



**THE INITIAL ACTUARIAL VALUATION FOR  
CARROLL COUNTY AMBULANCE DISTRICT  
AS OF NOVEMBER 30, 2016**

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December 22, 2016

Carroll County Ambulance District  
Carrollton, Missouri

Ladies and Gentlemen:

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

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

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

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

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

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

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

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

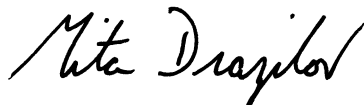
Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing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

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

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

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

Respectfully submitted,



Mita 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.

Carroll County Ambulance District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	12.60%	3.20%	0.20%	16.00%
L-3	General	15.90	4.60	0.30	20.80
LT-4(65)	General	13.60	3.90	0.20	17.70
LT-5(65)	General	16.60	5.10	0.30	22.00
L-7	General	19.10	6.00	0.30	25.40
LT-8(65)	General	19.60	6.30	0.30	26.20
L-12	General	22.30	7.40	0.40	30.10
LT-14(65)	General	22.60	7.60	0.40	30.60
L-6	General	25.50	8.80	0.50	34.80

\* 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.

Carroll County Ambulance District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.10%	3.40%	0.20%	16.70%
L-3	General	16.40	4.80	0.30	21.50
LT-4(65)	General	14.00	4.10	0.20	18.30
LT-5(65)	General	17.10	5.40	0.30	22.80
L-7	General	19.70	6.30	0.30	26.30
LT-8(65)	General	20.20	6.60	0.30	27.10
L-12	General	23.10	7.70	0.40	31.20
LT-14(65)	General	23.30	7.90	0.40	31.60
L-6	General	26.40	9.20	0.50	36.10

\* 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.

Carroll County Ambulance District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	12.90%	6.70%	0.20%	19.80%
L-3	General	16.10	8.20	0.30	24.60
LT-4(65)	General	13.80	7.40	0.20	21.40
LT-5(65)	General	16.80	8.70	0.30	25.80
L-7	General	19.30	9.60	0.30	29.20
LT-8(65)	General	19.70	9.90	0.30	29.90
L-12	General	22.50	11.10	0.40	34.00
LT-14(65)	General	22.70	11.20	0.40	34.30
L-6	General	25.70	12.50	0.50	38.70

\* 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.

Carroll County Ambulance District

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

Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.30%	6.90%	0.20%	20.40%
L-3	General	16.60	8.40	0.30	25.30
LT-4(65)	General	14.20	7.60	0.20	22.00
LT-5(65)	General	17.30	8.90	0.30	26.50
L-7	General	19.90	9.90	0.30	30.10
LT-8(65)	General	20.40	10.30	0.30	31.00
L-12	General	23.20	11.40	0.40	35.00
LT-14(65)	General	23.50	11.60	0.40	35.50
L-6	General	26.60	12.90	0.50	40.00

\* 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.

Carroll County Ambulance District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.40%	3.60%	0.20%	17.20%
L-3	General	16.80	5.10	0.30	22.20
LT-4(65)	General	15.10	4.80	0.20	20.10
LT-5(65)	General	18.10	5.90	0.30	24.30
L-7	General	20.20	6.60	0.30	27.10
LT-8(65)	General	21.00	7.10	0.30	28.40
L-12	General	23.50	8.10	0.40	32.00
LT-14(65)	General	24.00	8.30	0.40	32.70
L-6	General	26.90	9.60	0.50	37.00

# 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.

Carroll County Ambulance District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.80%	3.80%	0.20%	17.80%
L-3	General	17.30	5.40	0.30	23.00
LT-4(65)	General	15.60	5.00	0.20	20.80
LT-5(65)	General	18.70	6.20	0.30	25.20
L-7	General	20.80	6.90	0.30	28.00
LT-8(65)	General	21.70	7.50	0.30	29.50
L-12	General	24.30	8.40	0.40	33.10
LT-14(65)	General	24.80	8.70	0.40	33.90
L-6	General	27.80	10.00	0.50	38.30

# 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.

Carroll County Ambulance District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	13.60%	7.10%	0.20%	20.90%
L-3	General	16.90	8.60	0.30	25.80
LT-4(65)	General	15.30	8.20	0.20	23.70
LT-5(65)	General	18.20	9.50	0.30	28.00
L-7	General	20.30	10.20	0.30	30.80
LT-8(65)	General	21.20	10.70	0.30	32.20
L-12	General	23.70	11.70	0.40	35.80
LT-14(65)	General	24.20	12.00	0.40	36.60
L-6	General	27.10	13.30	0.50	40.90

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

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

Carroll County Ambulance District

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

Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost *	Current Cost	Disability Cost	Total Employer Contribution Rate
L-1	General	14.00%	7.30%	0.20%	21.50%
L-3	General	17.50	8.90	0.30	26.70
LT-4(65)	General	15.80	8.50	0.20	24.50
LT-5(65)	General	18.90	9.80	0.30	29.00
L-7	General	21.00	10.50	0.30	31.80
LT-8(65)	General	21.90	11.10	0.30	33.30
L-12	General	24.50	12.10	0.40	37.00
LT-14(65)	General	25.00	12.40	0.40	37.80
L-6	General	28.00	13.70	0.50	42.20

# 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.

Carroll County Ambulance District

Employer Contribution Dollars

Regular Retirement Eligibility

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

**Contributory Plan**

<b>5 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 79,701
L-3	103,611
LT-4(65)	88,169
LT-5(65)	109,589
L-7	126,525
LT-8(65)	130,510
L-12	149,937
LT-14(65)	152,428
L-6	173,350

<b>3 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 83,188
L-3	107,098
LT-4(65)	91,158
LT-5(65)	113,574
L-7	131,008
LT-8(65)	134,994
L-12	155,417
LT-14(65)	157,409
L-6	179,825

**Non-Contributory Plan**

<b>5 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 98,630
L-3	122,540
LT-4(65)	106,600
LT-5(65)	128,518
L-7	145,454
LT-8(65)	148,941
L-12	169,365
LT-14(65)	170,859
L-6	192,777

<b>3 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 101,619
L-3	126,027
LT-4(65)	109,589
LT-5(65)	132,005
L-7	149,937
LT-8(65)	154,421
L-12	174,346
LT-14(65)	176,837
L-6	199,252

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.

