



The Initial Valuation For

Bollinger County Soil and Water Conservation District

as of July 31, 2019



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August 16, 2019

Bollinger County Soil and Water Conservation District
Marble Hill, 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). This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

This report was prepared at the request of the political subdivision and is intended for use by the political subdivision and those designated or approved by the political subdivision. This report may be provided to parties other than the political subdivision only in its entirety and only with the permission of the political subdivision. GRS is not responsible for unauthorized use of this report.

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, 2019.

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. This valuation assumed the ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our expertise and not performed. 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 July 31, 2019. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

This report includes risk commentary in Appendix VI, but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

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

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the political subdivision as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the actuarial standards of practice issued by the Actuarial Standards Board, and with applicable statutes.

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, 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.

Bollinger County Soil and Water Conservation 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	2.30%	1.70%	0.20%	4.20%
L-3	General	3.00	2.60	0.30	5.90
LT-4(65)	General	2.60	2.10	0.20	4.90
LT-5(65)	General	3.30	2.90	0.30	6.50
L-7	General	3.80	3.50	0.30	7.60
LT-8(65)	General	4.00	3.70	0.30	8.00
L-12	General	4.60	4.50	0.40	9.50
LT-14(65)	General	4.60	4.60	0.40	9.60
L-6	General	5.30	5.40	0.50	11.20

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.40%	1.80%	0.20%	4.40%
L-3	General	3.20	2.70	0.30	6.20
LT-4(65)	General	2.80	2.20	0.20	5.20
LT-5(65)	General	3.50	3.00	0.30	6.80
L-7	General	3.90	3.80	0.30	8.00
LT-8(65)	General	4.10	4.00	0.30	8.40
L-12	General	4.70	4.80	0.40	9.90
LT-14(65)	General	4.80	4.90	0.40	10.10
L-6	General	5.50	5.70	0.50	11.70

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.70%	5.10%	0.20%	8.00%
L-3	General	3.40	6.10	0.30	9.80
LT-4(65)	General	3.10	5.40	0.20	8.70
LT-5(65)	General	3.70	6.40	0.30	10.40
L-7	General	4.10	7.10	0.30	11.50
LT-8(65)	General	4.30	7.30	0.30	11.90
L-12	General	4.80	8.20	0.40	13.40
LT-14(65)	General	4.80	8.30	0.40	13.50
L-6	General	5.40	9.20	0.50	15.10

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.80%	5.20%	0.20%	8.20%
L-3	General	3.50	6.30	0.30	10.10
LT-4(65)	General	3.20	5.60	0.20	9.00
LT-5(65)	General	3.80	6.60	0.30	10.70
L-7	General	4.20	7.40	0.30	11.90
LT-8(65)	General	4.40	7.60	0.30	12.30
L-12	General	4.90	8.50	0.40	13.80
LT-14(65)	General	5.00	8.60	0.40	14.00
L-6	General	5.60	9.50	0.50	15.60

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.30%	2.40%	0.20%	4.90%
L-3	General	3.10	3.40	0.30	6.80
LT-4(65)	General	3.30	3.60	0.20	7.10
LT-5(65)	General	3.80	4.30	0.30	8.40
L-7	General	3.80	4.50	0.30	8.60
LT-8(65)	General	4.30	5.00	0.30	9.60
L-12	General	4.50	5.60	0.40	10.50
LT-14(65)	General	4.80	5.90	0.40	11.10
L-6	General	5.30	6.70	0.50	12.50

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.

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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			Total Employer Contribution Rate
		Prior Service Cost *	Current Cost	Disability Cost	
L-1	General	2.40%	2.50%	0.20%	5.10%
L-3	General	3.20	3.60	0.30	7.10
LT-4(65)	General	3.50	3.80	0.20	7.50
LT-5(65)	General	4.00	4.50	0.30	8.80
L-7	General	4.00	4.70	0.30	9.00
LT-8(65)	General	4.50	5.30	0.30	10.10
L-12	General	4.70	5.90	0.40	11.00
LT-14(65)	General	5.00	6.10	0.40	11.50
L-6	General	5.50	7.10	0.50	13.10

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

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.70%	5.70%	0.20%	8.60%
L-3	General	3.40	6.90	0.30	10.60
LT-4(65)	General	3.70	6.90	0.20	10.80
LT-5(65)	General	4.10	7.80	0.30	12.20
L-7	General	4.10	8.10	0.30	12.50
LT-8(65)	General	4.50	8.70	0.30	13.50
L-12	General	4.70	9.30	0.40	14.40
LT-14(65)	General	5.00	9.60	0.40	15.00
L-6	General	5.40	10.50	0.50	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.

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation 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	2.80%	5.90%	0.20%	8.90%
L-3	General	3.50	7.10	0.30	10.90
LT-4(65)	General	3.80	7.10	0.20	11.10
LT-5(65)	General	4.30	8.00	0.30	12.60
L-7	General	4.20	8.40	0.30	12.90
LT-8(65)	General	4.70	9.00	0.30	14.00
L-12	General	4.90	9.60	0.40	14.90
LT-14(65)	General	5.10	9.90	0.40	15.40
L-6	General	5.60	10.90	0.50	17.00

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.

* Prior service credit was given for vesting purposes only.

Bollinger County Soil and Water Conservation District

Employer Contribution Dollars Regular Retirement Eligibility

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

Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 3,104
L-3	4,361
LT-4(65)	3,622
LT-5(65)	4,804
L-7	5,617
LT-8(65)	5,913
L-12	7,022
LT-14(65)	7,096
L-6	8,278

3 Year FAS	
Benefit Program	General
L-1	\$ 3,252
L-3	4,583
LT-4(65)	3,844
LT-5(65)	5,026
L-7	5,913
LT-8(65)	6,209
L-12	7,317
LT-14(65)	7,465
L-6	8,648

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 5,913
L-3	7,244
LT-4(65)	6,431
LT-5(65)	7,687
L-7	8,500
LT-8(65)	8,796
L-12	9,904
LT-14(65)	9,978
L-6	11,161

3 Year FAS	
Benefit Program	General
L-1	\$ 6,061
L-3	7,465
LT-4(65)	6,652
LT-5(65)	7,909
L-7	8,796
LT-8(65)	9,091
L-12	10,200
LT-14(65)	10,348
L-6	11,531

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.

