



The Initial Valuation For

Warren County Emergency Services

as of October 31, 2022



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December 22, 2022

Warren County Emergency Services
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 - 105.685 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 normal cost rate and the casualty rate. 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 and 9 represent the dollar cost of each benefit program for a one year period based on the payroll reported for this actuarial valuation. In budgeting amounts for LAGERS contributions you should consider any changes in payroll which have been made since data was submitted for the valuation and any changes anticipated to be made before the end of the period for which you are preparing the budget.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2022.

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 October 31, 2022. 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,
Gabriel, Roeder, Smith & Company



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 Emergency Services

Employer Contribution Rates 5 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	6.50%	0.20%	11.10%	17.80%	15.90%	14.00%	12.10%
	Public Safety	6.40	0.20	5.50	12.10	10.20	8.30	6.40
L-3	General	7.90	0.30	13.90	22.10	20.20	18.30	16.40
	Public Safety	7.80	0.30	6.90	15.00	13.10	11.20	9.30
LT-4(65)	General	7.20	0.20	12.00	19.40	17.50	15.60	13.70
	Public Safety	7.60	0.20	6.70	14.50	12.60	10.70	8.80
LT-5(65)	General	8.40	0.30	14.50	23.20	21.30	19.40	17.50
	Public Safety	8.70	0.30	7.70	16.70	14.80	12.90	11.00
L-7	General	9.30	0.30	16.70	26.30	24.40	22.50	20.60
	Public Safety	9.20	0.30	8.20	17.70	15.80	13.90	12.00
LT-8(65)	General	9.70	0.30	17.10	27.10	25.20	23.30	21.40
	Public Safety	9.80	0.30	8.80	18.90	17.00	15.10	13.20
L-12	General	10.80	0.40	19.40	30.60	28.70	26.80	24.90
	Public Safety	10.60	0.40	9.60	20.60	18.70	16.80	14.90
LT-14(65)	General	10.90	0.40	19.70	31.00	29.10	27.20	25.30
	Public Safety	10.90	0.40	9.90	21.20	19.30	17.40	15.50
L-6	General	12.20	0.50	22.20	34.90	33.00	31.10	29.20
	Public Safety	12.00	0.50	11.00	23.50	21.60	19.70	17.80

* Assumes that credit is granted for 100% of service rendered prior to the member-ship date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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 Emergency Services

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	6.70%	0.20%	11.50%	18.40%	16.50%	14.60%	12.70%
	Public Safety	6.60	0.20	5.70	12.50	10.60	8.70	6.80
L-3	General	8.20	0.30	14.30	22.80	20.90	19.00	17.10
	Public Safety	8.10	0.30	7.10	15.50	13.60	11.70	9.80
LT-4(65)	General	7.40	0.20	12.40	20.00	18.10	16.20	14.30
	Public Safety	7.90	0.20	6.90	15.00	13.10	11.20	9.30
LT-5(65)	General	8.70	0.30	15.00	24.00	22.10	20.20	18.30
	Public Safety	9.00	0.30	8.00	17.30	15.40	13.50	11.60
L-7	General	9.60	0.30	17.20	27.10	25.20	23.30	21.40
	Public Safety	9.50	0.30	8.50	18.30	16.40	14.50	12.60
LT-8(65)	General	10.00	0.30	17.60	27.90	26.00	24.10	22.20
	Public Safety	10.10	0.30	9.10	19.50	17.60	15.70	13.80
L-12	General	11.10	0.40	20.00	31.50	29.60	27.70	25.80
	Public Safety	11.00	0.40	9.90	21.30	19.40	17.50	15.60
LT-14(65)	General	11.30	0.40	20.30	32.00	30.10	28.20	26.30
	Public Safety	11.30	0.40	10.20	21.90	20.00	18.10	16.20
L-6	General	12.50	0.50	22.90	35.90	34.00	32.10	30.20
	Public Safety	12.40	0.50	11.40	24.30	22.40	20.50	18.60

* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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 Emergency Services

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	6.80%	0.20%	12.30%	19.30%	17.40%	15.50%	13.60%
	Public Safety	6.70	0.20	5.90	12.80	10.90	9.00	7.10
L-3	General	8.30	0.30	15.30	23.90	22.00	20.10	18.20
	Public Safety	8.10	0.30	7.40	15.80	13.90	12.00	10.10
LT-4(65)	General	7.90	0.20	14.70	22.80	20.90	19.00	17.10
	Public Safety	8.30	0.20	7.70	16.20	14.30	12.40	10.50
LT-5(65)	General	9.10	0.30	17.20	26.60	24.70	22.80	20.90
	Public Safety	9.40	0.30	8.80	18.50	16.60	14.70	12.80
L-7	General	9.80	0.30	18.40	28.50	26.60	24.70	22.80
	Public Safety	9.60	0.30	8.80	18.70	16.80	14.90	13.00
LT-8(65)	General	10.30	0.30	19.60	30.20	28.30	26.40	24.50
	Public Safety	10.40	0.30	9.80	20.50	18.60	16.70	14.80
L-12	General	11.30	0.40	21.50	33.20	31.30	29.40	27.50
	Public Safety	11.00	0.40	10.30	21.70	19.80	17.90	16.00
LT-14(65)	General	11.60	0.40	22.10	34.10	32.20	30.30	28.40
	Public Safety	11.50	0.40	10.80	22.70	20.80	18.90	17.00
L-6	General	12.80	0.50	24.50	37.80	35.90	34.00	32.10
	Public Safety	12.50	0.50	11.80	24.80	22.90	21.00	19.10

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

* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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 Emergency Services

Employer Contribution Rates 3 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	7.10%	0.20%	12.70%	20.00%	18.10%	16.20%	14.30%
	Public Safety	6.90	0.20	6.10	13.20	11.30	9.40	7.50
L-3	General	8.60	0.30	15.80	24.70	22.80	20.90	19.00
	Public Safety	8.40	0.30	7.60	16.30	14.40	12.50	10.60
LT-4(65)	General	8.10	0.20	15.20	23.50	21.60	19.70	17.80
	Public Safety	8.60	0.20	8.00	16.80	14.90	13.00	11.10
LT-5(65)	General	9.40	0.30	17.70	27.40	25.50	23.60	21.70
	Public Safety	9.70	0.30	9.10	19.10	17.20	15.30	13.40
L-7	General	10.10	0.30	19.00	29.40	27.50	25.60	23.70
	Public Safety	9.90	0.30	9.20	19.40	17.50	15.60	13.70
LT-8(65)	General	10.70	0.30	20.30	31.30	29.40	27.50	25.60
	Public Safety	10.80	0.30	10.10	21.20	19.30	17.40	15.50
L-12	General	11.70	0.40	22.20	34.30	32.40	30.50	28.60
	Public Safety	11.40	0.40	10.70	22.50	20.60	18.70	16.80
LT-14(65)	General	11.90	0.40	22.80	35.10	33.20	31.30	29.40
	Public Safety	11.90	0.40	11.20	23.50	21.60	19.70	17.80
L-6	General	13.20	0.50	25.30	39.00	37.10	35.20	33.30
	Public Safety	13.00	0.50	12.20	25.70	23.80	21.90	20.00

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

* Assumes that credit is granted for 100% of service rendered prior to the membership date for employees working in a covered position on the membership date and employed continuously in a covered position for one year with this employer. If the governing body wishes to elect one of the lesser percents allowed by law -- 75%, 50%, or 25% -- the prior service cost rate will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

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 Emergency Services

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 Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 23,173	\$ 20,700	\$ 18,226	\$ 15,753
L-3	28,771	26,298	23,824	21,351
LT-4(65)	25,256	22,783	20,309	17,836
LT-5(65)	30,203	27,730	25,256	22,783
L-7	34,239	31,766	29,292	26,819
LT-8(65)	35,281	32,807	30,334	27,860
L-12	39,837	37,364	34,890	32,417
LT-14(65)	40,358	37,884	35,411	32,937
L-6	45,435	42,962	40,488	38,015

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 23,954	\$ 21,481	\$ 19,007	\$ 16,534
L-3	29,683	27,209	24,736	22,262
LT-4(65)	26,037	23,564	21,090	18,617
LT-5(65)	31,245	28,771	26,298	23,824
L-7	35,281	32,807	30,334	27,860
LT-8(65)	36,322	33,849	31,375	28,902
L-12	41,009	38,535	36,062	33,588
LT-14(65)	41,660	39,186	36,713	34,239
L-6	46,737	44,264	41,790	39,316

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 25,126	\$ 22,653	\$ 20,179	\$ 17,705
L-3	31,115	28,641	26,168	23,694
LT-4(65)	29,683	27,209	24,736	22,262
LT-5(65)	34,630	32,156	29,683	27,209
L-7	37,103	34,630	32,156	29,683
LT-8(65)	39,316	36,843	34,369	31,896
L-12	43,222	40,749	38,275	35,801
LT-14(65)	44,394	41,920	39,447	36,973
L-6	49,211	46,737	44,264	41,790

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 26,037	\$ 23,564	\$ 21,090	\$ 18,617
L-3	32,156	29,683	27,209	24,736
LT-4(65)	30,594	28,120	25,647	23,173
LT-5(65)	35,671	33,198	30,724	28,251
L-7	38,275	35,801	33,328	30,854
LT-8(65)	40,749	38,275	35,801	33,328
L-12	44,654	42,181	39,707	37,233
LT-14(65)	45,696	43,222	40,749	38,275
L-6	50,773	48,299	45,826	43,352

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 Emergency Services

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 Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 101,107	\$ 85,230	\$ 69,354	\$ 53,478
L-3	125,339	109,462	93,586	77,710
LT-4(65)	121,161	105,284	89,408	73,532
LT-5(65)	139,544	123,667	107,791	91,915
L-7	147,900	132,023	116,147	100,271
LT-8(65)	157,927	142,050	126,174	110,298
L-12	172,132	156,256	140,379	124,503
LT-14(65)	177,145	161,269	145,393	129,517
L-6	196,364	180,488	164,611	148,735

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 104,449	\$ 88,573	\$ 72,696	\$ 56,820
L-3	129,517	113,640	97,764	81,888
LT-4(65)	125,339	109,462	93,586	77,710
LT-5(65)	144,557	128,681	112,805	96,929
L-7	152,913	137,037	121,161	105,284
LT-8(65)	162,940	147,064	131,188	115,312
L-12	177,981	162,105	146,228	130,352
LT-14(65)	182,994	167,118	151,242	135,366
L-6	203,049	187,172	171,296	155,420

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 106,956	\$ 91,079	\$ 75,203	\$ 59,327
L-3	132,023	116,147	100,271	84,395
LT-4(65)	135,366	119,490	103,613	87,737
LT-5(65)	154,584	138,708	122,832	106,956
L-7	156,256	140,379	124,503	108,627
LT-8(65)	171,296	155,420	139,544	123,667
L-12	181,323	165,447	149,571	133,695
LT-14(65)	189,679	173,803	157,927	142,050
L-6	207,227	191,350	175,474	159,598

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 110,298	\$ 94,422	\$ 78,546	\$ 62,669
L-3	136,201	120,325	104,449	88,573
LT-4(65)	140,379	124,503	108,627	92,751
LT-5(65)	159,598	143,722	127,845	111,969
L-7	162,105	146,228	130,352	114,476
LT-8(65)	177,145	161,269	145,393	129,517
L-12	188,008	172,132	156,256	140,379
LT-14(65)	196,364	180,488	164,611	148,735
L-6	214,747	198,871	182,994	167,118

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 Emergency Services

Employees and Payroll Included in the Valuation

	General	Public Safety
Number of Employees	3	16
Annual Payroll	\$ 130,187	\$ 835,591

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 Emergency Services

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 247,600	\$ 255,348
	Public Safety	784,707	812,418
L-3	General	309,521	319,188
	Public Safety	980,902	1,015,566
LT-4(65)	General	267,053	275,455
	Public Safety	954,537	988,356
LT-5(65)	General	324,110	334,275
	Public Safety	1,108,275	1,147,509
L-7	General	371,422	383,016
	Public Safety	1,177,098	1,218,657
LT-8(65)	General	381,146	393,089
	Public Safety	1,262,042	1,306,597
L-12	General	433,306	446,863
	Public Safety	1,373,282	1,421,747
LT-14(65)	General	438,181	451,903
	Public Safety	1,415,732	1,465,731
L-6	General	495,244	510,705
	Public Safety	1,569,476	1,624,865

Warren County Emergency Services

Unfunded Actuarial Accrued Liability (UAAL)

Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 273,513	\$ 282,429
	Public Safety	843,653	874,464
L-3	General	341,888	353,013
	Public Safety	1,054,578	1,093,042
LT-4(65)	General	327,874	338,724
	Public Safety	1,107,765	1,148,348
LT-5(65)	General	382,652	395,244
	Public Safety	1,252,688	1,298,449
L-7	General	410,279	423,632
	Public Safety	1,265,527	1,311,648
LT-8(65)	General	437,462	451,784
	Public Safety	1,397,575	1,448,565
L-12	General	478,648	494,231
	Public Safety	1,476,437	1,530,262
LT-14(65)	General	492,245	508,310
	Public Safety	1,542,454	1,598,708
L-6	General	547,037	564,841
	Public Safety	1,687,403	1,748,882

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 and has no material limitations or known weaknesses. 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

		Percent of Active Members Separating Within Next Year							
Sample Ages	Years of Service	General/Public Safety Members				Police		Fire	
		Men		Women					
		Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawal	Disability	Withdrawal
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

Percent Increase in Individual's Pay During Next Year			
Sample Ages	General/ Public Safety	Police	Fire
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

Schedule 2.

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

Early Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
55	3.00%	3.00%	50	2.50%	2.25%
56	3.00%	3.00%	51	2.50%	2.25%
57	3.00%	3.00%	52	3.00%	2.25%
58	3.00%	3.00%	53	3.00%	2.25%
59	3.00%	3.00%	54	3.50%	2.25%

Normal Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
60	10%	10%	55	11%	13%
61	10	10	56	11	13
62	25	15	57	11	13
63	20	15	58	11	13
64	20	15	59	11	13
65	25	25	60	11	15
66	25	30	61	11	20
67	20	25	62	22	20
68	20	25	63	18	20
69	20	20	64	18	20
70	100	100	65	100	100

Schedule 2. (Concluded)

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

Retirement Ages	General Members		Police/ Public Safety	Fire
	Men	Women		
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, 2022

(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, public safety 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, public safety 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 a percent of compensation beginning after completion of sufficient employment for 6 months of credited service. The law governing LAGERS has a provision for the adoption of a 2%, 4% or 6% member contribution rate.

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 0% plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the 0% plan may be done at the time of membership or a later date; however, a change in the member contribution rate may not be made more frequently than every 2 years. Under the 0% plan there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 936	\$1,461	97%
2,000	700	1,073	1,773	89%
2,500	875	1,208	2,083	83%
3,000	1,050	1,343	2,393	80%
3,500	1,225	1,480	2,705	77%
4,000	1,400	1,614	3,014	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 936	\$1,311	87%
2,000	500	1,073	1,573	79%
2,500	625	1,208	1,833	73%
3,000	750	1,343	2,093	70%
3,500	875	1,480	2,355	67%
4,000	1,000	1,614	2,614	65%
15 Years of Service:				
\$1,500	\$225	\$ 936	\$1,161	77%
2,000	300	1,073	1,373	69%
2,500	375	1,208	1,583	63%
3,000	450	1,343	1,793	60%
3,500	525	1,480	2,005	57%
4,000	600	1,614	2,214	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total		
			\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 656	\$ 936	\$1,592	106%	
2,000	875	1,073	1,948	97%	
2,500	1,094	1,208	2,302	92%	
3,000	1,313	1,343	2,656	89%	
3,500	1,531	1,480	3,011	86%	
4,000	1,750	1,614	3,364	84%	
25 Years of Service:					
\$1,500	\$ 469	\$ 936	\$1,405	94%	
2,000	625	1,073	1,698	85%	
2,500	781	1,208	1,989	80%	
3,000	938	1,343	2,281	76%	
3,500	1,094	1,480	2,574	74%	
4,000	1,250	1,614	2,864	72%	
15 Years of Service:					
\$1,500	\$281	\$ 936	\$1,217	81%	
2,000	375	1,073	1,448	72%	
2,500	469	1,208	1,677	67%	
3,000	563	1,343	1,906	64%	
3,500	656	1,480	2,136	61%	
4,000	750	1,614	2,364	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 936	\$1,724	115%
2,000	1,050	1,073	2,123	106%
2,500	1,313	1,208	2,521	101%
3,000	1,575	1,343	2,918	97%
3,500	1,838	1,480	3,318	95%
4,000	2,100	1,614	3,714	93%
25 Years of Service:				
\$1,500	\$ 563	\$ 936	\$1,499	100%
2,000	750	1,073	1,823	91%
2,500	938	1,208	2,146	86%
3,000	1,125	1,343	2,468	82%
3,500	1,313	1,480	2,793	80%
4,000	1,500	1,614	3,114	78%
15 Years of Service:				
\$1,500	\$338	\$ 936	\$1,274	85%
2,000	450	1,073	1,523	76%
2,500	563	1,208	1,771	71%
3,000	675	1,343	2,018	67%
3,500	788	1,480	2,268	65%
4,000	900	1,614	2,514	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 936	\$1,855	124%
2,000	1,225	1,073	2,298	115%
2,500	1,531	1,208	2,739	110%
3,000	1,838	1,343	3,181	106%
3,500	2,144	1,480	3,624	104%
4,000	2,450	1,614	4,064	102%
25 Years of Service:				
\$1,500	\$ 656	\$ 936	\$1,592	106%
2,000	875	1,073	1,948	97%
2,500	1,094	1,208	2,302	92%
3,000	1,313	1,343	2,656	89%
3,500	1,531	1,480	3,011	86%
4,000	1,750	1,614	3,364	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 936	\$1,330	89%
2,000	525	1,073	1,598	80%
2,500	656	1,208	1,864	75%
3,000	788	1,343	2,131	71%
3,500	919	1,480	2,399	69%
4,000	1,050	1,614	2,664	67%

