



**THE INITIAL ACTUARIAL VALUATION FOR  
CITY OF WARRENTON  
AS OF NOVEMBER 30, 2014**

# Table of Contents

	<b>Page</b>
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

December 23, 2014

City of Warrenton  
Warrenton, 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, 2014.

The computed contributions required for LAGERS participation will permit the System to continue to operate in sound condition 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.

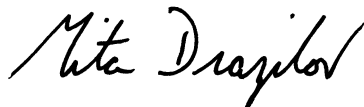
Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing 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, 2014. 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.

City of Warrenton

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	General	2.90%	3.20%	0.20%	6.30%
	Police	2.70	3.10	0.20	6.00
L-3	General	3.70	4.70	0.20	8.60
	Police	3.50	4.60	0.20	8.30
LT-4(65)	General	3.30	4.00	0.20	7.50
	Police	3.60	4.60	0.20	8.40
LT-5(65)	General	4.00	5.30	0.20	9.50
	Police	4.10	5.70	0.20	10.00
L-7	General	4.40	6.20	0.20	10.80
	Police	4.20	6.10	0.20	10.50
LT-8(65)	General	4.60	6.60	0.20	11.40
	Police	4.70	6.80	0.20	11.70
L-12	General	5.20	7.70	0.30	13.20
	Police	5.00	7.60	0.30	12.90
LT-14(65)	General	5.30	7.90	0.30	13.50
	Police	5.20	8.00	0.30	13.50
L-6	General	6.00	9.30	0.30	15.60
	Police	5.70	9.20	0.30	15.20

\* 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 Warrenton

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	General	3.00%	3.40%	0.20%	6.60%
	Police	2.90	3.30	0.20	6.40
L-3	General	3.80	5.00	0.20	9.00
	Police	3.60	4.90	0.20	8.70
LT-4(65)	General	3.40	4.20	0.20	7.80
	Police	3.70	4.90	0.20	8.80
LT-5(65)	General	4.10	5.60	0.20	9.90
	Police	4.30	6.00	0.20	10.50
L-7	General	4.60	6.50	0.20	11.30
	Police	4.40	6.50	0.20	11.10
LT-8(65)	General	4.80	6.90	0.20	11.90
	Police	4.90	7.10	0.20	12.20
L-12	General	5.40	8.10	0.30	13.80
	Police	5.20	8.10	0.30	13.60
LT-14(65)	General	5.50	8.30	0.30	14.10
	Police	5.40	8.40	0.30	14.10
L-6	General	6.20	9.70	0.30	16.20
	Police	6.00	9.60	0.30	15.90

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

City of Warrenton

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	General	3.10%	6.70%	0.20%	10.00%
	Police	3.00	6.60	0.20	9.80
L-3	General	3.90	8.20	0.20	12.30
	Police	3.80	8.20	0.20	12.20
LT-4(65)	General	3.50	7.50	0.20	11.20
	Police	3.90	8.10	0.20	12.20
LT-5(65)	General	4.20	8.80	0.20	13.20
	Police	4.40	9.30	0.20	13.90
L-7	General	4.70	9.80	0.20	14.70
	Police	4.50	9.70	0.20	14.40
LT-8(65)	General	4.90	10.20	0.20	15.30
	Police	4.90	10.50	0.20	15.60
L-12	General	5.50	11.30	0.30	17.10
	Police	5.30	11.20	0.30	16.80
LT-14(65)	General	5.60	11.50	0.30	17.40
	Police	5.50	11.60	0.30	17.40
L-6	General	6.30	12.90	0.30	19.50
	Police	6.00	12.80	0.30	19.10

\* 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 Warrenton

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	General	3.30%	6.90%	0.20%	10.40%
	Police	3.10	6.90	0.20	10.20
L-3	General	4.10	8.50	0.20	12.80
	Police	3.90	8.50	0.20	12.60
LT-4(65)	General	3.70	7.70	0.20	11.60
	Police	4.00	8.40	0.20	12.60
LT-5(65)	General	4.40	9.10	0.20	13.70
	Police	4.60	9.60	0.20	14.40
L-7	General	4.90	10.10	0.20	15.20
	Police	4.70	10.10	0.20	15.00
LT-8(65)	General	5.10	10.50	0.20	15.80
	Police	5.10	10.80	0.20	16.10
L-12	General	5.70	11.70	0.30	17.70
	Police	5.50	11.70	0.30	17.50
LT-14(65)	General	5.80	11.90	0.30	18.00
	Police	5.70	12.00	0.30	18.00
L-6	General	6.50	13.30	0.30	20.10
	Police	6.20	13.30	0.30	19.80