Bollinger County Soil and Water Conservation District

Employer Contribution Dollars Rule of 80 Retirement Eligibility

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

Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 3,622
L-3	5,026
LT-4(65)	5,248
LT-5(65)	6,209
L-7	6,357
LT-8(65)	7,096
L-12	7,761
LT-14(65)	8,204
L-6	9,239

3 Year FAS	
Benefit Program	General
L-1	\$ 3,770
L-3	5,248
LT-4(65)	5,544
LT-5(65)	6,504
L-7	6,652
LT-8(65)	7,465
L-12	8,131
LT-14(65)	8,500
L-6	9,683

Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 6,357
L-3	7,835
LT-4(65)	7,983
LT-5(65)	9,018
L-7	9,239
LT-8(65)	9,978
L-12	10,644
LT-14(65)	11,087
L-6	12,122

3 Year FAS	
Benefit Program	General
L-1	\$ 6,578
L-3	8,057
LT-4(65)	8,204
LT-5(65)	9,313
L-7	9,535
LT-8(65)	10,348
L-12	11,013
LT-14(65)	11,383
L-6	12,565

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.

Bollinger County Soil and Water Conservation District

Employees and Payroll Included in the Valuation

	General
Number of Employees	2
Annual Payroll	\$ 73,914

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:

Bollinger County Soil and Water Conservation 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	\$ 29,484	\$ 30,855	\$ 35,375	\$ 36,487
L-3	General	39,495	41,169	44,245	45,598
LT-4(65)	General	34,347	35,877	40,226	41,506
LT-5(65)	General	43,155	44,950	47,875	49,361
L-7	General	49,446	51,382	53,081	54,719
LT-8(65)	General	51,877	53,910	55,495	57,216
L-12	General	59,250	61,486	61,933	63,829
LT-14(65)	General	60,455	62,749	63,138	65,091
L-6	General	68,995	71,539	70,770	72,978

Bollinger County Soil and Water Conservation 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	\$ 30,252	\$ 31,615	\$ 35,156	\$ 36,341
L-3	General	39,933	41,606	43,965	45,415
LT-4(65)	General	43,100	44,944	47,985	49,639
LT-5(65)	General	49,573	51,606	53,597	55,395
L-7	General	49,510	51,504	52,753	54,511
LT-8(65)	General	55,931	58,165	59,167	61,163
L-12	General	58,961	61,274	61,539	63,607
LT-14(65)	General	62,178	64,604	64,756	66,935
L-6	General	68,388	70,997	70,331	72,690

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 and disability 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.

Separations From Active Employment (Not Including Death-In-Service) Before Age & Service Retirement and Individual Pay Increase Assumptions

		Percent of Active Members Separating Within Next Year							
Sample Ages	Years of Service	General Members				Police		Fire	
		Men		Women		Disability	Withdrawal	Disability	Withdrawal
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	0.09%	7.30	0.02%	10.80	0.10%	9.80	0.06%	5.00
30		0.12	6.50	0.03	8.90	0.11	7.80	0.10	4.00
35		0.15	5.00	0.06	7.40	0.16	6.10	0.23	2.80
40		0.21	3.70	0.10	5.70	0.22	4.40	0.35	2.20
45		0.30	3.00	0.16	4.20	0.34	3.20	0.56	1.80
50		0.44	2.40	0.24	3.30	0.53	1.80	0.85	1.00
55		0.68	1.80	0.34	2.50	0.88	1.00	1.31	0.50
60		1.02	1.00	0.48	1.20		0.00		0.00
65			0.00		0.00		0.00		0.00

Sample Ages	Percent Increase in Individual's Pay During Next Year	
	General & Police	Fire
25	6.55%	7.15%
30	5.75	6.05
35	5.25	5.15
40	4.75	4.45
45	4.25	4.15
50	3.85	3.85
55	3.65	3.65
60	3.55	3.25
65	3.25	3.25

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Continued)

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

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System

Brief Summary of LAGERS

Benefits and Conditions Evaluated and/or Considered as of February 28, 2019

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.
- (b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death.
- (c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

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

- (a) Subject to the maximum in (b), the redetermined amount is the amount other-wise payable multiplied by: 100% plus up to 4%, as determined by the LAGERS Board of Trustees, for each full year of retirement.
- (b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement.