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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 936	\$1,986	132%
2,000	1,400	1,073	2,473	124%
2,500	1,750	1,208	2,958	118%
3,000	2,100	1,343	3,443	115%
3,500	2,450	1,480	3,930	112%
4,000	2,800	1,614	4,414	110%
25 Years of Service:				
\$1,500	\$ 750	\$ 936	\$1,686	112%
2,000	1,000	1,073	2,073	104%
2,500	1,250	1,208	2,458	98%
3,000	1,500	1,343	2,843	95%
3,500	1,750	1,480	3,230	92%
4,000	2,000	1,614	3,614	90%
15 Years of Service:				
\$1,500	\$ 450	\$ 936	\$1,386	92%
2,000	600	1,073	1,673	84%
2,500	750	1,208	1,958	78%
3,000	900	1,343	2,243	75%
3,500	1,050	1,480	2,530	72%
4,000	1,200	1,614	2,814	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 936	\$1,050	\$1,461	70%	97%
2,000	1,400	700	1,073	1,400	1,773	70%	89%
2,500	1,750	875	1,208	1,750	2,083	70%	83%
3,000	2,100	1,050	1,343	2,100	2,393	70%	80%
3,500	2,450	1,225	1,480	2,450	2,705	70%	77%
4,000	2,800	1,400	1,614	2,800	3,014	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 936	\$ 750	\$1,311	50%	87%
2,000	1,000	500	1,073	1,000	1,573	50%	79%
2,500	1,250	625	1,208	1,250	1,833	50%	73%
3,000	1,500	750	1,343	1,500	2,093	50%	70%
3,500	1,750	875	1,480	1,750	2,355	50%	67%
4,000	2,000	1,000	1,614	2,000	2,614	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 936	\$ 450	\$1,161	30%	77%
2,000	600	300	1,073	600	1,373	30%	69%
2,500	750	375	1,208	750	1,583	30%	63%
3,000	900	450	1,343	900	1,793	30%	60%
3,500	1,050	525	1,480	1,050	2,005	30%	57%
4,000	1,200	600	1,614	1,200	2,214	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 936	\$1,050	\$1,592	70%	106%
2,000	1,400	875	1,073	1,400	1,948	70%	97%
2,500	1,750	1,094	1,208	1,750	2,302	70%	92%
3,000	2,100	1,313	1,343	2,100	2,656	70%	89%
3,500	2,450	1,531	1,480	2,450	3,011	70%	86%
4,000	2,800	1,750	1,614	2,800	3,364	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 936	\$ 750	\$1,405	50%	94%
2,000	1,000	625	1,073	1,000	1,698	50%	85%
2,500	1,250	781	1,208	1,250	1,989	50%	80%
3,000	1,500	938	1,343	1,500	2,281	50%	76%
3,500	1,750	1,094	1,480	1,750	2,574	50%	74%
4,000	2,000	1,250	1,614	2,000	2,864	50%	72%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 936	\$ 450	\$1,217	30%	81%
2,000	600	375	1,073	600	1,448	30%	72%
2,500	750	469	1,208	750	1,677	30%	67%
3,000	900	563	1,343	900	1,906	30%	64%
3,500	1,050	656	1,480	1,050	2,136	30%	61%
4,000	1,200	750	1,614	1,200	2,364	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 936	\$1,050	\$1,724	70%	115%
2,000	1,400	1,050	1,073	1,400	2,123	70%	106%
2,500	1,750	1,313	1,208	1,750	2,521	70%	101%
3,000	2,100	1,575	1,343	2,100	2,918	70%	97%
3,500	2,450	1,838	1,480	2,450	3,318	70%	95%
4,000	2,800	2,100	1,614	2,800	3,714	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 936	\$ 750	\$1,499	50%	100%
2,000	1,000	750	1,073	1,000	1,823	50%	91%
2,500	1,250	938	1,208	1,250	2,146	50%	86%
3,000	1,500	1,125	1,343	1,500	2,468	50%	82%
3,500	1,750	1,313	1,480	1,750	2,793	50%	80%
4,000	2,000	1,500	1,614	2,000	3,114	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 936	\$ 450	\$1,274	30%	85%
2,000	600	450	1,073	600	1,523	30%	76%
2,500	750	563	1,208	750	1,771	30%	71%
3,000	900	675	1,343	900	2,018	30%	67%
3,500	1,050	788	1,480	1,050	2,268	30%	65%
4,000	1,200	900	1,614	1,200	2,514	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 2022 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 936	\$1,050	\$1,855	70%	124%
2,000	1,400	1,225	1,073	1,400	2,298	70%	115%
2,500	1,750	1,531	1,208	1,750	2,739	70%	110%
3,000	2,100	1,838	1,343	2,100	3,181	70%	106%
3,500	2,450	2,144	1,480	2,450	3,624	70%	104%
4,000	2,800	2,450	1,614	2,800	4,064	70%	102%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 936	\$ 750	\$1,592	50%	106%
2,000	1,000	875	1,073	1,000	1,948	50%	97%
2,500	1,250	1,094	1,208	1,250	2,302	50%	92%
3,000	1,500	1,313	1,343	1,500	2,656	50%	89%
3,500	1,750	1,531	1,480	1,750	3,011	50%	86%
4,000	2,000	1,750	1,614	2,000	3,364	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 936	\$ 450	\$1,330	30%	89%
2,000	600	525	1,073	600	1,598	30%	80%
2,500	750	656	1,208	750	1,864	30%	75%
3,000	900	788	1,343	900	2,131	30%	71%
3,500	1,050	919	1,480	1,050	2,399	30%	69%
4,000	1,200	1,050	1,614	1,200	2,664	30%	67%

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 2022 - 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 Emergency Services - General

October 31, 2022

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29									
30-34									
35-39									
40-44		1						1	\$ 25,270
45-49									
50-54					1			1	\$ 51,408
55-59									
60-64									
65-69				1				1	\$ 53,509
70 & Over									
Totals		1		1	1			3	\$ 130,187

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

Age: 53.9 years.

Benefit Service: 16.6 years.

Annual Pay: \$43,396.

Warren County Emergency Services - Public Safety

October 31, 2022

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	2							2	\$ 86,300
25-29	6							6	\$ 272,776
30-34		1						1	\$ 56,473
35-39	1		2	1				4	\$ 211,272
40-44		1			1			2	\$ 133,052
45-49									
50-54									
55-59					1			1	\$ 75,718
60-64									
65-69									
70 & Over									
Totals	9	2	2	1	2			16	\$ 835,591

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

Age: 33.4 years.

Benefit Service: 7.1 years.

Annual Pay: \$52,224.

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.

Risk Commentary (Concluded)

PLAN MATURITY MEASURES

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

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

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

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

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

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

DURATION OF ACTUARIAL ACCRUED LIABILITY

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

ADDITIONAL RISK ASSESSMENT

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



December 22, 2022 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 October 31, 2022 Initial Actuarial Valuation of LAGERS benefits for the employees of

Warren County Emergency Services

Sincerely,

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp



December 22, 2022

Warren County Emergency Services
Warrenton, Missouri

Ladies and Gentlemen:

This report contains 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. This report is intended to be a supplement to the October 31, 2022 Initial Valuation for the Warren County Emergency Services dated December 22, 2022.

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, 2022. 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,
Gabriel, Roeder, Smith & Company

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

Mita D. Drazilov, ASA, FCA, MAAA

Warren County Emergency Services - General

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

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	
2022	\$ 130,187	17.8%	\$23,173	\$ 247,600	22.1%	\$28,771	\$ 309,521	19.4%	\$25,256	\$ 267,053
2023	133,767	17.8	23,811	249,975	22.1	29,563	312,490	19.4	25,951	269,615
2024	137,446	17.8	24,465	252,105	22.1	30,376	315,153	19.4	26,665	271,912
2025	141,226	17.8	25,138	253,962	22.1	31,211	317,474	19.4	27,398	273,914
2026	145,110	17.8	25,830	255,514	22.1	32,069	319,414	19.4	28,151	275,588
2027	149,101	17.8	26,540	256,729	22.1	32,951	320,933	19.4	28,926	276,898
2028	153,201	17.8	27,270	257,570	22.1	33,857	321,985	19.4	29,721	277,805
2029	157,414	17.8	28,020	257,999	22.1	34,788	322,521	19.4	30,538	278,268
2030	161,743	17.8	28,790	257,974	22.1	35,745	322,490	19.4	31,378	278,241
2031	166,191	17.8	29,582	257,450	22.1	36,728	321,835	19.4	32,241	277,676

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	
2022	\$ 130,187	23.2%	\$30,203	\$ 324,110	26.3%	\$34,239	\$ 371,422	27.1%	\$35,281	\$ 381,146
2023	133,767	23.2	31,034	327,219	26.3	35,181	374,985	27.1	36,251	384,802
2024	137,446	23.2	31,887	330,007	26.3	36,148	378,180	27.1	37,248	388,081
2025	141,226	23.2	32,764	332,437	26.3	37,142	380,965	27.1	38,272	390,939
2026	145,110	23.2	33,666	334,469	26.3	38,164	383,294	27.1	39,325	393,329
2027	149,101	23.2	34,591	336,059	26.3	39,214	385,116	27.1	40,406	395,199
2028	153,201	23.2	35,543	337,160	26.3	40,292	386,378	27.1	41,517	396,494
2029	157,414	23.2	36,520	337,722	26.3	41,400	387,022	27.1	42,659	397,155
2030	161,743	23.2	37,524	337,690	26.3	42,538	386,985	27.1	43,832	397,117
2031	166,191	23.2	38,556	337,004	26.3	43,708	386,199	27.1	45,038	396,311

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	
2022	\$ 130,187	30.6%	\$39,837	\$ 433,306	31.0%	\$40,358	\$ 438,181	34.9%	\$45,435	\$ 495,244
2023	133,767	30.6	40,933	437,463	31.0	41,468	442,384	34.9	46,685	499,995
2024	137,446	30.6	42,058	441,191	31.0	42,608	446,154	34.9	47,969	504,256
2025	141,226	30.6	43,215	444,440	31.0	43,780	449,440	34.9	49,288	507,969
2026	145,110	30.6	44,404	447,157	31.0	44,984	452,187	34.9	50,643	511,074
2027	149,101	30.6	45,625	449,283	31.0	46,221	454,337	34.9	52,036	513,504
2028	153,201	30.6	46,880	450,755	31.0	47,492	455,826	34.9	53,467	515,187
2029	157,414	30.6	48,169	451,506	31.0	48,798	456,585	34.9	54,937	516,045
2030	161,743	30.6	49,493	451,463	31.0	50,140	456,541	34.9	56,448	515,995
2031	166,191	30.6	50,854	450,546	31.0	51,519	455,614	34.9	58,001	514,947

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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	
2022	\$ 130,187	15.9%	\$20,700	\$ 247,600	20.2%	\$26,298	\$ 309,521	17.5%	\$22,783	\$ 267,053
2023	133,767	15.9	21,269	249,975	20.2	27,021	312,490	17.5	23,409	269,615
2024	137,446	15.9	21,854	252,105	20.2	27,764	315,153	17.5	24,053	271,912
2025	141,226	15.9	22,455	253,962	20.2	28,528	317,474	17.5	24,715	273,914
2026	145,110	15.9	23,072	255,514	20.2	29,312	319,414	17.5	25,394	275,588
2027	149,101	15.9	23,707	256,729	20.2	30,118	320,933	17.5	26,093	276,898
2028	153,201	15.9	24,359	257,570	20.2	30,947	321,985	17.5	26,810	277,805
2029	157,414	15.9	25,029	257,999	20.2	31,798	322,521	17.5	27,547	278,268
2030	161,743	15.9	25,717	257,974	20.2	32,672	322,490	17.5	28,305	278,241
2031	166,191	15.9	26,424	257,450	20.2	33,571	321,835	17.5	29,083	277,676

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	
2022	\$ 130,187	21.3%	\$27,730	\$ 324,110	24.4%	\$31,766	\$ 371,422	25.2%	\$32,807	\$ 381,146
2023	133,767	21.3	28,492	327,219	24.4	32,639	374,985	25.2	33,709	384,802
2024	137,446	21.3	29,276	330,007	24.4	33,537	378,180	25.2	34,636	388,081
2025	141,226	21.3	30,081	332,437	24.4	34,459	380,965	25.2	35,589	390,939
2026	145,110	21.3	30,908	334,469	24.4	35,407	383,294	25.2	36,568	393,329
2027	149,101	21.3	31,759	336,059	24.4	36,381	385,116	25.2	37,573	395,199
2028	153,201	21.3	32,632	337,160	24.4	37,381	386,378	25.2	38,607	396,494
2029	157,414	21.3	33,529	337,722	24.4	38,409	387,022	25.2	39,668	397,155
2030	161,743	21.3	34,451	337,690	24.4	39,465	386,985	25.2	40,759	397,117
2031	166,191	21.3	35,399	337,004	24.4	40,551	386,199	25.2	41,880	396,311

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	
2022	\$ 130,187	28.7%	\$37,364	\$ 433,306	29.1%	\$37,884	\$ 438,181	33.0%	\$42,962	\$ 495,244
2023	133,767	28.7	38,391	437,463	29.1	38,926	442,384	33.0	44,143	499,995
2024	137,446	28.7	39,447	441,191	29.1	39,997	446,154	33.0	45,357	504,256
2025	141,226	28.7	40,532	444,440	29.1	41,097	449,440	33.0	46,605	507,969
2026	145,110	28.7	41,647	447,157	29.1	42,227	452,187	33.0	47,886	511,074
2027	149,101	28.7	42,792	449,283	29.1	43,388	454,337	33.0	49,203	513,504
2028	153,201	28.7	43,969	450,755	29.1	44,581	455,826	33.0	50,556	515,187
2029	157,414	28.7	45,178	451,506	29.1	45,807	456,585	33.0	51,947	516,045
2030	161,743	28.7	46,420	451,463	29.1	47,067	456,541	33.0	53,375	515,995
2031	166,191	28.7	47,697	450,546	29.1	48,362	455,614	33.0	54,843	514,947

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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			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	
2022	\$ 130,187	14.0%	\$18,226	\$ 247,600	18.3%	\$23,824	\$ 309,521	15.6%	\$20,309	\$ 267,053
2023	133,767	14.0	18,727	249,975	18.3	24,479	312,490	15.6	20,868	269,615
2024	137,446	14.0	19,242	252,105	18.3	25,153	315,153	15.6	21,442	271,912
2025	141,226	14.0	19,772	253,962	18.3	25,844	317,474	15.6	22,031	273,914
2026	145,110	14.0	20,315	255,514	18.3	26,555	319,414	15.6	22,637	275,588
2027	149,101	14.0	20,874	256,729	18.3	27,285	320,933	15.6	23,260	276,898
2028	153,201	14.0	21,448	257,570	18.3	28,036	321,985	15.6	23,899	277,805
2029	157,414	14.0	22,038	257,999	18.3	28,807	322,521	15.6	24,557	278,268
2030	161,743	14.0	22,644	257,974	18.3	29,599	322,490	15.6	25,232	278,241
2031	166,191	14.0	23,267	257,450	18.3	30,413	321,835	15.6	25,926	277,676

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	
2022	\$ 130,187	19.4%	\$25,256	\$ 324,110	22.5%	\$29,292	\$ 371,422	23.3%	\$30,334	\$ 381,146
2023	133,767	19.4	25,951	327,219	22.5	30,098	374,985	23.3	31,168	384,802
2024	137,446	19.4	26,665	330,007	22.5	30,925	378,180	23.3	32,025	388,081
2025	141,226	19.4	27,398	332,437	22.5	31,776	380,965	23.3	32,906	390,939
2026	145,110	19.4	28,151	334,469	22.5	32,650	383,294	23.3	33,811	393,329
2027	149,101	19.4	28,926	336,059	22.5	33,548	385,116	23.3	34,741	395,199
2028	153,201	19.4	29,721	337,160	22.5	34,470	386,378	23.3	35,696	396,494
2029	157,414	19.4	30,538	337,722	22.5	35,418	387,022	23.3	36,677	397,155
2030	161,743	19.4	31,378	337,690	22.5	36,392	386,985	23.3	37,686	397,117
2031	166,191	19.4	32,241	337,004	22.5	37,393	386,199	23.3	38,723	396,311

