The Initial Valuation For
Warren County
as of June 30, 2021

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August 20, 2021

Warren County
Warrenton, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of the actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, the benefits provided by the Missouri Local Government Employees Retirement System (LAGERS). This report contains the information needed to comply with Missouri State disclosure requirements regarding the adoption of LAGERS benefits by a political subdivision (Sections 105.660 - 106.685 RSMo). 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 7 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 7 as the prior service cost rate. 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 rate 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 normal cost rate, casualty rate, and prior service cost rate (the total employer contribution rate as shown on pages 4 thru 7). These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on pages 8 thru 10 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 February28, 2021.

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 June 30, 2021. 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 Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for a member contribution rate of either 0%, 2%, 4% or 6%, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

Member Contribution Rate - 0% Plan. Under the 0% 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.

Member Contribution Rate - 2%, 4% or 6% Plan. Under any plan other than 0%, each covered member contributes a percentage 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.

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 144 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.

Warren County

Employer Contribution Rates
5 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates: 0%	2%	4%	6%
		Percents of Active Member Payroll						
L-1	General	7.40%	0.20%	0.80%	8.40%	6.50%	4.60%	2.70%
	Police	7.00	0.40	1.20	8.60	6.70	4.80	2.90
	Public Safety	6.90	0.20	0.50	7.60	5.70	3.80	1.90
L-3	General	9.00	0.30	1.00	10.30	8.40	6.50	4.60
	Police	8.60	0.50	1.50	10.60	8.70	6.80	4.90
	Public Safety	8.40	0.30	0.60	9.30	7.40	5.50	3.60
LT-4(65)	General	8.00	0.20	0.80	9.00	7.10	5.20	3.30
	Police	8.40	0.40	1.60	10.40	8.50	6.60	4.70
	Public Safety	8.00	0.20	0.60	8.80	6.90	5.00	3.10
LT-5(65)	General	9.50	0.30	1.00	10.80	8.90	7.00	5.10
	Police	9.60	0.50	1.80	11.90	10.00	8.10	6.20
	Public Safety	9.20	0.30	0.70	10.20	8.30	6.40	4.50
L-7	General	10.70	0.30	1.20	12.20	10.30	8.40	6.50
	Police	10.10	0.60	1.80	12.50	10.60	8.70	6.80
	Public Safety	9.80	0.30	0.80	10.90	9.00	7.10	5.20
LT-8(65)	General	11.00	0.30	1.20	12.50	10.60	8.70	6.80
	Police	10.80	0.60	2.00	13.40	11.50	9.60	7.70
	Public Safety	10.40	0.30	0.80	11.50	9.60	7.70	5.80
L-12	General	12.30	0.40	1.40	14.10	12.20	10.30	8.40
	Police	11.60	0.70	2.10	14.40	12.50	10.60	8.70
	Public Safety	11.30	0.40	0.90	12.60	10.70	8.80	6.90
LT-14(65)	General	12.40	0.40	1.40	14.20	12.30	10.40	8.50
	Police	12.00	0.70	2.20	14.90	13.00	11.10	9.20
	Public Safety	11.60	0.40	0.90	12.90	11.00	9.10	7.20
L-6	General	13.90	0.50	1.50	15.90	14.00	12.10	10.20
	Police	13.20	0.80	2.50	16.50	14.60	12.70	10.80
	Public Safety	12.80	0.50	1.00	14.30	12.40	10.50	8.60

* Prior service credit was given for vesting purposes only.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

Warren County

Employer Contribution Rates
3 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll: Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates: 0%	2%	4%	6%
L-1	General	7.60%	0.20%	0.80%	8.60%	6.70%	4.80%	2.90%
	Police	7.30	0.40	1.30	9.00	7.10	5.20	3.30
	Public Safety	7.10	0.20	0.50	7.80	5.90	4.00	2.10
L-3	General	9.30	0.30	1.00	10.60	8.70	6.80	4.90
	Police	8.90	0.50	1.60	11.00	9.10	7.20	5.30
	Public Safety	8.60	0.30	0.60	9.50	7.60	5.70	3.80
LT-4(65)	General	8.30	0.20	0.80	9.30	7.40	5.50	3.60
	Police	8.70	0.40	1.60	10.70	8.80	6.90	5.00
	Public Safety	8.30	0.20	0.60	9.10	7.20	5.30	3.40
LT-5(65)	General	9.80	0.30	1.00	11.10	9.20	7.30	5.40
	Police	9.90	0.50	1.80	12.20	10.30	8.40	6.50
	Public Safety	9.60	0.30	0.70	10.60	8.70	6.80	4.90
L-7	General	11.00	0.30	1.20	12.50	10.60	8.70	6.80
	Police	10.40	0.60	1.90	12.90	11.00	9.10	7.20
	Public Safety	10.20	0.30	0.80	11.30	9.40	7.50	5.60
LT-8(65)	General	11.30	0.30	1.20	12.80	10.90	9.00	7.10
	Police	11.20	0.60	2.10	13.90	12.00	10.10	8.20
	Public Safety	10.80	0.30	0.80	11.90	10.00	8.10	6.20
L-12	General	12.70	0.40	1.40	14.50	12.60	10.70	8.80
	Police	12.00	0.70	2.20	14.90	13.00	11.10	9.20
	Public Safety	11.70	0.40	0.90	13.00	11.10	9.20	7.30
LT-14(65)	General	12.80	0.40	1.40	14.60	12.70	10.80	8.90
	Police	12.40	0.70	2.30	15.40	13.50	11.60	9.70
	Public Safety	12.00	0.40	0.90	13.30	11.40	9.50	7.60
L-6	General	14.30	0.50	1.60	16.40	14.50	12.60	10.70
	Police	13.60	0.80	2.50	16.90	15.00	13.10	11.20
	Public Safety	13.30	0.50	1.00	14.80	12.90	11.00	9.10

* Prior service credit was given for vesting purposes only.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members’ service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

Warren County

Employer Contribution Rates
5 Year FAS - Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	7.50%	0.20%	0.70%	8.40%	6.50%	4.60%	2.70%
	Police	7.20	0.40	1.20	8.80	6.90	5.00	3.10
	Public Safety	7.10	0.20	0.50	7.80	5.90	4.00	2.10
L-3	General	9.20	0.30	0.90	10.40	8.50	6.60	4.70
	Police	8.80	0.50	1.50	10.80	8.90	7.00	5.10
	Public Safety	8.60	0.30	0.60	9.50	7.60	5.70	3.80
LT-4(65)	General	8.40	0.20	0.80	9.40	7.50	5.60	3.70
	Police	8.90	0.40	1.70	11.00	9.10	7.20	5.30
	Public Safety	8.70	0.20	0.70	9.60	7.70	5.80	3.90
LT-5(65)	General	9.80	0.30	1.00	11.10	9.20	7.30	5.40
	Police	10.10	0.50	1.90	12.50	10.60	8.70	6.80
	Public Safety	9.80	0.30	0.80	10.90	9.00	7.10	5.20
L-7	General	10.90	0.30	1.10	12.30	10.40	8.50	6.60
	Police	10.40	0.60	1.90	12.90	11.00	9.10	7.20
	Public Safety	10.20	0.30	0.80	11.30	9.40	7.50	5.60
LT-8(65)	General	11.30	0.30	1.10	12.70	10.80	8.90	7.00
	Police	11.20	0.60	2.10	13.90	12.00	10.10	8.20
	Public Safety	11.00	0.30	0.90	12.20	10.30	8.40	6.50
L-12	General	12.50	0.40	1.30	14.20	12.30	10.40	8.50
	Police	11.90	0.70	2.20	14.80	12.90	11.00	9.10
	Public Safety	11.70	0.40	0.90	13.00	11.10	9.20	7.30
LT-14(65)	General	12.70	0.40	1.30	14.40	12.50	10.60	8.70
	Police	12.40	0.70	2.30	15.40	13.50	11.60	9.70
	Public Safety	12.10	0.40	0.90	13.40	11.50	9.60	7.70
L-6	General	14.20	0.50	1.50	16.20	14.30	12.40	10.50
	Police	13.50	0.80	2.50	16.80	14.90	13.00	11.10
	Public Safety	13.30	0.50	1.00	14.80	12.90	11.00	9.10

\# 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.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

Warren County

Employer Contribution Rates
3 Year FAS - Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates: 0%	2%	4%	6%
		Percents of Active Member Payroll						
L-1	General	7.80%	0.20%	0.80%	8.80%	6.90%	5.00%	3.10%
	Police	7.40	0.40	1.30	9.10	7.20	5.30	3.40
	Public Safety	7.30	0.20	0.50	8.00	6.10	4.20	2.30
L-3	General	9.50	0.30	1.00	10.80	8.90	7.00	5.10
	Police	9.10	0.50	1.60	11.20	9.30	7.40	5.50
	Public Safety	8.90	0.30	0.70	9.90	8.00	6.10	4.20
LT-4(65)	General	8.60	0.20	0.80	9.60	7.70	5.80	3.90
	Police	9.20	0.40	1.70	11.30	9.40	7.50	5.60
	Public Safety	9.00	0.20	0.70	9.90	8.00	6.10	4.20
LT-5(65)	General	10.10	0.30	1.00	11.40	9.50	7.60	5.70
	Police	10.40	0.50	1.90	12.80	10.90	9.00	7.10
	Public Safety	10.20	0.30	0.80	11.30	9.40	7.50	5.60
L-7	General	11.20	0.30	1.10	12.60	10.70	8.80	6.90
	Police	10.70	0.60	1.90	13.20	11.30	9.40	7.50
	Public Safety	10.60	0.30	0.80	11.70	9.80	7.90	6.00
LT-8(65)	General	11.60	0.30	1.20	13.10	11.20	9.30	7.40
	Police	11.60	0.60	2.10	14.30	12.40	10.50	8.60
	Public Safety	11.40	0.30	0.90	12.60	10.70	8.80	6.90
L-12	General	12.90	0.40	1.30	14.60	12.70	10.80	8.90
	Police	12.40	0.70	2.20	15.30	13.40	11.50	9.60
	Public Safety	12.20	0.40	0.90	13.50	11.60	9.70	7.80
LT-14(65)	General	13.10	0.40	1.30	14.80	12.90	11.00	9.10
	Police	12.80	0.70	2.30	15.80	13.90	12.00	10.10
	Public Safety	12.60	0.40	1.00	14.00	12.10	10.20	8.30
L-6	General	14.60	0.50	1.50	16.60	14.70	12.80	10.90
	Police	14.00	0.80	2.60	17.40	15.50	13.60	11.70
	Public Safety	13.80	0.50	1.10	15.40	13.50	11.60	9.70

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

* Prior service credit was given for vesting purposes only.

The total employer contribution rate for each member contribution rate option shown above includes the prior service cost rate, casualty rate and corresponding normal cost rate. The prior service cost rate is the cost associated with paying off the unfunded actuarial accrued liability (past service). The normal cost rate plus the casualty rate is the cost of members' service being rendered each year (future service). For purposes of this initial valuation, the total employer contribution rate for the 0% member contribution rate plan is decreased by 1.9%, 3.8% and 5.7% for the 2%, 4% and 6% member contribution rate plans, respectively.

Warren County

Employer Contribution Dollars
General

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:

Regular Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 213,200	$ 164,976	$ 116,752	$ 68,529
L-3	261,424	213,200	164,976	116,752
LT-4(65)	228,429	180,205	131,981	83,757
LT-5(65)	274,114	225,891	177,667	129,443
L-7	309,648	261,424	213,200	164,976
LT-8(65)	317,262	269,038	220,814	172,591
L-12	357,872	309,648	261,424	213,200
LT-14(65)	360,410	312,186	263,962	215,738
L-6	403,557	355,333	307,110	258,886

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 218,276	$ 170,052	$ 121,829	$ 73,605
L-3	269,038	220,814	172,591	124,367
LT-4(65)	236,043	187,819	139,595	91,371
LT-5(65)	281,729	233,505	185,281	137,057
L-7	317,262	269,038	220,814	172,591
LT-8(65)	324,876	276,652	228,429	180,205
L-12	368,024	319,800	271,576	223,352
LT-14(65)	370,562	322,338	274,114	225,891
L-6	416,248	368,024	319,800	271,576

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 213,200	$ 164,976	$ 116,752	$ 68,529
L-3	263,962	215,738	167,514	119,291
LT-4(65)	238,581	190,357	142,133	93,910
LT-5(65)	281,729	233,505	185,281	137,057
L-7	312,186	263,962	215,738	167,514
LT-8(65)	322,338	274,114	225,891	177,667
L-12	360,410	312,186	263,962	215,738
LT-14(65)	365,486	317,262	269,038	220,814
L-6	411,172	362,948	314,724	266,500

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 223,352	$ 175,129	$ 126,905	$ 78,681
L-3	274,114	225,891	177,667	129,443
LT-4(65)	243,657	195,433	147,210	98,986
LT-5(65)	289,343	241,119	192,895	144,671
L-7	319,800	271,576	223,352	175,129
LT-8(65)	332,491	284,267	236,043	187,819
L-12	370,562	322,338	274,114	225,891
LT-14(65)	375,638	327,414	279,191	230,967
L-6	421,324	373,100	324,876	276,652

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.

Warren County

Employer Contribution Dollars
Police

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:

Regular Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 129,496	$ 100,886	$ 72,277	$ 43,667
L-3	159,611	131,002	102,392	73,783
LT-4(65)	156,600	127,990	99,381	70,771
LT-5(65)	179,186	150,577	121,967	93,358
L-7	188,221	159,611	131,002	102,392
LT-8(65)	201,773	173,163	144,554	115,944
L-12	216,830	188,221	159,611	131,002
LT-14(65)	224,359	195,750	167,140	138,531
L-6	248,452	219,842	191,232	162,623

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 135,519	$ 106,909	$ 78,300	$ 49,690
L-3	165,634	137,025	108,415	79,806
LT-4(65)	161,117	132,507	103,898	75,288
LT-5(65)	183,704	155,094	126,484	97,875
L-7	194,244	165,634	137,025	108,415
LT-8(65)	209,302	180,692	152,082	123,473
L-12	224,359	195,750	167,140	138,531
LT-14(65)	231,888	203,279	174,669	146,059
L-6	254,475	225,865	197,255	168,646

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 132,507	$ 103,898	$ 75,288	$ 46,679
L-3	162,623	134,013	105,404	76,794
LT-4(65)	165,634	137,025	108,415	79,806
LT-5(65)	188,221	159,611	131,002	102,392
L-7	194,244	165,634	137,025	108,415
LT-8(65)	209,302	180,692	152,082	123,473
L-12	222,854	194,244	165,634	137,025
LT-14(65)	231,888	203,279	174,669	146,059
L-6	252,969	224,359	195,750	167,140

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 137,025	$ 108,415	$ 79,806	$ 51,196
L-3	168,646	140,036	111,427	82,817
LT-4(65)	170,152	141,542	112,933	84,323
LT-5(65)	192,738	164,129	135,519	106,909
L-7	198,761	170,152	141,542	112,933
LT-8(65)	215,325	186,715	158,106	129,496
L-12	230,382	201,773	173,163	144,554
LT-14(65)	237,911	209,302	180,692	152,082
L-6	262,003	233,394	204,784	176,175

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.

Warren County

Employer Contribution Dollars
Public Safety

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:

Regular Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 81,966	$ 61,475	$ 40,983	$ 20,492
L-3	100,301	79,809	59,318	38,826
LT-4(65)	94,908	74,417	53,925	33,434
LT-5(65)	110,007	89,516	69,024	48,533
L-7	117,557	97,065	76,574	56,082
LT-8(65)	124,028	103,536	83,045	62,553
L-12	135,891	115,400	94,908	74,417
LT-14(65)	139,127	118,635	98,144	77,652
L-6	154,226	133,734	113,243	92,751

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 84,123	$ 63,632	$ 43,140	$ 22,649
L-3	102,458	81,966	61,475	40,983
LT-4(65)	98,144	77,652	57,161	36,669
LT-5(65)	114,321	93,830	73,338	52,847
L-7	121,871	101,379	80,888	60,396
LT-8(65)	128,342	107,850	87,359	66,867
L-12	140,205	119,714	99,222	78,731
LT-14(65)	143,441	122,949	102,458	81,966
L-6	159,618	139,127	118,635	98,144

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 84,123	$ 63,632	$ 43,140	$ 22,649
L-3	102,458	81,966	61,475	40,983
LT-4(65)	103,536	83,045	62,553	42,062
LT-5(65)	117,557	97,065	76,574	56,082
L-7	121,871	101,379	80,888	60,396
LT-8(65)	131,577	111,086	90,594	70,103
L-12	140,205	119,714	99,222	78,731
LT-14(65)	144,519	124,028	103,536	83,045
L-6	159,618	139,127	118,635	98,144

3 Year FAS				
Benefit	Member Contribution Rate			
Program	0%	2%	4%	6%
L-1	$ 86,280	$ 65,789	$ 45,297	$ 24,806
L-3	106,772	86,280	65,789	45,297
LT-4(65)	106,772	86,280	65,789	45,297
LT-5(65)	121,871	101,379	80,888	60,396
L-7	126,185	105,693	85,202	64,710
LT-8(65)	135,891	115,400	94,908	74,417
L-12	145,598	125,106	104,615	84,123
LT-14(65)	150,990	130,499	110,007	89,516
L-6	166,089	145,598	125,106	104,615

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.

Warren County

Employees and Payroll Included in the Valuation

	General	Police	Public Safety
Number of Employees	62	31	27
Annual Payroll	$ 2,538,096	$ 1,505,767	$ 1,078,500

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 7 as the "Prior Service Cost Rate" 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:

Warren County

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0% UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	$ 336,053	$ 346,149
	Police	316,470	326,487
	Public Safety	92,447	95,520
L-3	General	419,950	432,704
	Police	395,584	407,997
	Public Safety	115,530	119,378
LT-4(65)	General	351,818	362,465
	Police	402,456	415,533
	Public Safety	114,847	118,728
LT-5(65)	General	431,774	444,915
	Police	460,078	474,782
	Public Safety	132,320	136,750
L-7	General	503,995	519,256
	Police	474,695	489,713
	Public Safety	138,664	143,308
LT-8(65)	General	511,890	527,379
	Police	517,697	534,263
	Public Safety	149,876	154,887
L-12	General	588,046	605,819
	Police	553,808	571,255
	Public Safety	161,832	167,154
LT-14(65)	General	591,995	609,889
	Police	575,312	593,580
	Public Safety	167,412	172,928
L-6	General	672,093	692,343
	Police	632,877	652,939
	Public Safety	184,953	191,081

Warren County

Unfunded Actuarial Accrued Liability (UAAL)

Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0% UAAL (5 Year FAS)	Member Contribution Rate - 0% UAAL (3 Year FAS)
L-1	General	$ 320,804	$ 330,563
	Police	318,668	329,026
	Public Safety	95,928	99,207
L-3	General	400,933	413,155
	Police	398,325	411,279
	Public Safety	119,925	124,000
LT-4(65)	General	341,981	352,457
	Police	428,517	442,854
	Public Safety	125,988	130,333
LT-5(65)	General	416,824	429,580
	Police	480,640	496,635
	Public Safety	142,445	147,367
L-7	General	481,109	495,832
	Police	477,955	493,528
	Public Safety	143,931	148,834
LT-8(65)	General	491,727	506,773
	Police	532,879	550,452
	Public Safety	158,938	164,395
L-12	General	561,325	578,450
	Police	557,620	575,765
	Public Safety	167,909	173,630
LT-14(65)	General	566,656	583,908
	Police	585,010	604,291
	Public Safety	175,419	181,383
L-6	General	641,479	661,103
	Police	637,211	657,965
	Public Safety	191,935	198,447

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 7.00% 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 2.25% and the wage inflation rate used in making the valuations was 2.75%. The 7.00% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.25%. Adopted 2021.

2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubG-2010 Retiree Mortality Table for males and females. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubNS-2010 Disabled Retiree Mortality Table for males and females. The pre-retirement mortality tables used were 75% of the PubG-2010 Employee Mortality Table for males and females of General groups and 75% of the PubS-2010 Employee Mortality Table for males and females of Police, Fire and Public Safety groups. Mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scale to the above described tables. Adopted 2021.

3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2021.

4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2021.

5. Post-retirement cost of living allowances are assumed to be 2.00% per year. Adopted 2021.

6. Total active member payroll is assumed to increase 2.75% 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 2021.

7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.

8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.

9. This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Schedule 1.

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

Sample Ages	Years of Service	General/Public Safety Members: Men Disability	General/Public Safety Members: Men Withdrawal	General/Public Safety Members: Women Disability	General/Public Safety Members: Women Withdrawal	Police Disability	Police Withdrawal	Fire Disability	Fire Withdrawal
		Percent of Active Members Separating Within Next Year							
All	0		20.00%		23.00%		18.00%		12.00%
	1		18.00		21.00		17.00		10.00
	2		16.00		18.00		16.00		8.00
	3		13.00		15.00		14.00		8.00
	4		12.00		13.00		13.00		7.00
25	5 & Over	0.07%	8.80	0.02%	12.40	0.10%	10.80	0.07%	6.00
30		0.10	7.10	0.03	10.20	0.11	8.50	0.11	4.50
35		0.13	5.60	0.06	7.80	0.16	6.30	0.25	3.20
40		0.18	4.10	0.09	5.80	0.22	4.60	0.39	2.40
45		0.25	3.10	0.15	4.40	0.34	3.40	0.62	1.90
50		0.37	2.40	0.22	3.50	0.53	2.10	0.95	1.30
55		0.57	1.70	0.32	2.50	0.88	1.10	1.46	0.70
60		0.86	1.10	0.45	1.40		0.00		0.00
65			0.00		0.00		0.00		0.00

Sample Ages	General/ Public Safety	Police	Fire
	Percent Increase in Individual's Pay During Next Year		
25	6.75%	6.55%	7.15%
30	5.95	5.75	6.05
35	5.35	5.25	5.15
40	4.85	4.75	4.45
45	4.25	4.25	4.05
50	3.85	3.85	3.85
55	3.65	3.65	3.45
60	3.45	3.45	2.75
65	3.15	3.15	2.75

Schedule 2.