Carroll County Ambulance District

Employer Contribution Dollars

Rule of 80 Retirement Eligibility

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

**Contributory Plan**

<b>5 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 85,679
L-3	110,585
LT-4(65)	100,124
LT-5(65)	121,046
L-7	134,994
LT-8(65)	141,469
L-12	159,402
LT-14(65)	162,889
L-6	184,308

<b>3 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 88,667
L-3	114,570
LT-4(65)	103,611
LT-5(65)	125,529
L-7	139,477
LT-8(65)	146,949
L-12	164,881
LT-14(65)	168,866
L-6	190,784

**Non-Contributory Plan**

<b>5 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 104,109
L-3	128,518
LT-4(65)	118,057
LT-5(65)	139,477
L-7	153,424
LT-8(65)	160,398
L-12	178,331
LT-14(65)	182,316
L-6	203,736

<b>3 Year FAS</b>	
<b>Benefit Program</b>	<b>General</b>
L-1	\$ 107,098
L-3	133,001
LT-4(65)	122,042
LT-5(65)	144,458
L-7	158,406
LT-8(65)	165,878
L-12	184,308
LT-14(65)	188,294
L-6	210,211

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.

Carroll County Ambulance District

Employees and Payroll Included in the Valuation

	General
Number of Employees	10
Annual Payroll	\$ 498,131

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:

Carroll County Ambulance District

Regular Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 1,109,800	\$ 1,147,243	\$ 1,128,216	\$ 1,165,460
L-3	General	1,392,856	1,439,545	1,410,263	1,456,796
LT-4(65)	General	1,191,594	1,231,854	1,209,401	1,249,460
LT-5(65)	General	1,454,194	1,503,016	1,471,164	1,519,817
L-7	General	1,675,686	1,731,662	1,692,339	1,748,193
LT-8(65)	General	1,716,571	1,773,987	1,732,937	1,790,199
L-12	General	1,958,339	2,023,624	1,974,382	2,039,519
LT-14(65)	General	1,978,792	2,044,791	1,994,669	2,060,525
L-6	General	2,240,843	2,315,420	2,256,465	2,330,894

Carroll County Ambulance District

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 1,172,411	\$ 1,212,201	\$ 1,189,133	\$ 1,228,791
L-3	General	1,470,372	1,520,106	1,486,412	1,536,022
LT-4(65)	General	1,326,357	1,371,599	1,342,262	1,387,350
LT-5(65)	General	1,585,843	1,639,645	1,601,275	1,654,930
L-7	General	1,768,197	1,827,823	1,783,692	1,843,208
LT-8(65)	General	1,845,171	1,907,524	1,860,266	1,922,481
L-12	General	2,065,869	2,135,366	2,080,968	2,150,409
LT-14(65)	General	2,104,358	2,175,213	2,119,247	2,190,035
L-6	General	2,363,383	2,442,827	2,378,257	2,457,632

## **APPENDIX II**

### **SUMMARY OF FINANCIAL ASSUMPTIONS**

## **Summary of Assumptions Used in Actuarial Valuations**

### **Assumptions Adopted by Board of Trustees After Consulting With Actuary**

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

**Schedule 1.**

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

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

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

**Schedule 2.**

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

**Early Retirement**

<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	3.00%	3.00%	50	2.50%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	2.50%

**Normal Retirement**

<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%	13%
61	10	10	56	10	13
62	25	15	57	10	13
63	20	15	58	10	13
64	20	15	59	10	13
65	25	25	60	10	15
66	25	25	61	10	15
67	20	25	62	25	20
68	20	25	63	20	20
69	20	20	64	20	20
70	100	100	65	100	100

**Schedule 2. (Continued)**

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

<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	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	30	15	30	45
63	30	15	30	45
64	30	20	30	45
65	30	25	100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		

**APPENDIX III**

**SUMMARY OF  
LAGERS PROVISIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**APPENDIX IV**

**BENEFIT  
ILLUSTRATIONS**

**Missouri LAGERS**  
**Illustrations of Age and Service Allowance Amounts**  
**For Sample Combinations of Service & Salary**  
(L-1 Benefit Program is Years of Credited Service  
times: 1.00% of FAS <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	\$ 882	\$1,407	94%
2,000	700	1,028	1,728	86%
2,500	875	1,174	2,049	82%
3,000	1,050	1,320	2,370	79%
3,500	1,225	1,465	2,690	77%
4,000	1,400	1,611	3,011	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 882	\$1,257	84%
2,000	500	1,028	1,528	76%
2,500	625	1,174	1,799	72%
3,000	750	1,320	2,070	69%
3,500	875	1,465	2,340	67%
4,000	1,000	1,611	2,611	65%
15 Years of Service:				
\$1,500	\$225	\$ 882	\$1,107	74%
2,000	300	1,028	1,328	66%
2,500	375	1,174	1,549	62%
3,000	450	1,320	1,770	59%
3,500	525	1,465	1,990	57%
4,000	600	1,611	2,211	55%

<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 2016 - 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	\$ 882	\$1,538	103%
2,000	875	1,028	1,903	95%
2,500	1,094	1,174	2,268	91%
3,000	1,313	1,320	2,633	88%
3,500	1,531	1,465	2,996	86%
4,000	1,750	1,611	3,361	84%
25 Years of Service:				
\$1,500	\$ 469	\$ 882	\$1,351	90%
2,000	625	1,028	1,653	83%
2,500	781	1,174	1,955	78%
3,000	938	1,320	2,258	75%
3,500	1,094	1,465	2,559	73%
4,000	1,250	1,611	2,861	72%
15 Years of Service:				
\$1,500	\$281	\$ 882	\$1,163	78%
2,000	375	1,028	1,403	70%
2,500	469	1,174	1,643	66%
3,000	563	1,320	1,883	63%
3,500	656	1,465	2,121	61%
4,000	750	1,611	2,361	59%

<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 2016 - 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	\$ 882	\$1,670	111%
2,000	1,050	1,028	2,078	104%
2,500	1,313	1,174	2,487	99%
3,000	1,575	1,320	2,895	97%
3,500	1,838	1,465	3,303	94%
4,000	2,100	1,611	3,711	93%
25 Years of Service:				
\$1,500	\$ 563	\$ 882	\$1,445	96%
2,000	750	1,028	1,778	89%
2,500	938	1,174	2,112	84%
3,000	1,125	1,320	2,445	82%
3,500	1,313	1,465	2,778	79%
4,000	1,500	1,611	3,111	78%
15 Years of Service:				
\$1,500	\$338	\$ 882	\$1,220	81%
2,000	450	1,028	1,478	74%
2,500	563	1,174	1,737	69%
3,000	675	1,320	1,995	67%
3,500	788	1,465	2,253	64%
4,000	900	1,611	2,511	63%