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	
2022	\$ 130,187	26.8%	\$34,890	\$ 433,306	27.2%	\$35,411	\$ 438,181	31.1%	\$40,488	\$ 495,244
2023	133,767	26.8	35,850	437,463	27.2	36,385	442,384	31.1	41,602	499,995
2024	137,446	26.8	36,836	441,191	27.2	37,385	446,154	31.1	42,746	504,256
2025	141,226	26.8	37,849	444,440	27.2	38,413	449,440	31.1	43,921	507,969
2026	145,110	26.8	38,889	447,157	27.2	39,470	452,187	31.1	45,129	511,074
2027	149,101	26.8	39,959	449,283	27.2	40,555	454,337	31.1	46,370	513,504
2028	153,201	26.8	41,058	450,755	27.2	41,671	455,826	31.1	47,646	515,187
2029	157,414	26.8	42,187	451,506	27.2	42,817	456,585	31.1	48,956	516,045
2030	161,743	26.8	43,347	451,463	27.2	43,994	456,541	31.1	50,302	515,995
2031	166,191	26.8	44,539	450,546	27.2	45,204	455,614	31.1	51,685	514,947

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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			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	
2022	\$ 130,187	12.1%	\$15,753	\$ 247,600	16.4%	\$21,351	\$ 309,521	13.7%	\$17,836	\$ 267,053
2023	133,767	12.1	16,186	249,975	16.4	21,938	312,490	13.7	18,326	269,615
2024	137,446	12.1	16,631	252,105	16.4	22,541	315,153	13.7	18,830	271,912
2025	141,226	12.1	17,088	253,962	16.4	23,161	317,474	13.7	19,348	273,914
2026	145,110	12.1	17,558	255,514	16.4	23,798	319,414	13.7	19,880	275,588
2027	149,101	12.1	18,041	256,729	16.4	24,453	320,933	13.7	20,427	276,898
2028	153,201	12.1	18,537	257,570	16.4	25,125	321,985	13.7	20,989	277,805
2029	157,414	12.1	19,047	257,999	16.4	25,816	322,521	13.7	21,566	278,268
2030	161,743	12.1	19,571	257,974	16.4	26,526	322,490	13.7	22,159	278,241
2031	166,191	12.1	20,109	257,450	16.4	27,255	321,835	13.7	22,768	277,676

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	
2022	\$ 130,187	17.5%	\$22,783	\$ 324,110	20.6%	\$26,819	\$ 371,422	21.4%	\$27,860	\$ 381,146
2023	133,767	17.5	23,409	327,219	20.6	27,556	374,985	21.4	28,626	384,802
2024	137,446	17.5	24,053	330,007	20.6	28,314	378,180	21.4	29,413	388,081
2025	141,226	17.5	24,715	332,437	20.6	29,093	380,965	21.4	30,222	390,939
2026	145,110	17.5	25,394	334,469	20.6	29,893	383,294	21.4	31,054	393,329
2027	149,101	17.5	26,093	336,059	20.6	30,715	385,116	21.4	31,908	395,199
2028	153,201	17.5	26,810	337,160	20.6	31,559	386,378	21.4	32,785	396,494
2029	157,414	17.5	27,547	337,722	20.6	32,427	387,022	21.4	33,687	397,155
2030	161,743	17.5	28,305	337,690	20.6	33,319	386,985	21.4	34,613	397,117
2031	166,191	17.5	29,083	337,004	20.6	34,235	386,199	21.4	35,565	396,311

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	
2022	\$ 130,187	24.9%	\$32,417	\$ 433,306	25.3%	\$32,937	\$ 438,181	29.2%	\$38,015	\$ 495,244
2023	133,767	24.9	33,308	437,463	25.3	33,843	442,384	29.2	39,060	499,995
2024	137,446	24.9	34,224	441,191	25.3	34,774	446,154	29.2	40,134	504,256
2025	141,226	24.9	35,165	444,440	25.3	35,730	449,440	29.2	41,238	507,969
2026	145,110	24.9	36,132	447,157	25.3	36,713	452,187	29.2	42,372	511,074
2027	149,101	24.9	37,126	449,283	25.3	37,723	454,337	29.2	43,537	513,504
2028	153,201	24.9	38,147	450,755	25.3	38,760	455,826	29.2	44,735	515,187
2029	157,414	24.9	39,196	451,506	25.3	39,826	456,585	29.2	45,965	516,045
2030	161,743	24.9	40,274	451,463	25.3	40,921	456,541	29.2	47,229	515,995
2031	166,191	24.9	41,382	450,546	25.3	42,046	455,614	29.2	48,528	514,947

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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

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	
2022	\$ 130,187	18.4%	\$23,954	\$ 255,348	22.8%	\$29,683	\$ 319,188	20.0%	\$26,037	\$ 275,455
2023	133,767	18.4	24,613	257,797	22.8	30,499	322,250	20.0	26,753	278,097
2024	137,446	18.4	25,290	259,994	22.8	31,338	324,996	20.0	27,489	280,467
2025	141,226	18.4	25,986	261,909	22.8	32,200	327,389	20.0	28,245	282,532
2026	145,110	18.4	26,700	263,510	22.8	33,085	329,390	20.0	29,022	284,259
2027	149,101	18.4	27,435	264,763	22.8	33,995	330,956	20.0	29,820	285,610
2028	153,201	18.4	28,189	265,631	22.8	34,930	332,041	20.0	30,640	286,546
2029	157,414	18.4	28,964	266,074	22.8	35,890	332,594	20.0	31,483	287,023
2030	161,743	18.4	29,761	266,048	22.8	36,877	332,562	20.0	32,349	286,995
2031	166,191	18.4	30,579	265,508	22.8	37,892	331,887	20.0	33,238	286,412

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	
2022	\$ 130,187	24.0%	\$31,245	\$ 334,275	27.1%	\$35,281	\$ 383,016	27.9%	\$36,322	\$ 393,089
2023	133,767	24.0	32,104	337,482	27.1	36,251	386,690	27.9	37,321	396,860
2024	137,446	24.0	32,987	340,358	27.1	37,248	389,985	27.9	38,347	400,242
2025	141,226	24.0	33,894	342,864	27.1	38,272	392,857	27.9	39,402	403,189
2026	145,110	24.0	34,826	344,960	27.1	39,325	395,258	27.9	40,486	405,653
2027	149,101	24.0	35,784	346,600	27.1	40,406	397,137	27.9	41,599	407,582
2028	153,201	24.0	36,768	347,736	27.1	41,517	398,438	27.9	42,743	408,918
2029	157,414	24.0	37,779	348,315	27.1	42,659	399,102	27.9	43,919	409,599
2030	161,743	24.0	38,818	348,281	27.1	43,832	399,064	27.9	45,126	409,560
2031	166,191	24.0	39,886	347,574	27.1	45,038	398,254	27.9	46,367	408,728

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	
2022	\$ 130,187	31.5%	\$41,009	\$ 446,863	32.0%	\$41,660	\$ 451,903	35.9%	\$46,737	\$ 510,705
2023	133,767	31.5	42,137	451,150	32.0	42,805	456,238	35.9	48,022	515,604
2024	137,446	31.5	43,295	454,994	32.0	43,983	460,126	35.9	49,343	519,998
2025	141,226	31.5	44,486	458,345	32.0	45,192	463,514	35.9	50,700	523,827
2026	145,110	31.5	45,710	461,147	32.0	46,435	466,347	35.9	52,094	527,029
2027	149,101	31.5	46,967	463,339	32.0	47,712	468,564	35.9	53,527	529,535
2028	153,201	31.5	48,258	464,857	32.0	49,024	470,100	35.9	54,999	531,270
2029	157,414	31.5	49,585	465,632	32.0	50,372	470,883	35.9	56,512	532,155
2030	161,743	31.5	50,949	465,587	32.0	51,758	470,838	35.9	58,066	532,104
2031	166,191	31.5	52,350	464,641	32.0	53,181	469,882	35.9	59,663	531,023

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

Employer Contribution Rates (2% Member Contribution Rate, 3 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	
2022	\$ 130,187	16.5%	\$21,481	\$ 255,348	20.9%	\$27,209	\$ 319,188	18.1%	\$23,564	\$ 275,455
2023	133,767	16.5	22,072	257,797	20.9	27,957	322,250	18.1	24,212	278,097
2024	137,446	16.5	22,679	259,994	20.9	28,726	324,996	18.1	24,878	280,467
2025	141,226	16.5	23,302	261,909	20.9	29,516	327,389	18.1	25,562	282,532
2026	145,110	16.5	23,943	263,510	20.9	30,328	329,390	18.1	26,265	284,259
2027	149,101	16.5	24,602	264,763	20.9	31,162	330,956	18.1	26,987	285,610
2028	153,201	16.5	25,278	265,631	20.9	32,019	332,041	18.1	27,729	286,546
2029	157,414	16.5	25,973	266,074	20.9	32,900	332,594	18.1	28,492	287,023
2030	161,743	16.5	26,688	266,048	20.9	33,804	332,562	18.1	29,275	286,995
2031	166,191	16.5	27,422	265,508	20.9	34,734	331,887	18.1	30,081	286,412

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	
2022	\$ 130,187	22.1%	\$28,771	\$ 334,275	25.2%	\$32,807	\$ 383,016	26.0%	\$33,849	\$ 393,089
2023	133,767	22.1	29,563	337,482	25.2	33,709	386,690	26.0	34,779	396,860
2024	137,446	22.1	30,376	340,358	25.2	34,636	389,985	26.0	35,736	400,242
2025	141,226	22.1	31,211	342,864	25.2	35,589	392,857	26.0	36,719	403,189
2026	145,110	22.1	32,069	344,960	25.2	36,568	395,258	26.0	37,729	405,653
2027	149,101	22.1	32,951	346,600	25.2	37,573	397,137	26.0	38,766	407,582
2028	153,201	22.1	33,857	347,736	25.2	38,607	398,438	26.0	39,832	408,918
2029	157,414	22.1	34,788	348,315	25.2	39,668	399,102	26.0	40,928	409,599
2030	161,743	22.1	35,745	348,281	25.2	40,759	399,064	26.0	42,053	409,560
2031	166,191	22.1	36,728	347,574	25.2	41,880	398,254	26.0	43,210	408,728

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	
2022	\$ 130,187	29.6%	\$38,535	\$ 446,863	30.1%	\$39,186	\$ 451,903	34.0%	\$44,264	\$ 510,705
2023	133,767	29.6	39,595	451,150	30.1	40,264	456,238	34.0	45,481	515,604
2024	137,446	29.6	40,684	454,994	30.1	41,371	460,126	34.0	46,732	519,998
2025	141,226	29.6	41,803	458,345	30.1	42,509	463,514	34.0	48,017	523,827
2026	145,110	29.6	42,953	461,147	30.1	43,678	466,347	34.0	49,337	527,029
2027	149,101	29.6	44,134	463,339	30.1	44,879	468,564	34.0	50,694	529,535
2028	153,201	29.6	45,347	464,857	30.1	46,114	470,100	34.0	52,088	531,270
2029	157,414	29.6	46,595	465,632	30.1	47,382	470,883	34.0	53,521	532,155
2030	161,743	29.6	47,876	465,587	30.1	48,685	470,838	34.0	54,993	532,104
2031	166,191	29.6	49,193	464,641	30.1	50,023	469,882	34.0	56,505	531,023

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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			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	
2022	\$ 130,187	14.6%	\$19,007	\$ 255,348	19.0%	\$24,736	\$ 319,188	16.2%	\$21,090	\$ 275,455
2023	133,767	14.6	19,530	257,797	19.0	25,416	322,250	16.2	21,670	278,097
2024	137,446	14.6	20,067	259,994	19.0	26,115	324,996	16.2	22,266	280,467
2025	141,226	14.6	20,619	261,909	19.0	26,833	327,389	16.2	22,879	282,532
2026	145,110	14.6	21,186	263,510	19.0	27,571	329,390	16.2	23,508	284,259
2027	149,101	14.6	21,769	264,763	19.0	28,329	330,956	16.2	24,154	285,610
2028	153,201	14.6	22,367	265,631	19.0	29,108	332,041	16.2	24,819	286,546
2029	157,414	14.6	22,982	266,074	19.0	29,909	332,594	16.2	25,501	287,023
2030	161,743	14.6	23,614	266,048	19.0	30,731	332,562	16.2	26,202	286,995
2031	166,191	14.6	24,264	265,508	19.0	31,576	331,887	16.2	26,923	286,412

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	
2022	\$ 130,187	20.2%	\$26,298	\$ 334,275	23.3%	\$30,334	\$ 383,016	24.1%	\$31,375	\$ 393,089
2023	133,767	20.2	27,021	337,482	23.3	31,168	386,690	24.1	32,238	396,860
2024	137,446	20.2	27,764	340,358	23.3	32,025	389,985	24.1	33,124	400,242
2025	141,226	20.2	28,528	342,864	23.3	32,906	392,857	24.1	34,035	403,189
2026	145,110	20.2	29,312	344,960	23.3	33,811	395,258	24.1	34,972	405,653
2027	149,101	20.2	30,118	346,600	23.3	34,741	397,137	24.1	35,933	407,582
2028	153,201	20.2	30,947	347,736	23.3	35,696	398,438	24.1	36,921	408,918
2029	157,414	20.2	31,798	348,315	23.3	36,677	399,102	24.1	37,937	409,599
2030	161,743	20.2	32,672	348,281	23.3	37,686	399,064	24.1	38,980	409,560
2031	166,191	20.2	33,571	347,574	23.3	38,723	398,254	24.1	40,052	408,728

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	
2022	\$ 130,187	27.7%	\$36,062	\$ 446,863	28.2%	\$36,713	\$ 451,903	32.1%	\$41,790	\$ 510,705
2023	133,767	27.7	37,053	451,150	28.2	37,722	456,238	32.1	42,939	515,604
2024	137,446	27.7	38,073	454,994	28.2	38,760	460,126	32.1	44,120	519,998
2025	141,226	27.7	39,120	458,345	28.2	39,826	463,514	32.1	45,334	523,827
2026	145,110	27.7	40,195	461,147	28.2	40,921	466,347	32.1	46,580	527,029
2027	149,101	27.7	41,301	463,339	28.2	42,046	468,564	32.1	47,861	529,535
2028	153,201	27.7	42,437	464,857	28.2	43,203	470,100	32.1	49,178	531,270
2029	157,414	27.7	43,604	465,632	28.2	44,391	470,883	32.1	50,530	532,155
2030	161,743	27.7	44,803	465,587	28.2	45,612	470,838	32.1	51,920	532,104
2031	166,191	27.7	46,035	464,641	28.2	46,866	469,882	32.1	53,347	531,023

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 130,187	12.7%	\$16,534	\$ 255,348	17.1%	\$22,262	\$ 319,188	14.3%	\$18,617	\$ 275,455
2023	133,767	12.7	16,988	257,797	17.1	22,874	322,250	14.3	19,129	278,097
2024	137,446	12.7	17,456	259,994	17.1	23,503	324,996	14.3	19,655	280,467
2025	141,226	12.7	17,936	261,909	17.1	24,150	327,389	14.3	20,195	282,532
2026	145,110	12.7	18,429	263,510	17.1	24,814	329,390	14.3	20,751	284,259
2027	149,101	12.7	18,936	264,763	17.1	25,496	330,956	14.3	21,321	285,610
2028	153,201	12.7	19,457	265,631	17.1	26,197	332,041	14.3	21,908	286,546
2029	157,414	12.7	19,992	266,074	17.1	26,918	332,594	14.3	22,510	287,023
2030	161,743	12.7	20,541	266,048	17.1	27,658	332,562	14.3	23,129	286,995
2031	166,191	12.7	21,106	265,508	17.1	28,419	331,887	14.3	23,765	286,412

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	
2022	\$ 130,187	18.3%	\$23,824	\$ 334,275	21.4%	\$27,860	\$ 383,016	22.2%	\$28,902	\$ 393,089
2023	133,767	18.3	24,479	337,482	21.4	28,626	386,690	22.2	29,696	396,860
2024	137,446	18.3	25,153	340,358	21.4	29,413	389,985	22.2	30,513	400,242
2025	141,226	18.3	25,844	342,864	21.4	30,222	392,857	22.2	31,352	403,189
2026	145,110	18.3	26,555	344,960	21.4	31,054	395,258	22.2	32,214	405,653
2027	149,101	18.3	27,285	346,600	21.4	31,908	397,137	22.2	33,100	407,582
2028	153,201	18.3	28,036	347,736	21.4	32,785	398,438	22.2	34,011	408,918
2029	157,414	18.3	28,807	348,315	21.4	33,687	399,102	22.2	34,946	409,599
2030	161,743	18.3	29,599	348,281	21.4	34,613	399,064	22.2	35,907	409,560
2031	166,191	18.3	30,413	347,574	21.4	35,565	398,254	22.2	36,894	408,728

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	
2022	\$ 130,187	25.8%	\$33,588	\$ 446,863	26.3%	\$34,239	\$ 451,903	30.2%	\$39,316	\$ 510,705
2023	133,767	25.8	34,512	451,150	26.3	35,181	456,238	30.2	40,398	515,604
2024	137,446	25.8	35,461	454,994	26.3	36,148	460,126	30.2	41,509	519,998
2025	141,226	25.8	36,436	458,345	26.3	37,142	463,514	30.2	42,650	523,827
2026	145,110	25.8	37,438	461,147	26.3	38,164	466,347	30.2	43,823	527,029
2027	149,101	25.8	38,468	463,339	26.3	39,214	468,564	30.2	45,029	529,535
2028	153,201	25.8	39,526	464,857	26.3	40,292	470,100	30.2	46,267	531,270
2029	157,414	25.8	40,613	465,632	26.3	41,400	470,883	30.2	47,539	532,155
2030	161,743	25.8	41,730	465,587	26.3	42,538	470,838	30.2	48,846	532,104
2031	166,191	25.8	42,877	464,641	26.3	43,708	469,882	30.2	50,190	531,023