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

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

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

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 930	\$1,455	97%
2,000	700	1,076	1,776	89%
2,500	875	1,223	2,098	84%
3,000	1,050	1,370	2,420	81%
3,500	1,225	1,516	2,741	78%
4,000	1,400	1,662	3,062	77%
25 Years of Service:				
\$1,500	\$ 375	\$ 930	\$1,305	87%
2,000	500	1,076	1,576	79%
2,500	625	1,223	1,848	74%
3,000	750	1,370	2,120	71%
3,500	875	1,516	2,391	68%
4,000	1,000	1,662	2,662	67%
15 Years of Service:				
\$1,500	\$225	\$ 930	\$1,155	77%
2,000	300	1,076	1,376	69%
2,500	375	1,223	1,598	64%
3,000	450	1,370	1,820	61%
3,500	525	1,516	2,041	58%
4,000	600	1,662	2,262	57%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-3 Benefit Program is Years of Credited Service
times: 1.25% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 930	\$1,586	106%
2,000	875	1,076	1,951	98%
2,500	1,094	1,223	2,317	93%
3,000	1,313	1,370	2,683	89%
3,500	1,531	1,516	3,047	87%
4,000	1,750	1,662	3,412	85%
25 Years of Service:				
\$1,500	\$ 469	\$ 930	\$1,399	93%
2,000	625	1,076	1,701	85%
2,500	781	1,223	2,004	80%
3,000	938	1,370	2,308	77%
3,500	1,094	1,516	2,610	75%
4,000	1,250	1,662	2,912	73%
15 Years of Service:				
\$1,500	\$281	\$ 930	\$1,211	81%
2,000	375	1,076	1,451	73%
2,500	469	1,223	1,692	68%
3,000	563	1,370	1,933	64%
3,500	656	1,516	2,172	62%
4,000	750	1,662	2,412	60%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-7 Benefit Program is Years of Credited Service
times: 1.50% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 930	\$1,718	115%
2,000	1,050	1,076	2,126	106%
2,500	1,313	1,223	2,536	101%
3,000	1,575	1,370	2,945	98%
3,500	1,838	1,516	3,354	96%
4,000	2,100	1,662	3,762	94%
25 Years of Service:				
\$1,500	\$ 563	\$ 930	\$1,493	100%
2,000	750	1,076	1,826	91%
2,500	938	1,223	2,161	86%
3,000	1,125	1,370	2,495	83%
3,500	1,313	1,516	2,829	81%
4,000	1,500	1,662	3,162	79%
15 Years of Service:				
\$1,500	\$338	\$ 930	\$1,268	85%
2,000	450	1,076	1,526	76%
2,500	563	1,223	1,786	71%
3,000	675	1,370	2,045	68%
3,500	788	1,516	2,304	66%
4,000	900	1,662	2,562	64%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-12 Benefit Program is Years of Credited Service
times: 1.75% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 930	\$1,849	123%
2,000	1,225	1,076	2,301	115%
2,500	1,531	1,223	2,754	110%
3,000	1,838	1,370	3,208	107%
3,500	2,144	1,516	3,660	105%
4,000	2,450	1,662	4,112	103%
25 Years of Service:				
\$1,500	\$ 656	\$ 930	\$1,586	106%
2,000	875	1,076	1,951	98%
2,500	1,094	1,223	2,317	93%
3,000	1,313	1,370	2,683	89%
3,500	1,531	1,516	3,047	87%
4,000	1,750	1,662	3,412	85%
15 Years of Service:				
\$1,500	\$ 394	\$ 930	\$1,324	88%
2,000	525	1,076	1,601	80%
2,500	656	1,223	1,879	75%
3,000	788	1,370	2,158	72%
3,500	919	1,516	2,435	70%
4,000	1,050	1,662	2,712	68%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-6 Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 930	\$1,980	132%
2,000	1,400	1,076	2,476	124%
2,500	1,750	1,223	2,973	119%
3,000	2,100	1,370	3,470	116%
3,500	2,450	1,516	3,966	113%
4,000	2,800	1,662	4,462	112%
25 Years of Service:				
\$1,500	\$ 750	\$ 930	\$1,680	112%
2,000	1,000	1,076	2,076	104%
2,500	1,250	1,223	2,473	99%
3,000	1,500	1,370	2,870	96%
3,500	1,750	1,516	3,266	93%
4,000	2,000	1,662	3,662	92%
15 Years of Service:				
\$1,500	\$ 450	\$ 930	\$1,380	92%
2,000	600	1,076	1,676	84%
2,500	750	1,223	1,973	79%
3,000	900	1,370	2,270	76%
3,500	1,050	1,516	2,566	73%
4,000	1,200	1,662	2,862	72%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-4(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.00% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 930	\$1,050	\$1,455	70%	97%
2,000	1,400	700	1,076	1,400	1,776	70%	89%
2,500	1,750	875	1,223	1,750	2,098	70%	84%
3,000	2,100	1,050	1,370	2,100	2,420	70%	81%
3,500	2,450	1,225	1,516	2,450	2,741	70%	78%
4,000	2,800	1,400	1,662	2,800	3,062	70%	77%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 930	\$ 750	\$1,305	50%	87%
2,000	1,000	500	1,076	1,000	1,576	50%	79%
2,500	1,250	625	1,223	1,250	1,848	50%	74%
3,000	1,500	750	1,370	1,500	2,120	50%	71%
3,500	1,750	875	1,516	1,750	2,391	50%	68%
4,000	2,000	1,000	1,662	2,000	2,662	50%	67%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 930	\$ 450	\$1,155	30%	77%
2,000	600	300	1,076	600	1,376	30%	69%
2,500	750	375	1,223	750	1,598	30%	64%
3,000	900	450	1,370	900	1,820	30%	61%
3,500	1,050	525	1,516	1,050	2,041	30%	58%
4,000	1,200	600	1,662	1,200	2,262	30%	57%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-5(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.25% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 930	\$1,050	\$1,586	70%	106%
2,000	1,400	875	1,076	1,400	1,951	70%	98%
2,500	1,750	1,094	1,223	1,750	2,317	70%	93%
3,000	2,100	1,313	1,370	2,100	2,683	70%	89%
3,500	2,450	1,531	1,516	2,450	3,047	70%	87%
4,000	2,800	1,750	1,662	2,800	3,412	70%	85%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 930	\$ 750	\$1,399	50%	93%
2,000	1,000	625	1,076	1,000	1,701	50%	85%
2,500	1,250	781	1,223	1,250	2,004	50%	80%
3,000	1,500	938	1,370	1,500	2,308	50%	77%
3,500	1,750	1,094	1,516	1,750	2,610	50%	75%
4,000	2,000	1,250	1,662	2,000	2,912	50%	73%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 930	\$ 450	\$1,211	30%	81%
2,000	600	375	1,076	600	1,451	30%	73%
2,500	750	469	1,223	750	1,692	30%	68%
3,000	900	563	1,370	900	1,933	30%	64%
3,500	1,050	656	1,516	1,050	2,172	30%	62%
4,000	1,200	750	1,662	1,200	2,412	30%	60%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-8(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.50% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 930	\$1,050	\$1,718	70%	115%
2,000	1,400	1,050	1,076	1,400	2,126	70%	106%
2,500	1,750	1,313	1,223	1,750	2,536	70%	101%
3,000	2,100	1,575	1,370	2,100	2,945	70%	98%
3,500	2,450	1,838	1,516	2,450	3,354	70%	96%
4,000	2,800	2,100	1,662	2,800	3,762	70%	94%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 930	\$ 750	\$1,493	50%	100%
2,000	1,000	750	1,076	1,000	1,826	50%	91%
2,500	1,250	938	1,223	1,250	2,161	50%	86%
3,000	1,500	1,125	1,370	1,500	2,495	50%	83%
3,500	1,750	1,313	1,516	1,750	2,829	50%	81%
4,000	2,000	1,500	1,662	2,000	3,162	50%	79%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 930	\$ 450	\$1,268	30%	85%
2,000	600	450	1,076	600	1,526	30%	76%
2,500	750	563	1,223	750	1,786	30%	71%
3,000	900	675	1,370	900	2,045	30%	68%
3,500	1,050	788	1,516	1,050	2,304	30%	66%
4,000	1,200	900	1,662	1,200	2,562	30%	64%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-14(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.75% of FAS ¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 930	\$1,050	\$1,849	70%	123%
2,000	1,400	1,225	1,076	1,400	2,301	70%	115%
2,500	1,750	1,531	1,223	1,750	2,754	70%	110%
3,000	2,100	1,838	1,370	2,100	3,208	70%	107%
3,500	2,450	2,144	1,516	2,450	3,660	70%	105%
4,000	2,800	2,450	1,662	2,800	4,112	70%	103%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 930	\$ 750	\$1,586	50%	106%
2,000	1,000	875	1,076	1,000	1,951	50%	98%
2,500	1,250	1,094	1,223	1,250	2,317	50%	93%
3,000	1,500	1,313	1,370	1,500	2,683	50%	89%
3,500	1,750	1,531	1,516	1,750	3,047	50%	87%
4,000	2,000	1,750	1,662	2,000	3,412	50%	85%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 930	\$ 450	\$1,324	30%	88%
2,000	600	525	1,076	600	1,601	30%	80%
2,500	750	656	1,223	750	1,879	30%	75%
3,000	900	788	1,370	900	2,158	30%	72%
3,500	1,050	919	1,516	1,050	2,435	30%	70%
4,000	1,200	1,050	1,662	1,200	2,712	30%	68%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Bollinger County Soil and Water Conservation District

