



The Initial Valuation For
City of Manchester
as of August 31, 2021



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November 3, 2021

City of Manchester
Manchester, 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, 2021.

The computed contributions required for LAGERS participation will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the State law which governs LAGERS. This valuation assumed the ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our expertise and not performed. Summary provisions of the law as well as benefit illustrations can be found in Appendices III and IV.

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

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

In accordance with LAGERS Board policy, the employer contribution rates established by this valuation report are valid for purposes of joining the System for a two year period from the date of this valuation which was August 31, 2021. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

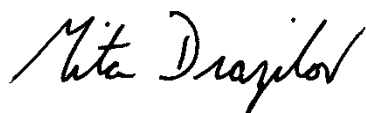
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita 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.

City of Manchester

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%	7.80%	14.50%	12.60%	10.70%	8.80%
	Police	7.30	0.40	5.60	13.30	11.40	9.50	7.60
L-3	General	7.90	0.30	9.80	18.00	16.10	14.20	12.30
	Police	8.90	0.50	7.00	16.40	14.50	12.60	10.70
LT-4(65)	General	7.10	0.20	8.60	15.90	14.00	12.10	10.20
	Police	8.70	0.40	6.90	16.00	14.10	12.20	10.30
LT-5(65)	General	8.30	0.30	10.40	19.00	17.10	15.20	13.30
	Police	10.00	0.50	8.00	18.50	16.60	14.70	12.80
L-7	General	9.20	0.30	11.70	21.20	19.30	17.40	15.50
	Police	10.50	0.60	8.40	19.50	17.60	15.70	13.80
LT-8(65)	General	9.60	0.30	12.10	22.00	20.10	18.20	16.30
	Police	11.20	0.60	9.10	20.90	19.00	17.10	15.20
L-12	General	10.60	0.40	13.70	24.70	22.80	20.90	19.00
	Police	12.10	0.70	9.80	22.60	20.70	18.80	16.90
LT-14(65)	General	10.80	0.40	13.90	25.10	23.20	21.30	19.40
	Police	12.50	0.70	10.20	23.40	21.50	19.60	17.70
L-6	General	12.00	0.50	15.60	28.10	26.20	24.30	22.40
	Police	13.70	0.80	11.20	25.70	23.80	21.90	20.00

* 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.

City of Manchester

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%	8.10%	15.00%	13.10%	11.20%	9.30%
	Police	7.50	0.40	5.80	13.70	11.80	9.90	8.00
L-3	General	8.10	0.30	10.10	18.50	16.60	14.70	12.80
	Police	9.20	0.50	7.30	17.00	15.10	13.20	11.30
LT-4(65)	General	7.30	0.20	8.90	16.40	14.50	12.60	10.70
	Police	9.00	0.40	7.20	16.60	14.70	12.80	10.90
LT-5(65)	General	8.60	0.30	10.70	19.60	17.70	15.80	13.90
	Police	10.30	0.50	8.30	19.10	17.20	15.30	13.40
L-7	General	9.50	0.30	12.10	21.90	20.00	18.10	16.20
	Police	10.90	0.60	8.70	20.20	18.30	16.40	14.50
LT-8(65)	General	9.90	0.30	12.50	22.70	20.80	18.90	17.00
	Police	11.60	0.60	9.40	21.60	19.70	17.80	15.90
L-12	General	11.00	0.40	14.10	25.50	23.60	21.70	19.80
	Police	12.50	0.70	10.20	23.40	21.50	19.60	17.70
LT-14(65)	General	11.10	0.40	14.40	25.90	24.00	22.10	20.20
	Police	12.90	0.70	10.50	24.10	22.20	20.30	18.40
L-6	General	12.40	0.50	16.20	29.10	27.20	25.30	23.40
	Police	14.20	0.80	11.60	26.60	24.70	22.80	20.90

* 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.