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 130,187	19.3%	\$25,126	\$ 273,513	23.9%	\$31,115	\$ 341,888	22.8%	\$29,683	\$ 327,874
2023	133,767	19.3	25,817	276,137	23.9	31,970	345,168	22.8	30,499	331,019
2024	137,446	19.3	26,527	278,490	23.9	32,850	348,109	22.8	31,338	333,840
2025	141,226	19.3	27,257	280,541	23.9	33,753	350,673	22.8	32,200	336,298
2026	145,110	19.3	28,006	282,256	23.9	34,681	352,816	22.8	33,085	338,354
2027	149,101	19.3	28,776	283,598	23.9	35,635	354,493	22.8	33,995	339,963
2028	153,201	19.3	29,568	284,527	23.9	36,615	355,655	22.8	34,930	341,077
2029	157,414	19.3	30,381	285,001	23.9	37,622	356,248	22.8	35,890	341,645
2030	161,743	19.3	31,216	284,974	23.9	38,657	356,214	22.8	36,877	341,612
2031	166,191	19.3	32,075	284,395	23.9	39,720	355,491	22.8	37,892	340,918

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	
2022	\$ 130,187	26.6%	\$34,630	\$ 382,652	28.5%	\$37,103	\$ 410,279	30.2%	\$39,316	\$ 437,462
2023	133,767	26.6	35,582	386,323	28.5	38,124	414,215	30.2	40,398	441,658
2024	137,446	26.6	36,561	389,615	28.5	39,172	417,745	30.2	41,509	445,421
2025	141,226	26.6	37,566	392,484	28.5	40,249	420,821	30.2	42,650	448,701
2026	145,110	26.6	38,599	394,883	28.5	41,356	423,393	30.2	43,823	451,444
2027	149,101	26.6	39,661	396,760	28.5	42,494	425,406	30.2	45,029	453,590
2028	153,201	26.6	40,751	398,060	28.5	43,662	426,800	30.2	46,267	455,076
2029	157,414	26.6	41,872	398,723	28.5	44,863	427,511	30.2	47,539	455,834
2030	161,743	26.6	43,024	398,685	28.5	46,097	427,470	30.2	48,846	455,790
2031	166,191	26.6	44,207	397,875	28.5	47,364	426,602	30.2	50,190	454,864

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	
2022	\$ 130,187	33.2%	\$43,222	\$ 478,648	34.1%	\$44,394	\$ 492,245	37.8%	\$49,211	\$ 547,037
2023	133,767	33.2	44,411	483,240	34.1	45,615	496,967	37.8	50,564	552,285
2024	137,446	33.2	45,632	487,358	34.1	46,869	501,202	37.8	51,955	556,991
2025	141,226	33.2	46,887	490,947	34.1	48,158	504,893	37.8	53,383	561,093
2026	145,110	33.2	48,177	493,948	34.1	49,483	507,979	37.8	54,852	564,523
2027	149,101	33.2	49,502	496,296	34.1	50,843	510,394	37.8	56,360	567,207
2028	153,201	33.2	50,863	497,922	34.1	52,242	512,067	37.8	57,910	569,066
2029	157,414	33.2	52,261	498,752	34.1	53,678	512,920	37.8	59,502	570,014
2030	161,743	33.2	53,699	498,704	34.1	55,154	512,871	37.8	61,139	569,959
2031	166,191	33.2	55,175	497,691	34.1	56,671	511,829	37.8	62,820	568,802

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 130,187	17.4%	\$22,653	\$ 273,513	22.0%	\$28,641	\$ 341,888	20.9%	\$27,209	\$ 327,874
2023	133,767	17.4	23,275	276,137	22.0	29,429	345,168	20.9	27,957	331,019
2024	137,446	17.4	23,916	278,490	22.0	30,238	348,109	20.9	28,726	333,840
2025	141,226	17.4	24,573	280,541	22.0	31,070	350,673	20.9	29,516	336,298
2026	145,110	17.4	25,249	282,256	22.0	31,924	352,816	20.9	30,328	338,354
2027	149,101	17.4	25,944	283,598	22.0	32,802	354,493	20.9	31,162	339,963
2028	153,201	17.4	26,657	284,527	22.0	33,704	355,655	20.9	32,019	341,077
2029	157,414	17.4	27,390	285,001	22.0	34,631	356,248	20.9	32,900	341,645
2030	161,743	17.4	28,143	284,974	22.0	35,583	356,214	20.9	33,804	341,612
2031	166,191	17.4	28,917	284,395	22.0	36,562	355,491	20.9	34,734	340,918

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	
2022	\$ 130,187	24.7%	\$32,156	\$ 382,652	26.6%	\$34,630	\$ 410,279	28.3%	\$36,843	\$ 437,462
2023	133,767	24.7	33,040	386,323	26.6	35,582	414,215	28.3	37,856	441,658
2024	137,446	24.7	33,949	389,615	26.6	36,561	417,745	28.3	38,897	445,421
2025	141,226	24.7	34,883	392,484	26.6	37,566	420,821	28.3	39,967	448,701
2026	145,110	24.7	35,842	394,883	26.6	38,599	423,393	28.3	41,066	451,444
2027	149,101	24.7	36,828	396,760	26.6	39,661	425,406	28.3	42,196	453,590
2028	153,201	24.7	37,841	398,060	26.6	40,751	426,800	28.3	43,356	455,076
2029	157,414	24.7	38,881	398,723	26.6	41,872	427,511	28.3	44,548	455,834
2030	161,743	24.7	39,951	398,685	26.6	43,024	427,470	28.3	45,773	455,790
2031	166,191	24.7	41,049	397,875	26.6	44,207	426,602	28.3	47,032	454,864

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	
2022	\$ 130,187	31.3%	\$40,749	\$ 478,648	32.2%	\$41,920	\$ 492,245	35.9%	\$46,737	\$ 547,037
2023	133,767	31.3	41,869	483,240	32.2	43,073	496,967	35.9	48,022	552,285
2024	137,446	31.3	43,021	487,358	32.2	44,258	501,202	35.9	49,343	556,991
2025	141,226	31.3	44,204	490,947	32.2	45,475	504,893	35.9	50,700	561,093
2026	145,110	31.3	45,419	493,948	32.2	46,725	507,979	35.9	52,094	564,523
2027	149,101	31.3	46,669	496,296	32.2	48,011	510,394	35.9	53,527	567,207
2028	153,201	31.3	47,952	497,922	32.2	49,331	512,067	35.9	54,999	569,066
2029	157,414	31.3	49,271	498,752	32.2	50,687	512,920	35.9	56,512	570,014
2030	161,743	31.3	50,626	498,704	32.2	52,081	512,871	35.9	58,066	569,959
2031	166,191	31.3	52,018	497,691	32.2	53,514	511,829	35.9	59,663	568,802

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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			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	
2022	\$ 130,187	15.5%	\$20,179	\$ 273,513	20.1%	\$26,168	\$ 341,888	19.0%	\$24,736	\$ 327,874
2023	133,767	15.5	20,734	276,137	20.1	26,887	345,168	19.0	25,416	331,019
2024	137,446	15.5	21,304	278,490	20.1	27,627	348,109	19.0	26,115	333,840
2025	141,226	15.5	21,890	280,541	20.1	28,386	350,673	19.0	26,833	336,298
2026	145,110	15.5	22,492	282,256	20.1	29,167	352,816	19.0	27,571	338,354
2027	149,101	15.5	23,111	283,598	20.1	29,969	354,493	19.0	28,329	339,963
2028	153,201	15.5	23,746	284,527	20.1	30,793	355,655	19.0	29,108	341,077
2029	157,414	15.5	24,399	285,001	20.1	31,640	356,248	19.0	29,909	341,645
2030	161,743	15.5	25,070	284,974	20.1	32,510	356,214	19.0	30,731	341,612
2031	166,191	15.5	25,760	284,395	20.1	33,404	355,491	19.0	31,576	340,918

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	
2022	\$ 130,187	22.8%	\$29,683	\$ 382,652	24.7%	\$32,156	\$ 410,279	26.4%	\$34,369	\$ 437,462
2023	133,767	22.8	30,499	386,323	24.7	33,040	414,215	26.4	35,314	441,658
2024	137,446	22.8	31,338	389,615	24.7	33,949	417,745	26.4	36,286	445,421
2025	141,226	22.8	32,200	392,484	24.7	34,883	420,821	26.4	37,284	448,701
2026	145,110	22.8	33,085	394,883	24.7	35,842	423,393	26.4	38,309	451,444
2027	149,101	22.8	33,995	396,760	24.7	36,828	425,406	26.4	39,363	453,590
2028	153,201	22.8	34,930	398,060	24.7	37,841	426,800	26.4	40,445	455,076
2029	157,414	22.8	35,890	398,723	24.7	38,881	427,511	26.4	41,557	455,834
2030	161,743	22.8	36,877	398,685	24.7	39,951	427,470	26.4	42,700	455,790
2031	166,191	22.8	37,892	397,875	24.7	41,049	426,602	26.4	43,874	454,864

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	
2022	\$ 130,187	29.4%	\$38,275	\$ 478,648	30.3%	\$39,447	\$ 492,245	34.0%	\$44,264	\$ 547,037
2023	133,767	29.4	39,327	483,240	30.3	40,531	496,967	34.0	45,481	552,285
2024	137,446	29.4	40,409	487,358	30.3	41,646	501,202	34.0	46,732	556,991
2025	141,226	29.4	41,520	490,947	30.3	42,791	504,893	34.0	48,017	561,093
2026	145,110	29.4	42,662	493,948	30.3	43,968	507,979	34.0	49,337	564,523
2027	149,101	29.4	43,836	496,296	30.3	45,178	510,394	34.0	50,694	567,207
2028	153,201	29.4	45,041	497,922	30.3	46,420	512,067	34.0	52,088	569,066
2029	157,414	29.4	46,280	498,752	30.3	47,696	512,920	34.0	53,521	570,014
2030	161,743	29.4	47,552	498,704	30.3	49,008	512,871	34.0	54,993	569,959
2031	166,191	29.4	48,860	497,691	30.3	50,356	511,829	34.0	56,505	568,802

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 130,187	13.6%	\$17,705	\$ 273,513	18.2%	\$23,694	\$ 341,888	17.1%	\$22,262	\$ 327,874
2023	133,767	13.6	18,192	276,137	18.2	24,346	345,168	17.1	22,874	331,019
2024	137,446	13.6	18,693	278,490	18.2	25,015	348,109	17.1	23,503	333,840
2025	141,226	13.6	19,207	280,541	18.2	25,703	350,673	17.1	24,150	336,298
2026	145,110	13.6	19,735	282,256	18.2	26,410	352,816	17.1	24,814	338,354
2027	149,101	13.6	20,278	283,598	18.2	27,136	354,493	17.1	25,496	339,963
2028	153,201	13.6	20,835	284,527	18.2	27,883	355,655	17.1	26,197	341,077
2029	157,414	13.6	21,408	285,001	18.2	28,649	356,248	17.1	26,918	341,645
2030	161,743	13.6	21,997	284,974	18.2	29,437	356,214	17.1	27,658	341,612
2031	166,191	13.6	22,602	284,395	18.2	30,247	355,491	17.1	28,419	340,918

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	
2022	\$ 130,187	20.9%	\$27,209	\$ 382,652	22.8%	\$29,683	\$ 410,279	24.5%	\$31,896	\$ 437,462
2023	133,767	20.9	27,957	386,323	22.8	30,499	414,215	24.5	32,773	441,658
2024	137,446	20.9	28,726	389,615	22.8	31,338	417,745	24.5	33,674	445,421
2025	141,226	20.9	29,516	392,484	22.8	32,200	420,821	24.5	34,600	448,701
2026	145,110	20.9	30,328	394,883	22.8	33,085	423,393	24.5	35,552	451,444
2027	149,101	20.9	31,162	396,760	22.8	33,995	425,406	24.5	36,530	453,590
2028	153,201	20.9	32,019	398,060	22.8	34,930	426,800	24.5	37,534	455,076
2029	157,414	20.9	32,900	398,723	22.8	35,890	427,511	24.5	38,566	455,834
2030	161,743	20.9	33,804	398,685	22.8	36,877	427,470	24.5	39,627	455,790
2031	166,191	20.9	34,734	397,875	22.8	37,892	426,602	24.5	40,717	454,864

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	
2022	\$ 130,187	27.5%	\$35,801	\$ 478,648	28.4%	\$36,973	\$ 492,245	32.1%	\$41,790	\$ 547,037
2023	133,767	27.5	36,786	483,240	28.4	37,990	496,967	32.1	42,939	552,285
2024	137,446	27.5	37,798	487,358	28.4	39,035	501,202	32.1	44,120	556,991
2025	141,226	27.5	38,837	490,947	28.4	40,108	504,893	32.1	45,334	561,093
2026	145,110	27.5	39,905	493,948	28.4	41,211	507,979	32.1	46,580	564,523
2027	149,101	27.5	41,003	496,296	28.4	42,345	510,394	32.1	47,861	567,207
2028	153,201	27.5	42,130	497,922	28.4	43,509	512,067	32.1	49,178	569,066
2029	157,414	27.5	43,289	498,752	28.4	44,706	512,920	32.1	50,530	570,014
2030	161,743	27.5	44,479	498,704	28.4	45,935	512,871	32.1	51,920	569,959
2031	166,191	27.5	45,703	497,691	28.4	47,198	511,829	32.1	53,347	568,802

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 130,187	20.0%	\$26,037	\$ 282,429	24.7%	\$32,156	\$ 353,013	23.5%	\$30,594	\$ 338,724
2023	133,767	20.0	26,753	285,138	24.7	33,040	356,399	23.5	31,435	341,973
2024	137,446	20.0	27,489	287,568	24.7	33,949	359,436	23.5	32,300	344,887
2025	141,226	20.0	28,245	289,686	24.7	34,883	362,083	23.5	33,188	347,427
2026	145,110	20.0	29,022	291,457	24.7	35,842	364,296	23.5	34,101	349,551
2027	149,101	20.0	29,820	292,843	24.7	36,828	366,028	23.5	35,039	351,213
2028	153,201	20.0	30,640	293,803	24.7	37,841	367,228	23.5	36,002	352,364
2029	157,414	20.0	31,483	294,293	24.7	38,881	367,840	23.5	36,992	352,951
2030	161,743	20.0	32,349	294,265	24.7	39,951	367,805	23.5	38,010	352,917
2031	166,191	20.0	33,238	293,667	24.7	41,049	367,058	23.5	39,055	352,200

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	
2022	\$ 130,187	27.4%	\$35,671	\$ 395,244	29.4%	\$38,275	\$ 423,632	31.3%	\$40,749	\$ 451,784
2023	133,767	27.4	36,652	399,035	29.4	39,327	427,696	31.3	41,869	456,118
2024	137,446	27.4	37,660	402,435	29.4	40,409	431,340	31.3	43,021	460,005
2025	141,226	27.4	38,696	405,399	29.4	41,520	434,516	31.3	44,204	463,393
2026	145,110	27.4	39,760	407,877	29.4	42,662	437,172	31.3	45,419	466,225
2027	149,101	27.4	40,854	409,816	29.4	43,836	439,250	31.3	46,669	468,442
2028	153,201	27.4	41,977	411,159	29.4	45,041	440,689	31.3	47,952	469,977
2029	157,414	27.4	43,131	411,844	29.4	46,280	441,423	31.3	49,271	470,760
2030	161,743	27.4	44,318	411,804	29.4	47,552	441,381	31.3	50,626	470,715
2031	166,191	27.4	45,536	410,968	29.4	48,860	440,485	31.3	52,018	469,759

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	
2022	\$ 130,187	34.3%	\$44,654	\$ 494,231	35.1%	\$45,696	\$ 508,310	39.0%	\$50,773	\$ 564,841
2023	133,767	34.3	45,882	498,972	35.1	46,952	513,186	39.0	52,169	570,259
2024	137,446	34.3	47,144	503,224	35.1	48,244	517,559	39.0	53,604	575,118
2025	141,226	34.3	48,441	506,930	35.1	49,570	521,370	39.0	55,078	579,353
2026	145,110	34.3	49,773	510,028	35.1	50,934	524,557	39.0	56,593	582,894
2027	149,101	34.3	51,142	512,453	35.1	52,334	527,051	39.0	58,149	585,665
2028	153,201	34.3	52,548	514,132	35.1	53,774	528,778	39.0	59,748	587,584
2029	157,414	34.3	53,993	514,989	35.1	55,252	529,659	39.0	61,391	588,563
2030	161,743	34.3	55,478	514,939	35.1	56,772	529,608	39.0	63,080	588,506
2031	166,191	34.3	57,004	513,893	35.1	58,333	528,532	39.0	64,814	587,311

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 130,187	18.1%	\$23,564	\$ 282,429	22.8%	\$29,683	\$ 353,013	21.6%	\$28,120	\$ 338,724
2023	133,767	18.1	24,212	285,138	22.8	30,499	356,399	21.6	28,894	341,973
2024	137,446	18.1	24,878	287,568	22.8	31,338	359,436	21.6	29,688	344,887
2025	141,226	18.1	25,562	289,686	22.8	32,200	362,083	21.6	30,505	347,427
2026	145,110	18.1	26,265	291,457	22.8	33,085	364,296	21.6	31,344	349,551
2027	149,101	18.1	26,987	292,843	22.8	33,995	366,028	21.6	32,206	351,213
2028	153,201	18.1	27,729	293,803	22.8	34,930	367,228	21.6	33,091	352,364
2029	157,414	18.1	28,492	294,293	22.8	35,890	367,840	21.6	34,001	352,951
2030	161,743	18.1	29,275	294,265	22.8	36,877	367,805	21.6	34,936	352,917
2031	166,191	18.1	30,081	293,667	22.8	37,892	367,058	21.6	35,897	352,200