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

Early Retirement

Retirement Ages	General Members Men	General Members Women
55	3.00%	3.00%
56	3.00%	3.00%
57	3.00%	3.00%
58	3.00%	3.00%
59	3.00%	3.00%

Retirement Ages	Police/ Public Safety	Fire
50	2.50%	2.25%
51	2.50%	2.25%
52	3.00%	2.25%
53	3.00%	2.25%
54	3.50%	2.25%

Normal Retirement

Retirement Ages	General Members Men	General Members Women
60	10%	10%
61	10	10
62	25	15
63	20	15
64	20	15
65	25	25
66	25	30
67	20	25
68	20	25
69	20	20
70	100	100

Retirement Ages	Police/ Public Safety	Fire
55	11%	13%
56	11	13
57	11	13
58	11	13
59	11	13
60	11	15
61	11	20
62	22	20
63	18	20
64	18	20
65	100	100

Schedule 2. (Concluded)

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

Retirement	General Members		Police/	
Ages	Men	Women	Public Safety	Fire
50	20%	15%	25%	25%
51	20	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	25	15	20	45
63	25	15	20	45
64	25	20	20	45
65	30	25	100	100
66	30	25		
67	20	25		
68	20	25		
69	20	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, 2021
(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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 525	$ 916	$1,441	96%
2,000	700	1,055	1,755	88%
2,500	875	1,192	2,067	83%
3,000	1,050	1,330	2,380	79%
3,500	1,225	1,469	2,694	77%
4,000	1,400	1,605	3,005	75%
25 Years of Service:				
$1,500	$ 375	$ 916	$1,291	86%
2,000	500	1,055	1,555	78%
2,500	625	1,192	1,817	73%
3,000	750	1,330	2,080	69%
3,500	875	1,469	2,344	67%
4,000	1,000	1,605	2,605	65%
15 Years of Service:				
$1,500	$225	$ 916	$1,141	76%
2,000	300	1,055	1,355	68%
2,500	375	1,192	1,567	63%
3,000	450	1,330	1,780	59%
3,500	525	1,469	1,994	57%
4,000	600	1,605	2,205	55%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 656	$ 916	$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
25 Years of Service:				
$1,500	$ 469	$ 916	$1,385	92%
2,000	625	1,055	1,680	84%
2,500	781	1,192	1,973	79%
3,000	938	1,330	2,268	76%
3,500	1,094	1,469	2,563	73%
4,000	1,250	1,605	2,855	71%
15 Years of Service:				
$1,500	$281	$ 916	$1,197	80%
2,000	375	1,055	1,430	72%
2,500	469	1,192	1,661	66%
3,000	563	1,330	1,893	63%
3,500	656	1,469	2,125	61%
4,000	750	1,605	2,355	59%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 788	$ 916	$1,704	114%
2,000	1,050	1,055	2,105	105%
2,500	1,313	1,192	2,505	100%
3,000	1,575	1,330	2,905	97%
3,500	1,838	1,469	3,307	94%
4,000	2,100	1,605	3,705	93%
25 Years of Service:				
$1,500	$ 563	$ 916	$1,479	99%
2,000	750	1,055	1,805	90%
2,500	938	1,192	2,130	85%
3,000	1,125	1,330	2,455	82%
3,500	1,313	1,469	2,782	79%
4,000	1,500	1,605	3,105	78%
15 Years of Service:				
$1,500	$338	$ 916	$1,254	84%
2,000	450	1,055	1,505	75%
2,500	563	1,192	1,755	70%
3,000	675	1,330	2,005	67%
3,500	788	1,469	2,257	64%
4,000	900	1,605	2,505	63%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$ 919	$ 916	$1,835	122%
2,000	1,225	1,055	2,280	114%
2,500	1,531	1,192	2,723	109%
3,000	1,838	1,330	3,168	106%
3,500	2,144	1,469	3,613	103%
4,000	2,450	1,605	4,055	101%
25 Years of Service:				
$1,500	$ 656	$ 916	$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
15 Years of Service:				
$1,500	$ 394	$ 916	$1,310	87%
2,000	525	1,055	1,580	79%
2,500	656	1,192	1,848	74%
3,000	788	1,330	2,118	71%
3,500	919	1,469	2,388	68%
4,000	1,050	1,605	2,655	66%

[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 2021 - 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 $	Estimated Monthly Total % of FAS
35 Years of Service:				
$1,500	$1,050	$ 916	$1,966	131%
2,000	1,400	1,055	2,455	123%
2,500	1,750	1,192	2,942	118%
3,000	2,100	1,330	3,430	114%
3,500	2,450	1,469	3,919	112%
4,000	2,800	1,605	4,405	110%
25 Years of Service:				
$1,500	$ 750	$ 916	$1,666	111%
2,000	1,000	1,055	2,055	103%
2,500	1,250	1,192	2,442	98%
3,000	1,500	1,330	2,830	94%
3,500	1,750	1,469	3,219	92%
4,000	2,000	1,605	3,605	90%
15 Years of Service:				
$1,500	$ 450	$ 916	$1,366	91%
2,000	600	1,055	1,655	83%
2,500	750	1,192	1,942	78%
3,000	900	1,330	2,230	74%
3,500	1,050	1,469	2,519	72%
4,000	1,200	1,605	2,805	70%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 525	$ 916	$1,050	$1,441	70%	96%
2,000	1,400	700	1,055	1,400	1,755	70%	88%
2,500	1,750	875	1,192	1,750	2,067	70%	83%
3,000	2,100	1,050	1,330	2,100	2,380	70%	79%
3,500	2,450	1,225	1,469	2,450	2,694	70%	77%
4,000	2,800	1,400	1,605	2,800	3,005	70%	75%
25 Years of Service:							
$1,500	$ 750	$ 375	$ 916	$ 750	$1,291	50%	86%
2,000	1,000	500	1,055	1,000	1,555	50%	78%
2,500	1,250	625	1,192	1,250	1,817	50%	73%
3,000	1,500	750	1,330	1,500	2,080	50%	69%
3,500	1,750	875	1,469	1,750	2,344	50%	67%
4,000	2,000	1,000	1,605	2,000	2,605	50%	65%
15 Years of Service:							
$1,500	$ 450	$225	$ 916	$ 450	$1,141	30%	76%
2,000	600	300	1,055	600	1,355	30%	68%
2,500	750	375	1,192	750	1,567	30%	63%
3,000	900	450	1,330	900	1,780	30%	59%
3,500	1,050	525	1,469	1,050	1,994	30%	57%
4,000	1,200	600	1,605	1,200	2,205	30%	55%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 656	$ 916	$1,050	$1,572	70%	105%
2,000	1,400	875	1,055	1,400	1,930	70%	97%
2,500	1,750	1,094	1,192	1,750	2,286	70%	91%
3,000	2,100	1,313	1,330	2,100	2,643	70%	88%
3,500	2,450	1,531	1,469	2,450	3,000	70%	86%
4,000	2,800	1,750	1,605	2,800	3,355	70%	84%
25 Years of Service:							
$1,500	$ 750	$ 469	$ 916	$ 750	$1,385	50%	92%
2,000	1,000	625	1,055	1,000	1,680	50%	84%
2,500	1,250	781	1,192	1,250	1,973	50%	79%
3,000	1,500	938	1,330	1,500	2,268	50%	76%
3,500	1,750	1,094	1,469	1,750	2,563	50%	73%
4,000	2,000	1,250	1,605	2,000	2,855	50%	71%
15 Years of Service:							
$1,500	$ 450	$281	$ 916	$ 450	$1,197	30%	80%
2,000	600	375	1,055	600	1,430	30%	72%
2,500	750	469	1,192	750	1,661	30%	66%
3,000	900	563	1,330	900	1,893	30%	63%
3,500	1,050	656	1,469	1,050	2,125	30%	61%
4,000	1,200	750	1,605	1,200	2,355	30%	59%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 788	$ 916	$1,050	$1,704	70%	114%
2,000	1,400	1,050	1,055	1,400	2,105	70%	105%
2,500	1,750	1,313	1,192	1,750	2,505	70%	100%
3,000	2,100	1,575	1,330	2,100	2,905	70%	97%
3,500	2,450	1,838	1,469	2,450	3,307	70%	94%
4,000	2,800	2,100	1,605	2,800	3,705	70%	93%
25 Years of Service:							
$1,500	$ 750	$ 563	$ 916	$ 750	$1,479	50%	99%
2,000	1,000	750	1,055	1,000	1,805	50%	90%
2,500	1,250	938	1,192	1,250	2,130	50%	85%
3,000	1,500	1,125	1,330	1,500	2,455	50%	82%
3,500	1,750	1,313	1,469	1,750	2,782	50%	79%
4,000	2,000	1,500	1,605	2,000	3,105	50%	78%
15 Years of Service:							
$1,500	$ 450	$338	$ 916	$ 450	$1,254	30%	84%
2,000	600	450	1,055	600	1,505	30%	75%
2,500	750	563	1,192	750	1,755	30%	70%
3,000	900	675	1,330	900	2,005	30%	67%
3,500	1,050	788	1,469	1,050	2,257	30%	64%
4,000	1,200	900	1,605	1,200	2,505	30%	63%

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - 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] To 65	LAGERS BENEFIT [3] At 65	Estimated Social Security [2]	Estimated Monthly Total To 65	Estimated Monthly Total At 65	Percent of FAS To 65	Percent of FAS At 65
35 Years of Service:							
$1,500	$1,050	$ 919	$ 916	$1,050	$1,835	70%	122%
2,000	1,400	1,225	1,055	1,400	2,280	70%	114%
2,500	1,750	1,531	1,192	1,750	2,723	70%	109%
3,000	2,100	1,838	1,330	2,100	3,168	70%	106%
3,500	2,450	2,144	1,469	2,450	3,613	70%	103%
4,000	2,800	2,450	1,605	2,800	4,055	70%	101%
25 Years of Service:							
$1,500	$ 750	$ 656	$ 916	$ 750	$1,572	50%	105%
2,000	1,000	875	1,055	1,000	1,930	50%	97%
2,500	1,250	1,094	1,192	1,250	2,286	50%	91%
3,000	1,500	1,313	1,330	1,500	2,643	50%	88%
3,500	1,750	1,531	1,469	1,750	3,000	50%	86%
4,000	2,000	1,750	1,605	2,000	3,355	50%	84%
15 Years of Service:							
$1,500	$ 450	$ 394	$ 916	$ 450	$1,310	30%	87%
2,000	600	525	1,055	600	1,580	30%	79%
2,500	750	656	1,192	750	1,848	30%	74%
3,000	900	788	1,330	900	2,118	30%	71%
3,500	1,050	919	1,469	1,050	2,388	30%	68%
4,000	1,200	1,050	1,605	1,200	2,655	30%	66%

[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 2021 - 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

Warren County - General

June 30, 2021

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	3							3	$ 110,260
30-34									
35-39	3							3	$ 185,017
40-44	3		1					4	$ 162,156
45-49	1	4						5	$ 296,880
50-54	5	2			1		1	9	$ 351,011
55-59	3	3	3	1		1		11	$ 431,933
60-64	9	2	3		1			15	$ 536,753
65-69	4	3	1		2		1	11	$ 437,941
70 & Over			1					1	$ 26,145
Totals	**31**	**14**	**9**	**1**	**4**	**1**	**2**	**62**	**$ 2,538,096**

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

Age: 54.9 years.
Benefit Service: 0.0 years.
Annual Pay: $40,937

Warren County - Police

June 30, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date: 0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals: No.	Valuation Payroll
Under 20									
20-24	2							2	$ 74,880
25-29	3							3	$ 133,744
30-34	5	4						9	$ 412,984
35-39	2	3	2					7	$ 342,201
40-44	2			2				4	$ 213,096
45-49	1				1			2	$ 102,564
50-54			1	1				2	$ 109,907
55-59					1		1	2	$ 116,391
60-64									
65-69									
70 & Over									
Totals	**15**	**7**	**3**	**3**	**2**		**1**	**31**	**$ 1,505,767**

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

Age: 37.0 years.

Benefit Service: 0.0 years.

Annual Pay: $48,573

Warren County - Public Safety

June 30, 2021

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	1							1	$ 36,400
20-24	9							9	$ 349,440
25-29	5							5	$ 196,560
30-34	3	1						4	$ 152,984
35-39	1		1					2	$ 77,126
40-44	2							2	$ 72,800
45-49			1					1	$ 61,256
50-54									
55-59	1			1				2	$ 95,534
60-64	1							1	$ 36,400
65-69									
70 & Over									
Totals	**23**	**1**	**2**	**1**				**27**	**$ 1,078,500**

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

Age: 32.2 years.

Benefit Service: 0.0 years.

Annual Pay: $39,944

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 7 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.

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 20, 2021 E-mail

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

Dear Bob:

Enclosed is the report of the June 30, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

Warren County

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

August 20, 2021

Warren County
Warrenton, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the June 30, 2021 Initial Valuation for the Warren County dated August 20, 2021.

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, 2021. The unfunded actuarial accrued liability shown for each member contribution rate option is based on the 0% member contribution rate plan.

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 Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

Warren County - General

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	8.4%	$213,200	$ 336,053	10.3%	$261,424	$ 419,950	9.0%	$228,429	$ 351,818
2022	2,607,894	8.4	219,063	339,277	10.3	268,613	423,978	9.0	234,710	355,193
2023	2,679,611	8.4	225,087	342,168	10.3	276,000	427,591	9.0	241,165	358,220
2024	2,753,300	8.4	231,277	344,688	10.3	283,590	430,740	9.0	247,797	360,858
2025	2,829,016	8.4	237,637	346,795	10.3	291,389	433,373	9.0	254,611	363,064
2026	2,906,814	8.4	244,172	348,444	10.3	299,402	435,433	9.0	261,613	364,790
2027	2,986,751	8.4	250,887	349,586	10.3	307,635	436,860	9.0	268,808	365,985
2028	3,068,887	8.4	257,787	350,168	10.3	316,095	437,588	9.0	276,200	366,595
2029	3,153,281	8.4	264,876	350,134	10.3	324,788	437,546	9.0	283,795	366,560
2030	3,239,996	8.4	272,160	349,423	10.3	333,720	436,657	9.0	291,600	365,816

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	10.8%	$274,114	$ 431,774	12.2%	$309,648	$ 503,995	12.5%	$317,262	$ 511,890
2022	2,607,894	10.8	281,653	435,916	12.2	318,163	508,830	12.5	325,987	516,800
2023	2,679,611	10.8	289,398	439,631	12.2	326,913	513,166	12.5	334,951	521,204
2024	2,753,300	10.8	297,356	442,869	12.2	335,903	516,945	12.5	344,163	525,042
2025	2,829,016	10.8	305,534	445,576	12.2	345,140	520,105	12.5	353,627	528,251
2026	2,906,814	10.8	313,936	447,694	12.2	354,631	522,578	12.5	363,352	530,762
2027	2,986,751	10.8	322,569	449,161	12.2	364,384	524,291	12.5	373,344	532,501
2028	3,068,887	10.8	331,440	449,909	12.2	374,404	525,165	12.5	383,611	533,388
2029	3,153,281	10.8	340,554	449,866	12.2	384,700	525,114	12.5	394,160	533,337
2030	3,239,996	10.8	349,920	448,952	12.2	395,280	524,048	12.5	405,000	532,254

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	14.1%	$357,872	$ 588,046	14.2%	$360,410	$ 591,995	15.9%	$403,557	$ 672,093
2022	2,607,894	14.1	367,713	593,687	14.2	370,321	597,674	15.9	414,655	678,540
2023	2,679,611	14.1	377,825	598,746	14.2	380,505	602,767	15.9	426,058	684,322
2024	2,753,300	14.1	388,215	603,155	14.2	390,969	607,206	15.9	437,775	689,362
2025	2,829,016	14.1	398,891	606,842	14.2	401,720	610,917	15.9	449,814	693,576
2026	2,906,814	14.1	409,861	609,727	14.2	412,768	613,821	15.9	462,183	696,873
2027	2,986,751	14.1	421,132	611,725	14.2	424,119	615,833	15.9	474,893	699,157
2028	3,068,887	14.1	432,713	612,744	14.2	435,782	616,859	15.9	487,953	700,322
2029	3,153,281	14.1	444,613	612,685	14.2	447,766	616,800	15.9	501,372	700,255
2030	3,239,996	14.1	456,839	611,441	14.2	460,079	615,547	15.9	515,159	698,833

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(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	
2021	$ 2,538,096	6.5%	$164,976	$ 336,053	8.4%	$213,200	$ 419,950	7.1%	$180,205	$ 351,818
2022	2,607,894	6.5	169,513	339,277	8.4	219,063	423,978	7.1	185,160	355,193
2023	2,679,611	6.5	174,175	342,168	8.4	225,087	427,591	7.1	190,252	358,220
2024	2,753,300	6.5	178,965	344,688	8.4	231,277	430,740	7.1	195,484	360,858
2025	2,829,016	6.5	183,886	346,795	8.4	237,637	433,373	7.1	200,860	363,064
2026	2,906,814	6.5	188,943	348,444	8.4	244,172	435,433	7.1	206,384	364,790
2027	2,986,751	6.5	194,139	349,586	8.4	250,887	436,860	7.1	212,059	365,985
2028	3,068,887	6.5	199,478	350,168	8.4	257,787	437,588	7.1	217,891	366,595
2029	3,153,281	6.5	204,963	350,134	8.4	264,876	437,546	7.1	223,883	366,560
2030	3,239,996	6.5	210,600	349,423	8.4	272,160	436,657	7.1	230,040	365,816

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	
2021	$ 2,538,096	8.9%	$225,891	$ 431,774	10.3%	$261,424	$ 503,995	10.6%	$269,038	$ 511,890
2022	2,607,894	8.9	232,103	435,916	10.3	268,613	508,830	10.6	276,437	516,800
2023	2,679,611	8.9	238,485	439,631	10.3	276,000	513,166	10.6	284,039	521,204
2024	2,753,300	8.9	245,044	442,869	10.3	283,590	516,945	10.6	291,850	525,042
2025	2,829,016	8.9	251,782	445,576	10.3	291,389	520,105	10.6	299,876	528,251
2026	2,906,814	8.9	258,706	447,694	10.3	299,402	522,578	10.6	308,122	530,762
2027	2,986,751	8.9	265,821	449,161	10.3	307,635	524,291	10.6	316,596	532,501
2028	3,068,887	8.9	273,131	449,909	10.3	316,095	525,165	10.6	325,302	533,388
2029	3,153,281	8.9	280,642	449,866	10.3	324,788	525,114	10.6	334,248	533,337
2030	3,239,996	8.9	288,360	448,952	10.3	333,720	524,048	10.6	343,440	532,254

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	
2021	$ 2,538,096	12.2%	$309,648	$ 588,046	12.3%	$312,186	$ 591,995	14.0%	$355,333	$ 672,093
2022	2,607,894	12.2	318,163	593,687	12.3	320,771	597,674	14.0	365,105	678,540
2023	2,679,611	12.2	326,913	598,746	12.3	329,592	602,767	14.0	375,146	684,322
2024	2,753,300	12.2	335,903	603,155	12.3	338,656	607,206	14.0	385,462	689,362
2025	2,829,016	12.2	345,140	606,842	12.3	347,969	610,917	14.0	396,062	693,576
2026	2,906,814	12.2	354,631	609,727	12.3	357,538	613,821	14.0	406,954	696,873
2027	2,986,751	12.2	364,384	611,725	12.3	367,370	615,833	14.0	418,145	699,157
2028	3,068,887	12.2	374,404	612,744	12.3	377,473	616,859	14.0	429,644	700,322
2029	3,153,281	12.2	384,700	612,685	12.3	387,854	616,800	14.0	441,459	700,255
2030	3,239,996	12.2	395,280	611,441	12.3	398,520	615,547	14.0	453,599	698,833

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	4.6%	$116,752	$ 336,053	6.5%	$164,976	$ 419,950	5.2%	$131,981	$ 351,818
2022	2,607,894	4.6	119,963	339,277	6.5	169,513	423,978	5.2	135,610	355,193
2023	2,679,611	4.6	123,262	342,168	6.5	174,175	427,591	5.2	139,340	358,220
2024	2,753,300	4.6	126,652	344,688	6.5	178,965	430,740	5.2	143,172	360,858
2025	2,829,016	4.6	130,135	346,795	6.5	183,886	433,373	5.2	147,109	363,064
2026	2,906,814	4.6	133,713	348,444	6.5	188,943	435,433	5.2	151,154	364,790
2027	2,986,751	4.6	137,391	349,586	6.5	194,139	436,860	5.2	155,311	365,985
2028	3,068,887	4.6	141,169	350,168	6.5	199,478	437,588	5.2	159,582	366,595
2029	3,153,281	4.6	145,051	350,134	6.5	204,963	437,546	5.2	163,971	366,560
2030	3,239,996	4.6	149,040	349,423	6.5	210,600	436,657	5.2	168,480	365,816

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	7.0%	$177,667	$ 431,774	8.4%	$213,200	$ 503,995	8.7%	$220,814	$ 511,890
2022	2,607,894	7.0	182,553	435,916	8.4	219,063	508,830	8.7	226,887	516,800
2023	2,679,611	7.0	187,573	439,631	8.4	225,087	513,166	8.7	233,126	521,204
2024	2,753,300	7.0	192,731	442,869	8.4	231,277	516,945	8.7	239,537	525,042
2025	2,829,016	7.0	198,031	445,576	8.4	237,637	520,105	8.7	246,124	528,251
2026	2,906,814	7.0	203,477	447,694	8.4	244,172	522,578	8.7	252,893	530,762
2027	2,986,751	7.0	209,073	449,161	8.4	250,887	524,291	8.7	259,847	532,501
2028	3,068,887	7.0	214,822	449,909	8.4	257,787	525,165	8.7	266,993	533,388
2029	3,153,281	7.0	220,730	449,866	8.4	264,876	525,114	8.7	274,335	533,337
2030	3,239,996	7.0	226,800	448,952	8.4	272,160	524,048	8.7	281,880	532,254

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	10.3%	$261,424	$ 588,046	10.4%	$263,962	$ 591,995	12.1%	$307,110	$ 672,093
2022	2,607,894	10.3	268,613	593,687	10.4	271,221	597,674	12.1	315,555	678,540
2023	2,679,611	10.3	276,000	598,746	10.4	278,680	602,767	12.1	324,233	684,322
2024	2,753,300	10.3	283,590	603,155	10.4	286,343	607,206	12.1	333,149	689,362
2025	2,829,016	10.3	291,389	606,842	10.4	294,218	610,917	12.1	342,311	693,576
2026	2,906,814	10.3	299,402	609,727	10.4	302,309	613,821	12.1	351,724	696,873
2027	2,986,751	10.3	307,635	611,725	10.4	310,622	615,833	12.1	361,397	699,157
2028	3,068,887	10.3	316,095	612,744	10.4	319,164	616,859	12.1	371,335	700,322
2029	3,153,281	10.3	324,788	612,685	10.4	327,941	616,800	12.1	381,547	700,255
2030	3,239,996	10.3	333,720	611,441	10.4	336,960	615,547	12.1	392,040	698,833

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	2.7%	$68,529	$ 336,053	4.6%	$116,752	$ 419,950	3.3%	$83,757	$ 351,818
2022	2,607,894	2.7	70,413	339,277	4.6	119,963	423,978	3.3	86,061	355,193
2023	2,679,611	2.7	72,349	342,168	4.6	123,262	427,591	3.3	88,427	358,220
2024	2,753,300	2.7	74,339	344,688	4.6	126,652	430,740	3.3	90,859	360,858
2025	2,829,016	2.7	76,383	346,795	4.6	130,135	433,373	3.3	93,358	363,064
2026	2,906,814	2.7	78,484	348,444	4.6	133,713	435,433	3.3	95,925	364,790
2027	2,986,751	2.7	80,642	349,586	4.6	137,391	436,860	3.3	98,563	365,985
2028	3,068,887	2.7	82,860	350,168	4.6	141,169	437,588	3.3	101,273	366,595
2029	3,153,281	2.7	85,139	350,134	4.6	145,051	437,546	3.3	104,058	366,560
2030	3,239,996	2.7	87,480	349,423	4.6	149,040	436,657	3.3	106,920	365,816

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	5.1%	$129,443	$ 431,774	6.5%	$164,976	$ 503,995	6.8%	$172,591	$ 511,890
2022	2,607,894	5.1	133,003	435,916	6.5	169,513	508,830	6.8	177,337	516,800
2023	2,679,611	5.1	136,660	439,631	6.5	174,175	513,166	6.8	182,214	521,204
2024	2,753,300	5.1	140,418	442,869	6.5	178,965	516,945	6.8	187,224	525,042
2025	2,829,016	5.1	144,280	445,576	6.5	183,886	520,105	6.8	192,373	528,251
2026	2,906,814	5.1	148,248	447,694	6.5	188,943	522,578	6.8	197,663	530,762
2027	2,986,751	5.1	152,324	449,161	6.5	194,139	524,291	6.8	203,099	532,501
2028	3,068,887	5.1	156,513	449,909	6.5	199,478	525,165	6.8	208,684	533,388
2029	3,153,281	5.1	160,817	449,866	6.5	204,963	525,114	6.8	214,423	533,337
2030	3,239,996	5.1	165,240	448,952	6.5	210,600	524,048	6.8	220,320	532,254

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	8.4%	$213,200	$ 588,046	8.5%	$215,738	$ 591,995	10.2%	$258,886	$ 672,093
2022	2,607,894	8.4	219,063	593,687	8.5	221,671	597,674	10.2	266,005	678,540
2023	2,679,611	8.4	225,087	598,746	8.5	227,767	602,767	10.2	273,320	684,322
2024	2,753,300	8.4	231,277	603,155	8.5	234,031	607,206	10.2	280,837	689,362
2025	2,829,016	8.4	237,637	606,842	8.5	240,466	610,917	10.2	288,560	693,576
2026	2,906,814	8.4	244,172	609,727	8.5	247,079	613,821	10.2	296,495	696,873
2027	2,986,751	8.4	250,887	611,725	8.5	253,874	615,833	10.2	304,649	699,157
2028	3,068,887	8.4	257,787	612,744	8.5	260,855	616,859	10.2	313,026	700,322
2029	3,153,281	8.4	264,876	612,685	8.5	268,029	616,800	10.2	321,635	700,255
2030	3,239,996	8.4	272,160	611,441	8.5	275,400	615,547	10.2	330,480	698,833

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	8.6%	$218,276	$ 346,149	10.6%	$269,038	$ 432,704	9.3%	$236,043	$ 362,465
2022	2,607,894	8.6	224,279	349,469	10.6	276,437	436,855	9.3	242,534	365,942
2023	2,679,611	8.6	230,447	352,447	10.6	284,039	440,578	9.3	249,204	369,060
2024	2,753,300	8.6	236,784	355,043	10.6	291,850	443,823	9.3	256,057	371,778
2025	2,829,016	8.6	243,295	357,213	10.6	299,876	446,536	9.3	263,098	374,050
2026	2,906,814	8.6	249,986	358,911	10.6	308,122	448,659	9.3	270,334	375,828
2027	2,986,751	8.6	256,861	360,087	10.6	316,596	450,129	9.3	277,768	377,060
2028	3,068,887	8.6	263,924	360,687	10.6	325,302	450,879	9.3	285,406	377,688
2029	3,153,281	8.6	271,182	360,652	10.6	334,248	450,836	9.3	293,255	377,652
2030	3,239,996	8.6	278,640	359,920	10.6	343,440	449,920	9.3	301,320	376,885

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	11.1%	$281,729	$ 444,915	12.5%	$317,262	$ 519,256	12.8%	$324,876	$ 527,379
2022	2,607,894	11.1	289,476	449,183	12.5	325,987	524,237	12.8	333,810	532,438
2023	2,679,611	11.1	297,437	453,011	12.5	334,951	528,704	12.8	342,990	536,975
2024	2,753,300	11.1	305,616	456,347	12.5	344,163	532,598	12.8	352,422	540,929
2025	2,829,016	11.1	314,021	459,136	12.5	353,627	535,853	12.8	362,114	544,235
2026	2,906,814	11.1	322,656	461,319	12.5	363,352	538,401	12.8	372,072	546,822
2027	2,986,751	11.1	331,529	462,831	12.5	373,344	540,165	12.8	382,304	548,614
2028	3,068,887	11.1	340,646	463,602	12.5	383,611	541,065	12.8	392,818	549,528
2029	3,153,281	11.1	350,014	463,557	12.5	394,160	541,013	12.8	403,620	549,475
2030	3,239,996	11.1	359,640	462,616	12.5	405,000	539,914	12.8	414,719	548,359