City of Manchester

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%	8.30%	15.30%	13.40%	11.50%	9.60%
	Police	7.40	0.40	5.90	13.70	11.80	9.90	8.00
L-3	General	8.30	0.30	10.40	19.00	17.10	15.20	13.30
	Police	9.10	0.50	7.30	16.90	15.00	13.10	11.20
LT-4(65)	General	8.00	0.20	9.60	17.80	15.90	14.00	12.10
	Police	9.00	0.40	7.50	16.90	15.00	13.10	11.20
LT-5(65)	General	9.20	0.30	11.40	20.90	19.00	17.10	15.20
	Police	10.30	0.50	8.60	19.40	17.50	15.60	13.70
L-7	General	9.80	0.30	12.40	22.50	20.60	18.70	16.80
	Police	10.70	0.60	8.80	20.10	18.20	16.30	14.40
LT-8(65)	General	10.40	0.30	13.10	23.80	21.90	20.00	18.10
	Police	11.50	0.60	9.60	21.70	19.80	17.90	16.00
L-12	General	11.30	0.40	14.50	26.20	24.30	22.40	20.50
	Police	12.30	0.70	10.20	23.20	21.30	19.40	17.50
LT-14(65)	General	11.60	0.40	14.80	26.80	24.90	23.00	21.10
	Police	12.70	0.70	10.70	24.10	22.20	20.30	18.40
L-6	General	12.70	0.50	16.60	29.80	27.90	26.00	24.10
	Police	14.00	0.80	11.70	26.50	24.60	22.70	20.80

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.

City of Manchester

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	7.00%	0.20%	8.60%	15.80%	13.90%	12.00%	10.10%
	Police	7.70	0.40	6.10	14.20	12.30	10.40	8.50
L-3	General	8.60	0.30	10.70	19.60	17.70	15.80	13.90
	Police	9.40	0.50	7.60	17.50	15.60	13.70	11.80
LT-4(65)	General	8.20	0.20	10.00	18.40	16.50	14.60	12.70
	Police	9.40	0.40	7.80	17.60	15.70	13.80	11.90
LT-5(65)	General	9.50	0.30	11.80	21.60	19.70	17.80	15.90
	Police	10.60	0.50	8.90	20.00	18.10	16.20	14.30
L-7	General	10.10	0.30	12.80	23.20	21.30	19.40	17.50
	Police	11.10	0.60	9.10	20.80	18.90	17.00	15.10
LT-8(65)	General	10.70	0.30	13.50	24.50	22.60	20.70	18.80
	Police	11.90	0.60	10.00	22.50	20.60	18.70	16.80
L-12	General	11.60	0.40	15.00	27.00	25.10	23.20	21.30
	Police	12.80	0.70	10.60	24.10	22.20	20.30	18.40
LT-14(65)	General	11.90	0.40	15.30	27.60	25.70	23.80	21.90
	Police	13.20	0.70	11.00	24.90	23.00	21.10	19.20
L-6	General	13.20	0.50	17.10	30.80	28.90	27.00	25.10
	Police	14.40	0.80	12.10	27.30	25.40	23.50	21.60

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

* Assumes that credit is granted for 100% of service rendered prior to the membership date 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.

City of Manchester

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	\$ 342,155	\$ 297,321	\$ 252,487	\$ 207,653
L-3	424,744	379,910	335,076	290,242
LT-4(65)	375,191	330,357	285,523	240,688
LT-5(65)	448,341	403,507	358,673	313,839
L-7	500,254	455,420	410,586	365,752
LT-8(65)	519,132	474,298	429,464	384,630
L-12	582,844	538,010	493,175	448,341
LT-14(65)	592,282	547,448	502,614	457,780
L-6	663,073	618,239	573,405	528,571

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 353,954	\$ 309,120	\$ 264,285	\$ 219,451
L-3	436,543	391,709	346,875	302,040
LT-4(65)	386,989	342,155	297,321	252,487
LT-5(65)	462,499	417,665	372,831	327,997
L-7	516,772	471,938	427,104	382,270
LT-8(65)	535,650	490,816	445,982	401,147
L-12	601,721	556,887	512,053	467,219
LT-14(65)	611,160	566,326	521,492	476,658
L-6	686,670	641,836	597,002	552,168

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 361,033	\$ 316,199	\$ 271,364	\$ 226,530
L-3	448,341	403,507	358,673	313,839
LT-4(65)	420,025	375,191	330,357	285,523
LT-5(65)	493,175	448,341	403,507	358,673
L-7	530,930	486,096	441,262	396,428
LT-8(65)	561,606	516,772	471,938	427,104
L-12	618,239	573,405	528,571	483,737
LT-14(65)	632,397	587,563	542,729	497,895
L-6	703,188	658,354	613,520	568,686

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 372,831	\$ 327,997	\$ 283,163	\$ 238,329
L-3	462,499	417,665	372,831	327,997
LT-4(65)	434,183	389,349	344,515	299,681
LT-5(65)	509,693	464,859	420,025	375,191
L-7	547,448	502,614	457,780	412,946
LT-8(65)	578,124	533,290	488,456	443,622
L-12	637,117	592,282	547,448	502,614
LT-14(65)	651,275	606,441	561,606	516,772
L-6	726,785	681,951	637,117	592,282

PLEASE NOTE THAT THE ABOVE INFORMATION IS BASED ON THE PERSONNEL AND PAYROLL DATA SUBMITTED FOR THE ACTUARIAL VALUATION. IN BUDGETING AMOUNTS FOR LAGERS CONTRIBUTIONS YOU SHOULD CONSIDER ANY CHANGES WHICH HAVE BEEN MADE SINCE DATA WAS SUBMITTED FOR THE VALUATION AND ANY CHANGES ANTICIPATED TO BE MADE BEFORE THE END OF THE PERIOD FOR WHICH YOU ARE PREPARING THE BUDGET.