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

City of Warrenton

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	General	3.10%	3.50%	0.20%	6.80%
	Police	2.90	3.20	0.20	6.30
L-3	General	3.90	5.10	0.20	9.20
	Police	3.60	4.70	0.20	8.50
LT-4(65)	General	3.80	4.70	0.20	8.70
	Police	3.80	4.90	0.20	8.90
LT-5(65)	General	4.40	6.00	0.20	10.60
	Police	4.40	6.00	0.20	10.60
L-7	General	4.80	6.70	0.20	11.70
	Police	4.40	6.30	0.20	10.90
LT-8(65)	General	5.10	7.30	0.20	12.60
	Police	4.90	7.10	0.20	12.20
L-12	General	5.60	8.30	0.30	14.20
	Police	5.20	7.70	0.30	13.20
LT-14(65)	General	5.80	8.60	0.30	14.70
	Police	5.40	8.30	0.30	14.00
L-6	General	6.40	9.90	0.30	16.60
	Police	5.90	9.40	0.30	15.60

# 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.

City of Warrenton

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	General	3.20%	3.80%	0.20%	7.20%
	Police	3.00	3.40	0.20	6.60
L-3	General	4.10	5.40	0.20	9.70
	Police	3.80	5.00	0.20	9.00
LT-4(65)	General	3.90	5.00	0.20	9.10
	Police	4.00	5.20	0.20	9.40
LT-5(65)	General	4.60	6.30	0.20	11.10
	Police	4.60	6.30	0.20	11.10
L-7	General	5.00	7.00	0.20	12.20
	Police	4.60	6.50	0.20	11.30
LT-8(65)	General	5.30	7.60	0.20	13.10
	Police	5.10	7.50	0.20	12.80
L-12	General	5.80	8.70	0.30	14.80
	Police	5.40	8.30	0.30	14.00
LT-14(65)	General	6.00	9.00	0.30	15.30
	Police	5.60	8.70	0.30	14.60
L-6	General	6.70	10.40	0.30	17.40
	Police	6.20	9.90	0.30	16.40

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

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

City of Warrenton

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	General	3.40%	7.00%	0.20%	10.60%
	Police	3.10	6.70	0.20	10.00
L-3	General	4.20	8.60	0.20	13.00
	Police	3.90	8.30	0.20	12.40
LT-4(65)	General	4.00	8.20	0.20	12.40
	Police	4.10	8.40	0.20	12.70
LT-5(65)	General	4.70	9.50	0.20	14.40
	Police	4.60	9.60	0.20	14.40
L-7	General	5.10	10.30	0.20	15.60
	Police	4.70	9.90	0.20	14.80
LT-8(65)	General	5.40	10.80	0.20	16.40
	Police	5.20	10.70	0.20	16.10
L-12	General	5.90	11.90	0.30	18.10
	Police	5.40	11.40	0.30	17.10
LT-14(65)	General	6.10	12.20	0.30	18.60
	Police	5.70	11.90	0.30	17.90
L-6	General	6.70	13.50	0.30	20.50
	Police	6.20	13.00	0.30	19.50

# 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.

City of Warrenton

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	General	3.50%	7.30%	0.20%	11.00%
	Police	3.20	7.00	0.20	10.40
L-3	General	4.40	8.90	0.20	13.50
	Police	4.00	8.60	0.20	12.80
LT-4(65)	General	4.20	8.50	0.20	12.90
	Police	4.30	8.70	0.20	13.20
LT-5(65)	General	4.90	9.90	0.20	15.00
	Police	4.80	9.90	0.20	14.90
L-7	General	5.20	10.60	0.20	16.00
	Police	4.80	10.20	0.20	15.20
LT-8(65)	General	5.60	11.20	0.20	17.00
	Police	5.40	11.10	0.20	16.70
L-12	General	6.10	12.30	0.30	18.70
	Police	5.70	11.90	0.30	17.90
LT-14(65)	General	6.30	12.60	0.30	19.20
	Police	5.90	12.30	0.30	18.50
L-6	General	7.00	14.00	0.30	21.30
	Police	6.50	13.50	0.30	20.30