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	14.5%	$368,024	$ 605,819	14.6%	$370,562	$ 609,889	16.4%	$416,248	$ 692,343
2022	2,607,894	14.5	378,145	611,630	14.6	380,753	615,739	16.4	427,695	698,984
2023	2,679,611	14.5	388,544	616,842	14.6	391,223	620,986	16.4	439,456	704,940
2024	2,753,300	14.5	399,229	621,385	14.6	401,982	625,559	16.4	451,541	710,131
2025	2,829,016	14.5	410,207	625,183	14.6	413,036	629,383	16.4	463,959	714,471
2026	2,906,814	14.5	421,488	628,155	14.6	424,395	632,375	16.4	476,717	717,868
2027	2,986,751	14.5	433,079	630,214	14.6	436,066	634,447	16.4	489,827	720,221
2028	3,068,887	14.5	444,989	631,264	14.6	448,058	635,504	16.4	503,297	721,421
2029	3,153,281	14.5	457,226	631,203	14.6	460,379	635,443	16.4	517,138	721,352
2030	3,239,996	14.5	469,799	629,921	14.6	473,039	634,153	16.4	531,359	719,887

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	6.7%	$170,052	$ 346,149	8.7%	$220,814	$ 432,704	7.4%	$187,819	$ 362,465
2022	2,607,894	6.7	174,729	349,469	8.7	226,887	436,855	7.4	192,984	365,942
2023	2,679,611	6.7	179,534	352,447	8.7	233,126	440,578	7.4	198,291	369,060
2024	2,753,300	6.7	184,471	355,043	8.7	239,537	443,823	7.4	203,744	371,778
2025	2,829,016	6.7	189,544	357,213	8.7	246,124	446,536	7.4	209,347	374,050
2026	2,906,814	6.7	194,757	358,911	8.7	252,893	448,659	7.4	215,104	375,828
2027	2,986,751	6.7	200,112	360,087	8.7	259,847	450,129	7.4	221,020	377,060
2028	3,068,887	6.7	205,615	360,687	8.7	266,993	450,879	7.4	227,098	377,688
2029	3,153,281	6.7	211,270	360,652	8.7	274,335	450,836	7.4	233,343	377,652
2030	3,239,996	6.7	217,080	359,920	8.7	281,880	449,920	7.4	239,760	376,885

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	9.2%	$233,505	$ 444,915	10.6%	$269,038	$ 519,256	10.9%	$276,652	$ 527,379
2022	2,607,894	9.2	239,926	449,183	10.6	276,437	524,237	10.9	284,260	532,438
2023	2,679,611	9.2	246,524	453,011	10.6	284,039	528,704	10.9	292,078	536,975
2024	2,753,300	9.2	253,304	456,347	10.6	291,850	532,598	10.9	300,110	540,929
2025	2,829,016	9.2	260,269	459,136	10.6	299,876	535,853	10.9	308,363	544,235
2026	2,906,814	9.2	267,427	461,319	10.6	308,122	538,401	10.9	316,843	546,822
2027	2,986,751	9.2	274,781	462,831	10.6	316,596	540,165	10.9	325,556	548,614
2028	3,068,887	9.2	282,338	463,602	10.6	325,302	541,065	10.9	334,509	549,528
2029	3,153,281	9.2	290,102	463,557	10.6	334,248	541,013	10.9	343,708	549,475
2030	3,239,996	9.2	298,080	462,616	10.6	343,440	539,914	10.9	353,160	548,359

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	12.6%	$319,800	$ 605,819	12.7%	$322,338	$ 609,889	14.5%	$368,024	$ 692,343
2022	2,607,894	12.6	328,595	611,630	12.7	331,203	615,739	14.5	378,145	698,984
2023	2,679,611	12.6	337,631	616,842	12.7	340,311	620,986	14.5	388,544	704,940
2024	2,753,300	12.6	346,916	621,385	12.7	349,669	625,559	14.5	399,229	710,131
2025	2,829,016	12.6	356,456	625,183	12.7	359,285	629,383	14.5	410,207	714,471
2026	2,906,814	12.6	366,259	628,155	12.7	369,165	632,375	14.5	421,488	717,868
2027	2,986,751	12.6	376,331	630,214	12.7	379,317	634,447	14.5	433,079	720,221
2028	3,068,887	12.6	386,680	631,264	12.7	389,749	635,504	14.5	444,989	721,421
2029	3,153,281	12.6	397,313	631,203	12.7	400,467	635,443	14.5	457,226	721,352
2030	3,239,996	12.6	408,239	629,921	12.7	411,479	634,153	14.5	469,799	719,887

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 2.75%.
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^{th} 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.

Warren County - General

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	4.8%	$121,829	$ 346,149	6.8%	$172,591	$ 432,704	5.5%	$139,595	$ 362,465
2022	2,607,894	4.8	125,179	349,469	6.8	177,337	436,855	5.5	143,434	365,942
2023	2,679,611	4.8	128,621	352,447	6.8	182,214	440,578	5.5	147,379	369,060
2024	2,753,300	4.8	132,158	355,043	6.8	187,224	443,823	5.5	151,432	371,778
2025	2,829,016	4.8	135,793	357,213	6.8	192,373	446,536	5.5	155,596	374,050
2026	2,906,814	4.8	139,527	358,911	6.8	197,663	448,659	5.5	159,875	375,828
2027	2,986,751	4.8	143,364	360,087	6.8	203,099	450,129	5.5	164,271	377,060
2028	3,068,887	4.8	147,307	360,687	6.8	208,684	450,879	5.5	168,789	377,688
2029	3,153,281	4.8	151,357	360,652	6.8	214,423	450,836	5.5	173,430	377,652
2030	3,239,996	4.8	155,520	359,920	6.8	220,320	449,920	5.5	178,200	376,885

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	7.3%	$185,281	$ 444,915	8.7%	$220,814	$ 519,256	9.0%	$228,429	$ 527,379
2022	2,607,894	7.3	190,376	449,183	8.7	226,887	524,237	9.0	234,710	532,438
2023	2,679,611	7.3	195,612	453,011	8.7	233,126	528,704	9.0	241,165	536,975
2024	2,753,300	7.3	200,991	456,347	8.7	239,537	532,598	9.0	247,797	540,929
2025	2,829,016	7.3	206,518	459,136	8.7	246,124	535,853	9.0	254,611	544,235
2026	2,906,814	7.3	212,197	461,319	8.7	252,893	538,401	9.0	261,613	546,822
2027	2,986,751	7.3	218,033	462,831	8.7	259,847	540,165	9.0	268,808	548,614
2028	3,068,887	7.3	224,029	463,602	8.7	266,993	541,065	9.0	276,200	549,528
2029	3,153,281	7.3	230,190	463,557	8.7	274,335	541,013	9.0	283,795	549,475
2030	3,239,996	7.3	236,520	462,616	8.7	281,880	539,914	9.0	291,600	548,359

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 2,538,096	10.7%	$271,576	$ 605,819	10.8%	$274,114	$ 609,889	12.6%	$319,800	$ 692,343
2022	2,607,894	10.7	279,045	611,630	10.8	281,653	615,739	12.6	328,595	698,984
2023	2,679,611	10.7	286,718	616,842	10.8	289,398	620,986	12.6	337,631	704,940
2024	2,753,300	10.7	294,603	621,385	10.8	297,356	625,559	12.6	346,916	710,131
2025	2,829,016	10.7	302,705	625,183	10.8	305,534	629,383	12.6	356,456	714,471
2026	2,906,814	10.7	311,029	628,155	10.8	313,936	632,375	12.6	366,259	717,868
2027	2,986,751	10.7	319,582	630,214	10.8	322,569	634,447	12.6	376,331	720,221
2028	3,068,887	10.7	328,371	631,264	10.8	331,440	635,504	12.6	386,680	721,421
2029	3,153,281	10.7	337,401	631,203	10.8	340,554	635,443	12.6	397,313	721,352
2030	3,239,996	10.7	346,680	629,921	10.8	349,920	634,153	12.6	408,239	719,887

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 2.75%.
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^{th} 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.

Warren County - General

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	2.9%	$73,605	$ 346,149	4.9%	$124,367	$ 432,704	3.6%	$91,371	$ 362,465
2022	2,607,894	2.9	75,629	349,469	4.9	127,787	436,855	3.6	93,884	365,942
2023	2,679,611	2.9	77,709	352,447	4.9	131,301	440,578	3.6	96,466	369,060
2024	2,753,300	2.9	79,846	355,043	4.9	134,912	443,823	3.6	99,119	371,778
2025	2,829,016	2.9	82,041	357,213	4.9	138,622	446,536	3.6	101,845	374,050
2026	2,906,814	2.9	84,298	358,911	4.9	142,434	448,659	3.6	104,645	375,828
2027	2,986,751	2.9	86,616	360,087	4.9	146,351	450,129	3.6	107,523	377,060
2028	3,068,887	2.9	88,998	360,687	4.9	150,375	450,879	3.6	110,480	377,688
2029	3,153,281	2.9	91,445	360,652	4.9	154,511	450,836	3.6	113,518	377,652
2030	3,239,996	2.9	93,960	359,920	4.9	158,760	449,920	3.6	116,640	376,885

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	5.4%	$137,057	$ 444,915	6.8%	$172,591	$ 519,256	7.1%	$180,205	$ 527,379
2022	2,607,894	5.4	140,826	449,183	6.8	177,337	524,237	7.1	185,160	532,438
2023	2,679,611	5.4	144,699	453,011	6.8	182,214	528,704	7.1	190,252	536,975
2024	2,753,300	5.4	148,678	456,347	6.8	187,224	532,598	7.1	195,484	540,929
2025	2,829,016	5.4	152,767	459,136	6.8	192,373	535,853	7.1	200,860	544,235
2026	2,906,814	5.4	156,968	461,319	6.8	197,663	538,401	7.1	206,384	546,822
2027	2,986,751	5.4	161,285	462,831	6.8	203,099	540,165	7.1	212,059	548,614
2028	3,068,887	5.4	165,720	463,602	6.8	208,684	541,065	7.1	217,891	549,528
2029	3,153,281	5.4	170,277	463,557	6.8	214,423	541,013	7.1	223,883	549,475
2030	3,239,996	5.4	174,960	462,616	6.8	220,320	539,914	7.1	230,040	548,359

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	8.8%	$223,352	$ 605,819	8.9%	$225,891	$ 609,889	10.7%	$271,576	$ 692,343
2022	2,607,894	8.8	229,495	611,630	8.9	232,103	615,739	10.7	279,045	698,984
2023	2,679,611	8.8	235,806	616,842	8.9	238,485	620,986	10.7	286,718	704,940
2024	2,753,300	8.8	242,290	621,385	8.9	245,044	625,559	10.7	294,603	710,131
2025	2,829,016	8.8	248,953	625,183	8.9	251,782	629,383	10.7	302,705	714,471
2026	2,906,814	8.8	255,800	628,155	8.9	258,706	632,375	10.7	311,029	717,868
2027	2,986,751	8.8	262,834	630,214	8.9	265,821	634,447	10.7	319,582	720,221
2028	3,068,887	8.8	270,062	631,264	8.9	273,131	635,504	10.7	328,371	721,421
2029	3,153,281	8.8	277,489	631,203	8.9	280,642	635,443	10.7	337,401	721,352
2030	3,239,996	8.8	285,120	629,921	8.9	288,360	634,153	10.7	346,680	719,887

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	8.4%	$213,200	$ 320,804	10.4%	$263,962	$ 400,933	9.4%	$238,581	$ 341,981
2022	2,607,894	8.4	219,063	323,881	10.4	271,221	404,779	9.4	245,142	345,262
2023	2,679,611	8.4	225,087	326,641	10.4	278,680	408,228	9.4	251,883	348,204
2024	2,753,300	8.4	231,277	329,046	10.4	286,343	411,234	9.4	258,810	350,768
2025	2,829,016	8.4	237,637	331,057	10.4	294,218	413,748	9.4	265,928	352,912
2026	2,906,814	8.4	244,172	332,631	10.4	302,309	415,715	9.4	273,241	354,590
2027	2,986,751	8.4	250,887	333,721	10.4	310,622	417,077	9.4	280,755	355,752
2028	3,068,887	8.4	257,787	334,277	10.4	319,164	417,772	9.4	288,475	356,345
2029	3,153,281	8.4	264,876	334,245	10.4	327,941	417,732	9.4	296,408	356,311
2030	3,239,996	8.4	272,160	333,566	10.4	336,960	416,884	9.4	304,560	355,587

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	11.1%	$281,729	$ 416,824	12.3%	$312,186	$ 481,109	12.7%	$322,338	$ 491,727
2022	2,607,894	11.1	289,476	420,822	12.3	320,771	485,724	12.7	331,203	496,444
2023	2,679,611	11.1	297,437	424,408	12.3	329,592	489,863	12.7	340,311	500,674
2024	2,753,300	11.1	305,616	427,533	12.3	338,656	493,470	12.7	349,669	504,361
2025	2,829,016	11.1	314,021	430,146	12.3	347,969	496,486	12.7	359,285	507,444
2026	2,906,814	11.1	322,656	432,191	12.3	357,538	498,846	12.7	369,165	509,856
2027	2,986,751	11.1	331,529	433,607	12.3	367,370	500,481	12.7	379,317	511,527
2028	3,068,887	11.1	340,646	434,329	12.3	377,473	501,315	12.7	389,749	512,379
2029	3,153,281	11.1	350,014	434,287	12.3	387,854	501,267	12.7	400,467	512,330
2030	3,239,996	11.1	359,640	433,405	12.3	398,520	500,249	12.7	411,479	511,290

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	14.2%	$360,410	$ 561,325	14.4%	$365,486	$ 566,656	16.2%	$411,172	$ 641,479
2022	2,607,894	14.2	370,321	566,710	14.4	375,537	572,092	16.2	422,479	647,632
2023	2,679,611	14.2	380,505	571,539	14.4	385,864	576,967	16.2	434,097	653,151
2024	2,753,300	14.2	390,969	575,748	14.4	396,475	581,216	16.2	446,035	657,961
2025	2,829,016	14.2	401,720	579,267	14.4	407,378	584,769	16.2	458,301	661,983
2026	2,906,814	14.2	412,768	582,021	14.4	418,581	587,549	16.2	470,904	665,130
2027	2,986,751	14.2	424,119	583,928	14.4	430,092	589,474	16.2	483,854	667,310
2028	3,068,887	14.2	435,782	584,901	14.4	441,920	590,456	16.2	497,160	668,422
2029	3,153,281	14.2	447,766	584,845	14.4	454,072	590,399	16.2	510,832	668,358
2030	3,239,996	14.2	460,079	583,657	14.4	466,559	589,200	16.2	524,879	667,001

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program Estimated Employer Contribution As a % of Payroll	L-1 Annual Dollars	L-1 Unfunded Actuarial Accrued Liability	L-3 Benefit Program Estimated Employer Contribution As a % of Payroll	L-3 Annual Dollars	L-3 Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-4(65) Annual Dollars	LT-4(65) Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	6.5%	$164,976	$ 320,804	8.5%	$215,738	$ 400,933	7.5%	$190,357	$ 341,981
2022	2,607,894	6.5	169,513	323,881	8.5	221,671	404,779	7.5	195,592	345,262
2023	2,679,611	6.5	174,175	326,641	8.5	227,767	408,228	7.5	200,971	348,204
2024	2,753,300	6.5	178,965	329,046	8.5	234,031	411,234	7.5	206,498	350,768
2025	2,829,016	6.5	183,886	331,057	8.5	240,466	413,748	7.5	212,176	352,912
2026	2,906,814	6.5	188,943	332,631	8.5	247,079	415,715	7.5	218,011	354,590
2027	2,986,751	6.5	194,139	333,721	8.5	253,874	417,077	7.5	224,006	355,752
2028	3,068,887	6.5	199,478	334,277	8.5	260,855	417,772	7.5	230,167	356,345
2029	3,153,281	6.5	204,963	334,245	8.5	268,029	417,732	7.5	236,496	356,311
2030	3,239,996	6.5	210,600	333,566	8.5	275,400	416,884	7.5	243,000	355,587

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-5(65) Annual Dollars	LT-5(65) Unfunded Actuarial Accrued Liability	L-7 Benefit Program Estimated Employer Contribution As a % of Payroll	L-7 Annual Dollars	L-7 Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-8(65) Annual Dollars	LT-8(65) Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	9.2%	$233,505	$ 416,824	10.4%	$263,962	$ 481,109	10.8%	$274,114	$ 491,727
2022	2,607,894	9.2	239,926	420,822	10.4	271,221	485,724	10.8	281,653	496,444
2023	2,679,611	9.2	246,524	424,408	10.4	278,680	489,863	10.8	289,398	500,674
2024	2,753,300	9.2	253,304	427,533	10.4	286,343	493,470	10.8	297,356	504,361
2025	2,829,016	9.2	260,269	430,146	10.4	294,218	496,486	10.8	305,534	507,444
2026	2,906,814	9.2	267,427	432,191	10.4	302,309	498,846	10.8	313,936	509,856
2027	2,986,751	9.2	274,781	433,607	10.4	310,622	500,481	10.8	322,569	511,527
2028	3,068,887	9.2	282,338	434,329	10.4	319,164	501,315	10.8	331,440	512,379
2029	3,153,281	9.2	290,102	434,287	10.4	327,941	501,267	10.8	340,554	512,330
2030	3,239,996	9.2	298,080	433,405	10.4	336,960	500,249	10.8	349,920	511,290

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program Estimated Employer Contribution As a % of Payroll	L-12 Annual Dollars	L-12 Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-14(65) Annual Dollars	LT-14(65) Unfunded Actuarial Accrued Liability	L-6 Benefit Program Estimated Employer Contribution As a % of Payroll	L-6 Annual Dollars	L-6 Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	12.3%	$312,186	$ 561,325	12.5%	$317,262	$ 566,656	14.3%	$362,948	$ 641,479
2022	2,607,894	12.3	320,771	566,710	12.5	325,987	572,092	14.3	372,929	647,632
2023	2,679,611	12.3	329,592	571,539	12.5	334,951	576,967	14.3	383,184	653,151
2024	2,753,300	12.3	338,656	575,748	12.5	344,163	581,216	14.3	393,722	657,961
2025	2,829,016	12.3	347,969	579,267	12.5	353,627	584,769	14.3	404,549	661,983
2026	2,906,814	12.3	357,538	582,021	12.5	363,352	587,549	14.3	415,674	665,130
2027	2,986,751	12.3	367,370	583,928	12.5	373,344	589,474	14.3	427,105	667,310
2028	3,068,887	12.3	377,473	584,901	12.5	383,611	590,456	14.3	438,851	668,422
2029	3,153,281	12.3	387,854	584,845	12.5	394,160	590,399	14.3	450,919	668,358
2030	3,239,996	12.3	398,520	583,657	12.5	405,000	589,200	14.3	463,319	667,001

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	4.6%	$116,752	$ 320,804	6.6%	$167,514	$ 400,933	5.6%	$142,133	$ 341,981
2022	2,607,894	4.6	119,963	323,881	6.6	172,121	404,779	5.6	146,042	345,262
2023	2,679,611	4.6	123,262	326,641	6.6	176,854	408,228	5.6	150,058	348,204
2024	2,753,300	4.6	126,652	329,046	6.6	181,718	411,234	5.6	154,185	350,768
2025	2,829,016	4.6	130,135	331,057	6.6	186,715	413,748	5.6	158,425	352,912
2026	2,906,814	4.6	133,713	332,631	6.6	191,850	415,715	5.6	162,782	354,590
2027	2,986,751	4.6	137,391	333,721	6.6	197,126	417,077	5.6	167,258	355,752
2028	3,068,887	4.6	141,169	334,277	6.6	202,547	417,772	5.6	171,858	356,345
2029	3,153,281	4.6	145,051	334,245	6.6	208,117	417,732	5.6	176,584	356,311
2030	3,239,996	4.6	149,040	333,566	6.6	213,840	416,884	5.6	181,440	355,587

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	7.3%	$185,281	$ 416,824	8.5%	$215,738	$ 481,109	8.9%	$225,891	$ 491,727
2022	2,607,894	7.3	190,376	420,822	8.5	221,671	485,724	8.9	232,103	496,444
2023	2,679,611	7.3	195,612	424,408	8.5	227,767	489,863	8.9	238,485	500,674
2024	2,753,300	7.3	200,991	427,533	8.5	234,031	493,470	8.9	245,044	504,361
2025	2,829,016	7.3	206,518	430,146	8.5	240,466	496,486	8.9	251,782	507,444
2026	2,906,814	7.3	212,197	432,191	8.5	247,079	498,846	8.9	258,706	509,856
2027	2,986,751	7.3	218,033	433,607	8.5	253,874	500,481	8.9	265,821	511,527
2028	3,068,887	7.3	224,029	434,329	8.5	260,855	501,315	8.9	273,131	512,379
2029	3,153,281	7.3	230,190	434,287	8.5	268,029	501,267	8.9	280,642	512,330
2030	3,239,996	7.3	236,520	433,405	8.5	275,400	500,249	8.9	288,360	511,290

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	10.4%	$263,962	$ 561,325	10.6%	$269,038	$ 566,656	12.4%	$314,724	$ 641,479
2022	2,607,894	10.4	271,221	566,710	10.6	276,437	572,092	12.4	323,379	647,632
2023	2,679,611	10.4	278,680	571,539	10.6	284,039	576,967	12.4	332,272	653,151
2024	2,753,300	10.4	286,343	575,748	10.6	291,850	581,216	12.4	341,409	657,961
2025	2,829,016	10.4	294,218	579,267	10.6	299,876	584,769	12.4	350,798	661,983
2026	2,906,814	10.4	302,309	582,021	10.6	308,122	587,549	12.4	360,445	665,130
2027	2,986,751	10.4	310,622	583,928	10.6	316,596	589,474	12.4	370,357	667,310
2028	3,068,887	10.4	319,164	584,901	10.6	325,302	590,456	12.4	380,542	668,422
2029	3,153,281	10.4	327,941	584,845	10.6	334,248	590,399	12.4	391,007	668,358
2030	3,239,996	10.4	336,960	583,657	10.6	343,440	589,200	12.4	401,760	667,001

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	2.7%	$68,529	$ 320,804	4.7%	$119,291	$ 400,933	3.7%	$93,910	$ 341,981
2022	2,607,894	2.7	70,413	323,881	4.7	122,571	404,779	3.7	96,492	345,262
2023	2,679,611	2.7	72,349	326,641	4.7	125,942	408,228	3.7	99,146	348,204
2024	2,753,300	2.7	74,339	329,046	4.7	129,405	411,234	3.7	101,872	350,768
2025	2,829,016	2.7	76,383	331,057	4.7	132,964	413,748	3.7	104,674	352,912
2026	2,906,814	2.7	78,484	332,631	4.7	136,620	415,715	3.7	107,552	354,590
2027	2,986,751	2.7	80,642	333,721	4.7	140,377	417,077	3.7	110,510	355,752
2028	3,068,887	2.7	82,860	334,277	4.7	144,238	417,772	3.7	113,549	356,345
2029	3,153,281	2.7	85,139	334,245	4.7	148,204	417,732	3.7	116,671	356,311
2030	3,239,996	2.7	87,480	333,566	4.7	152,280	416,884	3.7	119,880	355,587

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	5.4%	$137,057	$ 416,824	6.6%	$167,514	$ 481,109	7.0%	$177,667	$ 491,727
2022	2,607,894	5.4	140,826	420,822	6.6	172,121	485,724	7.0	182,553	496,444
2023	2,679,611	5.4	144,699	424,408	6.6	176,854	489,863	7.0	187,573	500,674
2024	2,753,300	5.4	148,678	427,533	6.6	181,718	493,470	7.0	192,731	504,361
2025	2,829,016	5.4	152,767	430,146	6.6	186,715	496,486	7.0	198,031	507,444
2026	2,906,814	5.4	156,968	432,191	6.6	191,850	498,846	7.0	203,477	509,856
2027	2,986,751	5.4	161,285	433,607	6.6	197,126	500,481	7.0	209,073	511,527
2028	3,068,887	5.4	165,720	434,329	6.6	202,547	501,315	7.0	214,822	512,379
2029	3,153,281	5.4	170,277	434,287	6.6	208,117	501,267	7.0	220,730	512,330
2030	3,239,996	5.4	174,960	433,405	6.6	213,840	500,249	7.0	226,800	511,290

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 2,538,096	8.5%	$215,738	$ 561,325	8.7%	$220,814	$ 566,656	10.5%	$266,500	$ 641,479
2022	2,607,894	8.5	221,671	566,710	8.7	226,887	572,092	10.5	273,829	647,632
2023	2,679,611	8.5	227,767	571,539	8.7	233,126	576,967	10.5	281,359	653,151
2024	2,753,300	8.5	234,031	575,748	8.7	239,537	581,216	10.5	289,097	657,961
2025	2,829,016	8.5	240,466	579,267	8.7	246,124	584,769	10.5	297,047	661,983
2026	2,906,814	8.5	247,079	582,021	8.7	252,893	587,549	10.5	305,215	665,130
2027	2,986,751	8.5	253,874	583,928	8.7	259,847	589,474	10.5	313,609	667,310
2028	3,068,887	8.5	260,855	584,901	8.7	266,993	590,456	10.5	322,233	668,422
2029	3,153,281	8.5	268,029	584,845	8.7	274,335	590,399	10.5	331,095	668,358
2030	3,239,996	8.5	275,400	583,657	8.7	281,880	589,200	10.5	340,200	667,001

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 2.75%.
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^{th} 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.