City of Manchester

Employer Contribution Dollars Police

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

Regular Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 305,851	\$ 262,158	\$ 218,465	\$ 174,772
L-3	377,139	333,446	289,753	246,060
LT-4(65)	367,941	324,248	280,555	236,862
LT-5(65)	425,431	381,738	338,045	294,353
L-7	448,428	404,735	361,042	317,349
LT-8(65)	480,622	436,930	393,237	349,544
L-12	519,716	476,023	432,330	388,637
LT-14(65)	538,113	494,420	450,727	407,034
L-6	591,005	547,312	503,619	459,926

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 315,049	\$ 271,356	\$ 227,663	\$ 183,970
L-3	390,937	347,244	303,551	259,858
LT-4(65)	381,738	338,045	294,353	250,660
LT-5(65)	439,229	395,536	351,843	308,150
L-7	464,525	420,832	377,139	333,446
LT-8(65)	496,720	453,027	409,334	365,641
L-12	538,113	494,420	450,727	407,034
LT-14(65)	554,211	510,518	466,825	423,132
L-6	611,701	568,008	524,315	480,622

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 315,049	\$ 271,356	\$ 227,663	\$ 183,970
L-3	388,637	344,944	301,251	257,558
LT-4(65)	388,637	344,944	301,251	257,558
LT-5(65)	446,128	402,435	358,742	315,049
L-7	462,225	418,532	374,840	331,147
LT-8(65)	499,019	455,327	411,634	367,941
L-12	533,514	489,821	446,128	402,435
LT-14(65)	554,211	510,518	466,825	423,132
L-6	609,402	565,709	522,016	478,323

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 326,547	\$ 282,854	\$ 239,161	\$ 195,468
L-3	402,435	358,742	315,049	271,356
LT-4(65)	404,735	361,042	317,349	273,656
LT-5(65)	459,926	416,233	372,540	328,847
L-7	478,323	434,630	390,937	347,244
LT-8(65)	517,417	473,724	430,031	386,338
L-12	554,211	510,518	466,825	423,132
LT-14(65)	572,608	528,915	485,222	441,529
L-6	627,799	584,106	540,413	496,720

PLEASE NOTE THAT THE ABOVE INFORMATION IS BASED ON THE PERSONNEL AND PAYROLL DATA SUBMITTED FOR THE ACTUARIAL VALUATION. IN BUDGETING AMOUNTS FOR LAGERS CONTRIBUTIONS YOU SHOULD CONSIDER ANY CHANGES WHICH HAVE BEEN MADE SINCE DATA WAS SUBMITTED FOR THE VALUATION AND ANY CHANGES ANTICIPATED TO BE MADE BEFORE THE END OF THE PERIOD FOR WHICH YOU ARE PREPARING THE BUDGET.

City of Manchester

Employees and Payroll Included in the Valuation

	General	Police
Number of Employees	47	35
Annual Payroll	\$ 2,359,691	\$ 2,299,629

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:

City of Manchester

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 3,162,714	\$ 3,266,080
	Police	2,213,094	2,290,392
L-3	General	3,953,370	4,082,693
	Police	2,766,525	2,863,075
LT-4(65)	General	3,489,743	3,604,367
	Police	2,727,039	2,822,767
LT-5(65)	General	4,198,698	4,336,329
	Police	3,151,944	3,262,317
L-7	General	4,744,040	4,899,146
	Police	3,319,848	3,435,763
LT-8(65)	General	4,907,517	5,068,361
	Police	3,576,841	3,701,890
L-12	General	5,534,659	5,715,784
	Police	3,873,152	4,008,356
LT-14(65)	General	5,616,445	5,800,337
	Police	4,001,625	4,141,453
L-6	General	6,324,763	6,531,680
	Police	4,426,482	4,580,923