<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 2016 - 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	\$ 882	\$1,801	120%
2,000	1,225	1,028	2,253	113%
2,500	1,531	1,174	2,705	108%
3,000	1,838	1,320	3,158	105%
3,500	2,144	1,465	3,609	103%
4,000	2,450	1,611	4,061	102%
25 Years of Service:				
\$1,500	\$ 656	\$ 882	\$1,538	103%
2,000	875	1,028	1,903	95%
2,500	1,094	1,174	2,268	91%
3,000	1,313	1,320	2,633	88%
3,500	1,531	1,465	2,996	86%
4,000	1,750	1,611	3,361	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 882	\$1,276	85%
2,000	525	1,028	1,553	78%
2,500	656	1,174	1,830	73%
3,000	788	1,320	2,108	70%
3,500	919	1,465	2,384	68%
4,000	1,050	1,611	2,661	67%

<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 2016 - 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	\$ 882	\$1,932	129%
2,000	1,400	1,028	2,428	121%
2,500	1,750	1,174	2,924	117%
3,000	2,100	1,320	3,420	114%
3,500	2,450	1,465	3,915	112%
4,000	2,800	1,611	4,411	110%
25 Years of Service:				
\$1,500	\$ 750	\$ 882	\$1,632	109%
2,000	1,000	1,028	2,028	101%
2,500	1,250	1,174	2,424	97%
3,000	1,500	1,320	2,820	94%
3,500	1,750	1,465	3,215	92%
4,000	2,000	1,611	3,611	90%
15 Years of Service:				
\$1,500	\$ 450	\$ 882	\$1,332	89%
2,000	600	1,028	1,628	81%
2,500	750	1,174	1,924	77%
3,000	900	1,320	2,220	74%
3,500	1,050	1,465	2,515	72%
4,000	1,200	1,611	2,811	70%

<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 2016 - 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	\$ 882	\$1,050	\$1,407	70%	94%
2,000	1,400	700	1,028	1,400	1,728	70%	86%
2,500	1,750	875	1,174	1,750	2,049	70%	82%
3,000	2,100	1,050	1,320	2,100	2,370	70%	79%
3,500	2,450	1,225	1,465	2,450	2,690	70%	77%
4,000	2,800	1,400	1,611	2,800	3,011	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 882	\$ 750	\$1,257	50%	84%
2,000	1,000	500	1,028	1,000	1,528	50%	76%
2,500	1,250	625	1,174	1,250	1,799	50%	72%
3,000	1,500	750	1,320	1,500	2,070	50%	69%
3,500	1,750	875	1,465	1,750	2,340	50%	67%
4,000	2,000	1,000	1,611	2,000	2,611	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 882	\$ 450	\$1,107	30%	74%
2,000	600	300	1,028	600	1,328	30%	66%
2,500	750	375	1,174	750	1,549	30%	62%
3,000	900	450	1,320	900	1,770	30%	59%
3,500	1,050	525	1,465	1,050	1,990	30%	57%
4,000	1,200	600	1,611	1,200	2,211	30%	55%

<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 2016 - 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	\$ 882	\$1,050	\$1,538	70%	103%
2,000	1,400	875	1,028	1,400	1,903	70%	95%
2,500	1,750	1,094	1,174	1,750	2,268	70%	91%
3,000	2,100	1,313	1,320	2,100	2,633	70%	88%
3,500	2,450	1,531	1,465	2,450	2,996	70%	86%
4,000	2,800	1,750	1,611	2,800	3,361	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 882	\$ 750	\$1,351	50%	90%
2,000	1,000	625	1,028	1,000	1,653	50%	83%
2,500	1,250	781	1,174	1,250	1,955	50%	78%
3,000	1,500	938	1,320	1,500	2,258	50%	75%
3,500	1,750	1,094	1,465	1,750	2,559	50%	73%
4,000	2,000	1,250	1,611	2,000	2,861	50%	72%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 882	\$ 450	\$1,163	30%	78%
2,000	600	375	1,028	600	1,403	30%	70%
2,500	750	469	1,174	750	1,643	30%	66%
3,000	900	563	1,320	900	1,883	30%	63%
3,500	1,050	656	1,465	1,050	2,121	30%	61%
4,000	1,200	750	1,611	1,200	2,361	30%	59%

<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 2016 - 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	\$ 882	\$1,050	\$1,670	70%	111%
2,000	1,400	1,050	1,028	1,400	2,078	70%	104%
2,500	1,750	1,313	1,174	1,750	2,487	70%	99%
3,000	2,100	1,575	1,320	2,100	2,895	70%	97%
3,500	2,450	1,838	1,465	2,450	3,303	70%	94%
4,000	2,800	2,100	1,611	2,800	3,711	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 882	\$ 750	\$1,445	50%	96%
2,000	1,000	750	1,028	1,000	1,778	50%	89%
2,500	1,250	938	1,174	1,250	2,112	50%	84%
3,000	1,500	1,125	1,320	1,500	2,445	50%	82%
3,500	1,750	1,313	1,465	1,750	2,778	50%	79%
4,000	2,000	1,500	1,611	2,000	3,111	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 882	\$ 450	\$1,220	30%	81%
2,000	600	450	1,028	600	1,478	30%	74%
2,500	750	563	1,174	750	1,737	30%	69%
3,000	900	675	1,320	900	1,995	30%	67%
3,500	1,050	788	1,465	1,050	2,253	30%	64%
4,000	1,200	900	1,611	1,200	2,511	30%	63%

<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 2016 - 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	\$ 882	\$1,050	\$1,801	70%	120%
2,000	1,400	1,225	1,028	1,400	2,253	70%	113%
2,500	1,750	1,531	1,174	1,750	2,705	70%	108%
3,000	2,100	1,838	1,320	2,100	3,158	70%	105%
3,500	2,450	2,144	1,465	2,450	3,609	70%	103%
4,000	2,800	2,450	1,611	2,800	4,061	70%	102%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 882	\$ 750	\$1,538	50%	103%
2,000	1,000	875	1,028	1,000	1,903	50%	95%
2,500	1,250	1,094	1,174	1,250	2,268	50%	91%
3,000	1,500	1,313	1,320	1,500	2,633	50%	88%
3,500	1,750	1,531	1,465	1,750	2,996	50%	86%
4,000	2,000	1,750	1,611	2,000	3,361	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 882	\$ 450	\$1,276	30%	85%
2,000	600	525	1,028	600	1,553	30%	78%
2,500	750	656	1,174	750	1,830	30%	73%
3,000	900	788	1,320	900	2,108	30%	70%
3,500	1,050	919	1,465	1,050	2,384	30%	68%
4,000	1,200	1,050	1,611	1,200	2,661	30%	67%

<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 2016 - 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**

Carroll County Ambulance District

November 30, 2016

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
<b>Under 20</b>									
<b>20-24</b>									
<b>25-29</b>									
<b>30-34</b>									
<b>35-39</b>									
<b>40-44</b>									
<b>45-49</b>			1	2				3	\$ 151,102
<b>50-54</b>									
<b>55-59</b>	1	1			1	1		4	\$ 176,471
<b>60-64</b>				1				1	\$ 52,786
<b>65-69</b>							1	1	\$ 71,194
<b>70 &amp; Over</b>							1	1	\$ 46,578
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>\$ 498,131</b>

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

Age: 57.1 years.