Warren County - General

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	8.8%	$223,352	$ 330,563	10.8%	$274,114	$ 413,155	9.6%	$243,657	$ 352,457
2022	2,607,894	8.8	229,495	333,734	10.8	281,653	417,118	9.6	250,358	355,838
2023	2,679,611	8.8	235,806	336,578	10.8	289,398	420,672	9.6	257,243	358,870
2024	2,753,300	8.8	242,290	339,057	10.8	297,356	423,770	9.6	264,317	361,513
2025	2,829,016	8.8	248,953	341,129	10.8	305,534	426,360	9.6	271,586	363,723
2026	2,906,814	8.8	255,800	342,751	10.8	313,936	428,387	9.6	279,054	365,452
2027	2,986,751	8.8	262,834	343,874	10.8	322,569	429,791	9.6	286,728	366,650
2028	3,068,887	8.8	270,062	344,447	10.8	331,440	430,507	9.6	294,613	367,261
2029	3,153,281	8.8	277,489	344,414	10.8	340,554	430,466	9.6	302,715	367,226
2030	3,239,996	8.8	285,120	343,715	10.8	349,920	429,592	9.6	311,040	366,480

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	11.4%	$289,343	$ 429,580	12.6%	$319,800	$ 495,832	13.1%	$332,491	$ 506,773
2022	2,607,894	11.4	297,300	433,701	12.6	328,595	500,588	13.1	341,634	511,634
2023	2,679,611	11.4	305,476	437,397	12.6	337,631	504,854	13.1	351,029	515,994
2024	2,753,300	11.4	313,876	440,618	12.6	346,916	508,572	13.1	360,682	519,794
2025	2,829,016	11.4	322,508	443,311	12.6	356,456	511,681	13.1	370,601	522,971
2026	2,906,814	11.4	331,377	445,419	12.6	366,259	514,114	13.1	380,793	525,457
2027	2,986,751	11.4	340,490	446,879	12.6	376,331	515,799	13.1	391,264	527,179
2028	3,068,887	11.4	349,853	447,624	12.6	386,680	516,658	13.1	402,024	528,057
2029	3,153,281	11.4	359,474	447,581	12.6	397,313	516,608	13.1	413,080	528,006
2030	3,239,996	11.4	369,360	446,672	12.6	408,239	515,559	13.1	424,439	526,934

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	14.6%	$370,562	$ 578,450	14.8%	$375,638	$ 583,908	16.6%	$421,324	$ 661,103
2022	2,607,894	14.6	380,753	583,999	14.8	385,968	589,509	16.6	432,910	667,445
2023	2,679,611	14.6	391,223	588,975	14.8	396,582	594,532	16.6	444,815	673,132
2024	2,753,300	14.6	401,982	593,312	14.8	407,488	598,910	16.6	457,048	678,089
2025	2,829,016	14.6	413,036	596,938	14.8	418,694	602,571	16.6	469,617	682,234
2026	2,906,814	14.6	424,395	599,776	14.8	430,208	605,436	16.6	482,531	685,477
2027	2,986,751	14.6	436,066	601,742	14.8	442,039	607,420	16.6	495,801	687,723
2028	3,068,887	14.6	448,058	602,745	14.8	454,195	608,432	16.6	509,435	688,869
2029	3,153,281	14.6	460,379	602,687	14.8	466,686	608,373	16.6	523,445	688,803
2030	3,239,996	14.6	473,039	601,463	14.8	479,519	607,137	16.6	537,839	687,404

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	6.9%	$175,129	$ 330,563	8.9%	$225,891	$ 413,155	7.7%	$195,433	$ 352,457
2022	2,607,894	6.9	179,945	333,734	8.9	232,103	417,118	7.7	200,808	355,838
2023	2,679,611	6.9	184,893	336,578	8.9	238,485	420,672	7.7	206,330	358,870
2024	2,753,300	6.9	189,978	339,057	8.9	245,044	423,770	7.7	212,004	361,513
2025	2,829,016	6.9	195,202	341,129	8.9	251,782	426,360	7.7	217,834	363,723
2026	2,906,814	6.9	200,570	342,751	8.9	258,706	428,387	7.7	223,825	365,452
2027	2,986,751	6.9	206,086	343,874	8.9	265,821	429,791	7.7	229,980	366,650
2028	3,068,887	6.9	211,753	344,447	8.9	273,131	430,507	7.7	236,304	367,261
2029	3,153,281	6.9	217,576	344,414	8.9	280,642	430,466	7.7	242,803	367,226
2030	3,239,996	6.9	223,560	343,715	8.9	288,360	429,592	7.7	249,480	366,480

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	9.5%	$241,119	$ 429,580	10.7%	$271,576	$ 495,832	11.2%	$284,267	$ 506,773
2022	2,607,894	9.5	247,750	433,701	10.7	279,045	500,588	11.2	292,084	511,634
2023	2,679,611	9.5	254,563	437,397	10.7	286,718	504,854	11.2	300,116	515,994
2024	2,753,300	9.5	261,564	440,618	10.7	294,603	508,572	11.2	308,370	519,794
2025	2,829,016	9.5	268,757	443,311	10.7	302,705	511,681	11.2	316,850	522,971
2026	2,906,814	9.5	276,147	445,419	10.7	311,029	514,114	11.2	325,563	525,457
2027	2,986,751	9.5	283,741	446,879	10.7	319,582	515,799	11.2	334,516	527,179
2028	3,068,887	9.5	291,544	447,624	10.7	328,371	516,658	11.2	343,715	528,057
2029	3,153,281	9.5	299,562	447,581	10.7	337,401	516,608	11.2	353,167	528,006
2030	3,239,996	9.5	307,800	446,672	10.7	346,680	515,559	11.2	362,880	526,934

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 2,538,096	12.7%	$322,338	$ 578,450	12.9%	$327,414	$ 583,908	14.7%	$373,100	$ 661,103
2022	2,607,894	12.7	331,203	583,999	12.9	336,418	589,509	14.7	383,360	667,445
2023	2,679,611	12.7	340,311	588,975	12.9	345,670	594,532	14.7	393,903	673,132
2024	2,753,300	12.7	349,669	593,312	12.9	355,176	598,910	14.7	404,735	678,089
2025	2,829,016	12.7	359,285	596,938	12.9	364,943	602,571	14.7	415,865	682,234
2026	2,906,814	12.7	369,165	599,776	12.9	374,979	605,436	14.7	427,302	685,477
2027	2,986,751	12.7	379,317	601,742	12.9	385,291	607,420	14.7	439,052	687,723
2028	3,068,887	12.7	389,749	602,745	12.9	395,886	608,432	14.7	451,126	688,869
2029	3,153,281	12.7	400,467	602,687	12.9	406,773	608,373	14.7	463,532	688,803
2030	3,239,996	12.7	411,479	601,463	12.9	417,959	607,137	14.7	476,279	687,404

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2021	$ 2,538,096	5.0%	$126,905	$ 330,563	7.0%	$177,667	$ 413,155	5.8%	$147,210	$ 352,457
2022	2,607,894	5.0	130,395	333,734	7.0	182,553	417,118	5.8	151,258	355,838
2023	2,679,611	5.0	133,981	336,578	7.0	187,573	420,672	5.8	155,417	358,870
2024	2,753,300	5.0	137,665	339,057	7.0	192,731	423,770	5.8	159,691	361,513
2025	2,829,016	5.0	141,451	341,129	7.0	198,031	426,360	5.8	164,083	363,723
2026	2,906,814	5.0	145,341	342,751	7.0	203,477	428,387	5.8	168,595	365,452
2027	2,986,751	5.0	149,338	343,874	7.0	209,073	429,791	5.8	173,232	366,650
2028	3,068,887	5.0	153,444	344,447	7.0	214,822	430,507	5.8	177,995	367,261
2029	3,153,281	5.0	157,664	344,414	7.0	220,730	430,466	5.8	182,890	367,226
2030	3,239,996	5.0	162,000	343,715	7.0	226,800	429,592	5.8	187,920	366,480

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	$ 2,538,096	7.6%	$192,895	$ 429,580	8.8%	$223,352	$ 495,832	9.3%	$236,043	$ 506,773
2022	2,607,894	7.6	198,200	433,701	8.8	229,495	500,588	9.3	242,534	511,634
2023	2,679,611	7.6	203,650	437,397	8.8	235,806	504,854	9.3	249,204	515,994
2024	2,753,300	7.6	209,251	440,618	8.8	242,290	508,572	9.3	256,057	519,794
2025	2,829,016	7.6	215,005	443,311	8.8	248,953	511,681	9.3	263,098	522,971
2026	2,906,814	7.6	220,918	445,419	8.8	255,800	514,114	9.3	270,334	525,457
2027	2,986,751	7.6	226,993	446,879	8.8	262,834	515,799	9.3	277,768	527,179
2028	3,068,887	7.6	233,235	447,624	8.8	270,062	516,658	9.3	285,406	528,057
2029	3,153,281	7.6	239,649	447,581	8.8	277,489	516,608	9.3	293,255	528,006
2030	3,239,996	7.6	246,240	446,672	8.8	285,120	515,559	9.3	301,320	526,934

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	$ 2,538,096	10.8%	$274,114	$ 578,450	11.0%	$279,191	$ 583,908	12.8%	$324,876	$ 661,103
2022	2,607,894	10.8	281,653	583,999	11.0	286,868	589,509	12.8	333,810	667,445
2023	2,679,611	10.8	289,398	588,975	11.0	294,757	594,532	12.8	342,990	673,132
2024	2,753,300	10.8	297,356	593,312	11.0	302,863	598,910	12.8	352,422	678,089
2025	2,829,016	10.8	305,534	596,938	11.0	311,192	602,571	12.8	362,114	682,234
2026	2,906,814	10.8	313,936	599,776	11.0	319,750	605,436	12.8	372,072	685,477
2027	2,986,751	10.8	322,569	601,742	11.0	328,543	607,420	12.8	382,304	687,723
2028	3,068,887	10.8	331,440	602,745	11.0	337,578	608,432	12.8	392,818	688,869
2029	3,153,281	10.8	340,554	602,687	11.0	346,861	608,373	12.8	403,620	688,803
2030	3,239,996	10.8	349,920	601,463	11.0	356,400	607,137	12.8	414,719	687,404

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 2.75%.
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.

Warren County - General

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2021	$ 2,538,096	3.1%	$78,681	$ 330,563	5.1%	$129,443	$ 413,155	3.9%	$98,986	$ 352,457
2022	2,607,894	3.1	80,845	333,734	5.1	133,003	417,118	3.9	101,708	355,838
2023	2,679,611	3.1	83,068	336,578	5.1	136,660	420,672	3.9	104,505	358,870
2024	2,753,300	3.1	85,352	339,057	5.1	140,418	423,770	3.9	107,379	361,513
2025	2,829,016	3.1	87,699	341,129	5.1	144,280	426,360	3.9	110,332	363,723
2026	2,906,814	3.1	90,111	342,751	5.1	148,248	428,387	3.9	113,366	365,452
2027	2,986,751	3.1	92,589	343,874	5.1	152,324	429,791	3.9	116,483	366,650
2028	3,068,887	3.1	95,135	344,447	5.1	156,513	430,507	3.9	119,687	367,261
2029	3,153,281	3.1	97,752	344,414	5.1	160,817	430,466	3.9	122,978	367,226
2030	3,239,996	3.1	100,440	343,715	5.1	165,240	429,592	3.9	126,360	366,480

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	$ 2,538,096	5.7%	$144,671	$ 429,580	6.9%	$175,129	$ 495,832	7.4%	$187,819	$ 506,773
2022	2,607,894	5.7	148,650	433,701	6.9	179,945	500,588	7.4	192,984	511,634
2023	2,679,611	5.7	152,738	437,397	6.9	184,893	504,854	7.4	198,291	515,994
2024	2,753,300	5.7	156,938	440,618	6.9	189,978	508,572	7.4	203,744	519,794
2025	2,829,016	5.7	161,254	443,311	6.9	195,202	511,681	7.4	209,347	522,971
2026	2,906,814	5.7	165,688	445,419	6.9	200,570	514,114	7.4	215,104	525,457
2027	2,986,751	5.7	170,245	446,879	6.9	206,086	515,799	7.4	221,020	527,179
2028	3,068,887	5.7	174,927	447,624	6.9	211,753	516,658	7.4	227,098	528,057
2029	3,153,281	5.7	179,737	447,581	6.9	217,576	516,608	7.4	233,343	528,006
2030	3,239,996	5.7	184,680	446,672	6.9	223,560	515,559	7.4	239,760	526,934

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
	Estimated			Actuarial			Actuarial			Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	$ 2,538,096	8.9%	$225,891	$ 578,450	9.1%	$230,967	$ 583,908	10.9%	$276,652	$ 661,103
2022	2,607,894	8.9	232,103	583,999	9.1	237,318	589,509	10.9	284,260	667,445
2023	2,679,611	8.9	238,485	588,975	9.1	243,845	594,532	10.9	292,078	673,132
2024	2,753,300	8.9	245,044	593,312	9.1	250,550	598,910	10.9	300,110	678,089
2025	2,829,016	8.9	251,782	596,938	9.1	257,440	602,571	10.9	308,363	682,234
2026	2,906,814	8.9	258,706	599,776	9.1	264,520	605,436	10.9	316,843	685,477
2027	2,986,751	8.9	265,821	601,742	9.1	271,794	607,420	10.9	325,556	687,723
2028	3,068,887	8.9	273,131	602,745	9.1	279,269	608,432	10.9	334,509	688,869
2029	3,153,281	8.9	280,642	602,687	9.1	286,949	608,373	10.9	343,708	688,803
2030	3,239,996	8.9	288,360	601,463	9.1	294,840	607,137	10.9	353,160	687,404

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	8.6%	$129,496	$ 316,470	10.6%	$159,611	$ 395,584	10.4%	$156,600	$ 402,456
2022	1,547,176	8.6	133,057	319,506	10.6	164,001	399,379	10.4	160,906	406,317
2023	1,589,723	8.6	136,716	322,229	10.6	168,511	402,782	10.4	165,331	409,779
2024	1,633,440	8.6	140,476	324,602	10.6	173,145	405,748	10.4	169,878	412,797
2025	1,678,360	8.6	144,339	326,586	10.6	177,906	408,228	10.4	174,549	415,320
2026	1,724,515	8.6	148,308	328,139	10.6	182,799	410,169	10.4	179,350	417,295
2027	1,771,939	8.6	152,387	329,214	10.6	187,826	411,513	10.4	184,282	418,663
2028	1,820,667	8.6	156,577	329,763	10.6	192,991	412,199	10.4	189,349	419,361
2029	1,870,735	8.6	160,883	329,731	10.6	198,298	412,159	10.4	194,556	419,321
2030	1,922,180	8.6	165,307	329,061	10.6	203,751	411,322	10.4	199,907	418,469

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	11.9%	$179,186	$ 460,078	12.5%	$188,221	$ 474,695	13.4%	$201,773	$ 517,697
2022	1,547,176	11.9	184,114	464,491	12.5	193,397	479,249	13.4	207,322	522,663
2023	1,589,723	11.9	189,177	468,449	12.5	198,715	483,333	13.4	213,023	527,117
2024	1,633,440	11.9	194,379	471,899	12.5	204,180	486,892	13.4	218,881	530,999
2025	1,678,360	11.9	199,725	474,783	12.5	209,795	489,868	13.4	224,900	534,245
2026	1,724,515	11.9	205,217	477,040	12.5	215,564	492,197	13.4	231,085	536,785
2027	1,771,939	11.9	210,861	478,603	12.5	221,492	493,810	13.4	237,440	538,544
2028	1,820,667	11.9	216,659	479,400	12.5	227,583	494,633	13.4	243,969	539,441
2029	1,870,735	11.9	222,617	479,354	12.5	233,842	494,585	13.4	250,678	539,389
2030	1,922,180	11.9	228,739	478,381	12.5	240,273	493,581	13.4	257,572	538,294

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	14.4%	$216,830	$ 553,808	14.9%	$224,359	$ 575,312	16.5%	$248,452	$ 632,877
2022	1,547,176	14.4	222,793	559,120	14.9	230,529	580,831	16.5	255,284	638,948
2023	1,589,723	14.4	228,920	563,884	14.9	236,869	585,780	16.5	262,304	644,393
2024	1,633,440	14.4	235,215	568,037	14.9	243,383	590,094	16.5	269,518	649,138
2025	1,678,360	14.4	241,684	571,509	14.9	250,076	593,701	16.5	276,929	653,106
2026	1,724,515	14.4	248,330	574,226	14.9	256,953	596,524	16.5	284,545	656,211
2027	1,771,939	14.4	255,159	576,108	14.9	264,019	598,479	16.5	292,370	658,361
2028	1,820,667	14.4	262,176	577,068	14.9	271,279	599,476	16.5	300,410	659,458
2029	1,870,735	14.4	269,386	577,012	14.9	278,740	599,418	16.5	308,671	659,395
2030	1,922,180	14.4	276,794	575,840	14.9	286,405	598,201	16.5	317,160	658,056

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	6.7%	$100,886	$ 316,470	8.7%	$131,002	$ 395,584	8.5%	$127,990	$ 402,456
2022	1,547,176	6.7	103,661	319,506	8.7	134,604	399,379	8.5	131,510	406,317
2023	1,589,723	6.7	106,511	322,229	8.7	138,306	402,782	8.5	135,126	409,779
2024	1,633,440	6.7	109,440	324,602	8.7	142,109	405,748	8.5	138,842	412,797
2025	1,678,360	6.7	112,450	326,586	8.7	146,017	408,228	8.5	142,661	415,320
2026	1,724,515	6.7	115,543	328,139	8.7	150,033	410,169	8.5	146,584	417,295
2027	1,771,939	6.7	118,720	329,214	8.7	154,159	411,513	8.5	150,615	418,663
2028	1,820,667	6.7	121,985	329,763	8.7	158,398	412,199	8.5	154,757	419,361
2029	1,870,735	6.7	125,339	329,731	8.7	162,754	412,159	8.5	159,012	419,321
2030	1,922,180	6.7	128,786	329,061	8.7	167,230	411,322	8.5	163,385	418,469

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	10.0%	$150,577	$ 460,078	10.6%	$159,611	$ 474,695	11.5%	$173,163	$ 517,697
2022	1,547,176	10.0	154,718	464,491	10.6	164,001	479,249	11.5	177,925	522,663
2023	1,589,723	10.0	158,972	468,449	10.6	168,511	483,333	11.5	182,818	527,117
2024	1,633,440	10.0	163,344	471,899	10.6	173,145	486,892	11.5	187,846	530,999
2025	1,678,360	10.0	167,836	474,783	10.6	177,906	489,868	11.5	193,011	534,245
2026	1,724,515	10.0	172,452	477,040	10.6	182,799	492,197	11.5	198,319	536,785
2027	1,771,939	10.0	177,194	478,603	10.6	187,826	493,810	11.5	203,773	538,544
2028	1,820,667	10.0	182,067	479,400	10.6	192,991	494,633	11.5	209,377	539,441
2029	1,870,735	10.0	187,074	479,354	10.6	198,298	494,585	11.5	215,135	539,389
2030	1,922,180	10.0	192,218	478,381	10.6	203,751	493,581	11.5	221,051	538,294

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	12.5%	$188,221	$ 553,808	13.0%	$195,750	$ 575,312	14.6%	$219,842	$ 632,877
2022	1,547,176	12.5	193,397	559,120	13.0	201,133	580,831	14.6	225,888	638,948
2023	1,589,723	12.5	198,715	563,884	13.0	206,664	585,780	14.6	232,100	644,393
2024	1,633,440	12.5	204,180	568,037	13.0	212,347	590,094	14.6	238,482	649,138
2025	1,678,360	12.5	209,795	571,509	13.0	218,187	593,701	14.6	245,041	653,106
2026	1,724,515	12.5	215,564	574,226	13.0	224,187	596,524	14.6	251,779	656,211
2027	1,771,939	12.5	221,492	576,108	13.0	230,352	598,479	14.6	258,703	658,361
2028	1,820,667	12.5	227,583	577,068	13.0	236,687	599,476	14.6	265,817	659,458
2029	1,870,735	12.5	233,842	577,012	13.0	243,196	599,418	14.6	273,127	659,395
2030	1,922,180	12.5	240,273	575,840	13.0	249,883	598,201	14.6	280,638	658,056

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	4.8%	$72,277	$ 316,470	6.8%	$102,392	$ 395,584	6.6%	$99,381	$ 402,456
2022	1,547,176	4.8	74,264	319,506	6.8	105,208	399,379	6.6	102,114	406,317
2023	1,589,723	4.8	76,307	322,229	6.8	108,101	402,782	6.6	104,922	409,779
2024	1,633,440	4.8	78,405	324,602	6.8	111,074	405,748	6.6	107,807	412,797
2025	1,678,360	4.8	80,561	326,586	6.8	114,128	408,228	6.6	110,772	415,320
2026	1,724,515	4.8	82,777	328,139	6.8	117,267	410,169	6.6	113,818	417,295
2027	1,771,939	4.8	85,053	329,214	6.8	120,492	411,513	6.6	116,948	418,663
2028	1,820,667	4.8	87,392	329,763	6.8	123,805	412,199	6.6	120,164	419,361
2029	1,870,735	4.8	89,795	329,731	6.8	127,210	412,159	6.6	123,469	419,321
2030	1,922,180	4.8	92,265	329,061	6.8	130,708	411,322	6.6	126,864	418,469

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	8.1%	$121,967	$ 460,078	8.7%	$131,002	$ 474,695	9.6%	$144,554	$ 517,697
2022	1,547,176	8.1	125,321	464,491	8.7	134,604	479,249	9.6	148,529	522,663
2023	1,589,723	8.1	128,768	468,449	8.7	138,306	483,333	9.6	152,613	527,117
2024	1,633,440	8.1	132,309	471,899	8.7	142,109	486,892	9.6	156,810	530,999
2025	1,678,360	8.1	135,947	474,783	8.7	146,017	489,868	9.6	161,123	534,245
2026	1,724,515	8.1	139,686	477,040	8.7	150,033	492,197	9.6	165,553	536,785
2027	1,771,939	8.1	143,527	478,603	8.7	154,159	493,810	9.6	170,106	538,544
2028	1,820,667	8.1	147,474	479,400	8.7	158,398	494,633	9.6	174,784	539,441
2029	1,870,735	8.1	151,530	479,354	8.7	162,754	494,585	9.6	179,591	539,389
2030	1,922,180	8.1	155,697	478,381	8.7	167,230	493,581	9.6	184,529	538,294

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	10.6%	$159,611	$ 553,808	11.1%	$167,140	$ 575,312	12.7%	$191,232	$ 632,877
2022	1,547,176	10.6	164,001	559,120	11.1	171,737	580,831	12.7	196,491	638,948
2023	1,589,723	10.6	168,511	563,884	11.1	176,459	585,780	12.7	201,895	644,393
2024	1,633,440	10.6	173,145	568,037	11.1	181,312	590,094	12.7	207,447	649,138
2025	1,678,360	10.6	177,906	571,509	11.1	186,298	593,701	12.7	213,152	653,106
2026	1,724,515	10.6	182,799	574,226	11.1	191,421	596,524	12.7	219,013	656,211
2027	1,771,939	10.6	187,826	576,108	11.1	196,685	598,479	12.7	225,036	658,361
2028	1,820,667	10.6	192,991	577,068	11.1	202,094	599,476	12.7	231,225	659,458
2029	1,870,735	10.6	198,298	577,012	11.1	207,652	599,418	12.7	237,583	659,395
2030	1,922,180	10.6	203,751	575,840	11.1	213,362	598,201	12.7	244,117	658,056