City of Manchester

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	\$ 3,347,269	\$ 3,458,987
	Police	2,306,629	2,388,478
L-3	General	4,184,106	4,323,722
	Police	2,883,411	2,985,676
LT-4(65)	General	3,898,366	4,029,422
	Police	2,967,045	3,072,931
LT-5(65)	General	4,597,373	4,751,520
	Police	3,378,672	3,498,953
L-7	General	5,020,842	5,188,534
	Police	3,460,059	3,582,871
LT-8(65)	General	5,296,385	5,473,702
	Police	3,790,296	3,925,046
L-12	General	5,857,763	6,053,274
	Police	4,036,683	4,179,982
LT-14(65)	General	5,995,488	6,195,942
	Police	4,201,789	4,351,064
L-6	General	6,694,237	6,917,733
	Police	4,613,442	4,777,130

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

1. The investment return rate used in making the valuations was 7.00% per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. The price inflation rate used in making the valuations was 2.25% and the wage inflation rate used in making the valuations was 2.75%. The 7.00% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.25%. Adopted 2021.
2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubG-2010 Retiree Mortality Table for males and females. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubNS-2010 Disabled Retiree Mortality Table for males and females. The pre-retirement mortality tables used were 75% of the PubG-2010 Employee Mortality Table for males and females of General groups and 75% of the PubS-2010 Employee Mortality Table for males and females of Police, Fire and Public Safety groups. Mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scale to the above described tables. Adopted 2021.
3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2021.
4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2021.
5. Post-retirement cost of living allowances are assumed to be 2.00% per year. Adopted 2021.
6. Total active member payroll is assumed to increase 2.75% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2021.
7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.
9. This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Schedule 1.

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

		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, 2021

(Section references are to RSMo)

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

The minimum service retirement age is age 60 for a general employee and age 55 for a police, 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	\$ 916	\$1,441	96%
2,000	700	1,055	1,755	88%
2,500	875	1,192	2,067	83%
3,000	1,050	1,330	2,380	79%
3,500	1,225	1,469	2,694	77%
4,000	1,400	1,605	3,005	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 916	\$1,291	86%
2,000	500	1,055	1,555	78%
2,500	625	1,192	1,817	73%
3,000	750	1,330	2,080	69%
3,500	875	1,469	2,344	67%
4,000	1,000	1,605	2,605	65%
15 Years of Service:				
\$1,500	\$225	\$ 916	\$1,141	76%
2,000	300	1,055	1,355	68%
2,500	375	1,192	1,567	63%
3,000	450	1,330	1,780	59%
3,500	525	1,469	1,994	57%
4,000	600	1,605	2,205	55%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total		
			\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 656	\$ 916	\$1,572	105%	
2,000	875	1,055	1,930	97%	
2,500	1,094	1,192	2,286	91%	
3,000	1,313	1,330	2,643	88%	
3,500	1,531	1,469	3,000	86%	
4,000	1,750	1,605	3,355	84%	
25 Years of Service:					
\$1,500	\$ 469	\$ 916	\$1,385	92%	
2,000	625	1,055	1,680	84%	
2,500	781	1,192	1,973	79%	
3,000	938	1,330	2,268	76%	
3,500	1,094	1,469	2,563	73%	
4,000	1,250	1,605	2,855	71%	
15 Years of Service:					
\$1,500	\$281	\$ 916	\$1,197	80%	
2,000	375	1,055	1,430	72%	
2,500	469	1,192	1,661	66%	
3,000	563	1,330	1,893	63%	
3,500	656	1,469	2,125	61%	
4,000	750	1,605	2,355	59%	

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total		
			\$	% of FAS	
35 Years of Service:					
\$1,500	\$ 788	\$ 916	\$1,704	114%	
2,000	1,050	1,055	2,105	105%	
2,500	1,313	1,192	2,505	100%	
3,000	1,575	1,330	2,905	97%	
3,500	1,838	1,469	3,307	94%	
4,000	2,100	1,605	3,705	93%	
25 Years of Service:					
\$1,500	\$ 563	\$ 916	\$1,479	99%	
2,000	750	1,055	1,805	90%	
2,500	938	1,192	2,130	85%	
3,000	1,125	1,330	2,455	82%	
3,500	1,313	1,469	2,782	79%	
4,000	1,500	1,605	3,105	78%	
15 Years of Service:					
\$1,500	\$338	\$ 916	\$1,254	84%	
2,000	450	1,055	1,505	75%	
2,500	563	1,192	1,755	70%	
3,000	675	1,330	2,005	67%	
3,500	788	1,469	2,257	64%	
4,000	900	1,605	2,505	63%	