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 130,187	25.5%	\$33,198	\$ 395,244	27.5%	\$35,801	\$ 423,632	29.4%	\$38,275	\$ 451,784
2023	133,767	25.5	34,111	399,035	27.5	36,786	427,696	29.4	39,327	456,118
2024	137,446	25.5	35,049	402,435	27.5	37,798	431,340	29.4	40,409	460,005
2025	141,226	25.5	36,013	405,399	27.5	38,837	434,516	29.4	41,520	463,393
2026	145,110	25.5	37,003	407,877	27.5	39,905	437,172	29.4	42,662	466,225
2027	149,101	25.5	38,021	409,816	27.5	41,003	439,250	29.4	43,836	468,442
2028	153,201	25.5	39,066	411,159	27.5	42,130	440,689	29.4	45,041	469,977
2029	157,414	25.5	40,141	411,844	27.5	43,289	441,423	29.4	46,280	470,760
2030	161,743	25.5	41,244	411,804	27.5	44,479	441,381	29.4	47,552	470,715
2031	166,191	25.5	42,379	410,968	27.5	45,703	440,485	29.4	48,860	469,759

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 130,187	32.4%	\$42,181	\$ 494,231	33.2%	\$43,222	\$ 508,310	37.1%	\$48,299	\$ 564,841
2023	133,767	32.4	43,341	498,972	33.2	44,411	513,186	37.1	49,628	570,259
2024	137,446	32.4	44,533	503,224	33.2	45,632	517,559	37.1	50,992	575,118
2025	141,226	32.4	45,757	506,930	33.2	46,887	521,370	37.1	52,395	579,353
2026	145,110	32.4	47,016	510,028	33.2	48,177	524,557	37.1	53,836	582,894
2027	149,101	32.4	48,309	512,453	33.2	49,502	527,051	37.1	55,316	585,665
2028	153,201	32.4	49,637	514,132	33.2	50,863	528,778	37.1	56,838	587,584
2029	157,414	32.4	51,002	514,989	33.2	52,261	529,659	37.1	58,401	588,563
2030	161,743	32.4	52,405	514,939	33.2	53,699	529,608	37.1	60,007	588,506
2031	166,191	32.4	53,846	513,893	33.2	55,175	528,532	37.1	61,657	587,311

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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			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	
2022	\$ 130,187	16.2%	\$21,090	\$ 282,429	20.9%	\$27,209	\$ 353,013	19.7%	\$25,647	\$ 338,724
2023	133,767	16.2	21,670	285,138	20.9	27,957	356,399	19.7	26,352	341,973
2024	137,446	16.2	22,266	287,568	20.9	28,726	359,436	19.7	27,077	344,887
2025	141,226	16.2	22,879	289,686	20.9	29,516	362,083	19.7	27,822	347,427
2026	145,110	16.2	23,508	291,457	20.9	30,328	364,296	19.7	28,587	349,551
2027	149,101	16.2	24,154	292,843	20.9	31,162	366,028	19.7	29,373	351,213
2028	153,201	16.2	24,819	293,803	20.9	32,019	367,228	19.7	30,181	352,364
2029	157,414	16.2	25,501	294,293	20.9	32,900	367,840	19.7	31,011	352,951
2030	161,743	16.2	26,202	294,265	20.9	33,804	367,805	19.7	31,863	352,917
2031	166,191	16.2	26,923	293,667	20.9	34,734	367,058	19.7	32,740	352,200

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	
2022	\$ 130,187	23.6%	\$30,724	\$ 395,244	25.6%	\$33,328	\$ 423,632	27.5%	\$35,801	\$ 451,784
2023	133,767	23.6	31,569	399,035	25.6	34,244	427,696	27.5	36,786	456,118
2024	137,446	23.6	32,437	402,435	25.6	35,186	431,340	27.5	37,798	460,005
2025	141,226	23.6	33,329	405,399	25.6	36,154	434,516	27.5	38,837	463,393
2026	145,110	23.6	34,246	407,877	25.6	37,148	437,172	27.5	39,905	466,225
2027	149,101	23.6	35,188	409,816	25.6	38,170	439,250	27.5	41,003	468,442
2028	153,201	23.6	36,155	411,159	25.6	39,219	440,689	27.5	42,130	469,977
2029	157,414	23.6	37,150	411,844	25.6	40,298	441,423	27.5	43,289	470,760
2030	161,743	23.6	38,171	411,804	25.6	41,406	441,381	27.5	44,479	470,715
2031	166,191	23.6	39,221	410,968	25.6	42,545	440,485	27.5	45,703	469,759

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	
2022	\$ 130,187	30.5%	\$39,707	\$ 494,231	31.3%	\$40,749	\$ 508,310	35.2%	\$45,826	\$ 564,841
2023	133,767	30.5	40,799	498,972	31.3	41,869	513,186	35.2	47,086	570,259
2024	137,446	30.5	41,921	503,224	31.3	43,021	517,559	35.2	48,381	575,118
2025	141,226	30.5	43,074	506,930	31.3	44,204	521,370	35.2	49,712	579,353
2026	145,110	30.5	44,259	510,028	31.3	45,419	524,557	35.2	51,079	582,894
2027	149,101	30.5	45,476	512,453	31.3	46,669	527,051	35.2	52,484	585,665
2028	153,201	30.5	46,726	514,132	31.3	47,952	528,778	35.2	53,927	587,584
2029	157,414	30.5	48,011	514,989	31.3	49,271	529,659	35.2	55,410	588,563
2030	161,743	30.5	49,332	514,939	31.3	50,626	529,608	35.2	56,934	588,506
2031	166,191	30.5	50,688	513,893	31.3	52,018	528,532	35.2	58,499	587,311

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 130,187	14.3%	\$18,617	\$ 282,429	19.0%	\$24,736	\$ 353,013	17.8%	\$23,173	\$ 338,724
2023	133,767	14.3	19,129	285,138	19.0	25,416	356,399	17.8	23,811	341,973
2024	137,446	14.3	19,655	287,568	19.0	26,115	359,436	17.8	24,465	344,887
2025	141,226	14.3	20,195	289,686	19.0	26,833	362,083	17.8	25,138	347,427
2026	145,110	14.3	20,751	291,457	19.0	27,571	364,296	17.8	25,830	349,551
2027	149,101	14.3	21,321	292,843	19.0	28,329	366,028	17.8	26,540	351,213
2028	153,201	14.3	21,908	293,803	19.0	29,108	367,228	17.8	27,270	352,364
2029	157,414	14.3	22,510	294,293	19.0	29,909	367,840	17.8	28,020	352,951
2030	161,743	14.3	23,129	294,265	19.0	30,731	367,805	17.8	28,790	352,917
2031	166,191	14.3	23,765	293,667	19.0	31,576	367,058	17.8	29,582	352,200

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	
2022	\$ 130,187	21.7%	\$28,251	\$ 395,244	23.7%	\$30,854	\$ 423,632	25.6%	\$33,328	\$ 451,784
2023	133,767	21.7	29,027	399,035	23.7	31,703	427,696	25.6	34,244	456,118
2024	137,446	21.7	29,826	402,435	23.7	32,575	431,340	25.6	35,186	460,005
2025	141,226	21.7	30,646	405,399	23.7	33,471	434,516	25.6	36,154	463,393
2026	145,110	21.7	31,489	407,877	23.7	34,391	437,172	25.6	37,148	466,225
2027	149,101	21.7	32,355	409,816	23.7	35,337	439,250	25.6	38,170	468,442
2028	153,201	21.7	33,245	411,159	23.7	36,309	440,689	25.6	39,219	469,977
2029	157,414	21.7	34,159	411,844	23.7	37,307	441,423	25.6	40,298	470,760
2030	161,743	21.7	35,098	411,804	23.7	38,333	441,381	25.6	41,406	470,715
2031	166,191	21.7	36,063	410,968	23.7	39,387	440,485	25.6	42,545	469,759

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	
2022	\$ 130,187	28.6%	\$37,233	\$ 494,231	29.4%	\$38,275	\$ 508,310	33.3%	\$43,352	\$ 564,841
2023	133,767	28.6	38,257	498,972	29.4	39,327	513,186	33.3	44,544	570,259
2024	137,446	28.6	39,310	503,224	29.4	40,409	517,559	33.3	45,770	575,118
2025	141,226	28.6	40,391	506,930	29.4	41,520	521,370	33.3	47,028	579,353
2026	145,110	28.6	41,501	510,028	29.4	42,662	524,557	33.3	48,322	582,894
2027	149,101	28.6	42,643	512,453	29.4	43,836	527,051	33.3	49,651	585,665
2028	153,201	28.6	43,815	514,132	29.4	45,041	528,778	33.3	51,016	587,584
2029	157,414	28.6	45,020	514,989	29.4	46,280	529,659	33.3	52,419	588,563
2030	161,743	28.6	46,258	514,939	29.4	47,552	529,608	33.3	53,860	588,506
2031	166,191	28.6	47,531	513,893	29.4	48,860	528,532	33.3	55,342	587,311

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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

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	
2022	\$ 835,591	12.1%	\$101,107	\$ 784,707	15.0%	\$125,339	\$ 980,902	14.5%	\$121,161	\$ 954,537
2023	858,570	12.1	103,887	792,234	15.0	128,786	990,311	14.5	124,493	963,694
2024	882,181	12.1	106,744	798,985	15.0	132,327	998,750	14.5	127,916	971,906
2025	906,441	12.1	109,679	804,869	15.0	135,966	1,006,105	14.5	131,434	979,063
2026	931,368	12.1	112,696	809,789	15.0	139,705	1,012,255	14.5	135,048	985,047
2027	956,981	12.1	115,795	813,639	15.0	143,547	1,017,067	14.5	138,762	989,730
2028	983,298	12.1	118,979	816,305	15.0	147,495	1,020,400	14.5	142,578	992,973
2029	1,010,339	12.1	122,251	817,665	15.0	151,551	1,022,100	14.5	146,499	994,627
2030	1,038,123	12.1	125,613	817,586	15.0	155,718	1,022,002	14.5	150,528	994,531
2031	1,066,671	12.1	129,067	815,926	15.0	160,001	1,019,926	14.5	154,667	992,511

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	
2022	\$ 835,591	16.7%	\$139,544	\$ 1,108,275	17.7%	\$147,900	\$ 1,177,098	18.9%	\$157,927	\$ 1,262,042
2023	858,570	16.7	143,381	1,118,906	17.7	151,967	1,188,390	18.9	162,270	1,274,148
2024	882,181	16.7	147,324	1,128,440	17.7	156,146	1,198,516	18.9	166,732	1,285,005
2025	906,441	16.7	151,376	1,136,750	17.7	160,440	1,207,342	18.9	171,317	1,294,468
2026	931,368	16.7	155,538	1,143,698	17.7	164,852	1,214,722	18.9	176,029	1,302,380
2027	956,981	16.7	159,816	1,149,135	17.7	169,386	1,220,497	18.9	180,869	1,308,572
2028	983,298	16.7	164,211	1,152,901	17.7	174,044	1,224,497	18.9	185,843	1,312,860
2029	1,010,339	16.7	168,727	1,154,822	17.7	178,830	1,226,537	18.9	190,954	1,315,047
2030	1,038,123	16.7	173,367	1,154,711	17.7	183,748	1,226,419	18.9	196,205	1,314,920
2031	1,066,671	16.7	178,134	1,152,366	17.7	188,801	1,223,928	18.9	201,601	1,312,250

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	
2022	\$ 835,591	20.6%	\$172,132	\$ 1,373,282	21.2%	\$177,145	\$ 1,415,732	23.5%	\$196,364	\$ 1,569,476
2023	858,570	20.6	176,865	1,386,455	21.2	182,017	1,429,313	23.5	201,764	1,584,531
2024	882,181	20.6	181,729	1,398,269	21.2	187,022	1,441,492	23.5	207,313	1,598,033
2025	906,441	20.6	186,727	1,408,566	21.2	192,165	1,452,107	23.5	213,014	1,609,801
2026	931,368	20.6	191,862	1,417,175	21.2	197,450	1,460,983	23.5	218,871	1,619,640
2027	956,981	20.6	197,138	1,423,912	21.2	202,880	1,467,929	23.5	224,891	1,627,340
2028	983,298	20.6	202,559	1,428,578	21.2	208,459	1,472,740	23.5	231,075	1,632,673
2029	1,010,339	20.6	208,130	1,430,958	21.2	214,192	1,475,194	23.5	237,430	1,635,393
2030	1,038,123	20.6	213,853	1,430,820	21.2	220,082	1,475,052	23.5	243,959	1,635,236
2031	1,066,671	20.6	219,734	1,427,914	21.2	226,134	1,472,056	23.5	250,668	1,631,915

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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	
2022	\$ 835,591	10.2%	\$85,230	\$ 784,707	13.1%	\$109,462	\$ 980,902	12.6%	\$105,284	\$ 954,537
2023	858,570	10.2	87,574	792,234	13.1	112,473	990,311	12.6	108,180	963,694
2024	882,181	10.2	89,982	798,985	13.1	115,566	998,750	12.6	111,155	971,906
2025	906,441	10.2	92,457	804,869	13.1	118,744	1,006,105	12.6	114,212	979,063
2026	931,368	10.2	95,000	809,789	13.1	122,009	1,012,255	12.6	117,352	985,047
2027	956,981	10.2	97,612	813,639	13.1	125,365	1,017,067	12.6	120,580	989,730
2028	983,298	10.2	100,296	816,305	13.1	128,812	1,020,400	12.6	123,896	992,973
2029	1,010,339	10.2	103,055	817,665	13.1	132,354	1,022,100	12.6	127,303	994,627
2030	1,038,123	10.2	105,889	817,586	13.1	135,994	1,022,002	12.6	130,803	994,531
2031	1,066,671	10.2	108,800	815,926	13.1	139,734	1,019,926	12.6	134,401	992,511

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	
2022	\$ 835,591	14.8%	\$123,667	\$ 1,108,275	15.8%	\$132,023	\$ 1,177,098	17.0%	\$142,050	\$ 1,262,042
2023	858,570	14.8	127,068	1,118,906	15.8	135,654	1,188,390	17.0	145,957	1,274,148
2024	882,181	14.8	130,563	1,128,440	15.8	139,385	1,198,516	17.0	149,971	1,285,005
2025	906,441	14.8	134,153	1,136,750	15.8	143,218	1,207,342	17.0	154,095	1,294,468
2026	931,368	14.8	137,842	1,143,698	15.8	147,156	1,214,722	17.0	158,333	1,302,380
2027	956,981	14.8	141,633	1,149,135	15.8	151,203	1,220,497	17.0	162,687	1,308,572
2028	983,298	14.8	145,528	1,152,901	15.8	155,361	1,224,497	17.0	167,161	1,312,860
2029	1,010,339	14.8	149,530	1,154,822	15.8	159,634	1,226,537	17.0	171,758	1,315,047
2030	1,038,123	14.8	153,642	1,154,711	15.8	164,023	1,226,419	17.0	176,481	1,314,920
2031	1,066,671	14.8	157,867	1,152,366	15.8	168,534	1,223,928	17.0	181,334	1,312,250

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	
2022	\$ 835,591	18.7%	\$156,256	\$ 1,373,282	19.3%	\$161,269	\$ 1,415,732	21.6%	\$180,488	\$ 1,569,476
2023	858,570	18.7	160,553	1,386,455	19.3	165,704	1,429,313	21.6	185,451	1,584,531
2024	882,181	18.7	164,968	1,398,269	19.3	170,261	1,441,492	21.6	190,551	1,598,033
2025	906,441	18.7	169,504	1,408,566	19.3	174,943	1,452,107	21.6	195,791	1,609,801
2026	931,368	18.7	174,166	1,417,175	19.3	179,754	1,460,983	21.6	201,175	1,619,640
2027	956,981	18.7	178,955	1,423,912	19.3	184,697	1,467,929	21.6	206,708	1,627,340
2028	983,298	18.7	183,877	1,428,578	19.3	189,777	1,472,740	21.6	212,392	1,632,673
2029	1,010,339	18.7	188,933	1,430,958	19.3	194,995	1,475,194	21.6	218,233	1,635,393
2030	1,038,123	18.7	194,129	1,430,820	19.3	200,358	1,475,052	21.6	224,235	1,635,236
2031	1,066,671	18.7	199,467	1,427,914	19.3	205,868	1,472,056	21.6	230,401	1,631,915

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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			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	
2022	\$ 835,591	8.3%	\$69,354	\$ 784,707	11.2%	\$93,586	\$ 980,902	10.7%	\$89,408	\$ 954,537
2023	858,570	8.3	71,261	792,234	11.2	96,160	990,311	10.7	91,867	963,694
2024	882,181	8.3	73,221	798,985	11.2	98,804	998,750	10.7	94,393	971,906
2025	906,441	8.3	75,235	804,869	11.2	101,521	1,006,105	10.7	96,989	979,063
2026	931,368	8.3	77,304	809,789	11.2	104,313	1,012,255	10.7	99,656	985,047
2027	956,981	8.3	79,429	813,639	11.2	107,182	1,017,067	10.7	102,397	989,730
2028	983,298	8.3	81,614	816,305	11.2	110,129	1,020,400	10.7	105,213	992,973
2029	1,010,339	8.3	83,858	817,665	11.2	113,158	1,022,100	10.7	108,106	994,627
2030	1,038,123	8.3	86,164	817,586	11.2	116,270	1,022,002	10.7	111,079	994,531
2031	1,066,671	8.3	88,534	815,926	11.2	119,467	1,019,926	10.7	114,134	992,511