July 31, 2019

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29									
30-34									
35-39									
40-44			1					1	\$ 36,541
45-49					1			1	\$ 37,373
50-54									
55-59									
60-64									
65-69									
70 & Over									
Totals			1		1			2	\$ 73,914

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

Age: 43.3 years.

Benefit Service: 0.0 years.

Annual Pay: \$36,957.

APPENDIX VI

RISK COMMENTARY

Risk Commentary

The determination of the accrued liability and the actuarially determined contribution (i.e., total employer contribution rate) requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. **Investment Risk** – actual investment returns may differ from the expected returns;
2. **Asset/Liability Mismatch Risk** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. **Contribution Risk** – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability, contributions and contribution rates differing from expected;
5. **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
6. **Other Demographic Risks** – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rates shown on pages 4 thru 11 may be considered as a minimum contribution rate for the selected benefit provisions that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Risk Commentary (Concluded)

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures are described below.

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



August 16, 2019 E-mail

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

Dear Bob:

Enclosed is the report of the July 31, 2019 Initial Actuarial Valuation of LAGERS benefits for the employees of

Bollinger County Soil and Water Conservation District

Sincerely,

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

August 16, 2019

Bollinger County Soil and Water Conservation District
Marble Hill, 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 July 31, 2019 Initial Valuation for the Bollinger County Soil and Water Conservation District dated August 16, 2019.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2019.

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 opinions herein.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA

Bollinger County Soil and Water Conservation 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	\$ 73,914	4.2%	\$3,104	\$ 29,484	5.9%	\$4,361	\$ 39,495	4.9%	\$3,622	\$ 34,347
2020	76,316	4.2	3,205	29,888	5.9	4,503	40,036	4.9	3,739	34,818
2021	78,796	4.2	3,309	30,265	5.9	4,649	40,541	4.9	3,861	35,257
2022	81,357	4.2	3,417	30,611	5.9	4,800	41,005	4.9	3,986	35,660
2023	84,001	4.2	3,528	30,922	5.9	4,956	41,422	4.9	4,116	36,022
2024	86,731	4.2	3,643	31,194	5.9	5,117	41,786	4.9	4,250	36,338
2025	89,550	4.2	3,761	31,421	5.9	5,283	42,090	4.9	4,388	36,603
2026	92,460	4.2	3,883	31,599	5.9	5,455	42,328	4.9	4,531	36,810
2027	95,465	4.2	4,010	31,721	5.9	5,632	42,492	4.9	4,678	36,952
2028	98,568	4.2	4,140	31,782	5.9	5,816	42,573	4.9	4,830	37,023

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	\$ 73,914	6.5%	\$4,804	\$ 43,155	7.6%	\$5,617	\$ 49,446	8.0%	\$5,913	\$ 51,877
2020	76,316	6.5	4,961	43,746	7.6	5,800	50,123	8.0	6,105	52,588
2021	78,796	6.5	5,122	44,298	7.6	5,988	50,755	8.0	6,304	53,251
2022	81,357	6.5	5,288	44,804	7.6	6,183	51,335	8.0	6,509	53,860
2023	84,001	6.5	5,460	45,259	7.6	6,384	51,857	8.0	6,720	54,407
2024	86,731	6.5	5,638	45,656	7.6	6,592	52,312	8.0	6,938	54,885
2025	89,550	6.5	5,821	45,989	7.6	6,806	52,693	8.0	7,164	55,285
2026	92,460	6.5	6,010	46,249	7.6	7,027	52,991	8.0	7,397	55,597
2027	95,465	6.5	6,205	46,428	7.6	7,255	53,196	8.0	7,637	55,812
2028	98,568	6.5	6,407	46,517	7.6	7,491	53,298	8.0	7,885	55,919