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 916	\$1,835	122%
2,000	1,225	1,055	2,280	114%
2,500	1,531	1,192	2,723	109%
3,000	1,838	1,330	3,168	106%
3,500	2,144	1,469	3,613	103%
4,000	2,450	1,605	4,055	101%
25 Years of Service:				
\$1,500	\$ 656	\$ 916	\$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 916	\$1,310	87%
2,000	525	1,055	1,580	79%
2,500	656	1,192	1,848	74%
3,000	788	1,330	2,118	71%
3,500	919	1,469	2,388	68%
4,000	1,050	1,605	2,655	66%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

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

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		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	\$ 916	\$1,050	\$1,441	70%	96%
2,000	1,400	700	1,055	1,400	1,755	70%	88%
2,500	1,750	875	1,192	1,750	2,067	70%	83%
3,000	2,100	1,050	1,330	2,100	2,380	70%	79%
3,500	2,450	1,225	1,469	2,450	2,694	70%	77%
4,000	2,800	1,400	1,605	2,800	3,005	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 916	\$ 750	\$1,291	50%	86%
2,000	1,000	500	1,055	1,000	1,555	50%	78%
2,500	1,250	625	1,192	1,250	1,817	50%	73%
3,000	1,500	750	1,330	1,500	2,080	50%	69%
3,500	1,750	875	1,469	1,750	2,344	50%	67%
4,000	2,000	1,000	1,605	2,000	2,605	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 916	\$ 450	\$1,141	30%	76%
2,000	600	300	1,055	600	1,355	30%	68%
2,500	750	375	1,192	750	1,567	30%	63%
3,000	900	450	1,330	900	1,780	30%	59%
3,500	1,050	525	1,469	1,050	1,994	30%	57%
4,000	1,200	600	1,605	1,200	2,205	30%	55%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		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	\$ 916	\$1,050	\$1,572	70%	105%
2,000	1,400	875	1,055	1,400	1,930	70%	97%
2,500	1,750	1,094	1,192	1,750	2,286	70%	91%
3,000	2,100	1,313	1,330	2,100	2,643	70%	88%
3,500	2,450	1,531	1,469	2,450	3,000	70%	86%
4,000	2,800	1,750	1,605	2,800	3,355	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 916	\$ 750	\$1,385	50%	92%
2,000	1,000	625	1,055	1,000	1,680	50%	84%
2,500	1,250	781	1,192	1,250	1,973	50%	79%
3,000	1,500	938	1,330	1,500	2,268	50%	76%
3,500	1,750	1,094	1,469	1,750	2,563	50%	73%
4,000	2,000	1,250	1,605	2,000	2,855	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 916	\$ 450	\$1,197	30%	80%
2,000	600	375	1,055	600	1,430	30%	72%
2,500	750	469	1,192	750	1,661	30%	66%
3,000	900	563	1,330	900	1,893	30%	63%
3,500	1,050	656	1,469	1,050	2,125	30%	61%
4,000	1,200	750	1,605	1,200	2,355	30%	59%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		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	\$ 916	\$1,050	\$1,704	70%	114%
2,000	1,400	1,050	1,055	1,400	2,105	70%	105%
2,500	1,750	1,313	1,192	1,750	2,505	70%	100%
3,000	2,100	1,575	1,330	2,100	2,905	70%	97%
3,500	2,450	1,838	1,469	2,450	3,307	70%	94%
4,000	2,800	2,100	1,605	2,800	3,705	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 916	\$ 750	\$1,479	50%	99%
2,000	1,000	750	1,055	1,000	1,805	50%	90%
2,500	1,250	938	1,192	1,250	2,130	50%	85%
3,000	1,500	1,125	1,330	1,500	2,455	50%	82%
3,500	1,750	1,313	1,469	1,750	2,782	50%	79%
4,000	2,000	1,500	1,605	2,000	3,105	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 916	\$ 450	\$1,254	30%	84%
2,000	600	450	1,055	600	1,505	30%	75%
2,500	750	563	1,192	750	1,755	30%	70%
3,000	900	675	1,330	900	2,005	30%	67%
3,500	1,050	788	1,469	1,050	2,257	30%	64%
4,000	1,200	900	1,605	1,200	2,505	30%	63%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		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	\$ 916	\$1,050	\$1,835	70%	122%
2,000	1,400	1,225	1,055	1,400	2,280	70%	114%
2,500	1,750	1,531	1,192	1,750	2,723	70%	109%
3,000	2,100	1,838	1,330	2,100	3,168	70%	106%
3,500	2,450	2,144	1,469	2,450	3,613	70%	103%
4,000	2,800	2,450	1,605	2,800	4,055	70%	101%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 916	\$ 750	\$1,572	50%	105%
2,000	1,000	875	1,055	1,000	1,930	50%	97%
2,500	1,250	1,094	1,192	1,250	2,286	50%	91%
3,000	1,500	1,313	1,330	1,500	2,643	50%	88%
3,500	1,750	1,531	1,469	1,750	3,000	50%	86%
4,000	2,000	1,750	1,605	2,000	3,355	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 916	\$ 450	\$1,310	30%	87%
2,000	600	525	1,055	600	1,580	30%	79%
2,500	750	656	1,192	750	1,848	30%	74%
3,000	900	788	1,330	900	2,118	30%	71%
3,500	1,050	919	1,469	1,050	2,388	30%	68%
4,000	1,200	1,050	1,605	1,200	2,655	30%	66%