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	2.9%	$43,667	$ 316,470	4.9%	$73,783	$ 395,584	4.7%	$70,771	$ 402,456
2022	1,547,176	2.9	44,868	319,506	4.9	75,812	399,379	4.7	72,717	406,317
2023	1,589,723	2.9	46,102	322,229	4.9	77,896	402,782	4.7	74,717	409,779
2024	1,633,440	2.9	47,370	324,602	4.9	80,039	405,748	4.7	76,772	412,797
2025	1,678,360	2.9	48,672	326,586	4.9	82,240	408,228	4.7	78,883	415,320
2026	1,724,515	2.9	50,011	328,139	4.9	84,501	410,169	4.7	81,052	417,295
2027	1,771,939	2.9	51,386	329,214	4.9	86,825	411,513	4.7	83,281	418,663
2028	1,820,667	2.9	52,799	329,763	4.9	89,213	412,199	4.7	85,571	419,361
2029	1,870,735	2.9	54,251	329,731	4.9	91,666	412,159	4.7	87,925	419,321
2030	1,922,180	2.9	55,743	329,061	4.9	94,187	411,322	4.7	90,342	418,469

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	6.2%	$93,358	$ 460,078	6.8%	$102,392	$ 474,695	7.7%	$115,944	$ 517,697
2022	1,547,176	6.2	95,925	464,491	6.8	105,208	479,249	7.7	119,133	522,663
2023	1,589,723	6.2	98,563	468,449	6.8	108,101	483,333	7.7	122,409	527,117
2024	1,633,440	6.2	101,273	471,899	6.8	111,074	486,892	7.7	125,775	530,999
2025	1,678,360	6.2	104,058	474,783	6.8	114,128	489,868	7.7	129,234	534,245
2026	1,724,515	6.2	106,920	477,040	6.8	117,267	492,197	7.7	132,788	536,785
2027	1,771,939	6.2	109,860	478,603	6.8	120,492	493,810	7.7	136,439	538,544
2028	1,820,667	6.2	112,881	479,400	6.8	123,805	494,633	7.7	140,191	539,441
2029	1,870,735	6.2	115,986	479,354	6.8	127,210	494,585	7.7	144,047	539,389
2030	1,922,180	6.2	119,175	478,381	6.8	130,708	493,581	7.7	148,008	538,294

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	8.7%	$131,002	$ 553,808	9.2%	$138,531	$ 575,312	10.8%	$162,623	$ 632,877
2022	1,547,176	8.7	134,604	559,120	9.2	142,340	580,831	10.8	167,095	638,948
2023	1,589,723	8.7	138,306	563,884	9.2	146,255	585,780	10.8	171,690	644,393
2024	1,633,440	8.7	142,109	568,037	9.2	150,276	590,094	10.8	176,412	649,138
2025	1,678,360	8.7	146,017	571,509	9.2	154,409	593,701	10.8	181,263	653,106
2026	1,724,515	8.7	150,033	574,226	9.2	158,655	596,524	10.8	186,248	656,211
2027	1,771,939	8.7	154,159	576,108	9.2	163,018	598,479	10.8	191,369	658,361
2028	1,820,667	8.7	158,398	577,068	9.2	167,501	599,476	10.8	196,632	659,458
2029	1,870,735	8.7	162,754	577,012	9.2	172,108	599,418	10.8	202,039	659,395
2030	1,922,180	8.7	167,230	575,840	9.2	176,841	598,201	10.8	207,595	658,056

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	9.0%	$135,519	$ 326,487	11.0%	$165,634	$ 407,997	10.7%	$161,117	$ 415,533
2022	1,547,176	9.0	139,246	329,619	11.0	170,189	411,911	10.7	165,548	419,519
2023	1,589,723	9.0	143,075	332,428	11.0	174,870	415,421	10.7	170,100	423,094
2024	1,633,440	9.0	147,010	334,876	11.0	179,678	418,480	10.7	174,778	426,210
2025	1,678,360	9.0	151,052	336,923	11.0	184,620	421,038	10.7	179,585	428,815
2026	1,724,515	9.0	155,206	338,525	11.0	189,697	423,040	10.7	184,523	430,854
2027	1,771,939	9.0	159,475	339,634	11.0	194,913	424,426	10.7	189,597	432,266
2028	1,820,667	9.0	163,860	340,200	11.0	200,273	425,133	10.7	194,811	432,986
2029	1,870,735	9.0	168,366	340,167	11.0	205,781	425,092	10.7	200,169	432,944
2030	1,922,180	9.0	172,996	339,476	11.0	211,440	424,229	10.7	205,673	432,065

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	12.2%	$183,704	$ 474,782	12.9%	$194,244	$ 489,713	13.9%	$209,302	$ 534,263
2022	1,547,176	12.2	188,755	479,336	12.9	199,586	494,411	13.9	215,057	539,388
2023	1,589,723	12.2	193,946	483,421	12.9	205,074	498,624	13.9	220,971	543,984
2024	1,633,440	12.2	199,280	486,981	12.9	210,714	502,296	13.9	227,048	547,990
2025	1,678,360	12.2	204,760	489,958	12.9	216,508	505,366	13.9	233,292	551,339
2026	1,724,515	12.2	210,391	492,287	12.9	222,462	507,769	13.9	239,708	553,960
2027	1,771,939	12.2	216,177	493,900	12.9	228,580	509,433	13.9	246,300	555,775
2028	1,820,667	12.2	222,121	494,723	12.9	234,866	510,282	13.9	253,073	556,701
2029	1,870,735	12.2	228,230	494,675	12.9	241,325	510,233	13.9	260,032	556,647
2030	1,922,180	12.2	234,506	493,670	12.9	247,961	509,197	13.9	267,183	555,517

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	14.9%	$224,359	$ 571,255	15.4%	$231,888	$ 593,580	16.9%	$254,475	$ 652,939
2022	1,547,176	14.9	230,529	576,735	15.4	238,265	599,274	16.9	261,473	659,202
2023	1,589,723	14.9	236,869	581,649	15.4	244,817	604,381	16.9	268,663	664,819
2024	1,633,440	14.9	243,383	585,932	15.4	251,550	608,832	16.9	276,051	669,715
2025	1,678,360	14.9	250,076	589,513	15.4	258,467	612,553	16.9	283,643	673,808
2026	1,724,515	14.9	256,953	592,316	15.4	265,575	615,465	16.9	291,443	677,011
2027	1,771,939	14.9	264,019	594,257	15.4	272,879	617,482	16.9	299,458	679,230
2028	1,820,667	14.9	271,279	595,247	15.4	280,383	618,511	16.9	307,693	680,362
2029	1,870,735	14.9	278,740	595,190	15.4	288,093	618,451	16.9	316,154	680,297
2030	1,922,180	14.9	286,405	593,981	15.4	296,016	617,195	16.9	324,848	678,915

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	$ 1,505,767	7.1%	$106,909	$ 326,487	9.1%	$137,025	$ 407,997	8.8%	$132,507	$ 415,533
2022	1,547,176	7.1	109,849	329,619	9.1	140,793	411,911	8.8	136,151	419,519
2023	1,589,723	7.1	112,870	332,428	9.1	144,665	415,421	8.8	139,896	423,094
2024	1,633,440	7.1	115,974	334,876	9.1	148,643	418,480	8.8	143,743	426,210
2025	1,678,360	7.1	119,164	336,923	9.1	152,731	421,038	8.8	147,696	428,815
2026	1,724,515	7.1	122,441	338,525	9.1	156,931	423,040	8.8	151,757	430,854
2027	1,771,939	7.1	125,808	339,634	9.1	161,246	424,426	8.8	155,931	432,266
2028	1,820,667	7.1	129,267	340,200	9.1	165,681	425,133	8.8	160,219	432,986
2029	1,870,735	7.1	132,822	340,167	9.1	170,237	425,092	8.8	164,625	432,944
2030	1,922,180	7.1	136,475	339,476	9.1	174,918	424,229	8.8	169,152	432,065

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	$ 1,505,767	10.3%	$155,094	$ 474,782	11.0%	$165,634	$ 489,713	12.0%	$180,692	$ 534,263
2022	1,547,176	10.3	159,359	479,336	11.0	170,189	494,411	12.0	185,661	539,388
2023	1,589,723	10.3	163,741	483,421	11.0	174,870	498,624	12.0	190,767	543,984
2024	1,633,440	10.3	168,244	486,981	11.0	179,678	502,296	12.0	196,013	547,990
2025	1,678,360	10.3	172,871	489,958	11.0	184,620	505,366	12.0	201,403	551,339
2026	1,724,515	10.3	177,625	492,287	11.0	189,697	507,769	12.0	206,942	553,960
2027	1,771,939	10.3	182,510	493,900	11.0	194,913	509,433	12.0	212,633	555,775
2028	1,820,667	10.3	187,529	494,723	11.0	200,273	510,282	12.0	218,480	556,701
2029	1,870,735	10.3	192,686	494,675	11.0	205,781	510,233	12.0	224,488	556,647
2030	1,922,180	10.3	197,985	493,670	11.0	211,440	509,197	12.0	230,662	555,517

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	$ 1,505,767	13.0%	$195,750	$ 571,255	13.5%	$203,279	$ 593,580	15.0%	$225,865	$ 652,939
2022	1,547,176	13.0	201,133	576,735	13.5	208,869	599,274	15.0	232,076	659,202
2023	1,589,723	13.0	206,664	581,649	13.5	214,613	604,381	15.0	238,458	664,819
2024	1,633,440	13.0	212,347	585,932	13.5	220,514	608,832	15.0	245,016	669,715
2025	1,678,360	13.0	218,187	589,513	13.5	226,579	612,553	15.0	251,754	673,808
2026	1,724,515	13.0	224,187	592,316	13.5	232,810	615,465	15.0	258,677	677,011
2027	1,771,939	13.0	230,352	594,257	13.5	239,212	617,482	15.0	265,791	679,230
2028	1,820,667	13.0	236,687	595,247	13.5	245,790	618,511	15.0	273,100	680,362
2029	1,870,735	13.0	243,196	595,190	13.5	252,549	618,451	15.0	280,610	680,297
2030	1,922,180	13.0	249,883	593,981	13.5	259,494	617,195	15.0	288,327	678,915

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	5.2%	$78,300	$ 326,487	7.2%	$108,415	$ 407,997	6.9%	$103,898	$ 415,533
2022	1,547,176	5.2	80,453	329,619	7.2	111,397	411,911	6.9	106,755	419,519
2023	1,589,723	5.2	82,666	332,428	7.2	114,460	415,421	6.9	109,691	423,094
2024	1,633,440	5.2	84,939	334,876	7.2	117,608	418,480	6.9	112,707	426,210
2025	1,678,360	5.2	87,275	336,923	7.2	120,842	421,038	6.9	115,807	428,815
2026	1,724,515	5.2	89,675	338,525	7.2	124,165	423,040	6.9	118,992	430,854
2027	1,771,939	5.2	92,141	339,634	7.2	127,580	424,426	6.9	122,264	432,266
2028	1,820,667	5.2	94,675	340,200	7.2	131,088	425,133	6.9	125,626	432,986
2029	1,870,735	5.2	97,278	340,167	7.2	134,693	425,092	6.9	129,081	432,944
2030	1,922,180	5.2	99,953	339,476	7.2	138,397	424,229	6.9	132,630	432,065

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	8.4%	$126,484	$ 474,782	9.1%	$137,025	$ 489,713	10.1%	$152,082	$ 534,263
2022	1,547,176	8.4	129,963	479,336	9.1	140,793	494,411	10.1	156,265	539,388
2023	1,589,723	8.4	133,537	483,421	9.1	144,665	498,624	10.1	160,562	543,984
2024	1,633,440	8.4	137,209	486,981	9.1	148,643	502,296	10.1	164,977	547,990
2025	1,678,360	8.4	140,982	489,958	9.1	152,731	505,366	10.1	169,514	551,339
2026	1,724,515	8.4	144,859	492,287	9.1	156,931	507,769	10.1	174,176	553,960
2027	1,771,939	8.4	148,843	493,900	9.1	161,246	509,433	10.1	178,966	555,775
2028	1,820,667	8.4	152,936	494,723	9.1	165,681	510,282	10.1	183,887	556,701
2029	1,870,735	8.4	157,142	494,675	9.1	170,237	510,233	10.1	188,944	556,647
2030	1,922,180	8.4	161,463	493,670	9.1	174,918	509,197	10.1	194,140	555,517

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	11.1%	$167,140	$ 571,255	11.6%	$174,669	$ 593,580	13.1%	$197,255	$ 652,939
2022	1,547,176	11.1	171,737	576,735	11.6	179,472	599,274	13.1	202,680	659,202
2023	1,589,723	11.1	176,459	581,649	11.6	184,408	604,381	13.1	208,254	664,819
2024	1,633,440	11.1	181,312	585,932	11.6	189,479	608,832	13.1	213,981	669,715
2025	1,678,360	11.1	186,298	589,513	11.6	194,690	612,553	13.1	219,865	673,808
2026	1,724,515	11.1	191,421	592,316	11.6	200,044	615,465	13.1	225,911	677,011
2027	1,771,939	11.1	196,685	594,257	11.6	205,545	617,482	13.1	232,124	679,230
2028	1,820,667	11.1	202,094	595,247	11.6	211,197	618,511	13.1	238,507	680,362
2029	1,870,735	11.1	207,652	595,190	11.6	217,005	618,451	13.1	245,066	680,297
2030	1,922,180	11.1	213,362	593,981	11.6	222,973	617,195	13.1	251,806	678,915

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Estimated Employer Contribution Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Estimated Employer Contribution Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Estimated Employer Contribution Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	3.3%	$49,690	$ 326,487	5.3%	$79,806	$ 407,997	5.0%	$75,288	$ 415,533
2022	1,547,176	3.3	51,057	329,619	5.3	82,000	411,911	5.0	77,359	419,519
2023	1,589,723	3.3	52,461	332,428	5.3	84,255	415,421	5.0	79,486	423,094
2024	1,633,440	3.3	53,904	334,876	5.3	86,572	418,480	5.0	81,672	426,210
2025	1,678,360	3.3	55,386	336,923	5.3	88,953	421,038	5.0	83,918	428,815
2026	1,724,515	3.3	56,909	338,525	5.3	91,399	423,040	5.0	86,226	430,854
2027	1,771,939	3.3	58,474	339,634	5.3	93,913	424,426	5.0	88,597	432,266
2028	1,820,667	3.3	60,082	340,200	5.3	96,495	425,133	5.0	91,033	432,986
2029	1,870,735	3.3	61,734	340,167	5.3	99,149	425,092	5.0	93,537	432,944
2030	1,922,180	3.3	63,432	339,476	5.3	101,876	424,229	5.0	96,109	432,065

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Estimated Employer Contribution Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Estimated Employer Contribution Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Estimated Employer Contribution Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	6.5%	$97,875	$ 474,782	7.2%	$108,415	$ 489,713	8.2%	$123,473	$ 534,263
2022	1,547,176	6.5	100,566	479,336	7.2	111,397	494,411	8.2	126,868	539,388
2023	1,589,723	6.5	103,332	483,421	7.2	114,460	498,624	8.2	130,357	543,984
2024	1,633,440	6.5	106,174	486,981	7.2	117,608	502,296	8.2	133,942	547,990
2025	1,678,360	6.5	109,093	489,958	7.2	120,842	505,366	8.2	137,626	551,339
2026	1,724,515	6.5	112,093	492,287	7.2	124,165	507,769	8.2	141,410	553,960
2027	1,771,939	6.5	115,176	493,900	7.2	127,580	509,433	8.2	145,299	555,775
2028	1,820,667	6.5	118,343	494,723	7.2	131,088	510,282	8.2	149,295	556,701
2029	1,870,735	6.5	121,598	494,675	7.2	134,693	510,233	8.2	153,400	556,647
2030	1,922,180	6.5	124,942	493,670	7.2	138,397	509,197	8.2	157,619	555,517

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Estimated Employer Contribution Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Estimated Employer Contribution Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Estimated Employer Contribution Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	9.2%	$138,531	$ 571,255	9.7%	$146,059	$ 593,580	11.2%	$168,646	$ 652,939
2022	1,547,176	9.2	142,340	576,735	9.7	150,076	599,274	11.2	173,284	659,202
2023	1,589,723	9.2	146,255	581,649	9.7	154,203	604,381	11.2	178,049	664,819
2024	1,633,440	9.2	150,276	585,932	9.7	158,444	608,832	11.2	182,945	669,715
2025	1,678,360	9.2	154,409	589,513	9.7	162,801	612,553	11.2	187,976	673,808
2026	1,724,515	9.2	158,655	592,316	9.7	167,278	615,465	11.2	193,146	677,011
2027	1,771,939	9.2	163,018	594,257	9.7	171,878	617,482	11.2	198,457	679,230
2028	1,820,667	9.2	167,501	595,247	9.7	176,605	618,511	11.2	203,915	680,362
2029	1,870,735	9.2	172,108	595,190	9.7	181,461	618,451	11.2	209,522	680,297
2030	1,922,180	9.2	176,841	593,981	9.7	186,451	617,195	11.2	215,284	678,915

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	8.8%	$132,507	$ 318,668	10.8%	$162,623	$ 398,325	11.0%	$165,634	$ 428,517
2022	1,547,176	8.8	136,151	321,725	10.8	167,095	402,146	11.0	170,189	432,628
2023	1,589,723	8.8	139,896	324,466	10.8	171,690	405,573	11.0	174,870	436,314
2024	1,633,440	8.8	143,743	326,855	10.8	176,412	408,560	11.0	179,678	439,527
2025	1,678,360	8.8	147,696	328,853	10.8	181,263	411,057	11.0	184,620	442,213
2026	1,724,515	8.8	151,757	330,416	10.8	186,248	413,011	11.0	189,697	444,315
2027	1,771,939	8.8	155,931	331,499	10.8	191,369	414,364	11.0	194,913	445,771
2028	1,820,667	8.8	160,219	332,051	10.8	196,632	415,054	11.0	200,273	446,514
2029	1,870,735	8.8	164,625	332,019	10.8	202,039	415,014	11.0	205,781	446,471
2030	1,922,180	8.8	169,152	331,345	10.8	207,595	414,171	11.0	211,440	445,564

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	12.5%	$188,221	$ 480,640	12.9%	$194,244	$ 477,955	13.9%	$209,302	$ 532,879
2022	1,547,176	12.5	193,397	485,251	12.9	199,586	482,540	13.9	215,057	537,991
2023	1,589,723	12.5	198,715	489,386	12.9	205,074	486,652	13.9	220,971	542,575
2024	1,633,440	12.5	204,180	492,990	12.9	210,714	490,236	13.9	227,048	546,571
2025	1,678,360	12.5	209,795	496,003	12.9	216,508	493,232	13.9	233,292	549,912
2026	1,724,515	12.5	215,564	498,361	12.9	222,462	495,577	13.9	239,708	552,526
2027	1,771,939	12.5	221,492	499,994	12.9	228,580	497,201	13.9	246,300	554,337
2028	1,820,667	12.5	227,583	500,827	12.9	234,866	498,029	13.9	253,073	555,261
2029	1,870,735	12.5	233,842	500,779	12.9	241,325	497,981	13.9	260,032	555,208
2030	1,922,180	12.5	240,273	499,762	12.9	247,961	496,970	13.9	267,183	554,080

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	14.8%	$222,854	$ 557,620	15.4%	$231,888	$ 585,010	16.8%	$252,969	$ 637,211
2022	1,547,176	14.8	228,982	562,969	15.4	238,265	590,622	16.8	259,926	643,324
2023	1,589,723	14.8	235,279	567,766	15.4	244,817	595,655	16.8	267,073	648,806
2024	1,633,440	14.8	241,749	571,947	15.4	251,550	600,042	16.8	274,418	653,584
2025	1,678,360	14.8	248,397	575,443	15.4	258,467	603,710	16.8	281,964	657,579
2026	1,724,515	14.8	255,228	578,179	15.4	265,575	606,580	16.8	289,719	660,705
2027	1,771,939	14.8	262,247	580,074	15.4	272,879	608,568	16.8	297,686	662,870
2028	1,820,667	14.8	269,459	581,040	15.4	280,383	609,582	16.8	305,872	663,974
2029	1,870,735	14.8	276,869	580,984	15.4	288,093	609,523	16.8	314,283	663,910
2030	1,922,180	14.8	284,483	579,804	15.4	296,016	608,285	16.8	322,926	662,562

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	6.9%	$103,898	$ 318,668	8.9%	$134,013	$ 398,325	9.1%	$137,025	$ 428,517
2022	1,547,176	6.9	106,755	321,725	8.9	137,699	402,146	9.1	140,793	432,628
2023	1,589,723	6.9	109,691	324,466	8.9	141,485	405,573	9.1	144,665	436,314
2024	1,633,440	6.9	112,707	326,855	8.9	145,376	408,560	9.1	148,643	439,527
2025	1,678,360	6.9	115,807	328,853	8.9	149,374	411,057	9.1	152,731	442,213
2026	1,724,515	6.9	118,992	330,416	8.9	153,482	413,011	9.1	156,931	444,315
2027	1,771,939	6.9	122,264	331,499	8.9	157,703	414,364	9.1	161,246	445,771
2028	1,820,667	6.9	125,626	332,051	8.9	162,039	415,054	9.1	165,681	446,514
2029	1,870,735	6.9	129,081	332,019	8.9	166,495	415,014	9.1	170,237	446,471
2030	1,922,180	6.9	132,630	331,345	8.9	171,074	414,171	9.1	174,918	445,564

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	10.6%	$159,611	$ 480,640	11.0%	$165,634	$ 477,955	12.0%	$180,692	$ 532,879
2022	1,547,176	10.6	164,001	485,251	11.0	170,189	482,540	12.0	185,661	537,991
2023	1,589,723	10.6	168,511	489,386	11.0	174,870	486,652	12.0	190,767	542,575
2024	1,633,440	10.6	173,145	492,990	11.0	179,678	490,236	12.0	196,013	546,571
2025	1,678,360	10.6	177,906	496,003	11.0	184,620	493,232	12.0	201,403	549,912
2026	1,724,515	10.6	182,799	498,361	11.0	189,697	495,577	12.0	206,942	552,526
2027	1,771,939	10.6	187,826	499,994	11.0	194,913	497,201	12.0	212,633	554,337
2028	1,820,667	10.6	192,991	500,827	11.0	200,273	498,029	12.0	218,480	555,261
2029	1,870,735	10.6	198,298	500,779	11.0	205,781	497,981	12.0	224,488	555,208
2030	1,922,180	10.6	203,751	499,762	11.0	211,440	496,970	12.0	230,662	554,080

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	12.9%	$194,244	$ 557,620	13.5%	$203,279	$ 585,010	14.9%	$224,359	$ 637,211
2022	1,547,176	12.9	199,586	562,969	13.5	208,869	590,622	14.9	230,529	643,324
2023	1,589,723	12.9	205,074	567,766	13.5	214,613	595,655	14.9	236,869	648,806
2024	1,633,440	12.9	210,714	571,947	13.5	220,514	600,042	14.9	243,383	653,584
2025	1,678,360	12.9	216,508	575,443	13.5	226,579	603,710	14.9	250,076	657,579
2026	1,724,515	12.9	222,462	578,179	13.5	232,810	606,580	14.9	256,953	660,705
2027	1,771,939	12.9	228,580	580,074	13.5	239,212	608,568	14.9	264,019	662,870
2028	1,820,667	12.9	234,866	581,040	13.5	245,790	609,582	14.9	271,279	663,974
2029	1,870,735	12.9	241,325	580,984	13.5	252,549	609,523	14.9	278,740	663,910
2030	1,922,180	12.9	247,961	579,804	13.5	259,494	608,285	14.9	286,405	662,562

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 2.75%.
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^{th} 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.