# 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 Warrenton

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**

<b>5 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 86,033	\$ 49,516
L-3	117,442	68,497
LT-4(65)	102,420	69,323
LT-5(65)	129,732	82,527
L-7	147,485	86,653
LT-8(65)	155,678	96,557
L-12	180,259	106,460
LT-14(65)	184,356	111,411
L-6	213,034	125,441

<b>3 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 90,130	\$ 52,817
L-3	122,904	71,798
LT-4(65)	106,517	72,624
LT-5(65)	135,194	86,653
L-7	154,313	91,605
LT-8(65)	162,506	100,683
L-12	188,453	112,237
LT-14(65)	192,550	116,363
L-6	221,227	131,218

**Non-Contributory Plan**

<b>5 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 136,560	\$ 80,876
L-3	167,969	100,683
LT-4(65)	152,947	100,683
LT-5(65)	180,259	114,713
L-7	200,743	118,839
LT-8(65)	208,937	128,742
L-12	233,518	138,645
LT-14(65)	237,614	143,597
L-6	266,292	157,627

<b>3 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 142,022	\$ 84,178
L-3	174,797	103,984
LT-4(65)	158,410	103,984
LT-5(65)	187,087	118,839
L-7	207,571	123,791
LT-8(65)	215,765	132,868
L-12	241,711	144,422
LT-14(65)	245,808	148,549
L-6	274,486	163,403

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 Warrenton

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**

<b>5 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 92,861	\$ 51,992
L-3	125,635	70,148
LT-4(65)	118,807	73,449
LT-5(65)	144,754	87,479
L-7	159,775	89,954
LT-8(65)	172,066	100,683
L-12	193,915	108,936
LT-14(65)	200,743	115,538
L-6	226,690	128,742

<b>3 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 98,323	\$ 54,468
L-3	132,463	74,274
LT-4(65)	124,270	77,575
LT-5(65)	151,582	91,605
L-7	166,603	93,256
LT-8(65)	178,894	105,635
L-12	202,109	115,538
LT-14(65)	208,937	120,489
L-6	237,614	135,344

**Non-Contributory Plan**

<b>5 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 144,754	\$ 82,527
L-3	177,528	102,333
LT-4(65)	169,334	104,809
LT-5(65)	196,646	118,839
L-7	213,034	122,140
LT-8(65)	223,958	132,868
L-12	247,174	141,121
LT-14(65)	254,002	147,723
L-6	279,948	160,928

<b>3 Year FAS</b>		
<b>Benefit Program</b>	<b>General</b>	<b>Police</b>
L-1	\$ 150,216	\$ 85,828
L-3	184,356	105,635
LT-4(65)	176,162	108,936
LT-5(65)	204,840	122,965
L-7	218,496	125,441
LT-8(65)	232,152	137,820
L-12	255,367	147,723
LT-14(65)	262,195	152,675
L-6	290,873	167,530

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 Warrenton

Employees and Payroll Included in the Valuation

	General	Police
Number of Employees	37	20
Annual Payroll	\$ 1,365,600	\$ 825,270

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



**APPENDIX I**

**UNFUNDED ACTUARIAL  
ACCRUED LIABILITY**

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

If the decision is made to join LAGERS the governing body also must decide how much credit to grant employees for their service before the membership date. The options are to cover 25%, 50%, 75% or 100% of prior service. The granting of prior service credit results in the establishment of an actuarial accrued liability. Because your political subdivision will not have established an asset balance with the System as of the membership date, the value established for prior service is an unfunded actuarial accrued liability.

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 11 as the "Prior Service Cost" are designed to pay for the applicable unfunded actuarial accrued liability. This procedure will allow your political subdivision to retire the unfunded actuarial accrued liability in an orderly fashion over a period of years without the need for an immediate large payment upon joining the System.

Should the governing body elect to grant credit for 100% of the employees' prior service, the unfunded actuarial accrued liability as of the date of this valuation would be as follows:

City of Warrenton

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	General	\$ 711,421	\$ 740,042	\$ 779,082	\$ 807,680
	Police	411,134	428,633	449,927	467,153
L-3	General	905,203	940,693	973,761	1,009,651
	Police	523,857	545,277	562,328	583,970
LT-4(65)	General	810,011	842,279	876,857	909,140
	Police	537,827	560,190	576,001	598,063
LT-5(65)	General	979,128	1,017,428	1,047,089	1,085,676
	Police	618,851	643,945	656,891	682,154
L-7	General	1,098,379	1,140,962	1,168,595	1,211,489
	Police	635,297	660,835	674,854	700,718
LT-8(65)	General	1,147,646	1,192,084	1,217,433	1,262,256
	Police	698,628	726,597	737,913	766,204
L-12	General	1,291,369	1,340,938	1,363,266	1,413,490
	Police	746,539	776,302	787,314	817,456
LT-14(65)	General	1,315,979	1,366,489	1,387,696	1,438,828
	Police	778,204	809,200	818,860	850,213
L-6	General	1,484,044	1,540,631	1,558,018	1,615,377
	Police	857,667	891,712	899,804	934,297