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

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2021 - it does not include any amounts which might be payable to an eligible spouse or children.

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

City of Manchester - General

August 31, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24	1							1	\$ 17,443
25-29	4							4	\$ 193,545
30-34	2		2					4	\$ 173,055
35-39	4	2						6	\$ 293,657
40-44	3	1			1			5	\$ 288,018
45-49	3	1	1	1				6	\$ 279,040
50-54			1	1				2	\$ 98,530
55-59	1	2	1		2	1	1	8	\$ 408,416
60-64	2		1		1	2	3	9	\$ 473,045
65-69	1				1			2	\$ 134,942
70 & Over									
Totals	21	6	6	2	5	3	4	47	\$ 2,359,691

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

Age: 47.3 years.

Benefit Service: 11.7 years.

Annual Pay: \$50,206.

City of Manchester - Police

August 31, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29	4							4	\$ 214,085
30-34	9	3						12	\$ 700,428
35-39	2	2	3					7	\$ 454,870
40-44	1	2		1				4	\$ 275,017
45-49	1				1			2	\$ 150,207
50-54				1	1			2	\$ 141,834
55-59	1				1	1		3	\$ 278,657
60-64							1	1	\$ 84,531
65-69									
70 & Over									
Totals	18	7	3	2	3	1	1	35	\$ 2,299,629

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

Age: 39.1 years.

Benefit Service: 8.4 years.

Annual Pay: \$65,704.

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.



November 3, 2021 E-mail

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

Dear Bob:

Enclosed is the report of the August 31, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Manchester

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



November 3, 2021

City of Manchester
Manchester, 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 August 31, 2021 Initial Valuation for the City of Manchester dated November 3, 2021.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2021. The unfunded actuarial accrued liability shown for each member contribution rate option is based on the 0% member contribution rate plan.

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

Respectfully submitted,

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

City of Manchester - 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	
2021	\$ 2,359,691	14.5%	\$342,155	\$ 3,162,714	18.0%	\$424,744	\$ 3,953,370	15.9%	\$375,191	\$ 3,489,743
2022	2,424,583	14.5	351,565	3,193,053	18.0	436,425	3,991,293	15.9	385,509	3,523,219
2023	2,491,259	14.5	361,233	3,220,262	18.0	448,427	4,025,303	15.9	396,110	3,553,241
2024	2,559,769	14.5	371,167	3,243,977	18.0	460,758	4,054,946	15.9	407,003	3,579,408
2025	2,630,163	14.5	381,374	3,263,805	18.0	473,429	4,079,731	15.9	418,196	3,601,286
2026	2,702,492	14.5	391,861	3,279,322	18.0	486,449	4,099,127	15.9	429,696	3,618,407
2027	2,776,811	14.5	402,638	3,290,069	18.0	499,826	4,112,560	15.9	441,513	3,630,265
2028	2,853,173	14.5	413,710	3,295,551	18.0	513,571	4,119,412	15.9	453,655	3,636,314
2029	2,931,635	14.5	425,087	3,295,234	18.0	527,694	4,119,016	15.9	466,130	3,635,964
2030	3,012,255	14.5	436,777	3,288,542	18.0	542,206	4,110,651	15.9	478,949	3,628,580

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	19.0%	\$448,341	\$ 4,198,698	21.2%	\$500,254	\$ 4,744,040	22.0%	\$519,132	\$ 4,907,517
2022	2,424,583	19.0	460,671	4,238,975	21.2	514,012	4,789,548	22.0	533,408	4,954,593
2023	2,491,259	19.0	473,339	4,275,096	21.2	528,147	4,830,361	22.0	548,077	4,996,812
2024	2,559,769	19.0	486,356	4,306,579	21.2	542,671	4,865,933	22.0	563,149	5,033,610
2025	2,630,163	19.0	499,731	4,332,902	21.2	557,595	4,895,675	22.0	578,636	5,064,377
2026	2,702,492	19.0	513,473	4,353,501	21.2	572,928	4,918,950	22.0	594,548	5,088,454
2027	2,776,811	19.0	527,594	4,367,768	21.2	588,684	4,935,070	22.0	610,898	5,105,129
2028	2,853,173	19.0	542,103	4,375,045	21.2	604,873	4,943,292	22.0	627,698	5,113,635
2029	2,931,635	19.0	557,011	4,374,624	21.2	621,507	4,942,816	22.0	644,960	5,113,143
2030	3,012,255	19.0	572,328	4,365,740	21.2	638,598	4,932,778	22.0	662,696	5,102,759

