	949,676	7,505,738	27.2	985,923	7,765,956	29.9	1,083,790	8,578,176

Notes regarding the above projections:

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# City of Ferguson - 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-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
2015	\$ 1,206,712	32.1%	\$387,355	\$ 4,930,685	33.9%	\$409,075	\$ 5,176,134	37.1%	\$447,690	\$ 5,638,958
2016	1,248,947	32.1	400,912	5,006,390	33.9	423,393	5,255,607	37.1	463,359	5,725,537
2017	1,292,660	32.1	414,944	5,077,721	33.9	438,212	5,330,489	37.1	479,577	5,807,115
2018	1,337,903	32.1	429,467	5,144,017	33.9	453,549	5,400,085	37.1	496,362	5,882,934
2019	1,384,730	32.1	444,498	5,204,555	33.9	469,423	5,463,636	37.1	513,735	5,952,168
2020	1,433,196	32.1	460,056	5,258,548	33.9	485,853	5,520,317	37.1	531,716	6,013,917
2021	1,483,358	32.1	476,158	5,305,138	33.9	502,858	5,569,227	37.1	550,326	6,067,200
2022	1,535,276	32.1	492,824	5,343,393	33.9	520,459	5,609,387	37.1	569,587	6,110,950
2023	1,589,011	32.1	510,073	5,372,299	33.9	538,675	5,639,732	37.1	589,523	6,144,008
2024	1,644,626	32.1	527,925	5,390,753	33.9	557,528	5,659,105	37.1	610,156	6,165,113

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 3.50%.
- 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.

# City of Ferguson - 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-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
2015	\$ 1,206,712	33.4%	\$403,042	\$ 5,118,103	35.3%	\$425,969	\$ 5,372,903	38.7%	\$466,998	\$ 5,852,982
2016	1,248,947	33.4	417,148	5,196,685	35.3	440,878	5,455,397	38.7	483,342	5,942,848
2017	1,292,660	33.4	431,748	5,270,727	35.3	456,309	5,533,126	38.7	500,259	6,027,522
2018	1,337,903	33.4	446,860	5,339,543	35.3	472,280	5,605,368	38.7	517,768	6,106,219
2019	1,384,730	33.4	462,500	5,402,382	35.3	488,810	5,671,335	38.7	535,891	6,178,080
2020	1,433,196	33.4	478,687	5,458,427	35.3	505,918	5,730,170	38.7	554,647	6,242,172
2021	1,483,358	33.4	495,442	5,506,788	35.3	523,625	5,780,939	38.7	574,060	6,297,477
2022	1,535,276	33.4	512,782	5,546,497	35.3	541,952	5,822,625	38.7	594,152	6,342,888
2023	1,589,011	33.4	530,730	5,576,501	35.3	560,921	5,854,123	38.7	614,947	6,377,201
2024	1,644,626	33.4	549,305	5,595,657	35.3	580,553	5,874,232	38.7	636,470	6,399,107

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 3.50%.
- 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.

# City of Ferguson - 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-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
2015	\$ 1,206,712	36.0%	\$434,416	\$ 4,938,266	37.8%	\$456,137	\$ 5,182,279	41.0%	\$494,752	\$ 5,643,672
2016	1,248,947	36.0	449,621	5,014,087	37.8	472,102	5,261,847	41.0	512,068	5,730,324
2017	1,292,660	36.0	465,358	5,085,528	37.8	488,625	5,336,818	41.0	529,991	5,811,970
2018	1,337,903	36.0	481,645	5,151,926	37.8	505,727	5,406,497	41.0	548,540	5,887,852
2019	1,384,730	36.0	498,503	5,212,557	37.8	523,428	5,470,124	41.0	567,739	5,957,144
2020	1,433,196	36.0	515,951	5,266,633	37.8	541,748	5,526,872	41.0	587,610	6,018,944
2021	1,483,358	36.0	534,009	5,313,295	37.8	560,709	5,575,840	41.0	608,177	6,072,271
2022	1,535,276	36.0	552,699	5,351,609	37.8	580,334	5,616,047	41.0	629,463	6,116,058
2023	1,589,011	36.0	572,044	5,380,559	37.8	600,646	5,646,428	41.0	651,495	6,149,144
2024	1,644,626	36.0	592,065	5,399,042	37.8	621,669	5,665,824	41.0	674,297	6,170,267

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 3.50%.
- 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.



City of Ferguson - 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-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
2015	\$ 1,206,712	37.3%	\$450,104	\$ 5,124,690	39.2%	\$473,031	\$ 5,378,081	42.6%	\$514,059	\$ 5,856,722
2016	1,248,947	37.3	465,857	5,203,373	39.2	489,587	5,460,655	42.6	532,051	5,946,645
2017	1,292,660	37.3	482,162	5,277,511	39.2	506,723	5,538,459	42.6	550,673	6,031,373
2018	1,337,903	37.3	499,038	5,346,415	39.2	524,458	5,610,770	42.6	569,947	6,110,120
2019	1,384,730	37.3	516,504	5,409,335	39.2	542,814	5,676,801	42.6	589,895	6,182,027
2020	1,433,196	37.3	534,582	5,465,452	39.2	561,813	5,735,693	42.6	610,541	6,246,160
2021	1,483,358	37.3	553,293	5,513,875	39.2	581,476	5,786,511	42.6	631,911	6,301,500
2022	1,535,276	37.3	572,658	5,553,635	39.2	601,828	5,828,237	42.6	654,028	6,346,940
2023	1,589,011	37.3	592,701	5,583,678	39.2	622,892	5,859,766	42.6	676,919	6,381,275
2024	1,644,626	37.3	613,445	5,602,858	39.2	644,693	5,879,895	42.6	700,611	6,403,195

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 3.50%.
- 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.