Benefit Service: 20.7 years.

Annual Pay: \$49,813.

December 22, 2016 E-mail

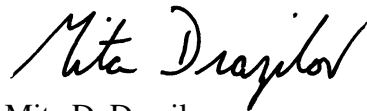
Mr. Keith Hughes, Executive Secretary  
Missouri Local Government  
Employees Retirement System  
P.O. Box 1665  
Jefferson City, Missouri 65102

Dear Keith:

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

Carroll County Ambulance District

Sincerely,



Mita D. Drazilov

MDD:adh

December 22, 2016

Carroll County Ambulance District  
Carrollton, Missouri

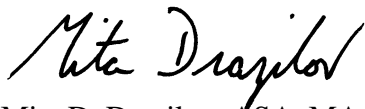
Ladies and Gentlemen:

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, 2016 Initial Valuation for the Carroll County Ambulance District dated December 22, 2016.

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

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

Respectfully submitted,



Mita D. Drazilov, ASA, MAAA

Carroll County Ambulance District - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	16.0%	\$79,701	\$ 1,109,800	20.8%	\$103,611	\$ 1,392,856	17.7%	\$88,169	\$ 1,191,594
2017	514,320	16.0	82,291	1,125,004	20.8	106,979	1,411,938	17.7	91,035	1,207,919
2018	531,035	16.0	84,966	1,139,190	20.8	110,455	1,429,742	17.7	93,993	1,223,150
2019	548,294	16.0	87,727	1,152,214	20.8	114,045	1,446,088	17.7	97,048	1,237,134
2020	566,114	16.0	90,578	1,163,922	20.8	117,752	1,460,782	17.7	100,202	1,249,704
2021	584,513	16.0	93,522	1,174,144	20.8	121,579	1,473,611	17.7	103,459	1,260,679
2022	603,510	16.0	96,562	1,182,697	20.8	125,530	1,484,345	17.7	106,821	1,269,862
2023	623,124	16.0	99,700	1,189,381	20.8	129,610	1,492,734	17.7	110,293	1,277,039
2024	643,376	16.0	102,940	1,193,980	20.8	133,822	1,498,506	17.7	113,878	1,281,977
2025	664,286	16.0	106,286	1,196,260	20.8	138,171	1,501,367	17.7	117,579	1,284,425

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	22.0%	\$109,589	\$ 1,454,194	25.4%	\$126,525	\$ 1,675,686	26.2%	\$130,510	\$ 1,716,571
2017	514,320	22.0	113,150	1,474,116	25.4	130,637	1,698,643	26.2	134,752	1,740,088
2018	531,035	22.0	116,828	1,492,704	25.4	134,883	1,720,062	26.2	139,131	1,762,029
2019	548,294	22.0	120,625	1,509,770	25.4	139,267	1,739,727	26.2	143,653	1,782,174
2020	566,114	22.0	124,545	1,525,111	25.4	143,793	1,757,404	26.2	148,322	1,800,283
2021	584,513	22.0	128,593	1,538,505	25.4	148,466	1,772,838	26.2	153,142	1,816,094
2022	603,510	22.0	132,772	1,549,712	25.4	153,292	1,785,752	26.2	158,120	1,829,323
2023	623,124	22.0	137,087	1,558,470	25.4	158,273	1,795,844	26.2	163,258	1,839,662
2024	643,376	22.0	141,543	1,564,497	25.4	163,418	1,802,789	26.2	168,565	1,846,776
2025	664,286	22.0	146,143	1,567,484	25.4	168,729	1,806,231	26.2	174,043	1,850,302

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	30.1%	\$149,937	\$ 1,958,339	30.6%	\$152,428	\$ 1,978,792	34.8%	\$173,350	\$ 2,240,843
2017	514,320	30.1	154,810	1,985,168	30.6	157,382	2,005,901	34.8	178,983	2,271,542
2018	531,035	30.1	159,842	2,010,200	30.6	162,497	2,031,194	34.8	184,800	2,300,185
2019	548,294	30.1	165,036	2,033,182	30.6	167,778	2,054,417	34.8	190,806	2,326,483
2020	566,114	30.1	170,400	2,053,841	30.6	173,231	2,075,292	34.8	197,008	2,350,122
2021	584,513	30.1	175,938	2,071,879	30.6	178,861	2,093,518	34.8	203,411	2,370,762
2022	603,510	30.1	181,657	2,086,971	30.6	184,674	2,108,768	34.8	210,021	2,388,031
2023	623,124	30.1	187,560	2,098,766	30.6	190,676	2,120,686	34.8	216,847	2,401,527
2024	643,376	30.1	193,656	2,106,882	30.6	196,873	2,128,887	34.8	223,895	2,410,814
2025	664,286	30.1	199,950	2,110,905	30.6	203,272	2,132,952	34.8	231,172	2,415,417

Notes regarding the above projections:

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

Carroll County Ambulance District - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	16.7%	\$83,188	\$ 1,147,243	21.5%	\$107,098	\$ 1,439,545	18.3%	\$91,158	\$ 1,231,854
2017	514,320	16.7	85,891	1,162,960	21.5	110,579	1,459,267	18.3	94,121	1,248,730
2018	531,035	16.7	88,683	1,177,624	21.5	114,173	1,477,667	18.3	97,179	1,264,476
2019	548,294	16.7	91,565	1,191,088	21.5	117,883	1,494,561	18.3	100,338	1,278,933
2020	566,114	16.7	94,541	1,203,191	21.5	121,715	1,509,747	18.3	103,599	1,291,928
2021	584,513	16.7	97,614	1,213,758	21.5	125,670	1,523,006	18.3	106,966	1,303,274
2022	603,510	16.7	100,786	1,222,599	21.5	129,755	1,534,100	18.3	110,442	1,312,767
2023	623,124	16.7	104,062	1,229,509	21.5	133,972	1,542,770	18.3	114,032	1,320,186
2024	643,376	16.7	107,444	1,234,264	21.5	138,326	1,548,736	18.3	117,738	1,325,291
2025	664,286	16.7	110,936	1,236,621	21.5	142,821	1,551,693	18.3	121,564	1,327,822