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	
2021	\$ 2,359,691	24.7%	\$582,844	\$ 5,534,659	25.1%	\$592,282	\$ 5,616,445	28.1%	\$663,073	\$ 6,324,763
2022	2,424,583	24.7	598,872	5,587,751	25.1	608,570	5,670,322	28.1	681,308	6,385,434
2023	2,491,259	24.7	615,341	5,635,365	25.1	625,306	5,718,640	28.1	700,044	6,439,845
2024	2,559,769	24.7	632,263	5,676,865	25.1	642,502	5,760,753	28.1	719,295	6,487,270
2025	2,630,163	24.7	649,650	5,711,563	25.1	660,171	5,795,964	28.1	739,076	6,526,922
2026	2,702,492	24.7	667,516	5,738,717	25.1	678,325	5,823,519	28.1	759,400	6,557,952
2027	2,776,811	24.7	685,872	5,757,523	25.1	696,980	5,842,603	28.1	780,284	6,579,443
2028	2,853,173	24.7	704,734	5,767,116	25.1	716,146	5,852,338	28.1	801,742	6,590,405
2029	2,931,635	24.7	724,114	5,766,561	25.1	735,840	5,851,775	28.1	823,789	6,589,771
2030	3,012,255	24.7	744,027	5,754,850	25.1	756,076	5,839,891	28.1	846,444	6,576,388

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.



City of Manchester - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	12.6%	\$297,321	\$ 3,162,714	16.1%	\$379,910	\$ 3,953,370	14.0%	\$330,357	\$ 3,489,743
2022	2,424,583	12.6	305,497	3,193,053	16.1	390,358	3,991,293	14.0	339,442	3,523,219
2023	2,491,259	12.6	313,899	3,220,262	16.1	401,093	4,025,303	14.0	348,776	3,553,241
2024	2,559,769	12.6	322,531	3,243,977	16.1	412,123	4,054,946	14.0	358,368	3,579,408
2025	2,630,163	12.6	331,401	3,263,805	16.1	423,456	4,079,731	14.0	368,223	3,601,286
2026	2,702,492	12.6	340,514	3,279,322	16.1	435,101	4,099,127	14.0	378,349	3,618,407
2027	2,776,811	12.6	349,878	3,290,069	16.1	447,067	4,112,560	14.0	388,754	3,630,265
2028	2,853,173	12.6	359,500	3,295,551	16.1	459,361	4,119,412	14.0	399,444	3,636,314
2029	2,931,635	12.6	369,386	3,295,234	16.1	471,993	4,119,016	14.0	410,429	3,635,964
2030	3,012,255	12.6	379,544	3,288,542	16.1	484,973	4,110,651	14.0	421,716	3,628,580

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	17.1%	\$403,507	\$ 4,198,698	19.3%	\$455,420	\$ 4,744,040	20.1%	\$474,298	\$ 4,907,517
2022	2,424,583	17.1	414,604	4,238,975	19.3	467,945	4,789,548	20.1	487,341	4,954,593
2023	2,491,259	17.1	426,005	4,275,096	19.3	480,813	4,830,361	20.1	500,743	4,996,812
2024	2,559,769	17.1	437,720	4,306,579	19.3	494,035	4,865,933	20.1	514,514	5,033,610
2025	2,630,163	17.1	449,758	4,332,902	19.3	507,621	4,895,675	20.1	528,663	5,064,377
2026	2,702,492	17.1	462,126	4,353,501	19.3	521,581	4,918,950	20.1	543,201	5,088,454
2027	2,776,811	17.1	474,835	4,367,768	19.3	535,925	4,935,070	20.1	558,139	5,105,129
2028	2,853,173	17.1	487,893	4,375,045	19.3	550,662	4,943,292	20.1	573,488	5,113,635
2029	2,931,635	17.1	501,310	4,374,624	19.3	565,806	4,942,816	20.1	589,259	5,113,143
2030	3,012,255	17.1	515,096	4,365,740	19.3	581,365	4,932,778	20.1	605,463	5,102,759