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	
2022	\$ 835,591	12.9%	\$107,791	\$ 1,108,275	13.9%	\$116,147	\$ 1,177,098	15.1%	\$126,174	\$ 1,262,042
2023	858,570	12.9	110,756	1,118,906	13.9	119,341	1,188,390	15.1	129,644	1,274,148
2024	882,181	12.9	113,801	1,128,440	13.9	122,623	1,198,516	15.1	133,209	1,285,005
2025	906,441	12.9	116,931	1,136,750	13.9	125,995	1,207,342	15.1	136,873	1,294,468
2026	931,368	12.9	120,146	1,143,698	13.9	129,460	1,214,722	15.1	140,637	1,302,380
2027	956,981	12.9	123,451	1,149,135	13.9	133,020	1,220,497	15.1	144,504	1,308,572
2028	983,298	12.9	126,845	1,152,901	13.9	136,678	1,224,497	15.1	148,478	1,312,860
2029	1,010,339	12.9	130,334	1,154,822	13.9	140,437	1,226,537	15.1	152,561	1,315,047
2030	1,038,123	12.9	133,918	1,154,711	13.9	144,299	1,226,419	15.1	156,757	1,314,920
2031	1,066,671	12.9	137,601	1,152,366	13.9	148,267	1,223,928	15.1	161,067	1,312,250

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	
2022	\$ 835,591	16.8%	\$140,379	\$ 1,373,282	17.4%	\$145,393	\$ 1,415,732	19.7%	\$164,611	\$ 1,569,476
2023	858,570	16.8	144,240	1,386,455	17.4	149,391	1,429,313	19.7	169,138	1,584,531
2024	882,181	16.8	148,206	1,398,269	17.4	153,499	1,441,492	19.7	173,790	1,598,033
2025	906,441	16.8	152,282	1,408,566	17.4	157,721	1,452,107	19.7	178,569	1,609,801
2026	931,368	16.8	156,470	1,417,175	17.4	162,058	1,460,983	19.7	183,479	1,619,640
2027	956,981	16.8	160,773	1,423,912	17.4	166,515	1,467,929	19.7	188,525	1,627,340
2028	983,298	16.8	165,194	1,428,578	17.4	171,094	1,472,740	19.7	193,710	1,632,673
2029	1,010,339	16.8	169,737	1,430,958	17.4	175,799	1,475,194	19.7	199,037	1,635,393
2030	1,038,123	16.8	174,405	1,430,820	17.4	180,633	1,475,052	19.7	204,510	1,635,236
2031	1,066,671	16.8	179,201	1,427,914	17.4	185,601	1,472,056	19.7	210,134	1,631,915

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 835,591	6.4%	\$53,478	\$ 784,707	9.3%	\$77,710	\$ 980,902	8.8%	\$73,532	\$ 954,537
2023	858,570	6.4	54,948	792,234	9.3	79,847	990,311	8.8	75,554	963,694
2024	882,181	6.4	56,460	798,985	9.3	82,043	998,750	8.8	77,632	971,906
2025	906,441	6.4	58,012	804,869	9.3	84,299	1,006,105	8.8	79,767	979,063
2026	931,368	6.4	59,608	809,789	9.3	86,617	1,012,255	8.8	81,960	985,047
2027	956,981	6.4	61,247	813,639	9.3	88,999	1,017,067	8.8	84,214	989,730
2028	983,298	6.4	62,931	816,305	9.3	91,447	1,020,400	8.8	86,530	992,973
2029	1,010,339	6.4	64,662	817,665	9.3	93,962	1,022,100	8.8	88,910	994,627
2030	1,038,123	6.4	66,440	817,586	9.3	96,545	1,022,002	8.8	91,355	994,531
2031	1,066,671	6.4	68,267	815,926	9.3	99,200	1,019,926	8.8	93,867	992,511

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	
2022	\$ 835,591	11.0%	\$91,915	\$ 1,108,275	12.0%	\$100,271	\$ 1,177,098	13.2%	\$110,298	\$ 1,262,042
2023	858,570	11.0	94,443	1,118,906	12.0	103,028	1,188,390	13.2	113,331	1,274,148
2024	882,181	11.0	97,040	1,128,440	12.0	105,862	1,198,516	13.2	116,448	1,285,005
2025	906,441	11.0	99,709	1,136,750	12.0	108,773	1,207,342	13.2	119,650	1,294,468
2026	931,368	11.0	102,450	1,143,698	12.0	111,764	1,214,722	13.2	122,941	1,302,380
2027	956,981	11.0	105,268	1,149,135	12.0	114,838	1,220,497	13.2	126,321	1,308,572
2028	983,298	11.0	108,163	1,152,901	12.0	117,996	1,224,497	13.2	129,795	1,312,860
2029	1,010,339	11.0	111,137	1,154,822	12.0	121,241	1,226,537	13.2	133,365	1,315,047
2030	1,038,123	11.0	114,194	1,154,711	12.0	124,575	1,226,419	13.2	137,032	1,314,920
2031	1,066,671	11.0	117,334	1,152,366	12.0	128,001	1,223,928	13.2	140,801	1,312,250

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	
2022	\$ 835,591	14.9%	\$124,503	\$ 1,373,282	15.5%	\$129,517	\$ 1,415,732	17.8%	\$148,735	\$ 1,569,476
2023	858,570	14.9	127,927	1,386,455	15.5	133,078	1,429,313	17.8	152,825	1,584,531
2024	882,181	14.9	131,445	1,398,269	15.5	136,738	1,441,492	17.8	157,028	1,598,033
2025	906,441	14.9	135,060	1,408,566	15.5	140,498	1,452,107	17.8	161,346	1,609,801
2026	931,368	14.9	138,774	1,417,175	15.5	144,362	1,460,983	17.8	165,784	1,619,640
2027	956,981	14.9	142,590	1,423,912	15.5	148,332	1,467,929	17.8	170,343	1,627,340
2028	983,298	14.9	146,511	1,428,578	15.5	152,411	1,472,740	17.8	175,027	1,632,673
2029	1,010,339	14.9	150,541	1,430,958	15.5	156,603	1,475,194	17.8	179,840	1,635,393
2030	1,038,123	14.9	154,680	1,430,820	15.5	160,909	1,475,052	17.8	184,786	1,635,236
2031	1,066,671	14.9	158,934	1,427,914	15.5	165,334	1,472,056	17.8	189,867	1,631,915

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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

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	
2022	\$ 835,591	12.5%	\$104,449	\$ 812,418	15.5%	\$129,517	\$ 1,015,566	15.0%	\$125,339	\$ 988,356
2023	858,570	12.5	107,321	820,211	15.5	133,078	1,025,308	15.0	128,786	997,837
2024	882,181	12.5	110,273	827,200	15.5	136,738	1,034,045	15.0	132,327	1,006,340
2025	906,441	12.5	113,305	833,292	15.5	140,498	1,041,660	15.0	135,966	1,013,751
2026	931,368	12.5	116,421	838,385	15.5	144,362	1,048,027	15.0	139,705	1,019,947
2027	956,981	12.5	119,623	842,371	15.5	148,332	1,053,009	15.0	143,547	1,024,796
2028	983,298	12.5	122,912	845,132	15.5	152,411	1,056,460	15.0	147,495	1,028,154
2029	1,010,339	12.5	126,292	846,540	15.5	156,603	1,058,220	15.0	151,551	1,029,867
2030	1,038,123	12.5	129,765	846,459	15.5	160,909	1,058,118	15.0	155,718	1,029,768
2031	1,066,671	12.5	133,334	844,740	15.5	165,334	1,055,969	15.0	160,001	1,027,677

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	
2022	\$ 835,591	17.3%	\$144,557	\$ 1,147,509	18.3%	\$152,913	\$ 1,218,657	19.5%	\$162,940	\$ 1,306,597
2023	858,570	17.3	148,533	1,158,517	18.3	157,118	1,230,347	19.5	167,421	1,319,131
2024	882,181	17.3	152,617	1,168,389	18.3	161,439	1,240,831	19.5	172,025	1,330,372
2025	906,441	17.3	156,814	1,176,993	18.3	165,879	1,249,969	19.5	176,756	1,340,169
2026	931,368	17.3	161,127	1,184,187	18.3	170,440	1,257,609	19.5	181,617	1,348,360
2027	956,981	17.3	165,558	1,189,817	18.3	175,128	1,263,588	19.5	186,611	1,354,770
2028	983,298	17.3	170,111	1,193,716	18.3	179,944	1,267,729	19.5	191,743	1,359,210
2029	1,010,339	17.3	174,789	1,195,705	18.3	184,892	1,269,841	19.5	197,016	1,361,475
2030	1,038,123	17.3	179,595	1,195,590	18.3	189,977	1,269,719	19.5	202,434	1,361,344
2031	1,066,671	17.3	184,534	1,193,162	18.3	195,201	1,267,140	19.5	208,001	1,358,579

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	
2022	\$ 835,591	21.3%	\$177,981	\$ 1,421,747	21.9%	\$182,994	\$ 1,465,731	24.3%	\$203,049	\$ 1,624,865
2023	858,570	21.3	182,875	1,435,385	21.9	188,027	1,479,791	24.3	208,633	1,640,452
2024	882,181	21.3	187,905	1,447,616	21.9	193,198	1,492,401	24.3	214,370	1,654,431
2025	906,441	21.3	193,072	1,458,277	21.9	198,511	1,503,391	24.3	220,265	1,666,615
2026	931,368	21.3	198,381	1,467,190	21.9	203,970	1,512,580	24.3	226,322	1,676,802
2027	956,981	21.3	203,837	1,474,165	21.9	209,579	1,519,771	24.3	232,546	1,684,774
2028	983,298	21.3	209,442	1,478,996	21.9	215,342	1,524,751	24.3	238,941	1,690,295
2029	1,010,339	21.3	215,202	1,481,460	21.9	221,264	1,527,291	24.3	245,512	1,693,111
2030	1,038,123	21.3	221,120	1,481,317	21.9	227,349	1,527,144	24.3	252,264	1,692,948
2031	1,066,671	21.3	227,201	1,478,309	21.9	233,601	1,524,043	24.3	259,201	1,689,510

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

Employer Contribution Rates (2% Member Contribution Rate, 3 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	
2022	\$ 835,591	10.6%	\$88,573	\$ 812,418	13.6%	\$113,640	\$ 1,015,566	13.1%	\$109,462	\$ 988,356
2023	858,570	10.6	91,008	820,211	13.6	116,766	1,025,308	13.1	112,473	997,837
2024	882,181	10.6	93,511	827,200	13.6	119,977	1,034,045	13.1	115,566	1,006,340
2025	906,441	10.6	96,083	833,292	13.6	123,276	1,041,660	13.1	118,744	1,013,751
2026	931,368	10.6	98,725	838,385	13.6	126,666	1,048,027	13.1	122,009	1,019,947
2027	956,981	10.6	101,440	842,371	13.6	130,149	1,053,009	13.1	125,365	1,024,796
2028	983,298	10.6	104,230	845,132	13.6	133,729	1,056,460	13.1	128,812	1,028,154
2029	1,010,339	10.6	107,096	846,540	13.6	137,406	1,058,220	13.1	132,354	1,029,867
2030	1,038,123	10.6	110,041	846,459	13.6	141,185	1,058,118	13.1	135,994	1,029,768
2031	1,066,671	10.6	113,067	844,740	13.6	145,067	1,055,969	13.1	139,734	1,027,677

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	
2022	\$ 835,591	15.4%	\$128,681	\$ 1,147,509	16.4%	\$137,037	\$ 1,218,657	17.6%	\$147,064	\$ 1,306,597
2023	858,570	15.4	132,220	1,158,517	16.4	140,805	1,230,347	17.6	151,108	1,319,131
2024	882,181	15.4	135,856	1,168,389	16.4	144,678	1,240,831	17.6	155,264	1,330,372
2025	906,441	15.4	139,592	1,176,993	16.4	148,656	1,249,969	17.6	159,534	1,340,169
2026	931,368	15.4	143,431	1,184,187	16.4	152,744	1,257,609	17.6	163,921	1,348,360
2027	956,981	15.4	147,375	1,189,817	16.4	156,945	1,263,588	17.6	168,429	1,354,770
2028	983,298	15.4	151,428	1,193,716	16.4	161,261	1,267,729	17.6	173,060	1,359,210
2029	1,010,339	15.4	155,592	1,195,705	16.4	165,696	1,269,841	17.6	177,820	1,361,475
2030	1,038,123	15.4	159,871	1,195,590	16.4	170,252	1,269,719	17.6	182,710	1,361,344
2031	1,066,671	15.4	164,267	1,193,162	16.4	174,934	1,267,140	17.6	187,734	1,358,579

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	
2022	\$ 835,591	19.4%	\$162,105	\$ 1,421,747	20.0%	\$167,118	\$ 1,465,731	22.4%	\$187,172	\$ 1,624,865
2023	858,570	19.4	166,563	1,435,385	20.0	171,714	1,479,791	22.4	192,320	1,640,452
2024	882,181	19.4	171,143	1,447,616	20.0	176,436	1,492,401	22.4	197,609	1,654,431
2025	906,441	19.4	175,850	1,458,277	20.0	181,288	1,503,391	22.4	203,043	1,666,615
2026	931,368	19.4	180,685	1,467,190	20.0	186,274	1,512,580	22.4	208,626	1,676,802
2027	956,981	19.4	185,654	1,474,165	20.0	191,396	1,519,771	22.4	214,364	1,684,774
2028	983,298	19.4	190,760	1,478,996	20.0	196,660	1,524,751	22.4	220,259	1,690,295
2029	1,010,339	19.4	196,006	1,481,460	20.0	202,068	1,527,291	22.4	226,316	1,693,111
2030	1,038,123	19.4	201,396	1,481,317	20.0	207,625	1,527,144	22.4	232,540	1,692,948
2031	1,066,671	19.4	206,934	1,478,309	20.0	213,334	1,524,043	22.4	238,934	1,689,510

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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			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	
2022	\$ 835,591	8.7%	\$72,696	\$ 812,418	11.7%	\$97,764	\$ 1,015,566	11.2%	\$93,586	\$ 988,356
2023	858,570	8.7	74,696	820,211	11.7	100,453	1,025,308	11.2	96,160	997,837
2024	882,181	8.7	76,750	827,200	11.7	103,215	1,034,045	11.2	98,804	1,006,340
2025	906,441	8.7	78,860	833,292	11.7	106,054	1,041,660	11.2	101,521	1,013,751
2026	931,368	8.7	81,029	838,385	11.7	108,970	1,048,027	11.2	104,313	1,019,947
2027	956,981	8.7	83,257	842,371	11.7	111,967	1,053,009	11.2	107,182	1,024,796
2028	983,298	8.7	85,547	845,132	11.7	115,046	1,056,460	11.2	110,129	1,028,154
2029	1,010,339	8.7	87,899	846,540	11.7	118,210	1,058,220	11.2	113,158	1,029,867
2030	1,038,123	8.7	90,317	846,459	11.7	121,460	1,058,118	11.2	116,270	1,029,768
2031	1,066,671	8.7	92,800	844,740	11.7	124,801	1,055,969	11.2	119,467	1,027,677

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	
2022	\$ 835,591	13.5%	\$112,805	\$ 1,147,509	14.5%	\$121,161	\$ 1,218,657	15.7%	\$131,188	\$ 1,306,597
2023	858,570	13.5	115,907	1,158,517	14.5	124,493	1,230,347	15.7	134,795	1,319,131
2024	882,181	13.5	119,094	1,168,389	14.5	127,916	1,240,831	15.7	138,502	1,330,372
2025	906,441	13.5	122,370	1,176,993	14.5	131,434	1,249,969	15.7	142,311	1,340,169
2026	931,368	13.5	125,735	1,184,187	14.5	135,048	1,257,609	15.7	146,225	1,348,360
2027	956,981	13.5	129,192	1,189,817	14.5	138,762	1,263,588	15.7	150,246	1,354,770
2028	983,298	13.5	132,745	1,193,716	14.5	142,578	1,267,729	15.7	154,378	1,359,210
2029	1,010,339	13.5	136,396	1,195,705	14.5	146,499	1,269,841	15.7	158,623	1,361,475
2030	1,038,123	13.5	140,147	1,195,590	14.5	150,528	1,269,719	15.7	162,985	1,361,344
2031	1,066,671	13.5	144,001	1,193,162	14.5	154,667	1,267,140	15.7	167,467	1,358,579