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	22.8%	\$113,574	\$ 1,503,016	26.3%	\$131,008	\$ 1,731,662	27.1%	\$134,994	\$ 1,773,987
2017	514,320	22.8	117,265	1,523,607	26.3	135,266	1,755,386	27.1	139,381	1,798,290
2018	531,035	22.8	121,076	1,542,819	26.3	139,662	1,777,520	27.1	143,910	1,820,965
2019	548,294	22.8	125,011	1,560,458	26.3	144,201	1,797,842	27.1	148,588	1,841,784
2020	566,114	22.8	129,074	1,576,314	26.3	148,888	1,816,110	27.1	153,417	1,860,498
2021	584,513	22.8	133,269	1,590,158	26.3	153,727	1,832,060	27.1	158,403	1,876,838
2022	603,510	22.8	137,600	1,601,741	26.3	158,723	1,845,405	27.1	163,551	1,890,510
2023	623,124	22.8	142,072	1,610,794	26.3	163,882	1,855,835	27.1	168,867	1,901,195
2024	643,376	22.8	146,690	1,617,023	26.3	169,208	1,863,012	27.1	174,355	1,908,547
2025	664,286	22.8	151,457	1,620,111	26.3	174,707	1,866,569	27.1	180,022	1,912,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	31.2%	\$155,417	\$ 2,023,624	31.6%	\$157,409	\$ 2,044,791	36.1%	\$179,825	\$ 2,315,420
2017	514,320	31.2	160,468	2,051,347	31.6	162,525	2,072,804	36.1	185,670	2,347,141
2018	531,035	31.2	165,683	2,077,213	31.6	167,807	2,098,941	36.1	191,704	2,376,737
2019	548,294	31.2	171,068	2,100,962	31.6	173,261	2,122,938	36.1	197,934	2,403,910
2020	566,114	31.2	176,628	2,122,310	31.6	178,892	2,144,509	36.1	204,367	2,428,336
2021	584,513	31.2	182,368	2,140,949	31.6	184,706	2,163,343	36.1	211,009	2,449,663
2022	603,510	31.2	188,295	2,156,544	31.6	190,709	2,179,102	36.1	217,867	2,467,507
2023	623,124	31.2	194,415	2,168,732	31.6	196,907	2,191,418	36.1	224,948	2,481,453
2024	643,376	31.2	200,733	2,177,119	31.6	203,307	2,199,892	36.1	232,259	2,491,049
2025	664,286	31.2	207,257	2,181,276	31.6	209,914	2,204,093	36.1	239,807	2,495,806

Notes regarding the above projections:

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

Carroll County Ambulance District - General

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

(0% member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	19.8%	\$98,630	\$ 1,128,216	24.6%	\$122,540	\$ 1,410,263	21.4%	\$106,600	\$ 1,209,401
2017	514,320	19.8	101,835	1,143,672	24.6	126,523	1,429,583	21.4	110,064	1,225,970
2018	531,035	19.8	105,145	1,158,093	24.6	130,635	1,447,609	21.4	113,641	1,241,429
2019	548,294	19.8	108,562	1,171,333	24.6	134,880	1,464,159	21.4	117,335	1,255,622
2020	566,114	19.8	112,091	1,183,235	24.6	139,264	1,479,036	21.4	121,148	1,268,380
2021	584,513	19.8	115,734	1,193,627	24.6	143,790	1,492,025	21.4	125,086	1,279,519
2022	603,510	19.8	119,495	1,202,322	24.6	148,463	1,502,893	21.4	129,151	1,288,839
2023	623,124	19.8	123,379	1,209,117	24.6	153,289	1,511,387	21.4	133,349	1,296,123
2024	643,376	19.8	127,388	1,213,793	24.6	158,270	1,517,232	21.4	137,682	1,301,135
2025	664,286	19.8	131,529	1,216,111	24.6	163,414	1,520,129	21.4	142,157	1,303,619

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	25.8%	\$128,518	\$ 1,471,164	29.2%	\$145,454	\$ 1,692,339	29.9%	\$148,941	\$ 1,732,937
2017	514,320	25.8	132,695	1,491,319	29.2	150,181	1,715,524	29.9	153,782	1,756,678
2018	531,035	25.8	137,007	1,510,124	29.2	155,062	1,737,156	29.9	158,779	1,778,829
2019	548,294	25.8	141,460	1,527,389	29.2	160,102	1,757,017	29.9	163,940	1,799,166
2020	566,114	25.8	146,057	1,542,909	29.2	165,305	1,774,870	29.9	169,268	1,817,447
2021	584,513	25.8	150,804	1,556,459	29.2	170,678	1,790,458	29.9	174,769	1,833,408
2022	603,510	25.8	155,706	1,567,797	29.2	176,225	1,803,500	29.9	180,449	1,846,763
2023	623,124	25.8	160,766	1,576,658	29.2	181,952	1,813,693	29.9	186,314	1,857,200
2024	643,376	25.8	165,991	1,582,755	29.2	187,866	1,820,707	29.9	192,369	1,864,382
2025	664,286	25.8	171,386	1,585,777	29.2	193,972	1,824,184	29.9	198,622	1,867,942

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	34.0%	\$169,365	\$ 1,974,382	34.3%	\$170,859	\$ 1,994,669	38.7%	\$192,777	\$ 2,256,465
2017	514,320	34.0	174,869	2,001,431	34.3	176,412	2,021,996	38.7	199,042	2,287,378
2018	531,035	34.0	180,552	2,026,668	34.3	182,145	2,047,492	38.7	205,511	2,316,220
2019	548,294	34.0	186,420	2,049,839	34.3	188,065	2,070,901	38.7	212,190	2,342,701
2020	566,114	34.0	192,479	2,070,667	34.3	194,177	2,091,943	38.7	219,086	2,366,505
2021	584,513	34.0	198,734	2,088,852	34.3	200,488	2,110,315	38.7	226,207	2,387,288
2022	603,510	34.0	205,193	2,104,068	34.3	207,004	2,125,687	38.7	233,558	2,404,678
2023	623,124	34.0	211,862	2,115,960	34.3	213,732	2,137,701	38.7	241,149	2,418,268
2024	643,376	34.0	218,748	2,124,143	34.3	220,678	2,145,968	38.7	248,987	2,427,620
2025	664,286	34.0	225,857	2,128,199	34.3	227,850	2,150,066	38.7	257,079	2,432,255