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2019	\$ 73,914	9.5%	\$7,022	\$ 59,250	9.6%	\$7,096	\$ 60,455	11.2%	\$8,278	\$ 68,995
2020	76,316	9.5	7,250	60,062	9.6	7,326	61,283	11.2	8,547	69,940
2021	78,796	9.5	7,486	60,819	9.6	7,564	62,056	11.2	8,825	70,822
2022	81,357	9.5	7,729	61,514	9.6	7,810	62,765	11.2	9,112	71,632
2023	84,001	9.5	7,980	62,139	9.6	8,064	63,403	11.2	9,408	72,360
2024	86,731	9.5	8,239	62,685	9.6	8,326	63,960	11.2	9,714	72,995
2025	89,550	9.5	8,507	63,142	9.6	8,597	64,426	11.2	10,030	73,527
2026	92,460	9.5	8,784	63,499	9.6	8,876	64,790	11.2	10,356	73,943
2027	95,465	9.5	9,069	63,745	9.6	9,165	65,041	11.2	10,692	74,229
2028	98,568	9.5	9,364	63,867	9.6	9,463	65,165	11.2	11,040	74,371

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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
2019	\$ 73,914	4.4%	\$3,252	\$ 30,855	6.2%	\$4,583	\$ 41,169	5.2%	\$3,844	\$ 35,877
2020	76,316	4.4	3,358	31,278	6.2	4,732	41,733	5.2	3,968	36,369
2021	78,796	4.4	3,467	31,672	6.2	4,885	42,259	5.2	4,097	36,828
2022	81,357	4.4	3,580	32,034	6.2	5,044	42,742	5.2	4,231	37,249
2023	84,001	4.4	3,696	32,359	6.2	5,208	43,176	5.2	4,368	37,627
2024	86,731	4.4	3,816	32,643	6.2	5,377	43,555	5.2	4,510	37,957
2025	89,550	4.4	3,940	32,881	6.2	5,552	43,872	5.2	4,657	38,233
2026	92,460	4.4	4,068	33,067	6.2	5,733	44,120	5.2	4,808	38,449
2027	95,465	4.4	4,200	33,195	6.2	5,919	44,291	5.2	4,964	38,598
2028	98,568	4.4	4,337	33,258	6.2	6,111	44,376	5.2	5,126	38,672

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
2019	\$ 73,914	6.8%	\$5,026	\$ 44,950	8.0%	\$5,913	\$ 51,382	8.4%	\$6,209	\$ 53,910
2020	76,316	6.8	5,189	45,566	8.0	6,105	52,086	8.4	6,411	54,649
2021	78,796	6.8	5,358	46,141	8.0	6,304	52,743	8.4	6,619	55,338
2022	81,357	6.8	5,532	46,669	8.0	6,509	53,346	8.4	6,834	55,971
2023	84,001	6.8	5,712	47,143	8.0	6,720	53,888	8.4	7,056	56,540
2024	86,731	6.8	5,898	47,557	8.0	6,938	54,361	8.4	7,285	57,037
2025	89,550	6.8	6,089	47,903	8.0	7,164	54,757	8.4	7,522	57,452
2026	92,460	6.8	6,287	48,174	8.0	7,397	55,066	8.4	7,767	57,777
2027	95,465	6.8	6,492	48,360	8.0	7,637	55,279	8.4	8,019	58,000
2028	98,568	6.8	6,703	48,452	8.0	7,885	55,385	8.4	8,280	58,111

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
2019	\$ 73,914	9.9%	\$7,317	\$ 61,486	10.1%	\$7,465	\$ 62,749	11.7%	\$8,648	\$ 71,539
2020	76,316	9.9	7,555	62,328	10.1	7,708	63,609	11.7	8,929	72,519
2021	78,796	9.9	7,801	63,114	10.1	7,958	64,411	11.7	9,219	73,433
2022	81,357	9.9	8,054	63,836	10.1	8,217	65,147	11.7	9,519	74,273
2023	84,001	9.9	8,316	64,485	10.1	8,484	65,809	11.7	9,828	75,028
2024	86,731	9.9	8,586	65,051	10.1	8,760	66,387	11.7	10,148	75,687
2025	89,550	9.9	8,865	65,525	10.1	9,045	66,871	11.7	10,477	76,238
2026	92,460	9.9	9,154	65,895	10.1	9,338	67,249	11.7	10,818	76,669
2027	95,465	9.9	9,451	66,150	10.1	9,642	67,509	11.7	11,169	76,965
2028	98,568	9.9	9,758	66,276	10.1	9,955	67,638	11.7	11,532	77,112

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	8.0%	\$5,913	\$ 35,375	9.8%	\$7,244	\$ 44,245	8.7%	\$6,431	\$ 40,226
2020	76,316	8.0	6,105	35,860	9.8	7,479	44,851	8.7	6,639	40,777
2021	78,796	8.0	6,304	36,312	9.8	7,722	45,417	8.7	6,855	41,291
2022	81,357	8.0	6,509	36,727	9.8	7,973	45,936	8.7	7,078	41,763
2023	84,001	8.0	6,720	37,100	9.8	8,232	46,403	8.7	7,308	42,187
2024	86,731	8.0	6,938	37,426	9.8	8,500	46,811	8.7	7,546	42,558
2025	89,550	8.0	7,164	37,699	9.8	8,776	47,152	8.7	7,791	42,868
2026	92,460	8.0	7,397	37,912	9.8	9,061	47,418	8.7	8,044	43,110
2027	95,465	8.0	7,637	38,059	9.8	9,356	47,601	8.7	8,305	43,277
2028	98,568	8.0	7,885	38,132	9.8	9,660	47,692	8.7	8,575	43,360

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	10.4%	\$7,687	\$ 47,875	11.5%	\$8,500	\$ 53,081	11.9%	\$8,796	\$ 55,495
2020	76,316	10.4	7,937	48,531	11.5	8,776	53,808	11.9	9,082	56,255
2021	78,796	10.4	8,195	49,143	11.5	9,062	54,486	11.9	9,377	56,964
2022	81,357	10.4	8,461	49,705	11.5	9,356	55,109	11.9	9,681	57,615
2023	84,001	10.4	8,736	50,210	11.5	9,660	55,669	11.9	9,996	58,200
2024	86,731	10.4	9,020	50,651	11.5	9,974	56,158	11.9	10,321	58,711
2025	89,550	10.4	9,313	51,020	11.5	10,298	56,567	11.9	10,656	59,139
2026	92,460	10.4	9,616	51,308	11.5	10,633	56,887	11.9	11,003	59,473
2027	95,465	10.4	9,928	51,506	11.5	10,978	57,107	11.9	11,360	59,703
2028	98,568	10.4	10,251	51,604	11.5	11,335	57,216	11.9	11,730	59,817