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	
2022	\$ 835,591	17.5%	\$146,228	\$ 1,421,747	18.1%	\$151,242	\$ 1,465,731	20.5%	\$171,296	\$ 1,624,865
2023	858,570	17.5	150,250	1,435,385	18.1	155,401	1,479,791	20.5	176,007	1,640,452
2024	882,181	17.5	154,382	1,447,616	18.1	159,675	1,492,401	20.5	180,847	1,654,431
2025	906,441	17.5	158,627	1,458,277	18.1	164,066	1,503,391	20.5	185,820	1,666,615
2026	931,368	17.5	162,989	1,467,190	18.1	168,578	1,512,580	20.5	190,930	1,676,802
2027	956,981	17.5	167,472	1,474,165	18.1	173,214	1,519,771	20.5	196,181	1,684,774
2028	983,298	17.5	172,077	1,478,996	18.1	177,977	1,524,751	20.5	201,576	1,690,295
2029	1,010,339	17.5	176,809	1,481,460	18.1	182,871	1,527,291	20.5	207,119	1,693,111
2030	1,038,123	17.5	181,672	1,481,317	18.1	187,900	1,527,144	20.5	212,815	1,692,948
2031	1,066,671	17.5	186,667	1,478,309	18.1	193,067	1,524,043	20.5	218,668	1,689,510

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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			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	
2022	\$ 835,591	6.8%	\$56,820	\$ 812,418	9.8%	\$81,888	\$ 1,015,566	9.3%	\$77,710	\$ 988,356
2023	858,570	6.8	58,383	820,211	9.8	84,140	1,025,308	9.3	79,847	997,837
2024	882,181	6.8	59,988	827,200	9.8	86,454	1,034,045	9.3	82,043	1,006,340
2025	906,441	6.8	61,638	833,292	9.8	88,831	1,041,660	9.3	84,299	1,013,751
2026	931,368	6.8	63,333	838,385	9.8	91,274	1,048,027	9.3	86,617	1,019,947
2027	956,981	6.8	65,075	842,371	9.8	93,784	1,053,009	9.3	88,999	1,024,796
2028	983,298	6.8	66,864	845,132	9.8	96,363	1,056,460	9.3	91,447	1,028,154
2029	1,010,339	6.8	68,703	846,540	9.8	99,013	1,058,220	9.3	93,962	1,029,867
2030	1,038,123	6.8	70,592	846,459	9.8	101,736	1,058,118	9.3	96,545	1,029,768
2031	1,066,671	6.8	72,534	844,740	9.8	104,534	1,055,969	9.3	99,200	1,027,677

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	
2022	\$ 835,591	11.6%	\$96,929	\$ 1,147,509	12.6%	\$105,284	\$ 1,218,657	13.8%	\$115,312	\$ 1,306,597
2023	858,570	11.6	99,594	1,158,517	12.6	108,180	1,230,347	13.8	118,483	1,319,131
2024	882,181	11.6	102,333	1,168,389	12.6	111,155	1,240,831	13.8	121,741	1,330,372
2025	906,441	11.6	105,147	1,176,993	12.6	114,212	1,249,969	13.8	125,089	1,340,169
2026	931,368	11.6	108,039	1,184,187	12.6	117,352	1,257,609	13.8	128,529	1,348,360
2027	956,981	11.6	111,010	1,189,817	12.6	120,580	1,263,588	13.8	132,063	1,354,770
2028	983,298	11.6	114,063	1,193,716	12.6	123,896	1,267,729	13.8	135,695	1,359,210
2029	1,010,339	11.6	117,199	1,195,705	12.6	127,303	1,269,841	13.8	139,427	1,361,475
2030	1,038,123	11.6	120,422	1,195,590	12.6	130,803	1,269,719	13.8	143,261	1,361,344
2031	1,066,671	11.6	123,734	1,193,162	12.6	134,401	1,267,140	13.8	147,201	1,358,579

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	
2022	\$ 835,591	15.6%	\$130,352	\$ 1,421,747	16.2%	\$135,366	\$ 1,465,731	18.6%	\$155,420	\$ 1,624,865
2023	858,570	15.6	133,937	1,435,385	16.2	139,088	1,479,791	18.6	159,694	1,640,452
2024	882,181	15.6	137,620	1,447,616	16.2	142,913	1,492,401	18.6	164,086	1,654,431
2025	906,441	15.6	141,405	1,458,277	16.2	146,843	1,503,391	18.6	168,598	1,666,615
2026	931,368	15.6	145,293	1,467,190	16.2	150,882	1,512,580	18.6	173,234	1,676,802
2027	956,981	15.6	149,289	1,474,165	16.2	155,031	1,519,771	18.6	177,998	1,684,774
2028	983,298	15.6	153,394	1,478,996	16.2	159,294	1,524,751	18.6	182,893	1,690,295
2029	1,010,339	15.6	157,613	1,481,460	16.2	163,675	1,527,291	18.6	187,923	1,693,111
2030	1,038,123	15.6	161,947	1,481,317	16.2	168,176	1,527,144	18.6	193,091	1,692,948
2031	1,066,671	15.6	166,401	1,478,309	16.2	172,801	1,524,043	18.6	198,401	1,689,510

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 835,591	12.8%	\$106,956	\$ 843,653	15.8%	\$132,023	\$ 1,054,578	16.2%	\$135,366	\$ 1,107,765
2023	858,570	12.8	109,897	851,746	15.8	135,654	1,064,694	16.2	139,088	1,118,391
2024	882,181	12.8	112,919	859,004	15.8	139,385	1,073,766	16.2	142,913	1,127,921
2025	906,441	12.8	116,024	865,330	15.8	143,218	1,081,673	16.2	146,843	1,136,227
2026	931,368	12.8	119,215	870,619	15.8	147,156	1,088,284	16.2	150,882	1,143,172
2027	956,981	12.8	122,494	874,758	15.8	151,203	1,093,458	16.2	155,031	1,148,607
2028	983,298	12.8	125,862	877,625	15.8	155,361	1,097,041	16.2	159,294	1,152,371
2029	1,010,339	12.8	129,323	879,087	15.8	159,634	1,098,869	16.2	163,675	1,154,291
2030	1,038,123	12.8	132,880	879,002	15.8	164,023	1,098,763	16.2	168,176	1,154,180
2031	1,066,671	12.8	136,534	877,217	15.8	168,534	1,096,532	16.2	172,801	1,151,836

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	
2022	\$ 835,591	18.5%	\$154,584	\$ 1,252,688	18.7%	\$156,256	\$ 1,265,527	20.5%	\$171,296	\$ 1,397,575
2023	858,570	18.5	158,835	1,264,705	18.7	160,553	1,277,667	20.5	176,007	1,410,981
2024	882,181	18.5	163,203	1,275,482	18.7	164,968	1,288,554	20.5	180,847	1,423,004
2025	906,441	18.5	167,692	1,284,875	18.7	169,504	1,298,043	20.5	185,820	1,433,483
2026	931,368	18.5	172,303	1,292,728	18.7	174,166	1,305,977	20.5	190,930	1,442,245
2027	956,981	18.5	177,041	1,298,874	18.7	178,955	1,312,186	20.5	196,181	1,449,102
2028	983,298	18.5	181,910	1,303,131	18.7	183,877	1,316,486	20.5	201,576	1,453,851
2029	1,010,339	18.5	186,913	1,305,302	18.7	188,933	1,318,679	20.5	207,119	1,456,273
2030	1,038,123	18.5	192,053	1,305,176	18.7	194,129	1,318,552	20.5	212,815	1,456,133
2031	1,066,671	18.5	197,334	1,302,525	18.7	199,467	1,315,874	20.5	218,668	1,453,176

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	
2022	\$ 835,591	21.7%	\$181,323	\$ 1,476,437	22.7%	\$189,679	\$ 1,542,454	24.8%	\$207,227	\$ 1,687,403
2023	858,570	21.7	186,310	1,490,600	22.7	194,895	1,557,250	24.8	212,925	1,703,590
2024	882,181	21.7	191,433	1,503,302	22.7	200,255	1,570,520	24.8	218,781	1,718,107
2025	906,441	21.7	196,698	1,514,373	22.7	205,762	1,582,086	24.8	224,797	1,730,760
2026	931,368	21.7	202,107	1,523,629	22.7	211,421	1,591,756	24.8	230,979	1,741,339
2027	956,981	21.7	207,665	1,530,873	22.7	217,235	1,599,323	24.8	237,331	1,749,618
2028	983,298	21.7	213,376	1,535,890	22.7	223,209	1,604,564	24.8	243,858	1,755,352
2029	1,010,339	21.7	219,244	1,538,449	22.7	229,347	1,607,237	24.8	250,564	1,758,277
2030	1,038,123	21.7	225,273	1,538,301	22.7	235,654	1,607,082	24.8	257,455	1,758,108
2031	1,066,671	21.7	231,468	1,535,177	22.7	242,134	1,603,818	24.8	264,534	1,754,538

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 835,591	10.9%	\$91,079	\$ 843,653	13.9%	\$116,147	\$ 1,054,578	14.3%	\$119,490	\$ 1,107,765
2023	858,570	10.9	93,584	851,746	13.9	119,341	1,064,694	14.3	122,776	1,118,391
2024	882,181	10.9	96,158	859,004	13.9	122,623	1,073,766	14.3	126,152	1,127,921
2025	906,441	10.9	98,802	865,330	13.9	125,995	1,081,673	14.3	129,621	1,136,227
2026	931,368	10.9	101,519	870,619	13.9	129,460	1,088,284	14.3	133,186	1,143,172
2027	956,981	10.9	104,311	874,758	13.9	133,020	1,093,458	14.3	136,848	1,148,607
2028	983,298	10.9	107,179	877,625	13.9	136,678	1,097,041	14.3	140,612	1,152,371
2029	1,010,339	10.9	110,127	879,087	13.9	140,437	1,098,869	14.3	144,478	1,154,291
2030	1,038,123	10.9	113,155	879,002	13.9	144,299	1,098,763	14.3	148,452	1,154,180
2031	1,066,671	10.9	116,267	877,217	13.9	148,267	1,096,532	14.3	152,534	1,151,836

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	
2022	\$ 835,591	16.6%	\$138,708	\$ 1,252,688	16.8%	\$140,379	\$ 1,265,527	18.6%	\$155,420	\$ 1,397,575
2023	858,570	16.6	142,523	1,264,705	16.8	144,240	1,277,667	18.6	159,694	1,410,981
2024	882,181	16.6	146,442	1,275,482	16.8	148,206	1,288,554	18.6	164,086	1,423,004
2025	906,441	16.6	150,469	1,284,875	16.8	152,282	1,298,043	18.6	168,598	1,433,483
2026	931,368	16.6	154,607	1,292,728	16.8	156,470	1,305,977	18.6	173,234	1,442,245
2027	956,981	16.6	158,859	1,298,874	16.8	160,773	1,312,186	18.6	177,998	1,449,102
2028	983,298	16.6	163,227	1,303,131	16.8	165,194	1,316,486	18.6	182,893	1,453,851
2029	1,010,339	16.6	167,716	1,305,302	16.8	169,737	1,318,679	18.6	187,923	1,456,273
2030	1,038,123	16.6	172,328	1,305,176	16.8	174,405	1,318,552	18.6	193,091	1,456,133
2031	1,066,671	16.6	177,067	1,302,525	16.8	179,201	1,315,874	18.6	198,401	1,453,176

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	
2022	\$ 835,591	19.8%	\$165,447	\$ 1,476,437	20.8%	\$173,803	\$ 1,542,454	22.9%	\$191,350	\$ 1,687,403
2023	858,570	19.8	169,997	1,490,600	20.8	178,583	1,557,250	22.9	196,613	1,703,590
2024	882,181	19.8	174,672	1,503,302	20.8	183,494	1,570,520	22.9	202,019	1,718,107
2025	906,441	19.8	179,475	1,514,373	20.8	188,540	1,582,086	22.9	207,575	1,730,760
2026	931,368	19.8	184,411	1,523,629	20.8	193,725	1,591,756	22.9	213,283	1,741,339
2027	956,981	19.8	189,482	1,530,873	20.8	199,052	1,599,323	22.9	219,149	1,749,618
2028	983,298	19.8	194,693	1,535,890	20.8	204,526	1,604,564	22.9	225,175	1,755,352
2029	1,010,339	19.8	200,047	1,538,449	20.8	210,151	1,607,237	22.9	231,368	1,758,277
2030	1,038,123	19.8	205,548	1,538,301	20.8	215,930	1,607,082	22.9	237,730	1,758,108
2031	1,066,671	19.8	211,201	1,535,177	20.8	221,868	1,603,818	22.9	244,268	1,754,538

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 835,591	9.0%	\$75,203	\$ 843,653	12.0%	\$100,271	\$ 1,054,578	12.4%	\$103,613	\$ 1,107,765
2023	858,570	9.0	77,271	851,746	12.0	103,028	1,064,694	12.4	106,463	1,118,391
2024	882,181	9.0	79,396	859,004	12.0	105,862	1,073,766	12.4	109,390	1,127,921
2025	906,441	9.0	81,580	865,330	12.0	108,773	1,081,673	12.4	112,399	1,136,227
2026	931,368	9.0	83,823	870,619	12.0	111,764	1,088,284	12.4	115,490	1,143,172
2027	956,981	9.0	86,128	874,758	12.0	114,838	1,093,458	12.4	118,666	1,148,607
2028	983,298	9.0	88,497	877,625	12.0	117,996	1,097,041	12.4	121,929	1,152,371
2029	1,010,339	9.0	90,931	879,087	12.0	121,241	1,098,869	12.4	125,282	1,154,291
2030	1,038,123	9.0	93,431	879,002	12.0	124,575	1,098,763	12.4	128,727	1,154,180
2031	1,066,671	9.0	96,000	877,217	12.0	128,001	1,096,532	12.4	132,267	1,151,836

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	
2022	\$ 835,591	14.7%	\$122,832	\$ 1,252,688	14.9%	\$124,503	\$ 1,265,527	16.7%	\$139,544	\$ 1,397,575
2023	858,570	14.7	126,210	1,264,705	14.9	127,927	1,277,667	16.7	143,381	1,410,981
2024	882,181	14.7	129,681	1,275,482	14.9	131,445	1,288,554	16.7	147,324	1,423,004
2025	906,441	14.7	133,247	1,284,875	14.9	135,060	1,298,043	16.7	151,376	1,433,483
2026	931,368	14.7	136,911	1,292,728	14.9	138,774	1,305,977	16.7	155,538	1,442,245
2027	956,981	14.7	140,676	1,298,874	14.9	142,590	1,312,186	16.7	159,816	1,449,102
2028	983,298	14.7	144,545	1,303,131	14.9	146,511	1,316,486	16.7	164,211	1,453,851
2029	1,010,339	14.7	148,520	1,305,302	14.9	150,541	1,318,679	16.7	168,727	1,456,273
2030	1,038,123	14.7	152,604	1,305,176	14.9	154,680	1,318,552	16.7	173,367	1,456,133
2031	1,066,671	14.7	156,801	1,302,525	14.9	158,934	1,315,874	16.7	178,134	1,453,176

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	
2022	\$ 835,591	17.9%	\$149,571	\$ 1,476,437	18.9%	\$157,927	\$ 1,542,454	21.0%	\$175,474	\$ 1,687,403
2023	858,570	17.9	153,684	1,490,600	18.9	162,270	1,557,250	21.0	180,300	1,703,590
2024	882,181	17.9	157,910	1,503,302	18.9	166,732	1,570,520	21.0	185,258	1,718,107
2025	906,441	17.9	162,253	1,514,373	18.9	171,317	1,582,086	21.0	190,353	1,730,760
2026	931,368	17.9	166,715	1,523,629	18.9	176,029	1,591,756	21.0	195,587	1,741,339
2027	956,981	17.9	171,300	1,530,873	18.9	180,869	1,599,323	21.0	200,966	1,749,618
2028	983,298	17.9	176,010	1,535,890	18.9	185,843	1,604,564	21.0	206,493	1,755,352
2029	1,010,339	17.9	180,851	1,538,449	18.9	190,954	1,607,237	21.0	212,171	1,758,277
2030	1,038,123	17.9	185,824	1,538,301	18.9	196,205	1,607,082	21.0	218,006	1,758,108
2031	1,066,671	17.9	190,934	1,535,177	18.9	201,601	1,603,818	21.0	224,001	1,754,538

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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			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	
2022	\$ 835,591	7.1%	\$59,327	\$ 843,653	10.1%	\$84,395	\$ 1,054,578	10.5%	\$87,737	\$ 1,107,765
2023	858,570	7.1	60,958	851,746	10.1	86,716	1,064,694	10.5	90,150	1,118,391
2024	882,181	7.1	62,635	859,004	10.1	89,100	1,073,766	10.5	92,629	1,127,921
2025	906,441	7.1	64,357	865,330	10.1	91,551	1,081,673	10.5	95,176	1,136,227
2026	931,368	7.1	66,127	870,619	10.1	94,068	1,088,284	10.5	97,794	1,143,172
2027	956,981	7.1	67,946	874,758	10.1	96,655	1,093,458	10.5	100,483	1,148,607
2028	983,298	7.1	69,814	877,625	10.1	99,313	1,097,041	10.5	103,246	1,152,371
2029	1,010,339	7.1	71,734	879,087	10.1	102,044	1,098,869	10.5	106,086	1,154,291
2030	1,038,123	7.1	73,707	879,002	10.1	104,850	1,098,763	10.5	109,003	1,154,180
2031	1,066,671	7.1	75,734	877,217	10.1	107,734	1,096,532	10.5	112,000	1,151,836