Warren County - Police

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	5.0%	$75,288	$ 318,668	7.0%	$105,404	$ 398,325	7.2%	$108,415	$ 428,517
2022	1,547,176	5.0	77,359	321,725	7.0	108,302	402,146	7.2	111,397	432,628
2023	1,589,723	5.0	79,486	324,466	7.0	111,281	405,573	7.2	114,460	436,314
2024	1,633,440	5.0	81,672	326,855	7.0	114,341	408,560	7.2	117,608	439,527
2025	1,678,360	5.0	83,918	328,853	7.0	117,485	411,057	7.2	120,842	442,213
2026	1,724,515	5.0	86,226	330,416	7.0	120,716	413,011	7.2	124,165	444,315
2027	1,771,939	5.0	88,597	331,499	7.0	124,036	414,364	7.2	127,580	445,771
2028	1,820,667	5.0	91,033	332,051	7.0	127,447	415,054	7.2	131,088	446,514
2029	1,870,735	5.0	93,537	332,019	7.0	130,951	415,014	7.2	134,693	446,471
2030	1,922,180	5.0	96,109	331,345	7.0	134,553	414,171	7.2	138,397	445,564

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	8.7%	$131,002	$ 480,640	9.1%	$137,025	$ 477,955	10.1%	$152,082	$ 532,879
2022	1,547,176	8.7	134,604	485,251	9.1	140,793	482,540	10.1	156,265	537,991
2023	1,589,723	8.7	138,306	489,386	9.1	144,665	486,652	10.1	160,562	542,575
2024	1,633,440	8.7	142,109	492,990	9.1	148,643	490,236	10.1	164,977	546,571
2025	1,678,360	8.7	146,017	496,003	9.1	152,731	493,232	10.1	169,514	549,912
2026	1,724,515	8.7	150,033	498,361	9.1	156,931	495,577	10.1	174,176	552,526
2027	1,771,939	8.7	154,159	499,994	9.1	161,246	497,201	10.1	178,966	554,337
2028	1,820,667	8.7	158,398	500,827	9.1	165,681	498,029	10.1	183,887	555,261
2029	1,870,735	8.7	162,754	500,779	9.1	170,237	497,981	10.1	188,944	555,208
2030	1,922,180	8.7	167,230	499,762	9.1	174,918	496,970	10.1	194,140	554,080

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	11.0%	$165,634	$ 557,620	11.6%	$174,669	$ 585,010	13.0%	$195,750	$ 637,211
2022	1,547,176	11.0	170,189	562,969	11.6	179,472	590,622	13.0	201,133	643,324
2023	1,589,723	11.0	174,870	567,766	11.6	184,408	595,655	13.0	206,664	648,806
2024	1,633,440	11.0	179,678	571,947	11.6	189,479	600,042	13.0	212,347	653,584
2025	1,678,360	11.0	184,620	575,443	11.6	194,690	603,710	13.0	218,187	657,579
2026	1,724,515	11.0	189,697	578,179	11.6	200,044	606,580	13.0	224,187	660,705
2027	1,771,939	11.0	194,913	580,074	11.6	205,545	608,568	13.0	230,352	662,870
2028	1,820,667	11.0	200,273	581,040	11.6	211,197	609,582	13.0	236,687	663,974
2029	1,870,735	11.0	205,781	580,984	11.6	217,005	609,523	13.0	243,196	663,910
2030	1,922,180	11.0	211,440	579,804	11.6	222,973	608,285	13.0	249,883	662,562

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	3.1%	$46,679	$ 318,668	5.1%	$76,794	$ 398,325	5.3%	$79,806	$ 428,517
2022	1,547,176	3.1	47,962	321,725	5.1	78,906	402,146	5.3	82,000	432,628
2023	1,589,723	3.1	49,281	324,466	5.1	81,076	405,573	5.3	84,255	436,314
2024	1,633,440	3.1	50,637	326,855	5.1	83,305	408,560	5.3	86,572	439,527
2025	1,678,360	3.1	52,029	328,853	5.1	85,596	411,057	5.3	88,953	442,213
2026	1,724,515	3.1	53,460	330,416	5.1	87,950	413,011	5.3	91,399	444,315
2027	1,771,939	3.1	54,930	331,499	5.1	90,369	414,364	5.3	93,913	445,771
2028	1,820,667	3.1	56,441	332,051	5.1	92,854	415,054	5.3	96,495	446,514
2029	1,870,735	3.1	57,993	332,019	5.1	95,407	415,014	5.3	99,149	446,471
2030	1,922,180	3.1	59,588	331,345	5.1	98,031	414,171	5.3	101,876	445,564

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	6.8%	$102,392	$ 480,640	7.2%	$108,415	$ 477,955	8.2%	$123,473	$ 532,879
2022	1,547,176	6.8	105,208	485,251	7.2	111,397	482,540	8.2	126,868	537,991
2023	1,589,723	6.8	108,101	489,386	7.2	114,460	486,652	8.2	130,357	542,575
2024	1,633,440	6.8	111,074	492,990	7.2	117,608	490,236	8.2	133,942	546,571
2025	1,678,360	6.8	114,128	496,003	7.2	120,842	493,232	8.2	137,626	549,912
2026	1,724,515	6.8	117,267	498,361	7.2	124,165	495,577	8.2	141,410	552,526
2027	1,771,939	6.8	120,492	499,994	7.2	127,580	497,201	8.2	145,299	554,337
2028	1,820,667	6.8	123,805	500,827	7.2	131,088	498,029	8.2	149,295	555,261
2029	1,870,735	6.8	127,210	500,779	7.2	134,693	497,981	8.2	153,400	555,208
2030	1,922,180	6.8	130,708	499,762	7.2	138,397	496,970	8.2	157,619	554,080

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	9.1%	$137,025	$ 557,620	9.7%	$146,059	$ 585,010	11.1%	$167,140	$ 637,211
2022	1,547,176	9.1	140,793	562,969	9.7	150,076	590,622	11.1	171,737	643,324
2023	1,589,723	9.1	144,665	567,766	9.7	154,203	595,655	11.1	176,459	648,806
2024	1,633,440	9.1	148,643	571,947	9.7	158,444	600,042	11.1	181,312	653,584
2025	1,678,360	9.1	152,731	575,443	9.7	162,801	603,710	11.1	186,298	657,579
2026	1,724,515	9.1	156,931	578,179	9.7	167,278	606,580	11.1	191,421	660,705
2027	1,771,939	9.1	161,246	580,074	9.7	171,878	608,568	11.1	196,685	662,870
2028	1,820,667	9.1	165,681	581,040	9.7	176,605	609,582	11.1	202,094	663,974
2029	1,870,735	9.1	170,237	580,984	9.7	181,461	609,523	11.1	207,652	663,910
2030	1,922,180	9.1	174,918	579,804	9.7	186,451	608,285	11.1	213,362	662,562

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	9.1%	$137,025	$ 329,026	11.2%	$168,646	$ 411,279	11.3%	$170,152	$ 442,854
2022	1,547,176	9.1	140,793	332,182	11.2	173,284	415,224	11.3	174,831	447,102
2023	1,589,723	9.1	144,665	335,013	11.2	178,049	418,762	11.3	179,639	450,912
2024	1,633,440	9.1	148,643	337,480	11.2	182,945	421,846	11.3	184,579	454,233
2025	1,678,360	9.1	152,731	339,543	11.2	187,976	424,424	11.3	189,655	457,009
2026	1,724,515	9.1	156,931	341,157	11.2	193,146	426,442	11.3	194,870	459,182
2027	1,771,939	9.1	161,246	342,275	11.2	198,457	427,839	11.3	200,229	460,687
2028	1,820,667	9.1	165,681	342,845	11.2	203,915	428,552	11.3	205,735	461,455
2029	1,870,735	9.1	170,237	342,812	11.2	209,522	428,511	11.3	211,393	461,411
2030	1,922,180	9.1	174,918	342,116	11.2	215,284	427,641	11.3	217,206	460,474

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	12.8%	$192,738	$ 496,635	13.2%	$198,761	$ 493,528	14.3%	$215,325	$ 550,452
2022	1,547,176	12.8	198,039	501,399	13.2	204,227	498,262	14.3	221,246	555,732
2023	1,589,723	12.8	203,485	505,672	13.2	209,843	502,508	14.3	227,330	560,467
2024	1,633,440	12.8	209,080	509,396	13.2	215,614	506,209	14.3	233,582	564,594
2025	1,678,360	12.8	214,830	512,510	13.2	221,544	509,303	14.3	240,005	568,045
2026	1,724,515	12.8	220,738	514,947	13.2	227,636	511,724	14.3	246,606	570,746
2027	1,771,939	12.8	226,808	516,635	13.2	233,896	513,401	14.3	253,387	572,616
2028	1,820,667	12.8	233,045	517,496	13.2	240,328	514,256	14.3	260,355	573,570
2029	1,870,735	12.8	239,454	517,446	13.2	246,937	514,207	14.3	267,515	573,515
2030	1,922,180	12.8	246,039	516,395	13.2	253,728	513,163	14.3	274,872	572,350

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,505,767	15.3%	$230,382	$ 575,765	15.8%	$237,911	$ 604,291	17.4%	$262,003	$ 657,965
2022	1,547,176	15.3	236,718	581,288	15.8	244,454	610,088	17.4	269,209	664,277
2023	1,589,723	15.3	243,228	586,241	15.8	251,176	615,287	17.4	276,612	669,937
2024	1,633,440	15.3	249,916	590,558	15.8	258,084	619,818	17.4	284,219	674,871
2025	1,678,360	15.3	256,789	594,168	15.8	265,181	623,606	17.4	292,035	678,996
2026	1,724,515	15.3	263,851	596,993	15.8	272,473	626,571	17.4	300,066	682,224
2027	1,771,939	15.3	271,107	598,949	15.8	279,966	628,624	17.4	308,317	684,460
2028	1,820,667	15.3	278,562	599,947	15.8	287,665	629,671	17.4	316,796	685,600
2029	1,870,735	15.3	286,222	599,889	15.8	295,576	629,610	17.4	325,508	685,534
2030	1,922,180	15.3	294,094	598,671	15.8	303,704	628,331	17.4	334,459	684,142

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	7.2%	$108,415	$ 329,026	9.3%	$140,036	$ 411,279	9.4%	$141,542	$ 442,854
2022	1,547,176	7.2	111,397	332,182	9.3	143,887	415,224	9.4	145,435	447,102
2023	1,589,723	7.2	114,460	335,013	9.3	147,844	418,762	9.4	149,434	450,912
2024	1,633,440	7.2	117,608	337,480	9.3	151,910	421,846	9.4	153,543	454,233
2025	1,678,360	7.2	120,842	339,543	9.3	156,087	424,424	9.4	157,766	457,009
2026	1,724,515	7.2	124,165	341,157	9.3	160,380	426,442	9.4	162,104	459,182
2027	1,771,939	7.2	127,580	342,275	9.3	164,790	427,839	9.4	166,562	460,687
2028	1,820,667	7.2	131,088	342,845	9.3	169,322	428,552	9.4	171,143	461,455
2029	1,870,735	7.2	134,693	342,812	9.3	173,978	428,511	9.4	175,849	461,411
2030	1,922,180	7.2	138,397	342,116	9.3	178,763	427,641	9.4	180,685	460,474

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	10.9%	$164,129	$ 496,635	11.3%	$170,152	$ 493,528	12.4%	$186,715	$ 550,452
2022	1,547,176	10.9	168,642	501,399	11.3	174,831	498,262	12.4	191,850	555,732
2023	1,589,723	10.9	173,280	505,672	11.3	179,639	502,508	12.4	197,126	560,467
2024	1,633,440	10.9	178,045	509,396	11.3	184,579	506,209	12.4	202,547	564,594
2025	1,678,360	10.9	182,941	512,510	11.3	189,655	509,303	12.4	208,117	568,045
2026	1,724,515	10.9	187,972	514,947	11.3	194,870	511,724	12.4	213,840	570,746
2027	1,771,939	10.9	193,141	516,635	11.3	200,229	513,401	12.4	219,720	572,616
2028	1,820,667	10.9	198,453	517,496	11.3	205,735	514,256	12.4	225,763	573,570
2029	1,870,735	10.9	203,910	517,446	11.3	211,393	514,207	12.4	231,971	573,515
2030	1,922,180	10.9	209,518	516,395	11.3	217,206	513,163	12.4	238,350	572,350

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	13.4%	$201,773	$ 575,765	13.9%	$209,302	$ 604,291	15.5%	$233,394	$ 657,965
2022	1,547,176	13.4	207,322	581,288	13.9	215,057	610,088	15.5	239,812	664,277
2023	1,589,723	13.4	213,023	586,241	13.9	220,971	615,287	15.5	246,407	669,937
2024	1,633,440	13.4	218,881	590,558	13.9	227,048	619,818	15.5	253,183	674,871
2025	1,678,360	13.4	224,900	594,168	13.9	233,292	623,606	15.5	260,146	678,996
2026	1,724,515	13.4	231,085	596,993	13.9	239,708	626,571	15.5	267,300	682,224
2027	1,771,939	13.4	237,440	598,949	13.9	246,300	628,624	15.5	274,651	684,460
2028	1,820,667	13.4	243,969	599,947	13.9	253,073	629,671	15.5	282,203	685,600
2029	1,870,735	13.4	250,678	599,889	13.9	260,032	629,610	15.5	289,964	685,534
2030	1,922,180	13.4	257,572	598,671	13.9	267,183	628,331	15.5	297,938	684,142

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	5.3%	$79,806	$ 329,026	7.4%	$111,427	$ 411,279	7.5%	$112,933	$ 442,854
2022	1,547,176	5.3	82,000	332,182	7.4	114,491	415,224	7.5	116,038	447,102
2023	1,589,723	5.3	84,255	335,013	7.4	117,640	418,762	7.5	119,229	450,912
2024	1,633,440	5.3	86,572	337,480	7.4	120,875	421,846	7.5	122,508	454,233
2025	1,678,360	5.3	88,953	339,543	7.4	124,199	424,424	7.5	125,877	457,009
2026	1,724,515	5.3	91,399	341,157	7.4	127,614	426,442	7.5	129,339	459,182
2027	1,771,939	5.3	93,913	342,275	7.4	131,123	427,839	7.5	132,895	460,687
2028	1,820,667	5.3	96,495	342,845	7.4	134,729	428,552	7.5	136,550	461,455
2029	1,870,735	5.3	99,149	342,812	7.4	138,434	428,511	7.5	140,305	461,411
2030	1,922,180	5.3	101,876	342,116	7.4	142,241	427,641	7.5	144,164	460,474

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	9.0%	$135,519	$ 496,635	9.4%	$141,542	$ 493,528	10.5%	$158,106	$ 550,452
2022	1,547,176	9.0	139,246	501,399	9.4	145,435	498,262	10.5	162,453	555,732
2023	1,589,723	9.0	143,075	505,672	9.4	149,434	502,508	10.5	166,921	560,467
2024	1,633,440	9.0	147,010	509,396	9.4	153,543	506,209	10.5	171,511	564,594
2025	1,678,360	9.0	151,052	512,510	9.4	157,766	509,303	10.5	176,228	568,045
2026	1,724,515	9.0	155,206	514,947	9.4	162,104	511,724	10.5	181,074	570,746
2027	1,771,939	9.0	159,475	516,635	9.4	166,562	513,401	10.5	186,054	572,616
2028	1,820,667	9.0	163,860	517,496	9.4	171,143	514,256	10.5	191,170	573,570
2029	1,870,735	9.0	168,366	517,446	9.4	175,849	514,207	10.5	196,427	573,515
2030	1,922,180	9.0	172,996	516,395	9.4	180,685	513,163	10.5	201,829	572,350

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,505,767	11.5%	$173,163	$ 575,765	12.0%	$180,692	$ 604,291	13.6%	$204,784	$ 657,965
2022	1,547,176	11.5	177,925	581,288	12.0	185,661	610,088	13.6	210,416	664,277
2023	1,589,723	11.5	182,818	586,241	12.0	190,767	615,287	13.6	216,202	669,937
2024	1,633,440	11.5	187,846	590,558	12.0	196,013	619,818	13.6	222,148	674,871
2025	1,678,360	11.5	193,011	594,168	12.0	201,403	623,606	13.6	228,257	678,996
2026	1,724,515	11.5	198,319	596,993	12.0	206,942	626,571	13.6	234,534	682,224
2027	1,771,939	11.5	203,773	598,949	12.0	212,633	628,624	13.6	240,984	684,460
2028	1,820,667	11.5	209,377	599,947	12.0	218,480	629,671	13.6	247,611	685,600
2029	1,870,735	11.5	215,135	599,889	12.0	224,488	629,610	13.6	254,420	685,534
2030	1,922,180	11.5	221,051	598,671	12.0	230,662	628,331	13.6	261,416	684,142

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 2.75%.
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.

Warren County - Police

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	3.4%	$51,196	$ 329,026	5.5%	$82,817	$ 411,279	5.6%	$84,323	$ 442,854
2022	1,547,176	3.4	52,604	332,182	5.5	85,095	415,224	5.6	86,642	447,102
2023	1,589,723	3.4	54,051	335,013	5.5	87,435	418,762	5.6	89,024	450,912
2024	1,633,440	3.4	55,537	337,480	5.5	89,839	421,846	5.6	91,473	454,233
2025	1,678,360	3.4	57,064	339,543	5.5	92,310	424,424	5.6	93,988	457,009
2026	1,724,515	3.4	58,634	341,157	5.5	94,848	426,442	5.6	96,573	459,182
2027	1,771,939	3.4	60,246	342,275	5.5	97,457	427,839	5.6	99,229	460,687
2028	1,820,667	3.4	61,903	342,845	5.5	100,137	428,552	5.6	101,957	461,455
2029	1,870,735	3.4	63,605	342,812	5.5	102,890	428,511	5.6	104,761	461,411
2030	1,922,180	3.4	65,354	342,116	5.5	105,720	427,641	5.6	107,642	460,474

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	7.1%	$106,909	$ 496,635	7.5%	$112,933	$ 493,528	8.6%	$129,496	$ 550,452
2022	1,547,176	7.1	109,849	501,399	7.5	116,038	498,262	8.6	133,057	555,732
2023	1,589,723	7.1	112,870	505,672	7.5	119,229	502,508	8.6	136,716	560,467
2024	1,633,440	7.1	115,974	509,396	7.5	122,508	506,209	8.6	140,476	564,594
2025	1,678,360	7.1	119,164	512,510	7.5	125,877	509,303	8.6	144,339	568,045
2026	1,724,515	7.1	122,441	514,947	7.5	129,339	511,724	8.6	148,308	570,746
2027	1,771,939	7.1	125,808	516,635	7.5	132,895	513,401	8.6	152,387	572,616
2028	1,820,667	7.1	129,267	517,496	7.5	136,550	514,256	8.6	156,577	573,570
2029	1,870,735	7.1	132,822	517,446	7.5	140,305	514,207	8.6	160,883	573,515
2030	1,922,180	7.1	136,475	516,395	7.5	144,164	513,163	8.6	165,307	572,350

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,505,767	9.6%	$144,554	$ 575,765	10.1%	$152,082	$ 604,291	11.7%	$176,175	$ 657,965
2022	1,547,176	9.6	148,529	581,288	10.1	156,265	610,088	11.7	181,020	664,277
2023	1,589,723	9.6	152,613	586,241	10.1	160,562	615,287	11.7	185,998	669,937
2024	1,633,440	9.6	156,810	590,558	10.1	164,977	619,818	11.7	191,112	674,871
2025	1,678,360	9.6	161,123	594,168	10.1	169,514	623,606	11.7	196,368	678,996
2026	1,724,515	9.6	165,553	596,993	10.1	174,176	626,571	11.7	201,768	682,224
2027	1,771,939	9.6	170,106	598,949	10.1	178,966	628,624	11.7	207,317	684,460
2028	1,820,667	9.6	174,784	599,947	10.1	183,887	629,671	11.7	213,018	685,600
2029	1,870,735	9.6	179,591	599,889	10.1	188,944	629,610	11.7	218,876	685,534
2030	1,922,180	9.6	184,529	598,671	10.1	194,140	628,331	11.7	224,895	684,142

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 2.75%.
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^{th} 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.

Warren County - Public Safety

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 As a % of Payroll	L-1 Annual Dollars	L-1 Unfunded Actuarial Accrued Liability	L-3 As a % of Payroll	L-3 Annual Dollars	L-3 Unfunded Actuarial Accrued Liability	LT-4(65) As a % of Payroll	LT-4(65) Annual Dollars	LT-4(65) Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	7.6%	$81,966	$ 92,447	9.3%	$100,301	$ 115,530	8.8%	$94,908	$ 114,847
2022	1,108,159	7.6	84,220	93,334	9.3	103,059	116,638	8.8	97,518	115,949
2023	1,138,633	7.6	86,536	94,129	9.3	105,893	117,632	8.8	100,200	116,937
2024	1,169,945	7.6	88,916	94,822	9.3	108,805	118,498	8.8	102,955	117,798
2025	1,202,118	7.6	91,361	95,402	9.3	111,797	119,222	8.8	105,786	118,518
2026	1,235,176	7.6	93,873	95,856	9.3	114,871	119,789	8.8	108,695	119,081
2027	1,269,143	7.6	96,455	96,170	9.3	118,030	120,182	8.8	111,685	119,471
2028	1,304,044	7.6	99,107	96,330	9.3	121,276	120,382	8.8	114,756	119,670
2029	1,339,905	7.6	101,833	96,321	9.3	124,611	120,370	8.8	117,912	119,658
2030	1,376,752	7.6	104,633	96,125	9.3	128,038	120,126	8.8	121,154	119,415

Valuation Year	Estimated Projected Payroll	LT-5(65) As a % of Payroll	LT-5(65) Annual Dollars	LT-5(65) Unfunded Actuarial Accrued Liability	L-7 As a % of Payroll	L-7 Annual Dollars	L-7 Unfunded Actuarial Accrued Liability	LT-8(65) As a % of Payroll	LT-8(65) Annual Dollars	LT-8(65) Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	10.2%	$110,007	$ 132,320	10.9%	$117,557	$ 138,664	11.5%	$124,028	$ 149,876
2022	1,108,159	10.2	113,032	133,589	10.9	120,789	139,994	11.5	127,438	151,314
2023	1,138,633	10.2	116,141	134,727	10.9	124,111	141,187	11.5	130,943	152,603
2024	1,169,945	10.2	119,334	135,719	10.9	127,524	142,227	11.5	134,544	153,727
2025	1,202,118	10.2	122,616	136,549	10.9	131,031	143,096	11.5	138,244	154,667
2026	1,235,176	10.2	125,988	137,198	10.9	134,634	143,776	11.5	142,045	155,402
2027	1,269,143	10.2	129,453	137,648	10.9	138,337	144,247	11.5	145,951	155,911
2028	1,304,044	10.2	133,012	137,877	10.9	142,141	144,487	11.5	149,965	156,171
2029	1,339,905	10.2	136,670	137,864	10.9	146,050	144,473	11.5	154,089	156,156
2030	1,376,752	10.2	140,429	137,584	10.9	150,066	144,180	11.5	158,326	155,839

Valuation Year	Estimated Projected Payroll	L-12 As a % of Payroll	L-12 Annual Dollars	L-12 Unfunded Actuarial Accrued Liability	LT-14(65) As a % of Payroll	LT-14(65) Annual Dollars	LT-14(65) Unfunded Actuarial Accrued Liability	L-6 As a % of Payroll	L-6 Annual Dollars	L-6 Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	12.6%	$135,891	$ 161,832	12.9%	$139,127	$ 167,412	14.3%	$154,226	$ 184,953
2022	1,108,159	12.6	139,628	163,384	12.9	142,953	169,018	14.3	158,467	186,727
2023	1,138,633	12.6	143,468	164,776	12.9	146,884	170,458	14.3	162,825	188,318
2024	1,169,945	12.6	147,413	165,989	12.9	150,923	171,713	14.3	167,302	189,705
2025	1,202,118	12.6	151,467	167,004	12.9	155,073	172,763	14.3	171,903	190,865
2026	1,235,176	12.6	155,632	167,798	12.9	159,338	173,584	14.3	176,630	191,772
2027	1,269,143	12.6	159,912	168,348	12.9	163,719	174,153	14.3	181,487	192,400
2028	1,304,044	12.6	164,310	168,628	12.9	168,222	174,443	14.3	186,478	192,721
2029	1,339,905	12.6	168,828	168,612	12.9	172,848	174,426	14.3	191,606	192,702
2030	1,376,752	12.6	173,471	168,270	12.9	177,601	174,072	14.3	196,876	192,311

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	5.7%	$61,475	$ 92,447	7.4%	$79,809	$ 115,530	6.9%	$74,417	$ 114,847
2022	1,108,159	5.7	63,165	93,334	7.4	82,004	116,638	6.9	76,463	115,949
2023	1,138,633	5.7	64,902	94,129	7.4	84,259	117,632	6.9	78,566	116,937
2024	1,169,945	5.7	66,687	94,822	7.4	86,576	118,498	6.9	80,726	117,798
2025	1,202,118	5.7	68,521	95,402	7.4	88,957	119,222	6.9	82,946	118,518
2026	1,235,176	5.7	70,405	95,856	7.4	91,403	119,789	6.9	85,227	119,081
2027	1,269,143	5.7	72,341	96,170	7.4	93,917	120,182	6.9	87,571	119,471
2028	1,304,044	5.7	74,331	96,330	7.4	96,499	120,382	6.9	89,979	119,670
2029	1,339,905	5.7	76,375	96,321	7.4	99,153	120,370	6.9	92,453	119,658
2030	1,376,752	5.7	78,475	96,125	7.4	101,880	120,126	6.9	94,996	119,415

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	8.3%	$89,516	$ 132,320	9.0%	$97,065	$ 138,664	9.6%	$103,536	$ 149,876
2022	1,108,159	8.3	91,977	133,589	9.0	99,734	139,994	9.6	106,383	151,314
2023	1,138,633	8.3	94,507	134,727	9.0	102,477	141,187	9.6	109,309	152,603
2024	1,169,945	8.3	97,105	135,719	9.0	105,295	142,227	9.6	112,315	153,727
2025	1,202,118	8.3	99,776	136,549	9.0	108,191	143,096	9.6	115,403	154,667
2026	1,235,176	8.3	102,520	137,198	9.0	111,166	143,776	9.6	118,577	155,402
2027	1,269,143	8.3	105,339	137,648	9.0	114,223	144,247	9.6	121,838	155,911
2028	1,304,044	8.3	108,236	137,877	9.0	117,364	144,487	9.6	125,188	156,171
2029	1,339,905	8.3	111,212	137,864	9.0	120,591	144,473	9.6	128,631	156,156
2030	1,376,752	8.3	114,270	137,584	9.0	123,908	144,180	9.6	132,168	155,839