Notes regarding the above projections:

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

Carroll County Ambulance District - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	20.4%	\$101,619	\$ 1,165,460	25.3%	\$126,027	\$ 1,456,796	22.0%	\$109,589	\$ 1,249,460
2017	514,320	20.4	104,921	1,181,427	25.3	130,123	1,476,754	22.0	113,150	1,266,577
2018	531,035	20.4	108,331	1,196,324	25.3	134,352	1,495,375	22.0	116,828	1,282,548
2019	548,294	20.4	111,852	1,210,001	25.3	138,718	1,512,472	22.0	120,625	1,297,211
2020	566,114	20.4	115,487	1,222,296	25.3	143,227	1,527,840	22.0	124,545	1,310,392
2021	584,513	20.4	119,241	1,233,031	25.3	147,882	1,541,258	22.0	128,593	1,321,900
2022	603,510	20.4	123,116	1,242,013	25.3	152,688	1,552,485	22.0	132,772	1,331,529
2023	623,124	20.4	127,117	1,249,032	25.3	157,650	1,561,259	22.0	137,087	1,339,054
2024	643,376	20.4	131,249	1,253,862	25.3	162,774	1,567,296	22.0	141,543	1,344,232
2025	664,286	20.4	135,514	1,256,256	25.3	168,064	1,570,289	22.0	146,143	1,346,799

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	26.5%	\$132,005	\$ 1,519,817	30.1%	\$149,937	\$ 1,748,193	31.0%	\$154,421	\$ 1,790,199
2017	514,320	26.5	136,295	1,540,638	30.1	154,810	1,772,143	31.0	159,439	1,814,724
2018	531,035	26.5	140,724	1,560,064	30.1	159,842	1,794,489	31.0	164,621	1,837,607
2019	548,294	26.5	145,298	1,577,900	30.1	165,036	1,815,005	31.0	169,971	1,858,616
2020	566,114	26.5	150,020	1,593,933	30.1	170,400	1,833,447	31.0	175,495	1,877,501
2021	584,513	26.5	154,896	1,607,931	30.1	175,938	1,849,549	31.0	181,199	1,893,990
2022	603,510	26.5	159,930	1,619,644	30.1	181,657	1,863,022	31.0	187,088	1,907,786
2023	623,124	26.5	165,128	1,628,798	30.1	187,560	1,873,551	31.0	193,168	1,918,568
2024	643,376	26.5	170,495	1,635,097	30.1	193,656	1,880,796	31.0	199,447	1,925,987
2025	664,286	26.5	176,036	1,638,219	30.1	199,950	1,884,387	31.0	205,929	1,929,665

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	35.0%	\$174,346	\$ 2,039,519	35.5%	\$176,837	\$ 2,060,525	40.0%	\$199,252	\$ 2,330,894
2017	514,320	35.0	180,012	2,067,460	35.5	182,584	2,088,754	40.0	205,728	2,362,827
2018	531,035	35.0	185,862	2,093,529	35.5	188,517	2,115,092	40.0	212,414	2,392,621
2019	548,294	35.0	191,903	2,117,464	35.5	194,644	2,139,274	40.0	219,318	2,419,976
2020	566,114	35.0	198,140	2,138,979	35.5	200,970	2,161,011	40.0	226,446	2,444,565
2021	584,513	35.0	204,580	2,157,764	35.5	207,502	2,179,990	40.0	233,805	2,466,034
2022	603,510	35.0	211,229	2,173,482	35.5	214,246	2,195,870	40.0	241,404	2,483,997
2023	623,124	35.0	218,093	2,185,766	35.5	221,209	2,208,280	40.0	249,250	2,498,036
2024	643,376	35.0	225,182	2,194,218	35.5	228,398	2,216,820	40.0	257,350	2,507,696
2025	664,286	35.0	232,500	2,198,408	35.5	235,822	2,221,053	40.0	265,714	2,512,484

Notes regarding the above projections:

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

Carroll County Ambulance District - 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-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	17.2%	\$85,679	\$ 1,172,411	22.2%	\$110,585	\$ 1,470,372	20.1%	\$100,124	\$ 1,326,357
2017	514,320	17.2	88,463	1,188,473	22.2	114,179	1,490,516	20.1	103,378	1,344,528
2018	531,035	17.2	91,338	1,203,459	22.2	117,890	1,509,310	20.1	106,738	1,361,482
2019	548,294	17.2	94,307	1,217,218	22.2	121,721	1,526,566	20.1	110,207	1,377,048
2020	566,114	17.2	97,372	1,229,586	22.2	125,677	1,542,077	20.1	113,789	1,391,040
2021	584,513	17.2	100,536	1,240,385	22.2	129,762	1,555,620	20.1	117,487	1,403,257
2022	603,510	17.2	103,804	1,249,420	22.2	133,979	1,566,952	20.1	121,306	1,413,479
2023	623,124	17.2	107,177	1,256,481	22.2	138,334	1,575,808	20.1	125,248	1,421,468
2024	643,376	17.2	110,661	1,261,340	22.2	142,829	1,581,902	20.1	129,319	1,426,965
2025	664,286	17.2	114,257	1,263,748	22.2	147,471	1,584,923	20.1	133,521	1,429,690

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	24.3%	\$121,046	\$ 1,585,843	27.1%	\$134,994	\$ 1,768,197	28.4%	\$141,469	\$ 1,845,171
2017	514,320	24.3	124,980	1,607,569	27.1	139,381	1,792,421	28.4	146,067	1,870,450
2018	531,035	24.3	129,042	1,627,839	27.1	143,910	1,815,022	28.4	150,814	1,894,035
2019	548,294	24.3	133,235	1,646,450	27.1	148,588	1,835,773	28.4	155,715	1,915,689
2020	566,114	24.3	137,566	1,663,179	27.1	153,417	1,854,426	28.4	160,776	1,935,154
2021	584,513	24.3	142,037	1,677,786	27.1	158,403	1,870,712	28.4	166,002	1,952,149
2022	603,510	24.3	146,653	1,690,008	27.1	163,551	1,884,339	28.4	171,397	1,966,369
2023	623,124	24.3	151,419	1,699,559	27.1	168,867	1,894,989	28.4	176,967	1,977,482
2024	643,376	24.3	156,340	1,706,131	27.1	174,355	1,902,317	28.4	182,719	1,985,129
2025	664,286	24.3	161,421	1,709,389	27.1	180,022	1,905,949	28.4	188,657	1,988,920