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	13.4%	\$9,904	\$ 61,933	13.5%	\$9,978	\$ 63,138	15.1%	\$11,161	\$ 70,770
2020	76,316	13.4	10,226	62,781	13.5	10,303	64,003	15.1	11,524	71,740
2021	78,796	13.4	10,559	63,573	13.5	10,637	64,810	15.1	11,898	72,645
2022	81,357	13.4	10,902	64,300	13.5	10,983	65,551	15.1	12,285	73,476
2023	84,001	13.4	11,256	64,953	13.5	11,340	66,217	15.1	12,684	74,223
2024	86,731	13.4	11,622	65,523	13.5	11,709	66,799	15.1	13,096	74,875
2025	89,550	13.4	12,000	66,000	13.5	12,089	67,286	15.1	13,522	75,420
2026	92,460	13.4	12,390	66,373	13.5	12,482	67,666	15.1	13,961	75,846
2027	95,465	13.4	12,792	66,630	13.5	12,888	67,928	15.1	14,415	76,139
2028	98,568	13.4	13,208	66,757	13.5	13,307	68,058	15.1	14,884	76,284

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	8.2%	\$6,061	\$ 36,487	10.1%	\$7,465	\$ 45,598	9.0%	\$6,652	\$ 41,506
2020	76,316	8.2	6,258	36,987	10.1	7,708	46,223	9.0	6,868	42,075
2021	78,796	8.2	6,461	37,453	10.1	7,958	46,806	9.0	7,092	42,606
2022	81,357	8.2	6,671	37,881	10.1	8,217	47,341	9.0	7,322	43,093
2023	84,001	8.2	6,888	38,266	10.1	8,484	47,822	9.0	7,560	43,531
2024	86,731	8.2	7,112	38,602	10.1	8,760	48,242	9.0	7,806	43,913
2025	89,550	8.2	7,343	38,883	10.1	9,045	48,593	9.0	8,060	44,233
2026	92,460	8.2	7,582	39,103	10.1	9,338	48,868	9.0	8,321	44,483
2027	95,465	8.2	7,828	39,254	10.1	9,642	49,057	9.0	8,592	44,655
2028	98,568	8.2	8,083	39,329	10.1	9,955	49,151	9.0	8,871	44,740

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	10.7%	\$7,909	\$ 49,361	11.9%	\$8,796	\$ 54,719	12.3%	\$9,091	\$ 57,216
2020	76,316	10.7	8,166	50,037	11.9	9,082	55,469	12.3	9,387	58,000
2021	78,796	10.7	8,431	50,668	11.9	9,377	56,168	12.3	9,692	58,731
2022	81,357	10.7	8,705	51,247	11.9	9,681	56,810	12.3	10,007	59,402
2023	84,001	10.7	8,988	51,768	11.9	9,996	57,387	12.3	10,332	60,006
2024	86,731	10.7	9,280	52,223	11.9	10,321	57,891	12.3	10,668	60,533
2025	89,550	10.7	9,582	52,603	11.9	10,656	58,313	12.3	11,015	60,974
2026	92,460	10.7	9,893	52,900	11.9	11,003	58,643	12.3	11,373	61,319
2027	95,465	10.7	10,215	53,105	11.9	11,360	58,870	12.3	11,742	61,556
2028	98,568	10.7	10,547	53,206	11.9	11,730	58,982	12.3	12,124	61,674

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	13.8%	\$10,200	\$ 63,829	14.0%	\$10,348	\$ 65,091	15.6%	\$11,531	\$ 72,978
2020	76,316	13.8	10,532	64,703	14.0	10,684	65,983	15.6	11,905	73,978
2021	78,796	13.8	10,874	65,519	14.0	11,031	66,815	15.6	12,292	74,911
2022	81,357	13.8	11,227	66,268	14.0	11,390	67,579	15.6	12,692	75,767
2023	84,001	13.8	11,592	66,941	14.0	11,760	68,266	15.6	13,104	76,537
2024	86,731	13.8	11,969	67,529	14.0	12,142	68,866	15.6	13,530	77,209
2025	89,550	13.8	12,358	68,021	14.0	12,537	69,368	15.6	13,970	77,771
2026	92,460	13.8	12,759	68,405	14.0	12,944	69,760	15.6	14,424	78,211
2027	95,465	13.8	13,174	68,670	14.0	13,365	70,030	15.6	14,893	78,513
2028	98,568	13.8	13,602	68,801	14.0	13,800	70,164	15.6	15,377	78,663

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	4.9%	\$3,622	\$ 30,252	6.8%	\$5,026	\$ 39,933	7.1%	\$5,248	\$ 43,100
2020	76,316	4.9	3,739	30,666	6.8	5,189	40,480	7.1	5,418	43,690
2021	78,796	4.9	3,861	31,053	6.8	5,358	40,990	7.1	5,595	44,241
2022	81,357	4.9	3,986	31,408	6.8	5,532	41,459	7.1	5,776	44,747
2023	84,001	4.9	4,116	31,727	6.8	5,712	41,880	7.1	5,964	45,202
2024	86,731	4.9	4,250	32,006	6.8	5,898	42,248	7.1	6,158	45,599
2025	89,550	4.9	4,388	32,239	6.8	6,089	42,556	7.1	6,358	45,931
2026	92,460	4.9	4,531	32,421	6.8	6,287	42,797	7.1	6,565	46,191
2027	95,465	4.9	4,678	32,546	6.8	6,492	42,962	7.1	6,778	46,370
2028	98,568	4.9	4,830	32,608	6.8	6,703	43,044	7.1	6,998	46,459