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	10.7%	$115,400	$ 161,832	11.0%	$118,635	$ 167,412	12.4%	$133,734	$ 184,953
2022	1,108,159	10.7	118,573	163,384	11.0	121,897	169,018	12.4	137,412	186,727
2023	1,138,633	10.7	121,834	164,776	11.0	125,250	170,458	12.4	141,190	188,318
2024	1,169,945	10.7	125,184	165,989	11.0	128,694	171,713	12.4	145,073	189,705
2025	1,202,118	10.7	128,627	167,004	11.0	132,233	172,763	12.4	149,063	190,865
2026	1,235,176	10.7	132,164	167,798	11.0	135,869	173,584	12.4	153,162	191,772
2027	1,269,143	10.7	135,798	168,348	11.0	139,606	174,153	12.4	157,374	192,400
2028	1,304,044	10.7	139,533	168,628	11.0	143,445	174,443	12.4	161,701	192,721
2029	1,339,905	10.7	143,370	168,612	11.0	147,390	174,426	12.4	166,148	192,702
2030	1,376,752	10.7	147,312	168,270	11.0	151,443	174,072	12.4	170,717	192,311

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	3.8%	$40,983	$ 92,447	5.5%	$59,318	$ 115,530	5.0%	$53,925	$ 114,847
2022	1,108,159	3.8	42,110	93,334	5.5	60,949	116,638	5.0	55,408	115,949
2023	1,138,633	3.8	43,268	94,129	5.5	62,625	117,632	5.0	56,932	116,937
2024	1,169,945	3.8	44,458	94,822	5.5	64,347	118,498	5.0	58,497	117,798
2025	1,202,118	3.8	45,680	95,402	5.5	66,116	119,222	5.0	60,106	118,518
2026	1,235,176	3.8	46,937	95,856	5.5	67,935	119,789	5.0	61,759	119,081
2027	1,269,143	3.8	48,227	96,170	5.5	69,803	120,182	5.0	63,457	119,471
2028	1,304,044	3.8	49,554	96,330	5.5	71,722	120,382	5.0	65,202	119,670
2029	1,339,905	3.8	50,916	96,321	5.5	73,695	120,370	5.0	66,995	119,658
2030	1,376,752	3.8	52,317	96,125	5.5	75,721	120,126	5.0	68,838	119,415

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	6.4%	$69,024	$ 132,320	7.1%	$76,574	$ 138,664	7.7%	$83,045	$ 149,876
2022	1,108,159	6.4	70,922	133,589	7.1	78,679	139,994	7.7	85,328	151,314
2023	1,138,633	6.4	72,873	134,727	7.1	80,843	141,187	7.7	87,675	152,603
2024	1,169,945	6.4	74,876	135,719	7.1	83,066	142,227	7.7	90,086	153,727
2025	1,202,118	6.4	76,936	136,549	7.1	85,350	143,096	7.7	92,563	154,667
2026	1,235,176	6.4	79,051	137,198	7.1	87,697	143,776	7.7	95,109	155,402
2027	1,269,143	6.4	81,225	137,648	7.1	90,109	144,247	7.7	97,724	155,911
2028	1,304,044	6.4	83,459	137,877	7.1	92,587	144,487	7.7	100,411	156,171
2029	1,339,905	6.4	85,754	137,864	7.1	95,133	144,473	7.7	103,173	156,156
2030	1,376,752	6.4	88,112	137,584	7.1	97,749	144,180	7.7	106,010	155,839

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	8.8%	$94,908	$ 161,832	9.1%	$98,144	$ 167,412	10.5%	$113,243	$ 184,953
2022	1,108,159	8.8	97,518	163,384	9.1	100,842	169,018	10.5	116,357	186,727
2023	1,138,633	8.8	100,200	164,776	9.1	103,616	170,458	10.5	119,556	188,318
2024	1,169,945	8.8	102,955	165,989	9.1	106,465	171,713	10.5	122,844	189,705
2025	1,202,118	8.8	105,786	167,004	9.1	109,393	172,763	10.5	126,222	190,865
2026	1,235,176	8.8	108,695	167,798	9.1	112,401	173,584	10.5	129,693	191,772
2027	1,269,143	8.8	111,685	168,348	9.1	115,492	174,153	10.5	133,260	192,400
2028	1,304,044	8.8	114,756	168,628	9.1	118,668	174,443	10.5	136,925	192,721
2029	1,339,905	8.8	117,912	168,612	9.1	121,931	174,426	10.5	140,690	192,702
2030	1,376,752	8.8	121,154	168,270	9.1	125,284	174,072	10.5	144,559	192,311

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program Estimated Employer Contribution As a % of Payroll	L-1 Annual Dollars	L-1 Unfunded Actuarial Accrued Liability	L-3 Benefit Program Estimated Employer Contribution As a % of Payroll	L-3 Annual Dollars	L-3 Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-4(65) Annual Dollars	LT-4(65) Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	1.9%	$20,492	$ 92,447	3.6%	$38,826	$ 115,530	3.1%	$33,434	$ 114,847
2022	1,108,159	1.9	21,055	93,334	3.6	39,894	116,638	3.1	34,353	115,949
2023	1,138,633	1.9	21,634	94,129	3.6	40,991	117,632	3.1	35,298	116,937
2024	1,169,945	1.9	22,229	94,822	3.6	42,118	118,498	3.1	36,268	117,798
2025	1,202,118	1.9	22,840	95,402	3.6	43,276	119,222	3.1	37,266	118,518
2026	1,235,176	1.9	23,468	95,856	3.6	44,466	119,789	3.1	38,290	119,081
2027	1,269,143	1.9	24,114	96,170	3.6	45,689	120,182	3.1	39,343	119,471
2028	1,304,044	1.9	24,777	96,330	3.6	46,946	120,382	3.1	40,425	119,670
2029	1,339,905	1.9	25,458	96,321	3.6	48,237	120,370	3.1	41,537	119,658
2030	1,376,752	1.9	26,158	96,125	3.6	49,563	120,126	3.1	42,679	119,415

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-5(65) Annual Dollars	LT-5(65) Unfunded Actuarial Accrued Liability	L-7 Benefit Program Estimated Employer Contribution As a % of Payroll	L-7 Annual Dollars	L-7 Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-8(65) Annual Dollars	LT-8(65) Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	4.5%	$48,533	$ 132,320	5.2%	$56,082	$ 138,664	5.8%	$62,553	$ 149,876
2022	1,108,159	4.5	49,867	133,589	5.2	57,624	139,994	5.8	64,273	151,314
2023	1,138,633	4.5	51,238	134,727	5.2	59,209	141,187	5.8	66,041	152,603
2024	1,169,945	4.5	52,648	135,719	5.2	60,837	142,227	5.8	67,857	153,727
2025	1,202,118	4.5	54,095	136,549	5.2	62,510	143,096	5.8	69,723	154,667
2026	1,235,176	4.5	55,583	137,198	5.2	64,229	143,776	5.8	71,640	155,402
2027	1,269,143	4.5	57,111	137,648	5.2	65,995	144,247	5.8	73,610	155,911
2028	1,304,044	4.5	58,682	137,877	5.2	67,810	144,487	5.8	75,635	156,171
2029	1,339,905	4.5	60,296	137,864	5.2	69,675	144,473	5.8	77,714	156,156
2030	1,376,752	4.5	61,954	137,584	5.2	71,591	144,180	5.8	79,852	155,839

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program Estimated Employer Contribution As a % of Payroll	L-12 Annual Dollars	L-12 Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program Estimated Employer Contribution As a % of Payroll	LT-14(65) Annual Dollars	LT-14(65) Unfunded Actuarial Accrued Liability	L-6 Benefit Program Estimated Employer Contribution As a % of Payroll	L-6 Annual Dollars	L-6 Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	6.9%	$74,417	$ 161,832	7.2%	$77,652	$ 167,412	8.6%	$92,751	$ 184,953
2022	1,108,159	6.9	76,463	163,384	7.2	79,787	169,018	8.6	95,302	186,727
2023	1,138,633	6.9	78,566	164,776	7.2	81,982	170,458	8.6	97,922	188,318
2024	1,169,945	6.9	80,726	165,989	7.2	84,236	171,713	8.6	100,615	189,705
2025	1,202,118	6.9	82,946	167,004	7.2	86,552	172,763	8.6	103,382	190,865
2026	1,235,176	6.9	85,227	167,798	7.2	88,933	173,584	8.6	106,225	191,772
2027	1,269,143	6.9	87,571	168,348	7.2	91,378	174,153	8.6	109,146	192,400
2028	1,304,044	6.9	89,979	168,628	7.2	93,891	174,443	8.6	112,148	192,721
2029	1,339,905	6.9	92,453	168,612	7.2	96,473	174,426	8.6	115,232	192,702
2030	1,376,752	6.9	94,996	168,270	7.2	99,126	174,072	8.6	118,401	192,311

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	7.8%	$84,123	$ 95,520	9.5%	$102,458	$ 119,378	9.1%	$98,144	$ 118,728
2022	1,108,159	7.8	86,436	96,436	9.5	105,275	120,523	9.1	100,842	119,867
2023	1,138,633	7.8	88,813	97,258	9.5	108,170	121,550	9.1	103,616	120,888
2024	1,169,945	7.8	91,256	97,974	9.5	111,145	122,445	9.1	106,465	121,778
2025	1,202,118	7.8	93,765	98,573	9.5	114,201	123,193	9.1	109,393	122,522
2026	1,235,176	7.8	96,344	99,042	9.5	117,342	123,779	9.1	112,401	123,104
2027	1,269,143	7.8	98,993	99,367	9.5	120,569	124,185	9.1	115,492	123,507
2028	1,304,044	7.8	101,715	99,533	9.5	123,884	124,392	9.1	118,668	123,713
2029	1,339,905	7.8	104,513	99,523	9.5	127,291	124,380	9.1	121,931	123,701
2030	1,376,752	7.8	107,387	99,321	9.5	130,791	124,127	9.1	125,284	123,450

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	10.6%	$114,321	$ 136,750	11.3%	$121,871	$ 143,308	11.9%	$128,342	$ 154,887
2022	1,108,159	10.6	117,465	138,062	11.3	125,222	144,683	11.9	131,871	156,373
2023	1,138,633	10.6	120,695	139,238	11.3	128,666	145,916	11.9	135,497	157,705
2024	1,169,945	10.6	124,014	140,263	11.3	132,204	146,991	11.9	139,223	158,866
2025	1,202,118	10.6	127,425	141,120	11.3	135,839	147,889	11.9	143,052	159,837
2026	1,235,176	10.6	130,929	141,791	11.3	139,575	148,592	11.9	146,986	160,597
2027	1,269,143	10.6	134,529	142,256	11.3	143,413	149,079	11.9	151,028	161,123
2028	1,304,044	10.6	138,229	142,493	11.3	147,357	149,327	11.9	155,181	161,391
2029	1,339,905	10.6	142,030	142,479	11.3	151,409	149,313	11.9	159,449	161,375
2030	1,376,752	10.6	145,936	142,190	11.3	155,573	149,010	11.9	163,833	161,047

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	13.0%	$140,205	$ 167,154	13.3%	$143,441	$ 172,928	14.8%	$159,618	$ 191,081
2022	1,108,159	13.0	144,061	168,757	13.3	147,385	174,587	14.8	164,008	192,914
2023	1,138,633	13.0	148,022	170,195	13.3	151,438	176,075	14.8	168,518	194,558
2024	1,169,945	13.0	152,093	171,448	13.3	155,603	177,372	14.8	173,152	195,991
2025	1,202,118	13.0	156,275	172,496	13.3	159,882	178,456	14.8	177,913	197,189
2026	1,235,176	13.0	160,573	173,316	13.3	164,278	179,304	14.8	182,806	198,126
2027	1,269,143	13.0	164,989	173,884	13.3	168,796	179,892	14.8	187,833	198,775
2028	1,304,044	13.0	169,526	174,174	13.3	173,438	180,192	14.8	192,999	199,106
2029	1,339,905	13.0	174,188	174,157	13.3	178,207	180,175	14.8	198,306	199,087
2030	1,376,752	13.0	178,978	173,803	13.3	183,108	179,809	14.8	203,759	198,683

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	5.9%	$63,632	$ 95,520	7.6%	$81,966	$ 119,378	7.2%	$77,652	$ 118,728
2022	1,108,159	5.9	65,381	96,436	7.6	84,220	120,523	7.2	79,787	119,867
2023	1,138,633	5.9	67,179	97,258	7.6	86,536	121,550	7.2	81,982	120,888
2024	1,169,945	5.9	69,027	97,974	7.6	88,916	122,445	7.2	84,236	121,778
2025	1,202,118	5.9	70,925	98,573	7.6	91,361	123,193	7.2	86,552	122,522
2026	1,235,176	5.9	72,875	99,042	7.6	93,873	123,779	7.2	88,933	123,104
2027	1,269,143	5.9	74,879	99,367	7.6	96,455	124,185	7.2	91,378	123,507
2028	1,304,044	5.9	76,939	99,533	7.6	99,107	124,392	7.2	93,891	123,713
2029	1,339,905	5.9	79,054	99,523	7.6	101,833	124,380	7.2	96,473	123,701
2030	1,376,752	5.9	81,228	99,321	7.6	104,633	124,127	7.2	99,126	123,450

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	8.7%	$93,830	$ 136,750	9.4%	$101,379	$ 143,308	10.0%	$107,850	$ 154,887
2022	1,108,159	8.7	96,410	138,062	9.4	104,167	144,683	10.0	110,816	156,373
2023	1,138,633	8.7	99,061	139,238	9.4	107,032	145,916	10.0	113,863	157,705
2024	1,169,945	8.7	101,785	140,263	9.4	109,975	146,991	10.0	116,995	158,866
2025	1,202,118	8.7	104,584	141,120	9.4	112,999	147,889	10.0	120,212	159,837
2026	1,235,176	8.7	107,460	141,791	9.4	116,107	148,592	10.0	123,518	160,597
2027	1,269,143	8.7	110,415	142,256	9.4	119,299	149,079	10.0	126,914	161,123
2028	1,304,044	8.7	113,452	142,493	9.4	122,580	149,327	10.0	130,404	161,391
2029	1,339,905	8.7	116,572	142,479	9.4	125,951	149,313	10.0	133,991	161,375
2030	1,376,752	8.7	119,777	142,190	9.4	129,415	149,010	10.0	137,675	161,047

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	11.1%	$119,714	$ 167,154	11.4%	$122,949	$ 172,928	12.9%	$139,127	$ 191,081
2022	1,108,159	11.1	123,006	168,757	11.4	126,330	174,587	12.9	142,953	192,914
2023	1,138,633	11.1	126,388	170,195	11.4	129,804	176,075	12.9	146,884	194,558
2024	1,169,945	11.1	129,864	171,448	11.4	133,374	177,372	12.9	150,923	195,991
2025	1,202,118	11.1	133,435	172,496	11.4	137,041	178,456	12.9	155,073	197,189
2026	1,235,176	11.1	137,105	173,316	11.4	140,810	179,304	12.9	159,338	198,126
2027	1,269,143	11.1	140,875	173,884	11.4	144,682	179,892	12.9	163,719	198,775
2028	1,304,044	11.1	144,749	174,174	11.4	148,661	180,192	12.9	168,222	199,106
2029	1,339,905	11.1	148,729	174,157	11.4	152,749	180,175	12.9	172,848	199,087
2030	1,376,752	11.1	152,819	173,803	11.4	156,950	179,809	12.9	177,601	198,683

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Regular Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	4.0%	$43,140	$ 95,520	5.7%	$61,475	$ 119,378	5.3%	$57,161	$ 118,728
2022	1,108,159	4.0	44,326	96,436	5.7	63,165	120,523	5.3	58,732	119,867
2023	1,138,633	4.0	45,545	97,258	5.7	64,902	121,550	5.3	60,348	120,888
2024	1,169,945	4.0	46,798	97,974	5.7	66,687	122,445	5.3	62,007	121,778
2025	1,202,118	4.0	48,085	98,573	5.7	68,521	123,193	5.3	63,712	122,522
2026	1,235,176	4.0	49,407	99,042	5.7	70,405	123,779	5.3	65,464	123,104
2027	1,269,143	4.0	50,766	99,367	5.7	72,341	124,185	5.3	67,265	123,507
2028	1,304,044	4.0	52,162	99,533	5.7	74,331	124,392	5.3	69,114	123,713
2029	1,339,905	4.0	53,596	99,523	5.7	76,375	124,380	5.3	71,015	123,701
2030	1,376,752	4.0	55,070	99,321	5.7	78,475	124,127	5.3	72,968	123,450

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	6.8%	$73,338	$ 136,750	7.5%	$80,888	$ 143,308	8.1%	$87,359	$ 154,887
2022	1,108,159	6.8	75,355	138,062	7.5	83,112	144,683	8.1	89,761	156,373
2023	1,138,633	6.8	77,427	139,238	7.5	85,397	145,916	8.1	92,229	157,705
2024	1,169,945	6.8	79,556	140,263	7.5	87,746	146,991	8.1	94,766	158,866
2025	1,202,118	6.8	81,744	141,120	7.5	90,159	147,889	8.1	97,372	159,837
2026	1,235,176	6.8	83,992	141,791	7.5	92,638	148,592	8.1	100,049	160,597
2027	1,269,143	6.8	86,302	142,256	7.5	95,186	149,079	8.1	102,801	161,123
2028	1,304,044	6.8	88,675	142,493	7.5	97,803	149,327	8.1	105,628	161,391
2029	1,339,905	6.8	91,114	142,479	7.5	100,493	149,313	8.1	108,532	161,375
2030	1,376,752	6.8	93,619	142,190	7.5	103,256	149,010	8.1	111,517	161,047

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	9.2%	$99,222	$ 167,154	9.5%	$102,458	$ 172,928	11.0%	$118,635	$ 191,081
2022	1,108,159	9.2	101,951	168,757	9.5	105,275	174,587	11.0	121,897	192,914
2023	1,138,633	9.2	104,754	170,195	9.5	108,170	176,075	11.0	125,250	194,558
2024	1,169,945	9.2	107,635	171,448	9.5	111,145	177,372	11.0	128,694	195,991
2025	1,202,118	9.2	110,595	172,496	9.5	114,201	178,456	11.0	132,233	197,189
2026	1,235,176	9.2	113,636	173,316	9.5	117,342	179,304	11.0	135,869	198,126
2027	1,269,143	9.2	116,761	173,884	9.5	120,569	179,892	11.0	139,606	198,775
2028	1,304,044	9.2	119,972	174,174	9.5	123,884	180,192	11.0	143,445	199,106
2029	1,339,905	9.2	123,271	174,157	9.5	127,291	180,175	11.0	147,390	199,087
2030	1,376,752	9.2	126,661	173,803	9.5	130,791	179,809	11.0	151,443	198,683

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)

(Member contributions are additional)

Regular Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	2.1%	$22,649	$ 95,520	3.8%	$40,983	$ 119,378	3.4%	$36,669	$ 118,728
2022	1,108,159	2.1	23,271	96,436	3.8	42,110	120,523	3.4	37,677	119,867
2023	1,138,633	2.1	23,911	97,258	3.8	43,268	121,550	3.4	38,714	120,888
2024	1,169,945	2.1	24,569	97,974	3.8	44,458	122,445	3.4	39,778	121,778
2025	1,202,118	2.1	25,244	98,573	3.8	45,680	123,193	3.4	40,872	122,522
2026	1,235,176	2.1	25,939	99,042	3.8	46,937	123,779	3.4	41,996	123,104
2027	1,269,143	2.1	26,652	99,367	3.8	48,227	124,185	3.4	43,151	123,507
2028	1,304,044	2.1	27,385	99,533	3.8	49,554	124,392	3.4	44,337	123,713
2029	1,339,905	2.1	28,138	99,523	3.8	50,916	124,380	3.4	45,557	123,701
2030	1,376,752	2.1	28,912	99,321	3.8	52,317	124,127	3.4	46,810	123,450

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	4.9%	$52,847	$ 136,750	5.6%	$60,396	$ 143,308	6.2%	$66,867	$ 154,887
2022	1,108,159	4.9	54,300	138,062	5.6	62,057	144,683	6.2	68,706	156,373
2023	1,138,633	4.9	55,793	139,238	5.6	63,763	145,916	6.2	70,595	157,705
2024	1,169,945	4.9	57,327	140,263	5.6	65,517	146,991	6.2	72,537	158,866
2025	1,202,118	4.9	58,904	141,120	5.6	67,319	147,889	6.2	74,531	159,837
2026	1,235,176	4.9	60,524	141,791	5.6	69,170	148,592	6.2	76,581	160,597
2027	1,269,143	4.9	62,188	142,256	5.6	71,072	149,079	6.2	78,687	161,123
2028	1,304,044	4.9	63,898	142,493	5.6	73,026	149,327	6.2	80,851	161,391
2029	1,339,905	4.9	65,655	142,479	5.6	75,035	149,313	6.2	83,074	161,375
2030	1,376,752	4.9	67,461	142,190	5.6	77,098	149,010	6.2	85,359	161,047

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	7.3%	$78,731	$ 167,154	7.6%	$81,966	$ 172,928	9.1%	$98,144	$ 191,081
2022	1,108,159	7.3	80,896	168,757	7.6	84,220	174,587	9.1	100,842	192,914
2023	1,138,633	7.3	83,120	170,195	7.6	86,536	176,075	9.1	103,616	194,558
2024	1,169,945	7.3	85,406	171,448	7.6	88,916	177,372	9.1	106,465	195,991
2025	1,202,118	7.3	87,755	172,496	7.6	91,361	178,456	9.1	109,393	197,189
2026	1,235,176	7.3	90,168	173,316	7.6	93,873	179,304	9.1	112,401	198,126
2027	1,269,143	7.3	92,647	173,884	7.6	96,455	179,892	9.1	115,492	198,775
2028	1,304,044	7.3	95,195	174,174	7.6	99,107	180,192	9.1	118,668	199,106
2029	1,339,905	7.3	97,813	174,157	7.6	101,833	180,175	9.1	121,931	199,087
2030	1,376,752	7.3	100,503	173,803	7.6	104,633	179,809	9.1	125,284	198,683

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (0% Member Contribution Rate, 5 Year FAS)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	7.8%	$84,123	$ 95,928	9.5%	$102,458	$ 119,925	9.6%	$103,536	$ 125,988
2022	1,108,159	7.8	86,436	96,848	9.5	105,275	121,075	9.6	106,383	127,197
2023	1,138,633	7.8	88,813	97,673	9.5	108,170	122,107	9.6	109,309	128,281
2024	1,169,945	7.8	91,256	98,392	9.5	111,145	123,006	9.6	112,315	129,226
2025	1,202,118	7.8	93,765	98,993	9.5	114,201	123,758	9.6	115,403	130,016
2026	1,235,176	7.8	96,344	99,464	9.5	117,342	124,346	9.6	118,577	130,634
2027	1,269,143	7.8	98,993	99,790	9.5	120,569	124,753	9.6	121,838	131,062
2028	1,304,044	7.8	101,715	99,956	9.5	123,884	124,961	9.6	125,188	131,280
2029	1,339,905	7.8	104,513	99,946	9.5	127,291	124,949	9.6	128,631	131,267
2030	1,376,752	7.8	107,387	99,743	9.5	130,791	124,695	9.6	132,168	131,000

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	10.9%	$117,557	$ 142,445	11.3%	$121,871	$ 143,931	12.2%	$131,577	$ 158,938
2022	1,108,159	10.9	120,789	143,811	11.3	125,222	145,312	12.2	135,195	160,463
2023	1,138,633	10.9	124,111	145,036	11.3	128,666	146,550	12.2	138,913	161,830
2024	1,169,945	10.9	127,524	146,104	11.3	132,204	147,629	12.2	142,733	163,022
2025	1,202,118	10.9	131,031	146,997	11.3	135,839	148,531	12.2	146,658	164,018
2026	1,235,176	10.9	134,634	147,696	11.3	139,575	149,237	12.2	150,691	164,798
2027	1,269,143	10.9	138,337	148,180	11.3	143,413	149,726	12.2	154,835	165,338
2028	1,304,044	10.9	142,141	148,427	11.3	147,357	149,975	12.2	159,093	165,613
2029	1,339,905	10.9	146,050	148,413	11.3	151,409	149,961	12.2	163,468	165,597
2030	1,376,752	10.9	150,066	148,112	11.3	155,573	149,656	12.2	167,964	165,261

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	13.0%	$140,205	$ 167,909	13.4%	$144,519	$ 175,419	14.8%	$159,618	$ 191,935
2022	1,108,159	13.0	144,061	169,520	13.4	148,493	177,102	14.8	164,008	193,776
2023	1,138,633	13.0	148,022	170,965	13.4	152,577	178,611	14.8	168,518	195,427
2024	1,169,945	13.0	152,093	172,224	13.4	156,773	179,926	14.8	173,152	196,866
2025	1,202,118	13.0	156,275	173,277	13.4	161,084	181,026	14.8	177,913	198,069
2026	1,235,176	13.0	160,573	174,101	13.4	165,514	181,887	14.8	182,806	199,011
2027	1,269,143	13.0	164,989	174,672	13.4	170,065	182,483	14.8	187,833	199,663
2028	1,304,044	13.0	169,526	174,963	13.4	174,742	182,787	14.8	192,999	199,996
2029	1,339,905	13.0	174,188	174,946	13.4	179,547	182,769	14.8	198,306	199,977
2030	1,376,752	13.0	178,978	174,591	13.4	184,485	182,398	14.8	203,759	199,571