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	32.0%	\$159,402	\$ 2,065,869	32.7%	\$162,889	\$ 2,104,358	37.0%	\$184,308	\$ 2,363,383
2017	514,320	32.0	164,582	2,094,171	32.7	168,183	2,133,187	37.0	190,298	2,395,761
2018	531,035	32.0	169,931	2,120,577	32.7	173,648	2,160,085	37.0	196,483	2,425,970
2019	548,294	32.0	175,454	2,144,821	32.7	179,292	2,184,781	37.0	202,869	2,453,706
2020	566,114	32.0	181,156	2,166,614	32.7	185,119	2,206,980	37.0	209,462	2,478,638
2021	584,513	32.0	187,044	2,185,642	32.7	191,136	2,226,362	37.0	216,270	2,500,406
2022	603,510	32.0	193,123	2,201,563	32.7	197,348	2,242,580	37.0	223,299	2,518,620
2023	623,124	32.0	199,400	2,214,006	32.7	203,762	2,255,254	37.0	230,556	2,532,854
2024	643,376	32.0	205,880	2,222,568	32.7	210,384	2,263,975	37.0	238,049	2,542,649
2025	664,286	32.0	212,572	2,226,812	32.7	217,222	2,268,298	37.0	245,786	2,547,504

Notes regarding the above projections:

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

Carroll County Ambulance District - 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-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	17.8%	\$88,667	\$ 1,212,201	23.0%	\$114,570	\$ 1,520,106	20.8%	\$103,611	\$ 1,371,599
2017	514,320	17.8	91,549	1,228,808	23.0	118,294	1,540,931	20.8	106,979	1,390,390
2018	531,035	17.8	94,524	1,244,302	23.0	122,138	1,560,361	20.8	110,455	1,407,922
2019	548,294	17.8	97,596	1,258,528	23.0	126,108	1,578,201	20.8	114,045	1,424,019
2020	566,114	17.8	100,768	1,271,316	23.0	130,206	1,594,237	20.8	117,752	1,438,488
2021	584,513	17.8	104,043	1,282,481	23.0	134,438	1,608,238	20.8	121,579	1,451,121
2022	603,510	17.8	107,425	1,291,823	23.0	138,807	1,619,953	20.8	125,530	1,461,691
2023	623,124	17.8	110,916	1,299,124	23.0	143,319	1,629,108	20.8	129,610	1,469,952
2024	643,376	17.8	114,521	1,304,148	23.0	147,976	1,635,408	20.8	133,822	1,475,636
2025	664,286	17.8	118,243	1,306,638	23.0	152,786	1,638,531	20.8	138,171	1,478,454

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	25.2%	\$125,529	\$ 1,639,645	28.0%	\$139,477	\$ 1,827,823	29.5%	\$146,949	\$ 1,907,524
2017	514,320	25.2	129,609	1,662,108	28.0	144,010	1,852,864	29.5	151,724	1,933,657
2018	531,035	25.2	133,821	1,683,066	28.0	148,690	1,876,227	29.5	156,655	1,958,039
2019	548,294	25.2	138,170	1,702,308	28.0	153,522	1,897,678	29.5	161,747	1,980,425
2020	566,114	25.2	142,661	1,719,605	28.0	158,512	1,916,960	29.5	167,004	2,000,548
2021	584,513	25.2	147,297	1,734,707	28.0	163,664	1,933,795	29.5	172,431	2,018,118
2022	603,510	25.2	152,085	1,747,343	28.0	168,983	1,947,881	29.5	178,035	2,032,819
2023	623,124	25.2	157,027	1,757,218	28.0	174,475	1,958,890	29.5	183,822	2,044,308
2024	643,376	25.2	162,131	1,764,013	28.0	180,145	1,966,465	29.5	189,796	2,052,213
2025	664,286	25.2	167,400	1,767,381	28.0	186,000	1,970,220	29.5	195,964	2,056,132

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	33.1%	\$164,881	\$ 2,135,366	33.9%	\$168,866	\$ 2,175,213	38.3%	\$190,784	\$ 2,442,827
2017	514,320	33.1	170,240	2,164,620	33.9	174,354	2,205,013	38.3	196,985	2,476,293
2018	531,035	33.1	175,773	2,191,914	33.9	180,021	2,232,817	38.3	203,386	2,507,517
2019	548,294	33.1	181,485	2,216,974	33.9	185,872	2,258,345	38.3	209,997	2,536,185
2020	566,114	33.1	187,384	2,239,500	33.9	191,913	2,281,292	38.3	216,822	2,561,955
2021	584,513	33.1	193,474	2,259,168	33.9	198,150	2,301,327	38.3	223,868	2,584,455
2022	603,510	33.1	199,762	2,275,625	33.9	204,590	2,318,091	38.3	231,144	2,603,281
2023	623,124	33.1	206,254	2,288,486	33.9	211,239	2,331,192	38.3	238,656	2,617,994
2024	643,376	33.1	212,957	2,297,336	33.9	218,104	2,340,207	38.3	246,413	2,628,118
2025	664,286	33.1	219,879	2,301,723	33.9	225,193	2,344,676	38.3	254,422	2,633,136

Notes regarding the above projections:

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

Carroll County Ambulance District - 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-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	20.9%	\$104,109	\$ 1,189,133	25.8%	\$128,518	\$ 1,486,412	23.7%	\$118,057	\$ 1,342,262
2017	514,320	20.9	107,493	1,205,424	25.8	132,695	1,506,776	23.7	121,894	1,360,651
2018	531,035	20.9	110,986	1,220,624	25.8	137,007	1,525,775	23.7	125,855	1,377,808
2019	548,294	20.9	114,593	1,234,579	25.8	141,460	1,543,219	23.7	129,946	1,393,560
2020	566,114	20.9	118,318	1,247,123	25.8	146,057	1,558,900	23.7	134,169	1,407,720
2021	584,513	20.9	122,163	1,258,076	25.8	150,804	1,572,591	23.7	138,530	1,420,083
2022	603,510	20.9	126,134	1,267,240	25.8	155,706	1,584,046	23.7	143,032	1,430,427
2023	623,124	20.9	130,233	1,274,402	25.8	160,766	1,592,999	23.7	147,680	1,438,511
2024	643,376	20.9	134,466	1,279,330	25.8	165,991	1,599,159	23.7	152,480	1,444,074
2025	664,286	20.9	138,836	1,281,773	25.8	171,386	1,602,213	23.7	157,436	1,446,831