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	
2022	\$ 835,591	12.8%	\$106,956	\$ 1,252,688	13.0%	\$108,627	\$ 1,265,527	14.8%	\$123,667	\$ 1,397,575
2023	858,570	12.8	109,897	1,264,705	13.0	111,614	1,277,667	14.8	127,068	1,410,981
2024	882,181	12.8	112,919	1,275,482	13.0	114,684	1,288,554	14.8	130,563	1,423,004
2025	906,441	12.8	116,024	1,284,875	13.0	117,837	1,298,043	14.8	134,153	1,433,483
2026	931,368	12.8	119,215	1,292,728	13.0	121,078	1,305,977	14.8	137,842	1,442,245
2027	956,981	12.8	122,494	1,298,874	13.0	124,408	1,312,186	14.8	141,633	1,449,102
2028	983,298	12.8	125,862	1,303,131	13.0	127,829	1,316,486	14.8	145,528	1,453,851
2029	1,010,339	12.8	129,323	1,305,302	13.0	131,344	1,318,679	14.8	149,530	1,456,273
2030	1,038,123	12.8	132,880	1,305,176	13.0	134,956	1,318,552	14.8	153,642	1,456,133
2031	1,066,671	12.8	136,534	1,302,525	13.0	138,667	1,315,874	14.8	157,867	1,453,176

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	
2022	\$ 835,591	16.0%	\$133,695	\$ 1,476,437	17.0%	\$142,050	\$ 1,542,454	19.1%	\$159,598	\$ 1,687,403
2023	858,570	16.0	137,371	1,490,600	17.0	145,957	1,557,250	19.1	163,987	1,703,590
2024	882,181	16.0	141,149	1,503,302	17.0	149,971	1,570,520	19.1	168,497	1,718,107
2025	906,441	16.0	145,031	1,514,373	17.0	154,095	1,582,086	19.1	173,130	1,730,760
2026	931,368	16.0	149,019	1,523,629	17.0	158,333	1,591,756	19.1	177,891	1,741,339
2027	956,981	16.0	153,117	1,530,873	17.0	162,687	1,599,323	19.1	182,783	1,749,618
2028	983,298	16.0	157,328	1,535,890	17.0	167,161	1,604,564	19.1	187,810	1,755,352
2029	1,010,339	16.0	161,654	1,538,449	17.0	171,758	1,607,237	19.1	192,975	1,758,277
2030	1,038,123	16.0	166,100	1,538,301	17.0	176,481	1,607,082	19.1	198,281	1,758,108
2031	1,066,671	16.0	170,667	1,535,177	17.0	181,334	1,603,818	19.1	203,734	1,754,538

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - 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			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	
2022	\$ 835,591	13.2%	\$110,298	\$ 874,464	16.3%	\$136,201	\$ 1,093,042	16.8%	\$140,379	\$ 1,148,348
2023	858,570	13.2	113,331	882,852	16.3	139,947	1,103,527	16.8	144,240	1,159,364
2024	882,181	13.2	116,448	890,375	16.3	143,796	1,112,930	16.8	148,206	1,169,243
2025	906,441	13.2	119,650	896,932	16.3	147,750	1,121,126	16.8	152,282	1,177,854
2026	931,368	13.2	122,941	902,414	16.3	151,813	1,127,979	16.8	156,470	1,185,053
2027	956,981	13.2	126,321	906,704	16.3	155,988	1,133,342	16.8	160,773	1,190,687
2028	983,298	13.2	129,795	909,675	16.3	160,278	1,137,056	16.8	165,194	1,194,589
2029	1,010,339	13.2	133,365	911,191	16.3	164,685	1,138,950	16.8	169,737	1,196,579
2030	1,038,123	13.2	137,032	911,103	16.3	169,214	1,138,840	16.8	174,405	1,196,464
2031	1,066,671	13.2	140,801	909,253	16.3	173,867	1,136,527	16.8	179,201	1,194,034

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	
2022	\$ 835,591	19.1%	\$159,598	\$ 1,298,449	19.4%	\$162,105	\$ 1,311,648	21.2%	\$177,145	\$ 1,448,565
2023	858,570	19.1	163,987	1,310,905	19.4	166,563	1,324,230	21.2	182,017	1,462,461
2024	882,181	19.1	168,497	1,322,075	19.4	171,143	1,335,514	21.2	187,022	1,474,923
2025	906,441	19.1	173,130	1,331,811	19.4	175,850	1,345,349	21.2	192,165	1,485,785
2026	931,368	19.1	177,891	1,339,951	19.4	180,685	1,353,572	21.2	197,450	1,494,866
2027	956,981	19.1	182,783	1,346,321	19.4	185,654	1,360,007	21.2	202,880	1,501,973
2028	983,298	19.1	187,810	1,350,733	19.4	190,760	1,364,464	21.2	208,459	1,506,895
2029	1,010,339	19.1	192,975	1,352,984	19.4	196,006	1,366,737	21.2	214,192	1,509,406
2030	1,038,123	19.1	198,281	1,352,854	19.4	201,396	1,366,605	21.2	220,082	1,509,261
2031	1,066,671	19.1	203,734	1,350,107	19.4	206,934	1,363,830	21.2	226,134	1,506,196

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	
2022	\$ 835,591	22.5%	\$188,008	\$ 1,530,262	23.5%	\$196,364	\$ 1,598,708	25.7%	\$214,747	\$ 1,748,882
2023	858,570	22.5	193,178	1,544,941	23.5	201,764	1,614,044	25.7	220,652	1,765,658
2024	882,181	22.5	198,491	1,558,106	23.5	207,313	1,627,798	25.7	226,721	1,780,703
2025	906,441	22.5	203,949	1,569,580	23.5	213,014	1,639,785	25.7	232,955	1,793,817
2026	931,368	22.5	209,558	1,579,174	23.5	218,871	1,649,808	25.7	239,362	1,804,781
2027	956,981	22.5	215,321	1,586,682	23.5	224,891	1,657,651	25.7	245,944	1,813,361
2028	983,298	22.5	221,242	1,591,882	23.5	231,075	1,663,083	25.7	252,708	1,819,304
2029	1,010,339	22.5	227,326	1,594,534	23.5	237,430	1,665,854	25.7	259,657	1,822,335
2030	1,038,123	22.5	233,578	1,594,381	23.5	243,959	1,665,694	25.7	266,798	1,822,160
2031	1,066,671	22.5	240,001	1,591,143	23.5	250,668	1,662,311	25.7	274,134	1,818,459

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 835,591	11.3%	\$94,422	\$ 874,464	14.4%	\$120,325	\$ 1,093,042	14.9%	\$124,503	\$ 1,148,348
2023	858,570	11.3	97,018	882,852	14.4	123,634	1,103,527	14.9	127,927	1,159,364
2024	882,181	11.3	99,686	890,375	14.4	127,034	1,112,930	14.9	131,445	1,169,243
2025	906,441	11.3	102,428	896,932	14.4	130,528	1,121,126	14.9	135,060	1,177,854
2026	931,368	11.3	105,245	902,414	14.4	134,117	1,127,979	14.9	138,774	1,185,053
2027	956,981	11.3	108,139	906,704	14.4	137,805	1,133,342	14.9	142,590	1,190,687
2028	983,298	11.3	111,113	909,675	14.4	141,595	1,137,056	14.9	146,511	1,194,589
2029	1,010,339	11.3	114,168	911,191	14.4	145,489	1,138,950	14.9	150,541	1,196,579
2030	1,038,123	11.3	117,308	911,103	14.4	149,490	1,138,840	14.9	154,680	1,196,464
2031	1,066,671	11.3	120,534	909,253	14.4	153,601	1,136,527	14.9	158,934	1,194,034

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	
2022	\$ 835,591	17.2%	\$143,722	\$ 1,298,449	17.5%	\$146,228	\$ 1,311,648	19.3%	\$161,269	\$ 1,448,565
2023	858,570	17.2	147,674	1,310,905	17.5	150,250	1,324,230	19.3	165,704	1,462,461
2024	882,181	17.2	151,735	1,322,075	17.5	154,382	1,335,514	19.3	170,261	1,474,923
2025	906,441	17.2	155,908	1,331,811	17.5	158,627	1,345,349	19.3	174,943	1,485,785
2026	931,368	17.2	160,195	1,339,951	17.5	162,989	1,353,572	19.3	179,754	1,494,866
2027	956,981	17.2	164,601	1,346,321	17.5	167,472	1,360,007	19.3	184,697	1,501,973
2028	983,298	17.2	169,127	1,350,733	17.5	172,077	1,364,464	19.3	189,777	1,506,895
2029	1,010,339	17.2	173,778	1,352,984	17.5	176,809	1,366,737	19.3	194,995	1,509,406
2030	1,038,123	17.2	178,557	1,352,854	17.5	181,672	1,366,605	19.3	200,358	1,509,261
2031	1,066,671	17.2	183,467	1,350,107	17.5	186,667	1,363,830	19.3	205,868	1,506,196

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	
2022	\$ 835,591	20.6%	\$172,132	\$ 1,530,262	21.6%	\$180,488	\$ 1,598,708	23.8%	\$198,871	\$ 1,748,882
2023	858,570	20.6	176,865	1,544,941	21.6	185,451	1,614,044	23.8	204,340	1,765,658
2024	882,181	20.6	181,729	1,558,106	21.6	190,551	1,627,798	23.8	209,959	1,780,703
2025	906,441	20.6	186,727	1,569,580	21.6	195,791	1,639,785	23.8	215,733	1,793,817
2026	931,368	20.6	191,862	1,579,174	21.6	201,175	1,649,808	23.8	221,666	1,804,781
2027	956,981	20.6	197,138	1,586,682	21.6	206,708	1,657,651	23.8	227,761	1,813,361
2028	983,298	20.6	202,559	1,591,882	21.6	212,392	1,663,083	23.8	234,025	1,819,304
2029	1,010,339	20.6	208,130	1,594,534	21.6	218,233	1,665,854	23.8	240,461	1,822,335
2030	1,038,123	20.6	213,853	1,594,381	21.6	224,235	1,665,694	23.8	247,073	1,822,160
2031	1,066,671	20.6	219,734	1,591,143	21.6	230,401	1,662,311	23.8	253,868	1,818,459

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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			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	
2022	\$ 835,591	9.4%	\$78,546	\$ 874,464	12.5%	\$104,449	\$ 1,093,042	13.0%	\$108,627	\$ 1,148,348
2023	858,570	9.4	80,706	882,852	12.5	107,321	1,103,527	13.0	111,614	1,159,364
2024	882,181	9.4	82,925	890,375	12.5	110,273	1,112,930	13.0	114,684	1,169,243
2025	906,441	9.4	85,205	896,932	12.5	113,305	1,121,126	13.0	117,837	1,177,854
2026	931,368	9.4	87,549	902,414	12.5	116,421	1,127,979	13.0	121,078	1,185,053
2027	956,981	9.4	89,956	906,704	12.5	119,623	1,133,342	13.0	124,408	1,190,687
2028	983,298	9.4	92,430	909,675	12.5	122,912	1,137,056	13.0	127,829	1,194,589
2029	1,010,339	9.4	94,972	911,191	12.5	126,292	1,138,950	13.0	131,344	1,196,579
2030	1,038,123	9.4	97,584	911,103	12.5	129,765	1,138,840	13.0	134,956	1,196,464
2031	1,066,671	9.4	100,267	909,253	12.5	133,334	1,136,527	13.0	138,667	1,194,034

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	
2022	\$ 835,591	15.3%	\$127,845	\$ 1,298,449	15.6%	\$130,352	\$ 1,311,648	17.4%	\$145,393	\$ 1,448,565
2023	858,570	15.3	131,361	1,310,905	15.6	133,937	1,324,230	17.4	149,391	1,462,461
2024	882,181	15.3	134,974	1,322,075	15.6	137,620	1,335,514	17.4	153,499	1,474,923
2025	906,441	15.3	138,685	1,331,811	15.6	141,405	1,345,349	17.4	157,721	1,485,785
2026	931,368	15.3	142,499	1,339,951	15.6	145,293	1,353,572	17.4	162,058	1,494,866
2027	956,981	15.3	146,418	1,346,321	15.6	149,289	1,360,007	17.4	166,515	1,501,973
2028	983,298	15.3	150,445	1,350,733	15.6	153,394	1,364,464	17.4	171,094	1,506,895
2029	1,010,339	15.3	154,582	1,352,984	15.6	157,613	1,366,737	17.4	175,799	1,509,406
2030	1,038,123	15.3	158,833	1,352,854	15.6	161,947	1,366,605	17.4	180,633	1,509,261
2031	1,066,671	15.3	163,201	1,350,107	15.6	166,401	1,363,830	17.4	185,601	1,506,196

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	
2022	\$ 835,591	18.7%	\$156,256	\$ 1,530,262	19.7%	\$164,611	\$ 1,598,708	21.9%	\$182,994	\$ 1,748,882
2023	858,570	18.7	160,553	1,544,941	19.7	169,138	1,614,044	21.9	188,027	1,765,658
2024	882,181	18.7	164,968	1,558,106	19.7	173,790	1,627,798	21.9	193,198	1,780,703
2025	906,441	18.7	169,504	1,569,580	19.7	178,569	1,639,785	21.9	198,511	1,793,817
2026	931,368	18.7	174,166	1,579,174	19.7	183,479	1,649,808	21.9	203,970	1,804,781
2027	956,981	18.7	178,955	1,586,682	19.7	188,525	1,657,651	21.9	209,579	1,813,361
2028	983,298	18.7	183,877	1,591,882	19.7	193,710	1,663,083	21.9	215,342	1,819,304
2029	1,010,339	18.7	188,933	1,594,534	19.7	199,037	1,665,854	21.9	221,264	1,822,335
2030	1,038,123	18.7	194,129	1,594,381	19.7	204,510	1,665,694	21.9	227,349	1,822,160
2031	1,066,671	18.7	199,467	1,591,143	19.7	210,134	1,662,311	21.9	233,601	1,818,459

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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 Emergency Services - Public Safety

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial 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	
2022	\$ 835,591	7.5%	\$62,669	\$ 874,464	10.6%	\$88,573	\$ 1,093,042	11.1%	\$92,751	\$ 1,148,348
2023	858,570	7.5	64,393	882,852	10.6	91,008	1,103,527	11.1	95,301	1,159,364
2024	882,181	7.5	66,164	890,375	10.6	93,511	1,112,930	11.1	97,922	1,169,243
2025	906,441	7.5	67,983	896,932	10.6	96,083	1,121,126	11.1	100,615	1,177,854
2026	931,368	7.5	69,853	902,414	10.6	98,725	1,127,979	11.1	103,382	1,185,053
2027	956,981	7.5	71,774	906,704	10.6	101,440	1,133,342	11.1	106,225	1,190,687
2028	983,298	7.5	73,747	909,675	10.6	104,230	1,137,056	11.1	109,146	1,194,589
2029	1,010,339	7.5	75,775	911,191	10.6	107,096	1,138,950	11.1	112,148	1,196,579
2030	1,038,123	7.5	77,859	911,103	10.6	110,041	1,138,840	11.1	115,232	1,196,464
2031	1,066,671	7.5	80,000	909,253	10.6	113,067	1,136,527	11.1	118,400	1,194,034

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	
2022	\$ 835,591	13.4%	\$111,969	\$ 1,298,449	13.7%	\$114,476	\$ 1,311,648	15.5%	\$129,517	\$ 1,448,565
2023	858,570	13.4	115,048	1,310,905	13.7	117,624	1,324,230	15.5	133,078	1,462,461
2024	882,181	13.4	118,212	1,322,075	13.7	120,859	1,335,514	15.5	136,738	1,474,923
2025	906,441	13.4	121,463	1,331,811	13.7	124,182	1,345,349	15.5	140,498	1,485,785
2026	931,368	13.4	124,803	1,339,951	13.7	127,597	1,353,572	15.5	144,362	1,494,866
2027	956,981	13.4	128,235	1,346,321	13.7	131,106	1,360,007	15.5	148,332	1,501,973
2028	983,298	13.4	131,762	1,350,733	13.7	134,712	1,364,464	15.5	152,411	1,506,895
2029	1,010,339	13.4	135,385	1,352,984	13.7	138,416	1,366,737	15.5	156,603	1,509,406
2030	1,038,123	13.4	139,108	1,352,854	13.7	142,223	1,366,605	15.5	160,909	1,509,261
2031	1,066,671	13.4	142,934	1,350,107	13.7	146,134	1,363,830	15.5	165,334	1,506,196

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	
2022	\$ 835,591	16.8%	\$140,379	\$ 1,530,262	17.8%	\$148,735	\$ 1,598,708	20.0%	\$167,118	\$ 1,748,882
2023	858,570	16.8	144,240	1,544,941	17.8	152,825	1,614,044	20.0	171,714	1,765,658
2024	882,181	16.8	148,206	1,558,106	17.8	157,028	1,627,798	20.0	176,436	1,780,703
2025	906,441	16.8	152,282	1,569,580	17.8	161,346	1,639,785	20.0	181,288	1,793,817
2026	931,368	16.8	156,470	1,579,174	17.8	165,784	1,649,808	20.0	186,274	1,804,781
2027	956,981	16.8	160,773	1,586,682	17.8	170,343	1,657,651	20.0	191,396	1,813,361
2028	983,298	16.8	165,194	1,591,882	17.8	175,027	1,663,083	20.0	196,660	1,819,304
2029	1,010,339	16.8	169,737	1,594,534	17.8	179,840	1,665,854	20.0	202,068	1,822,335
2030	1,038,123	16.8	174,405	1,594,381	17.8	184,786	1,665,694	20.0	207,625	1,822,160
2031	1,066,671	16.8	179,201	1,591,143	17.8	189,867	1,662,311	20.0	213,334	1,818,459

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 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.