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	8.4%	\$6,209	\$ 49,573	8.6%	\$6,357	\$ 49,510	9.6%	\$7,096	\$ 55,931
2020	76,316	8.4	6,411	50,252	8.6	6,563	50,188	9.6	7,326	56,697
2021	78,796	8.4	6,619	50,886	8.6	6,776	50,821	9.6	7,564	57,412
2022	81,357	8.4	6,834	51,468	8.6	6,997	51,402	9.6	7,810	58,068
2023	84,001	8.4	7,056	51,991	8.6	7,224	51,924	9.6	8,064	58,658
2024	86,731	8.4	7,285	52,448	8.6	7,459	52,380	9.6	8,326	59,173
2025	89,550	8.4	7,522	52,830	8.6	7,701	52,762	9.6	8,597	59,604
2026	92,460	8.4	7,767	53,129	8.6	7,952	53,060	9.6	8,876	59,941
2027	95,465	8.4	8,019	53,334	8.6	8,210	53,265	9.6	9,165	60,173
2028	98,568	8.4	8,280	53,436	8.6	8,477	53,367	9.6	9,463	60,288

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	10.5%	\$7,761	\$ 58,961	11.1%	\$8,204	\$ 62,178	12.5%	\$9,239	\$ 68,388
2020	76,316	10.5	8,013	59,769	11.1	8,471	63,030	12.5	9,540	69,325
2021	78,796	10.5	8,274	60,523	11.1	8,746	63,825	12.5	9,850	70,199
2022	81,357	10.5	8,542	61,215	11.1	9,031	64,555	12.5	10,170	71,002
2023	84,001	10.5	8,820	61,837	11.1	9,324	65,211	12.5	10,500	71,723
2024	86,731	10.5	9,107	62,380	11.1	9,627	65,784	12.5	10,841	72,353
2025	89,550	10.5	9,403	62,834	11.1	9,940	66,263	12.5	11,194	72,880
2026	92,460	10.5	9,708	63,189	11.1	10,263	66,637	12.5	11,558	73,292
2027	95,465	10.5	10,024	63,433	11.1	10,597	66,895	12.5	11,933	73,575
2028	98,568	10.5	10,350	63,554	11.1	10,941	67,023	12.5	12,321	73,715

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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
2019	\$ 73,914	5.1%	\$3,770	\$ 31,615	7.1%	\$5,248	\$ 41,606	7.5%	\$5,544	\$ 44,944
2020	76,316	5.1	3,892	32,048	7.1	5,418	42,176	7.5	5,724	45,560
2021	78,796	5.1	4,019	32,452	7.1	5,595	42,708	7.5	5,910	46,134
2022	81,357	5.1	4,149	32,823	7.1	5,776	43,196	7.5	6,102	46,661
2023	84,001	5.1	4,284	33,157	7.1	5,964	43,635	7.5	6,300	47,135
2024	86,731	5.1	4,423	33,448	7.1	6,158	44,018	7.5	6,505	47,549
2025	89,550	5.1	4,567	33,692	7.1	6,358	44,339	7.5	6,716	47,895
2026	92,460	5.1	4,715	33,882	7.1	6,565	44,590	7.5	6,935	48,166
2027	95,465	5.1	4,869	34,013	7.1	6,778	44,762	7.5	7,160	48,352
2028	98,568	5.1	5,027	34,078	7.1	6,998	44,847	7.5	7,393	48,444

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
2019	\$ 73,914	8.8%	\$6,504	\$ 51,606	9.0%	\$6,652	\$ 51,504	10.1%	\$7,465	\$ 58,165
2020	76,316	8.8	6,716	52,313	9.0	6,868	52,210	10.1	7,708	58,962
2021	78,796	8.8	6,934	52,973	9.0	7,092	52,868	10.1	7,958	59,705
2022	81,357	8.8	7,159	53,579	9.0	7,322	53,472	10.1	8,217	60,388
2023	84,001	8.8	7,392	54,123	9.0	7,560	54,015	10.1	8,484	61,002
2024	86,731	8.8	7,632	54,598	9.0	7,806	54,489	10.1	8,760	61,538
2025	89,550	8.8	7,880	54,996	9.0	8,060	54,886	10.1	9,045	61,986
2026	92,460	8.8	8,136	55,307	9.0	8,321	55,196	10.1	9,338	62,336
2027	95,465	8.8	8,401	55,521	9.0	8,592	55,409	10.1	9,642	62,577
2028	98,568	8.8	8,674	55,627	9.0	8,871	55,515	10.1	9,955	62,696

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
2019	\$ 73,914	11.0%	\$8,131	\$ 61,274	11.5%	\$8,500	\$ 64,604	13.1%	\$9,683	\$ 70,997
2020	76,316	11.0	8,395	62,113	11.5	8,776	65,489	13.1	9,997	71,970
2021	78,796	11.0	8,668	62,896	11.5	9,062	66,315	13.1	10,322	72,877
2022	81,357	11.0	8,949	63,615	11.5	9,356	67,073	13.1	10,658	73,710
2023	84,001	11.0	9,240	64,261	11.5	9,660	67,755	13.1	11,004	74,459
2024	86,731	11.0	9,540	64,825	11.5	9,974	68,350	13.1	11,362	75,113
2025	89,550	11.0	9,851	65,297	11.5	10,298	68,848	13.1	11,731	75,660
2026	92,460	11.0	10,171	65,666	11.5	10,633	69,237	13.1	12,112	76,088
2027	95,465	11.0	10,501	65,920	11.5	10,978	69,505	13.1	12,506	76,382
2028	98,568	11.0	10,842	66,046	11.5	11,335	69,638	13.1	12,912	76,528

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	8.6%	\$6,357	\$ 35,156	10.6%	\$7,835	\$ 43,965	10.8%	\$7,983	\$ 47,985
2020	76,316	8.6	6,563	35,638	10.6	8,089	44,567	10.8	8,242	48,642
2021	78,796	8.6	6,776	36,087	10.6	8,352	45,129	10.8	8,510	49,255
2022	81,357	8.6	6,997	36,500	10.6	8,624	45,645	10.8	8,787	49,818
2023	84,001	8.6	7,224	36,871	10.6	8,904	46,109	10.8	9,072	50,324
2024	86,731	8.6	7,459	37,195	10.6	9,193	46,514	10.8	9,367	50,766
2025	89,550	8.6	7,701	37,466	10.6	9,492	46,853	10.8	9,671	51,136
2026	92,460	8.6	7,952	37,678	10.6	9,801	47,118	10.8	9,986	51,425
2027	95,465	8.6	8,210	37,824	10.6	10,119	47,300	10.8	10,310	51,624
2028	98,568	8.6	8,477	37,896	10.6	10,448	47,390	10.8	10,645	51,723