City of Warrenton

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	General	\$ 768,895	\$ 799,826	\$ 834,297	\$ 865,407
	Police	426,551	444,712	465,055	483,001
L-3	General	976,326	1,014,861	1,042,878	1,081,790
	Police	542,929	565,133	581,285	603,734
LT-4(65)	General	934,291	971,506	998,840	1,036,206
	Police	575,662	599,567	613,531	637,226
LT-5(65)	General	1,100,357	1,143,606	1,166,292	1,209,829
	Police	654,721	681,285	692,653	719,403
L-7	General	1,183,251	1,229,406	1,251,513	1,298,073
	Police	657,997	684,612	697,571	724,486
LT-8(65)	General	1,265,942	1,315,215	1,333,753	1,383,464
	Police	732,528	761,997	771,846	801,642
L-12	General	1,390,022	1,443,809	1,460,077	1,514,478
	Police	772,917	803,843	813,846	845,230
LT-14(65)	General	1,431,340	1,486,644	1,501,193	1,557,155
	Police	810,169	842,560	850,984	883,792
L-6	General	1,596,485	1,657,846	1,668,658	1,730,863
	Police	887,764	923,099	930,160	966,007

## **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**

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

<b>Retirement Ages</b>	<b>General Members</b>		<b>Retirement Ages</b>	<b>Police</b>	<b>Fire</b>
	<b>Men</b>	<b>Women</b>			
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, 2014**  
**(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	\$ 890	\$1,415	94%
2,000	700	1,040	1,740	87%
2,500	875	1,190	2,065	83%
3,000	1,050	1,343	2,393	80%
3,500	1,225	1,493	2,718	78%
4,000	1,400	1,642	3,042	76%
25 Years of Service:				
\$1,500	\$ 375	\$ 890	\$1,265	84%
2,000	500	1,040	1,540	77%
2,500	625	1,190	1,815	73%
3,000	750	1,343	2,093	70%
3,500	875	1,493	2,368	68%
4,000	1,000	1,642	2,642	66%
15 Years of Service:				
\$1,500	\$225	\$ 890	\$1,115	74%
2,000	300	1,040	1,340	67%
2,500	375	1,190	1,565	63%
3,000	450	1,343	1,793	60%
3,500	525	1,493	2,018	58%
4,000	600	1,642	2,242	56%

<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 2014 - 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	\$ 890	\$1,546	103%
2,000	875	1,040	1,915	96%
2,500	1,094	1,190	2,284	91%
3,000	1,313	1,343	2,656	89%
3,500	1,531	1,493	3,024	86%
4,000	1,750	1,642	3,392	85%
25 Years of Service:				
\$1,500	\$ 469	\$ 890	\$1,359	91%
2,000	625	1,040	1,665	83%
2,500	781	1,190	1,971	79%
3,000	938	1,343	2,281	76%
3,500	1,094	1,493	2,587	74%
4,000	1,250	1,642	2,892	72%
15 Years of Service:				
\$1,500	\$281	\$ 890	\$1,171	78%
2,000	375	1,040	1,415	71%
2,500	469	1,190	1,659	66%
3,000	563	1,343	1,906	64%
3,500	656	1,493	2,149	61%
4,000	750	1,642	2,392	60%

<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 2014 - 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	\$ 890	\$1,678	112%
2,000	1,050	1,040	2,090	105%
2,500	1,313	1,190	2,503	100%
3,000	1,575	1,343	2,918	97%
3,500	1,838	1,493	3,331	95%
4,000	2,100	1,642	3,742	94%
25 Years of Service:				
\$1,500	\$ 563	\$ 890	\$1,453	97%
2,000	750	1,040	1,790	90%
2,500	938	1,190	2,128	85%
3,000	1,125	1,343	2,468	82%
3,500	1,313	1,493	2,806	80%
4,000	1,500	1,642	3,142	79%
15 Years of Service:				
\$1,500	\$338	\$ 890	\$1,228	82%
2,000	450	1,040	1,490	75%
2,500	563	1,190	1,753	70%
3,000	675	1,343	2,018	67%
3,500	788	1,493	2,281	65%
4,000	900	1,642	2,542	64%