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	28.0%	\$139,477	\$ 1,601,275	30.8%	\$153,424	\$ 1,783,692	32.2%	\$160,398	\$ 1,860,266
2017	514,320	28.0	144,010	1,623,212	30.8	158,411	1,808,128	32.2	165,611	1,885,751
2018	531,035	28.0	148,690	1,643,680	30.8	163,559	1,830,927	32.2	170,993	1,909,529
2019	548,294	28.0	153,522	1,662,472	30.8	168,875	1,851,860	32.2	176,551	1,931,361
2020	566,114	28.0	158,512	1,679,364	30.8	174,363	1,870,677	32.2	182,289	1,950,985
2021	584,513	28.0	163,664	1,694,113	30.8	180,030	1,887,106	32.2	188,213	1,968,119
2022	603,510	28.0	168,983	1,706,453	30.8	185,881	1,900,852	32.2	194,330	1,982,455
2023	623,124	28.0	174,475	1,716,097	30.8	191,922	1,911,595	32.2	200,646	1,993,659
2024	643,376	28.0	180,145	1,722,733	30.8	198,160	1,918,987	32.2	207,167	2,001,369
2025	664,286	28.0	186,000	1,726,023	30.8	204,600	1,922,651	32.2	213,900	2,005,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	35.8%	\$178,331	\$ 2,080,968	36.6%	\$182,316	\$ 2,119,247	40.9%	\$203,736	\$ 2,378,257
2017	514,320	35.8	184,127	2,109,477	36.6	188,241	2,148,280	40.9	210,357	2,410,839
2018	531,035	35.8	190,111	2,136,076	36.6	194,359	2,175,368	40.9	217,193	2,441,238
2019	548,294	35.8	196,289	2,160,498	36.6	200,676	2,200,239	40.9	224,252	2,469,149
2020	566,114	35.8	202,669	2,182,451	36.6	207,198	2,222,595	40.9	231,541	2,494,238
2021	584,513	35.8	209,256	2,201,618	36.6	213,932	2,242,115	40.9	239,066	2,516,143
2022	603,510	35.8	216,057	2,217,655	36.6	220,885	2,258,447	40.9	246,836	2,534,471
2023	623,124	35.8	223,078	2,230,188	36.6	228,063	2,271,211	40.9	254,858	2,548,795
2024	643,376	35.8	230,329	2,238,812	36.6	235,476	2,279,994	40.9	263,141	2,558,651
2025	664,286	35.8	237,814	2,243,087	36.6	243,129	2,284,348	40.9	271,693	2,563,537

Notes regarding the above projections:

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

Carroll County Ambulance District - 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-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	21.5%	\$107,098	\$ 1,228,791	26.7%	\$133,001	\$ 1,536,022	24.5%	\$122,042	\$ 1,387,350
2017	514,320	21.5	110,579	1,245,625	26.7	137,323	1,557,065	24.5	126,008	1,406,356
2018	531,035	21.5	114,173	1,261,332	26.7	141,786	1,576,699	24.5	130,104	1,424,089
2019	548,294	21.5	117,883	1,275,753	26.7	146,394	1,594,725	24.5	134,332	1,440,371
2020	566,114	21.5	121,715	1,288,716	26.7	151,152	1,610,929	24.5	138,698	1,455,006
2021	584,513	21.5	125,670	1,300,034	26.7	156,065	1,625,077	24.5	143,206	1,467,784
2022	603,510	21.5	129,755	1,309,504	26.7	161,137	1,636,915	24.5	147,860	1,478,476
2023	623,124	21.5	133,972	1,316,905	26.7	166,374	1,646,166	24.5	152,665	1,486,832
2024	643,376	21.5	138,326	1,321,998	26.7	171,781	1,652,532	24.5	157,627	1,492,582
2025	664,286	21.5	142,821	1,324,522	26.7	177,364	1,655,687	24.5	162,750	1,495,432

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	29.0%	\$144,458	\$ 1,654,930	31.8%	\$158,406	\$ 1,843,208	33.3%	\$165,878	\$ 1,922,481
2017	514,320	29.0	149,153	1,677,602	31.8	163,554	1,868,460	33.3	171,269	1,948,819
2018	531,035	29.0	154,000	1,698,756	31.8	168,869	1,892,020	33.3	176,835	1,973,392
2019	548,294	29.0	159,005	1,718,178	31.8	174,357	1,913,651	33.3	182,582	1,995,954
2020	566,114	29.0	164,173	1,735,636	31.8	180,024	1,933,095	33.3	188,516	2,016,235
2021	584,513	29.0	169,509	1,750,879	31.8	185,875	1,950,072	33.3	194,643	2,033,942
2022	603,510	29.0	175,018	1,763,633	31.8	191,916	1,964,277	33.3	200,969	2,048,758
2023	623,124	29.0	180,706	1,773,600	31.8	198,153	1,975,378	33.3	207,500	2,060,337
2024	643,376	29.0	186,579	1,780,459	31.8	204,594	1,983,017	33.3	214,244	2,068,304
2025	664,286	29.0	192,643	1,783,859	31.8	211,243	1,986,804	33.3	221,207	2,072,253

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2016	\$ 498,131	37.0%	\$184,308	\$ 2,150,409	37.8%	\$188,294	\$ 2,190,035	42.2%	\$210,211	\$ 2,457,632
2017	514,320	37.0	190,298	2,179,869	37.8	194,413	2,220,038	42.2	217,043	2,491,301
2018	531,035	37.0	196,483	2,207,356	37.8	200,731	2,248,031	42.2	224,097	2,522,715
2019	548,294	37.0	202,869	2,232,593	37.8	207,255	2,273,733	42.2	231,380	2,551,557
2020	566,114	37.0	209,462	2,255,278	37.8	213,991	2,296,836	42.2	238,900	2,577,483
2021	584,513	37.0	216,270	2,275,085	37.8	220,946	2,317,008	42.2	246,664	2,600,119
2022	603,510	37.0	223,299	2,291,657	37.8	228,127	2,333,886	42.2	254,681	2,619,059
2023	623,124	37.0	230,556	2,304,609	37.8	235,541	2,347,076	42.2	262,958	2,633,861
2024	643,376	37.0	238,049	2,313,521	37.8	243,196	2,356,152	42.2	271,505	2,644,046
2025	664,286	37.0	245,786	2,317,939	37.8	251,100	2,360,651	42.2	280,329	2,649,095

Notes regarding the above projections:

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