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	12.2%	\$9,018	\$ 53,597	12.5%	\$9,239	\$ 52,753	13.5%	\$9,978	\$ 59,167
2020	76,316	12.2	9,311	54,331	12.5	9,540	53,476	13.5	10,303	59,978
2021	78,796	12.2	9,613	55,016	12.5	9,850	54,150	13.5	10,637	60,734
2022	81,357	12.2	9,926	55,645	12.5	10,170	54,769	13.5	10,983	61,428
2023	84,001	12.2	10,248	56,210	12.5	10,500	55,326	13.5	11,340	62,052
2024	86,731	12.2	10,581	56,704	12.5	10,841	55,812	13.5	11,709	62,597
2025	89,550	12.2	10,925	57,117	12.5	11,194	56,219	13.5	12,089	63,053
2026	92,460	12.2	11,280	57,440	12.5	11,558	56,537	13.5	12,482	63,409
2027	95,465	12.2	11,647	57,662	12.5	11,933	56,756	13.5	12,888	63,654
2028	98,568	12.2	12,025	57,772	12.5	12,321	56,864	13.5	13,307	63,776

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	14.4%	\$10,644	\$ 61,539	15.0%	\$11,087	\$ 64,756	16.4%	\$12,122	\$ 70,331
2020	76,316	14.4	10,990	62,382	15.0	11,447	65,643	16.4	12,516	71,295
2021	78,796	14.4	11,347	63,169	15.0	11,819	66,471	16.4	12,923	72,194
2022	81,357	14.4	11,715	63,891	15.0	12,204	67,231	16.4	13,343	73,019
2023	84,001	14.4	12,096	64,540	15.0	12,600	67,914	16.4	13,776	73,761
2024	86,731	14.4	12,489	65,107	15.0	13,010	68,510	16.4	14,224	74,409
2025	89,550	14.4	12,895	65,581	15.0	13,433	69,009	16.4	14,686	74,951
2026	92,460	14.4	13,314	65,952	15.0	13,869	69,399	16.4	15,163	75,375
2027	95,465	14.4	13,747	66,207	15.0	14,320	69,667	16.4	15,656	75,666
2028	98,568	14.4	14,194	66,333	15.0	14,785	69,800	16.4	16,165	75,810

Notes regarding the above projections:

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

Bollinger County Soil and Water Conservation 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	8.9%	\$6,578	\$ 36,341	10.9%	\$8,057	\$ 45,415	11.1%	\$8,204	\$ 49,639
2020	76,316	8.9	6,792	36,839	10.9	8,318	46,037	11.1	8,471	50,319
2021	78,796	8.9	7,013	37,304	10.9	8,589	46,617	11.1	8,746	50,953
2022	81,357	8.9	7,241	37,730	10.9	8,868	47,150	11.1	9,031	51,536
2023	84,001	8.9	7,476	38,113	10.9	9,156	47,629	11.1	9,324	52,060
2024	86,731	8.9	7,719	38,448	10.9	9,454	48,047	11.1	9,627	52,517
2025	89,550	8.9	7,970	38,728	10.9	9,761	48,397	11.1	9,940	52,900
2026	92,460	8.9	8,229	38,947	10.9	10,078	48,671	11.1	10,263	53,199
2027	95,465	8.9	8,496	39,098	10.9	10,406	48,859	11.1	10,597	53,405
2028	98,568	8.9	8,773	39,173	10.9	10,744	48,952	11.1	10,941	53,507

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	12.6%	\$9,313	\$ 55,395	12.9%	\$9,535	\$ 54,511	14.0%	\$10,348	\$ 61,163
2020	76,316	12.6	9,616	56,154	12.9	9,845	55,258	14.0	10,684	62,001
2021	78,796	12.6	9,928	56,862	12.9	10,165	55,955	14.0	11,031	62,783
2022	81,357	12.6	10,251	57,512	12.9	10,495	56,595	14.0	11,390	63,501
2023	84,001	12.6	10,584	58,096	12.9	10,836	57,170	14.0	11,760	64,146
2024	86,731	12.6	10,928	58,606	12.9	11,188	57,672	14.0	12,142	64,709
2025	89,550	12.6	11,283	59,033	12.9	11,552	58,092	14.0	12,537	65,180
2026	92,460	12.6	11,650	59,367	12.9	11,927	58,420	14.0	12,944	65,548
2027	95,465	12.6	12,029	59,597	12.9	12,315	58,646	14.0	13,365	65,801
2028	98,568	12.6	12,420	59,711	12.9	12,715	58,758	14.0	13,800	65,927

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2019	\$ 73,914	14.9%	\$11,013	\$ 63,607	15.4%	\$11,383	\$ 66,935	17.0%	\$12,565	\$ 72,690
2020	76,316	14.9	11,371	64,478	15.4	11,753	67,852	17.0	12,974	73,686
2021	78,796	14.9	11,741	65,291	15.4	12,135	68,708	17.0	13,395	74,615
2022	81,357	14.9	12,122	66,037	15.4	12,529	69,494	17.0	13,831	75,468
2023	84,001	14.9	12,516	66,708	15.4	12,936	70,200	17.0	14,280	76,235
2024	86,731	14.9	12,923	67,294	15.4	13,357	70,817	17.0	14,744	76,905
2025	89,550	14.9	13,343	67,784	15.4	13,791	71,333	17.0	15,224	77,465
2026	92,460	14.9	13,777	68,167	15.4	14,239	71,736	17.0	15,718	77,903
2027	95,465	14.9	14,224	68,431	15.4	14,702	72,013	17.0	16,229	78,204
2028	98,568	14.9	14,687	68,562	15.4	15,179	72,151	17.0	16,757	78,353

Notes regarding the above projections:

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