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (2% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	5.9%	$63,632	$ 95,928	7.6%	$81,966	$ 119,925	7.7%	$83,045	$ 125,988
2022	1,108,159	5.9	65,381	96,848	7.6	84,220	121,075	7.7	85,328	127,197
2023	1,138,633	5.9	67,179	97,673	7.6	86,536	122,107	7.7	87,675	128,281
2024	1,169,945	5.9	69,027	98,392	7.6	88,916	123,006	7.7	90,086	129,226
2025	1,202,118	5.9	70,925	98,993	7.6	91,361	123,758	7.7	92,563	130,016
2026	1,235,176	5.9	72,875	99,464	7.6	93,873	124,346	7.7	95,109	130,634
2027	1,269,143	5.9	74,879	99,790	7.6	96,455	124,753	7.7	97,724	131,062
2028	1,304,044	5.9	76,939	99,956	7.6	99,107	124,961	7.7	100,411	131,280
2029	1,339,905	5.9	79,054	99,946	7.6	101,833	124,949	7.7	103,173	131,267
2030	1,376,752	5.9	81,228	99,743	7.6	104,633	124,695	7.7	106,010	131,000

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	9.0%	$97,065	$ 142,445	9.4%	$101,379	$ 143,931	10.3%	$111,086	$ 158,938
2022	1,108,159	9.0	99,734	143,811	9.4	104,167	145,312	10.3	114,140	160,463
2023	1,138,633	9.0	102,477	145,036	9.4	107,032	146,550	10.3	117,279	161,830
2024	1,169,945	9.0	105,295	146,104	9.4	109,975	147,629	10.3	120,504	163,022
2025	1,202,118	9.0	108,191	146,997	9.4	112,999	148,531	10.3	123,818	164,018
2026	1,235,176	9.0	111,166	147,696	9.4	116,107	149,237	10.3	127,223	164,798
2027	1,269,143	9.0	114,223	148,180	9.4	119,299	149,726	10.3	130,722	165,338
2028	1,304,044	9.0	117,364	148,427	9.4	122,580	149,975	10.3	134,317	165,613
2029	1,339,905	9.0	120,591	148,413	9.4	125,951	149,961	10.3	138,010	165,597
2030	1,376,752	9.0	123,908	148,112	9.4	129,415	149,656	10.3	141,805	165,261

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	11.1%	$119,714	$ 167,909	11.5%	$124,028	$ 175,419	12.9%	$139,127	$ 191,935
2022	1,108,159	11.1	123,006	169,520	11.5	127,438	177,102	12.9	142,953	193,776
2023	1,138,633	11.1	126,388	170,965	11.5	130,943	178,611	12.9	146,884	195,427
2024	1,169,945	11.1	129,864	172,224	11.5	134,544	179,926	12.9	150,923	196,866
2025	1,202,118	11.1	133,435	173,277	11.5	138,244	181,026	12.9	155,073	198,069
2026	1,235,176	11.1	137,105	174,101	11.5	142,045	181,887	12.9	159,338	199,011
2027	1,269,143	11.1	140,875	174,672	11.5	145,951	182,483	12.9	163,719	199,663
2028	1,304,044	11.1	144,749	174,963	11.5	149,965	182,787	12.9	168,222	199,996
2029	1,339,905	11.1	148,729	174,946	11.5	154,089	182,769	12.9	172,848	199,977
2030	1,376,752	11.1	152,819	174,591	11.5	158,326	182,398	12.9	177,601	199,571

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (4% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	4.0%	$43,140	$ 95,928	5.7%	$61,475	$ 119,925	5.8%	$62,553	$ 125,988
2022	1,108,159	4.0	44,326	96,848	5.7	63,165	121,075	5.8	64,273	127,197
2023	1,138,633	4.0	45,545	97,673	5.7	64,902	122,107	5.8	66,041	128,281
2024	1,169,945	4.0	46,798	98,392	5.7	66,687	123,006	5.8	67,857	129,226
2025	1,202,118	4.0	48,085	98,993	5.7	68,521	123,758	5.8	69,723	130,016
2026	1,235,176	4.0	49,407	99,464	5.7	70,405	124,346	5.8	71,640	130,634
2027	1,269,143	4.0	50,766	99,790	5.7	72,341	124,753	5.8	73,610	131,062
2028	1,304,044	4.0	52,162	99,956	5.7	74,331	124,961	5.8	75,635	131,280
2029	1,339,905	4.0	53,596	99,946	5.7	76,375	124,949	5.8	77,714	131,267
2030	1,376,752	4.0	55,070	99,743	5.7	78,475	124,695	5.8	79,852	131,000

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	7.1%	$76,574	$ 142,445	7.5%	$80,888	$ 143,931	8.4%	$90,594	$ 158,938
2022	1,108,159	7.1	78,679	143,811	7.5	83,112	145,312	8.4	93,085	160,463
2023	1,138,633	7.1	80,843	145,036	7.5	85,397	146,550	8.4	95,645	161,830
2024	1,169,945	7.1	83,066	146,104	7.5	87,746	147,629	8.4	98,275	163,022
2025	1,202,118	7.1	85,350	146,997	7.5	90,159	148,531	8.4	100,978	164,018
2026	1,235,176	7.1	87,697	147,696	7.5	92,638	149,237	8.4	103,755	164,798
2027	1,269,143	7.1	90,109	148,180	7.5	95,186	149,726	8.4	106,608	165,338
2028	1,304,044	7.1	92,587	148,427	7.5	97,803	149,975	8.4	109,540	165,613
2029	1,339,905	7.1	95,133	148,413	7.5	100,493	149,961	8.4	112,552	165,597
2030	1,376,752	7.1	97,749	148,112	7.5	103,256	149,656	8.4	115,647	165,261

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	9.2%	$99,222	$ 167,909	9.6%	$103,536	$ 175,419	11.0%	$118,635	$ 191,935
2022	1,108,159	9.2	101,951	169,520	9.6	106,383	177,102	11.0	121,897	193,776
2023	1,138,633	9.2	104,754	170,965	9.6	109,309	178,611	11.0	125,250	195,427
2024	1,169,945	9.2	107,635	172,224	9.6	112,315	179,926	11.0	128,694	196,866
2025	1,202,118	9.2	110,595	173,277	9.6	115,403	181,026	11.0	132,233	198,069
2026	1,235,176	9.2	113,636	174,101	9.6	118,577	181,887	11.0	135,869	199,011
2027	1,269,143	9.2	116,761	174,672	9.6	121,838	182,483	11.0	139,606	199,663
2028	1,304,044	9.2	119,972	174,963	9.6	125,188	182,787	11.0	143,445	199,996
2029	1,339,905	9.2	123,271	174,946	9.6	128,631	182,769	11.0	147,390	199,977
2030	1,376,752	9.2	126,661	174,591	9.6	132,168	182,398	11.0	151,443	199,571

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 2.75%.
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^{th} 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.

Warren County - Public Safety

Employer Contribution Rates (6% Member Contribution Rate, 5 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	2.1%	$22,649	$ 95,928	3.8%	$40,983	$ 119,925	3.9%	$42,062	$ 125,988
2022	1,108,159	2.1	23,271	96,848	3.8	42,110	121,075	3.9	43,218	127,197
2023	1,138,633	2.1	23,911	97,673	3.8	43,268	122,107	3.9	44,407	128,281
2024	1,169,945	2.1	24,569	98,392	3.8	44,458	123,006	3.9	45,628	129,226
2025	1,202,118	2.1	25,244	98,993	3.8	45,680	123,758	3.9	46,883	130,016
2026	1,235,176	2.1	25,939	99,464	3.8	46,937	124,346	3.9	48,172	130,634
2027	1,269,143	2.1	26,652	99,790	3.8	48,227	124,753	3.9	49,497	131,062
2028	1,304,044	2.1	27,385	99,956	3.8	49,554	124,961	3.9	50,858	131,280
2029	1,339,905	2.1	28,138	99,946	3.8	50,916	124,949	3.9	52,256	131,267
2030	1,376,752	2.1	28,912	99,743	3.8	52,317	124,695	3.9	53,693	131,000

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	5.2%	$56,082	$ 142,445	5.6%	$60,396	$ 143,931	6.5%	$70,103	$ 158,938
2022	1,108,159	5.2	57,624	143,811	5.6	62,057	145,312	6.5	72,030	160,463
2023	1,138,633	5.2	59,209	145,036	5.6	63,763	146,550	6.5	74,011	161,830
2024	1,169,945	5.2	60,837	146,104	5.6	65,517	147,629	6.5	76,046	163,022
2025	1,202,118	5.2	62,510	146,997	5.6	67,319	148,531	6.5	78,138	164,018
2026	1,235,176	5.2	64,229	147,696	5.6	69,170	149,237	6.5	80,286	164,798
2027	1,269,143	5.2	65,995	148,180	5.6	71,072	149,726	6.5	82,494	165,338
2028	1,304,044	5.2	67,810	148,427	5.6	73,026	149,975	6.5	84,763	165,613
2029	1,339,905	5.2	69,675	148,413	5.6	75,035	149,961	6.5	87,094	165,597
2030	1,376,752	5.2	71,591	148,112	5.6	77,098	149,656	6.5	89,489	165,261

		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
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	$ 1,078,500	7.3%	$78,731	$ 167,909	7.7%	$83,045	$ 175,419	9.1%	$98,144	$ 191,935
2022	1,108,159	7.3	80,896	169,520	7.7	85,328	177,102	9.1	100,842	193,776
2023	1,138,633	7.3	83,120	170,965	7.7	87,675	178,611	9.1	103,616	195,427
2024	1,169,945	7.3	85,406	172,224	7.7	90,086	179,926	9.1	106,465	196,866
2025	1,202,118	7.3	87,755	173,277	7.7	92,563	181,026	9.1	109,393	198,069
2026	1,235,176	7.3	90,168	174,101	7.7	95,109	181,887	9.1	112,401	199,011
2027	1,269,143	7.3	92,647	174,672	7.7	97,724	182,483	9.1	115,492	199,663
2028	1,304,044	7.3	95,195	174,963	7.7	100,411	182,787	9.1	118,668	199,996
2029	1,339,905	7.3	97,813	174,946	7.7	103,173	182,769	9.1	121,931	199,977
2030	1,376,752	7.3	100,503	174,591	7.7	106,010	182,398	9.1	125,284	199,571

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (0% Member Contribution Rate, 3 Year FAS)

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-1: Annual Dollars	L-1: Unfunded Actuarial Accrued Liability	L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-3: Annual Dollars	L-3: Unfunded Actuarial Accrued Liability	LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-4(65): Annual Dollars	LT-4(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	8.0%	$86,280	$ 99,207	9.9%	$106,772	$ 124,000	9.9%	$106,772	$ 130,333
2022	1,108,159	8.0	88,653	100,159	9.9	109,708	125,189	9.9	109,708	131,583
2023	1,138,633	8.0	91,091	101,012	9.9	112,725	126,256	9.9	112,725	132,704
2024	1,169,945	8.0	93,596	101,756	9.9	115,825	127,186	9.9	115,825	133,681
2025	1,202,118	8.0	96,169	102,378	9.9	119,010	127,963	9.9	119,010	134,498
2026	1,235,176	8.0	98,814	102,865	9.9	122,282	128,571	9.9	122,282	135,137
2027	1,269,143	8.0	101,531	103,202	9.9	125,645	128,992	9.9	125,645	135,580
2028	1,304,044	8.0	104,324	103,374	9.9	129,100	129,207	9.9	129,100	135,806
2029	1,339,905	8.0	107,192	103,364	9.9	132,651	129,195	9.9	132,651	135,793
2030	1,376,752	8.0	110,140	103,154	9.9	136,298	128,933	9.9	136,298	135,517

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-5(65): Annual Dollars	LT-5(65): Unfunded Actuarial Accrued Liability	L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-7: Annual Dollars	L-7: Unfunded Actuarial Accrued Liability	LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-8(65): Annual Dollars	LT-8(65): Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	11.3%	$121,871	$ 147,367	11.7%	$126,185	$ 148,834	12.6%	$135,891	$ 164,395
2022	1,108,159	11.3	125,222	148,781	11.7	129,655	150,262	12.6	139,628	165,972
2023	1,138,633	11.3	128,666	150,049	11.7	133,220	151,542	12.6	143,468	167,386
2024	1,169,945	11.3	132,204	151,154	11.7	136,884	152,658	12.6	147,413	168,619
2025	1,202,118	11.3	135,839	152,078	11.7	140,648	153,591	12.6	151,467	169,650
2026	1,235,176	11.3	139,575	152,801	11.7	144,516	154,321	12.6	155,632	170,457
2027	1,269,143	11.3	143,413	153,302	11.7	148,490	154,827	12.6	159,912	171,016
2028	1,304,044	11.3	147,357	153,557	11.7	152,573	155,085	12.6	164,310	171,301
2029	1,339,905	11.3	151,409	153,542	11.7	156,769	155,070	12.6	168,828	171,285
2030	1,376,752	11.3	155,573	153,230	11.7	161,080	154,755	12.6	173,471	170,937

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-12: Annual Dollars	L-12: Unfunded Actuarial Accrued Liability	LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll	LT-14(65): Annual Dollars	LT-14(65): Unfunded Actuarial Accrued Liability	L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll	L-6: Annual Dollars	L-6: Unfunded Actuarial Accrued Liability
2021	$ 1,078,500	13.5%	$145,598	$ 173,630	14.0%	$150,990	$ 181,383	15.4%	$166,089	$ 198,447
2022	1,108,159	13.5	149,601	175,296	14.0	155,142	183,123	15.4	170,656	200,351
2023	1,138,633	13.5	153,715	176,790	14.0	159,409	184,683	15.4	175,349	202,058
2024	1,169,945	13.5	157,943	178,092	14.0	163,792	186,043	15.4	180,172	203,546
2025	1,202,118	13.5	162,286	179,181	14.0	168,297	187,180	15.4	185,126	204,790
2026	1,235,176	13.5	166,749	180,033	14.0	172,925	188,070	15.4	190,217	205,764
2027	1,269,143	13.5	171,334	180,623	14.0	177,680	188,686	15.4	195,448	206,438
2028	1,304,044	13.5	176,046	180,924	14.0	182,566	189,000	15.4	200,823	206,782
2029	1,339,905	13.5	180,887	180,907	14.0	187,587	188,982	15.4	206,345	206,762
2030	1,376,752	13.5	185,862	180,540	14.0	192,745	188,598	15.4	212,020	206,342

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (2% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	6.1%	$65,789	$ 99,207	8.0%	$86,280	$ 124,000	8.0%	$86,280	$ 130,333
2022	1,108,159	6.1	67,598	100,159	8.0	88,653	125,189	8.0	88,653	131,583
2023	1,138,633	6.1	69,457	101,012	8.0	91,091	126,256	8.0	91,091	132,704
2024	1,169,945	6.1	71,367	101,756	8.0	93,596	127,186	8.0	93,596	133,681
2025	1,202,118	6.1	73,329	102,378	8.0	96,169	127,963	8.0	96,169	134,498
2026	1,235,176	6.1	75,346	102,865	8.0	98,814	128,571	8.0	98,814	135,137
2027	1,269,143	6.1	77,418	103,202	8.0	101,531	128,992	8.0	101,531	135,580
2028	1,304,044	6.1	79,547	103,374	8.0	104,324	129,207	8.0	104,324	135,806
2029	1,339,905	6.1	81,734	103,364	8.0	107,192	129,195	8.0	107,192	135,793
2030	1,376,752	6.1	83,982	103,154	8.0	110,140	128,933	8.0	110,140	135,517

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	9.4%	$101,379	$ 147,367	9.8%	$105,693	$ 148,834	10.7%	$115,400	$ 164,395
2022	1,108,159	9.4	104,167	148,781	9.8	108,600	150,262	10.7	118,573	165,972
2023	1,138,633	9.4	107,032	150,049	9.8	111,586	151,542	10.7	121,834	167,386
2024	1,169,945	9.4	109,975	151,154	9.8	114,655	152,658	10.7	125,184	168,619
2025	1,202,118	9.4	112,999	152,078	9.8	117,808	153,591	10.7	128,627	169,650
2026	1,235,176	9.4	116,107	152,801	9.8	121,047	154,321	10.7	132,164	170,457
2027	1,269,143	9.4	119,299	153,302	9.8	124,376	154,827	10.7	135,798	171,016
2028	1,304,044	9.4	122,580	153,557	9.8	127,796	155,085	10.7	139,533	171,301
2029	1,339,905	9.4	125,951	153,542	9.8	131,311	155,070	10.7	143,370	171,285
2030	1,376,752	9.4	129,415	153,230	9.8	134,922	154,755	10.7	147,312	170,937

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	11.6%	$125,106	$ 173,630	12.1%	$130,499	$ 181,383	13.5%	$145,598	$ 198,447
2022	1,108,159	11.6	128,546	175,296	12.1	134,087	183,123	13.5	149,601	200,351
2023	1,138,633	11.6	132,081	176,790	12.1	137,775	184,683	13.5	153,715	202,058
2024	1,169,945	11.6	135,714	178,092	12.1	141,563	186,043	13.5	157,943	203,546
2025	1,202,118	11.6	139,446	179,181	12.1	145,456	187,180	13.5	162,286	204,790
2026	1,235,176	11.6	143,280	180,033	12.1	149,456	188,070	13.5	166,749	205,764
2027	1,269,143	11.6	147,221	180,623	12.1	153,566	188,686	13.5	171,334	206,438
2028	1,304,044	11.6	151,269	180,924	12.1	157,789	189,000	13.5	176,046	206,782
2029	1,339,905	11.6	155,429	180,907	12.1	162,129	188,982	13.5	180,887	206,762
2030	1,376,752	11.6	159,703	180,540	12.1	166,587	188,598	13.5	185,862	206,342

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 2.75%.
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^{th} 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.

Warren County - Public Safety

Employer Contribution Rates (4% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	4.2%	$45,297	$ 99,207	6.1%	$65,789	$ 124,000	6.1%	$65,789	$ 130,333
2022	1,108,159	4.2	46,543	100,159	6.1	67,598	125,189	6.1	67,598	131,583
2023	1,138,633	4.2	47,823	101,012	6.1	69,457	126,256	6.1	69,457	132,704
2024	1,169,945	4.2	49,138	101,756	6.1	71,367	127,186	6.1	71,367	133,681
2025	1,202,118	4.2	50,489	102,378	6.1	73,329	127,963	6.1	73,329	134,498
2026	1,235,176	4.2	51,877	102,865	6.1	75,346	128,571	6.1	75,346	135,137
2027	1,269,143	4.2	53,304	103,202	6.1	77,418	128,992	6.1	77,418	135,580
2028	1,304,044	4.2	54,770	103,374	6.1	79,547	129,207	6.1	79,547	135,806
2029	1,339,905	4.2	56,276	103,364	6.1	81,734	129,195	6.1	81,734	135,793
2030	1,376,752	4.2	57,824	103,154	6.1	83,982	128,933	6.1	83,982	135,517

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	7.5%	$80,888	$ 147,367	7.9%	$85,202	$ 148,834	8.8%	$94,908	$ 164,395
2022	1,108,159	7.5	83,112	148,781	7.9	87,545	150,262	8.8	97,518	165,972
2023	1,138,633	7.5	85,397	150,049	7.9	89,952	151,542	8.8	100,200	167,386
2024	1,169,945	7.5	87,746	151,154	7.9	92,426	152,658	8.8	102,955	168,619
2025	1,202,118	7.5	90,159	152,078	7.9	94,967	153,591	8.8	105,786	169,650
2026	1,235,176	7.5	92,638	152,801	7.9	97,579	154,321	8.8	108,695	170,457
2027	1,269,143	7.5	95,186	153,302	7.9	100,262	154,827	8.8	111,685	171,016
2028	1,304,044	7.5	97,803	153,557	7.9	103,019	155,085	8.8	114,756	171,301
2029	1,339,905	7.5	100,493	153,542	7.9	105,852	155,070	8.8	117,912	171,285
2030	1,376,752	7.5	103,256	153,230	7.9	108,763	154,755	8.8	121,154	170,937

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	9.7%	$104,615	$ 173,630	10.2%	$110,007	$ 181,383	11.6%	$125,106	$ 198,447
2022	1,108,159	9.7	107,491	175,296	10.2	113,032	183,123	11.6	128,546	200,351
2023	1,138,633	9.7	110,447	176,790	10.2	116,141	184,683	11.6	132,081	202,058
2024	1,169,945	9.7	113,485	178,092	10.2	119,334	186,043	11.6	135,714	203,546
2025	1,202,118	9.7	116,605	179,181	10.2	122,616	187,180	11.6	139,446	204,790
2026	1,235,176	9.7	119,812	180,033	10.2	125,988	188,070	11.6	143,280	205,764
2027	1,269,143	9.7	123,107	180,623	10.2	129,453	188,686	11.6	147,221	206,438
2028	1,304,044	9.7	126,492	180,924	10.2	133,012	189,000	11.6	151,269	206,782
2029	1,339,905	9.7	129,971	180,907	10.2	136,670	188,982	11.6	155,429	206,762
2030	1,376,752	9.7	133,545	180,540	10.2	140,429	188,598	11.6	159,703	206,342

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 2.75%.
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.

Warren County - Public Safety

Employer Contribution Rates (6% Member Contribution Rate, 3 Year FAS)
(Member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	2.3%	$24,806	$ 99,207	4.2%	$45,297	$ 124,000	4.2%	$45,297	$ 130,333
2022	1,108,159	2.3	25,488	100,159	4.2	46,543	125,189	4.2	46,543	131,583
2023	1,138,633	2.3	26,189	101,012	4.2	47,823	126,256	4.2	47,823	132,704
2024	1,169,945	2.3	26,909	101,756	4.2	49,138	127,186	4.2	49,138	133,681
2025	1,202,118	2.3	27,649	102,378	4.2	50,489	127,963	4.2	50,489	134,498
2026	1,235,176	2.3	28,409	102,865	4.2	51,877	128,571	4.2	51,877	135,137
2027	1,269,143	2.3	29,190	103,202	4.2	53,304	128,992	4.2	53,304	135,580
2028	1,304,044	2.3	29,993	103,374	4.2	54,770	129,207	4.2	54,770	135,806
2029	1,339,905	2.3	30,818	103,364	4.2	56,276	129,195	4.2	56,276	135,793
2030	1,376,752	2.3	31,665	103,154	4.2	57,824	128,933	4.2	57,824	135,517

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	5.6%	$60,396	$ 147,367	6.0%	$64,710	$ 148,834	6.9%	$74,417	$ 164,395
2022	1,108,159	5.6	62,057	148,781	6.0	66,490	150,262	6.9	76,463	165,972
2023	1,138,633	5.6	63,763	150,049	6.0	68,318	151,542	6.9	78,566	167,386
2024	1,169,945	5.6	65,517	151,154	6.0	70,197	152,658	6.9	80,726	168,619
2025	1,202,118	5.6	67,319	152,078	6.0	72,127	153,591	6.9	82,946	169,650
2026	1,235,176	5.6	69,170	152,801	6.0	74,111	154,321	6.9	85,227	170,457
2027	1,269,143	5.6	71,072	153,302	6.0	76,149	154,827	6.9	87,571	171,016
2028	1,304,044	5.6	73,026	153,557	6.0	78,243	155,085	6.9	89,979	171,301
2029	1,339,905	5.6	75,035	153,542	6.0	80,394	155,070	6.9	92,453	171,285
2030	1,376,752	5.6	77,098	153,230	6.0	82,605	154,755	6.9	94,996	170,937

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded	Estimated Employer Contribution		Unfunded
Valuation Year	Estimated Projected Payroll	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability	As a % of Payroll	Annual Dollars	Actuarial Accrued Liability
2021	$ 1,078,500	7.8%	$84,123	$ 173,630	8.3%	$89,516	$ 181,383	9.7%	$104,615	$ 198,447
2022	1,108,159	7.8	86,436	175,296	8.3	91,977	183,123	9.7	107,491	200,351
2023	1,138,633	7.8	88,813	176,790	8.3	94,507	184,683	9.7	110,447	202,058
2024	1,169,945	7.8	91,256	178,092	8.3	97,105	186,043	9.7	113,485	203,546
2025	1,202,118	7.8	93,765	179,181	8.3	99,776	187,180	9.7	116,605	204,790
2026	1,235,176	7.8	96,344	180,033	8.3	102,520	188,070	9.7	119,812	205,764
2027	1,269,143	7.8	98,993	180,623	8.3	105,339	188,686	9.7	123,107	206,438
2028	1,304,044	7.8	101,715	180,924	8.3	108,236	189,000	9.7	126,492	206,782
2029	1,339,905	7.8	104,513	180,907	8.3	111,212	188,982	9.7	129,971	206,762
2030	1,376,752	7.8	107,387	180,540	8.3	114,270	188,598	9.7	133,545	206,342

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 2.75%.
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.