<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 2014 - 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	\$ 890	\$1,809	121%
2,000	1,225	1,040	2,265	113%
2,500	1,531	1,190	2,721	109%
3,000	1,838	1,343	3,181	106%
3,500	2,144	1,493	3,637	104%
4,000	2,450	1,642	4,092	102%
25 Years of Service:				
\$1,500	\$ 656	\$ 890	\$1,546	103%
2,000	875	1,040	1,915	96%
2,500	1,094	1,190	2,284	91%
3,000	1,313	1,343	2,656	89%
3,500	1,531	1,493	3,024	86%
4,000	1,750	1,642	3,392	85%
15 Years of Service:				
\$1,500	\$ 394	\$ 890	\$1,284	86%
2,000	525	1,040	1,565	78%
2,500	656	1,190	1,846	74%
3,000	788	1,343	2,131	71%
3,500	919	1,493	2,412	69%
4,000	1,050	1,642	2,692	67%

<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 2014 - 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	\$ 890	\$1,940	129%
2,000	1,400	1,040	2,440	122%
2,500	1,750	1,190	2,940	118%
3,000	2,100	1,343	3,443	115%
3,500	2,450	1,493	3,943	113%
4,000	2,800	1,642	4,442	111%
25 Years of Service:				
\$1,500	\$ 750	\$ 890	\$1,640	109%
2,000	1,000	1,040	2,040	102%
2,500	1,250	1,190	2,440	98%
3,000	1,500	1,343	2,843	95%
3,500	1,750	1,493	3,243	93%
4,000	2,000	1,642	3,642	91%
15 Years of Service:				
\$1,500	\$ 450	\$ 890	\$1,340	89%
2,000	600	1,040	1,640	82%
2,500	750	1,190	1,940	78%
3,000	900	1,343	2,243	75%
3,500	1,050	1,493	2,543	73%
4,000	1,200	1,642	2,842	71%

<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 2014 - 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	\$ 890	\$1,050	\$1,415	70%	94%
2,000	1,400	700	1,040	1,400	1,740	70%	87%
2,500	1,750	875	1,190	1,750	2,065	70%	83%
3,000	2,100	1,050	1,343	2,100	2,393	70%	80%
3,500	2,450	1,225	1,493	2,450	2,718	70%	78%
4,000	2,800	1,400	1,642	2,800	3,042	70%	76%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 890	\$ 750	\$1,265	50%	84%
2,000	1,000	500	1,040	1,000	1,540	50%	77%
2,500	1,250	625	1,190	1,250	1,815	50%	73%
3,000	1,500	750	1,343	1,500	2,093	50%	70%
3,500	1,750	875	1,493	1,750	2,368	50%	68%
4,000	2,000	1,000	1,642	2,000	2,642	50%	66%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 890	\$ 450	\$1,115	30%	74%
2,000	600	300	1,040	600	1,340	30%	67%
2,500	750	375	1,190	750	1,565	30%	63%
3,000	900	450	1,343	900	1,793	30%	60%
3,500	1,050	525	1,493	1,050	2,018	30%	58%
4,000	1,200	600	1,642	1,200	2,242	30%	56%

<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 2014 - 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	\$ 890	\$1,050	\$1,546	70%	103%
2,000	1,400	875	1,040	1,400	1,915	70%	96%
2,500	1,750	1,094	1,190	1,750	2,284	70%	91%
3,000	2,100	1,313	1,343	2,100	2,656	70%	89%
3,500	2,450	1,531	1,493	2,450	3,024	70%	86%
4,000	2,800	1,750	1,642	2,800	3,392	70%	85%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 890	\$ 750	\$1,359	50%	91%
2,000	1,000	625	1,040	1,000	1,665	50%	83%
2,500	1,250	781	1,190	1,250	1,971	50%	79%
3,000	1,500	938	1,343	1,500	2,281	50%	76%
3,500	1,750	1,094	1,493	1,750	2,587	50%	74%
4,000	2,000	1,250	1,642	2,000	2,892	50%	72%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 890	\$ 450	\$1,171	30%	78%
2,000	600	375	1,040	600	1,415	30%	71%
2,500	750	469	1,190	750	1,659	30%	66%
3,000	900	563	1,343	900	1,906	30%	64%
3,500	1,050	656	1,493	1,050	2,149	30%	61%
4,000	1,200	750	1,642	1,200	2,392	30%	60%

<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 2014 - 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	\$ 890	\$1,050	\$1,678	70%	112%
2,000	1,400	1,050	1,040	1,400	2,090	70%	105%
2,500	1,750	1,313	1,190	1,750	2,503	70%	100%
3,000	2,100	1,575	1,343	2,100	2,918	70%	97%
3,500	2,450	1,838	1,493	2,450	3,331	70%	95%
4,000	2,800	2,100	1,642	2,800	3,742	70%	94%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 890	\$ 750	\$1,453	50%	97%
2,000	1,000	750	1,040	1,000	1,790	50%	90%
2,500	1,250	938	1,190	1,250	2,128	50%	85%
3,000	1,500	1,125	1,343	1,500	2,468	50%	82%
3,500	1,750	1,313	1,493	1,750	2,806	50%	80%
4,000	2,000	1,500	1,642	2,000	3,142	50%	79%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 890	\$ 450	\$1,228	30%	82%
2,000	600	450	1,040	600	1,490	30%	75%
2,500	750	563	1,190	750	1,753	30%	70%
3,000	900	675	1,343	900	2,018	30%	67%
3,500	1,050	788	1,493	1,050	2,281	30%	65%
4,000	1,200	900	1,642	1,200	2,542	30%	64%

<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 2014 - 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	\$ 890	\$1,050	\$1,809	70%	121%
2,000	1,400	1,225	1,040	1,400	2,265	70%	113%
2,500	1,750	1,531	1,190	1,750	2,721	70%	109%
3,000	2,100	1,838	1,343	2,100	3,181	70%	106%
3,500	2,450	2,144	1,493	2,450	3,637	70%	104%
4,000	2,800	2,450	1,642	2,800	4,092	70%	102%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 890	\$ 750	\$1,546	50%	103%
2,000	1,000	875	1,040	1,000	1,915	50%	96%
2,500	1,250	1,094	1,190	1,250	2,284	50%	91%
3,000	1,500	1,313	1,343	1,500	2,656	50%	89%
3,500	1,750	1,531	1,493	1,750	3,024	50%	86%
4,000	2,000	1,750	1,642	2,000	3,392	50%	85%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 890	\$ 450	\$1,284	30%	86%
2,000	600	525	1,040	600	1,565	30%	78%
2,500	750	656	1,190	750	1,846	30%	74%
3,000	900	788	1,343	900	2,131	30%	71%
3,500	1,050	919	1,493	1,050	2,412	30%	69%
4,000	1,200	1,050	1,642	1,200	2,692	30%	67%

<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 2014 - 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 Warrenton - General

November 30, 2014

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>	1							1	\$ 24,960
<b>20-24</b>	1							1	\$ 24,960
<b>25-29</b>	4							4	\$ 102,232
<b>30-34</b>	1	1						2	\$ 54,995
<b>35-39</b>	3		1	1				5	\$ 197,702
<b>40-44</b>	2	2						4	\$ 157,275
<b>45-49</b>		1	1	1				3	\$ 126,842
<b>50-54</b>	4	2						6	\$ 251,008
<b>55-59</b>	4	3	1					8	\$ 322,991
<b>60-64</b>		3						3	\$ 102,635
<b>65-69</b>									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>20</b>	<b>12</b>	<b>3</b>	<b>2</b>				<b>37</b>	<b>\$ 1,365,600</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: 5.1 years.

Annual Pay: \$36,908.



City of Warrenton - Police

November 30, 2014

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	\$ 73,715
25-29	1							1	\$ 35,838
30-34	6							6	\$ 222,810
35-39	1	2						3	\$ 126,083
40-44	1	2	2	1				6	\$ 259,954
45-49									
50-54		1						1	\$ 70,012
55-59	1							1	\$ 36,858
60-64									
65-69									
<b>70 &amp; Over</b>									
<b>Totals</b>	<b>12</b>	<b>5</b>	<b>2</b>	<b>1</b>				<b>20</b>	<b>\$ 825,270</b>

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

Age: 37.0 years.

Benefit Service: 5.2 years.

Annual Pay: \$41,264.



December 23, 2014 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, 2014 Initial Actuarial  
Valuation of LAGERS benefits for the employees of

City of Warrenton

Sincerely,

Mita D. Drazilov

MDD:adh