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	
2021	\$ 2,359,691	22.8%	\$538,010	\$ 5,534,659	23.2%	\$547,448	\$ 5,616,445	26.2%	\$618,239	\$ 6,324,763
2022	2,424,583	22.8	552,805	5,587,751	23.2	562,503	5,670,322	26.2	635,241	6,385,434
2023	2,491,259	22.8	568,007	5,635,365	23.2	577,972	5,718,640	26.2	652,710	6,439,845
2024	2,559,769	22.8	583,627	5,676,865	23.2	593,866	5,760,753	26.2	670,659	6,487,270
2025	2,630,163	22.8	599,677	5,711,563	23.2	610,198	5,795,964	26.2	689,103	6,526,922
2026	2,702,492	22.8	616,168	5,738,717	23.2	626,978	5,823,519	26.2	708,053	6,557,952
2027	2,776,811	22.8	633,113	5,757,523	23.2	644,220	5,842,603	26.2	727,524	6,579,443
2028	2,853,173	22.8	650,523	5,767,116	23.2	661,936	5,852,338	26.2	747,531	6,590,405
2029	2,931,635	22.8	668,413	5,766,561	23.2	680,139	5,851,775	26.2	768,088	6,589,771
2030	3,012,255	22.8	686,794	5,754,850	23.2	698,843	5,839,891	26.2	789,211	6,576,388

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.



City of Manchester - 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	
2021	\$ 2,359,691	10.7%	\$252,487	\$ 3,162,714	14.2%	\$335,076	\$ 3,953,370	12.1%	\$285,523	\$ 3,489,743
2022	2,424,583	10.7	259,430	3,193,053	14.2	344,291	3,991,293	12.1	293,375	3,523,219
2023	2,491,259	10.7	266,565	3,220,262	14.2	353,759	4,025,303	12.1	301,442	3,553,241
2024	2,559,769	10.7	273,895	3,243,977	14.2	363,487	4,054,946	12.1	309,732	3,579,408
2025	2,630,163	10.7	281,427	3,263,805	14.2	373,483	4,079,731	12.1	318,250	3,601,286
2026	2,702,492	10.7	289,167	3,279,322	14.2	383,754	4,099,127	12.1	327,002	3,618,407
2027	2,776,811	10.7	297,119	3,290,069	14.2	394,307	4,112,560	12.1	335,994	3,630,265
2028	2,853,173	10.7	305,290	3,295,551	14.2	405,151	4,119,412	12.1	345,234	3,636,314
2029	2,931,635	10.7	313,685	3,295,234	14.2	416,292	4,119,016	12.1	354,728	3,635,964
2030	3,012,255	10.7	322,311	3,288,542	14.2	427,740	4,110,651	12.1	364,483	3,628,580

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	15.2%	\$358,673	\$ 4,198,698	17.4%	\$410,586	\$ 4,744,040	18.2%	\$429,464	\$ 4,907,517
2022	2,424,583	15.2	368,537	4,238,975	17.4	421,877	4,789,548	18.2	441,274	4,954,593
2023	2,491,259	15.2	378,671	4,275,096	17.4	433,479	4,830,361	18.2	453,409	4,996,812
2024	2,559,769	15.2	389,085	4,306,579	17.4	445,400	4,865,933	18.2	465,878	5,033,610
2025	2,630,163	15.2	399,785	4,332,902	17.4	457,648	4,895,675	18.2	478,690	5,064,377
2026	2,702,492	15.2	410,779	4,353,501	17.4	470,234	4,918,950	18.2	491,854	5,088,454
2027	2,776,811	15.2	422,075	4,367,768	17.4	483,165	4,935,070	18.2	505,380	5,105,129
2028	2,853,173	15.2	433,682	4,375,045	17.4	496,452	4,943,292	18.2	519,277	5,113,635
2029	2,931,635	15.2	445,609	4,374,624	17.4	510,104	4,942,816	18.2	533,558	5,113,143
2030	3,012,255	15.2	457,863	4,365,740	17.4	524,132	4,932,778	18.2	548,230	5,102,759

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	
2021	\$ 2,359,691	20.9%	\$493,175	\$ 5,534,659	21.3%	\$502,614	\$ 5,616,445	24.3%	\$573,405	\$ 6,324,763
2022	2,424,583	20.9	506,738	5,587,751	21.3	516,436	5,670,322	24.3	589,174	6,385,434
2023	2,491,259	20.9	520,673	5,635,365	21.3	530,638	5,718,640	24.3	605,376	6,439,845
2024	2,559,769	20.9	534,992	5,676,865	21.3	545,231	5,760,753	24.3	622,024	6,487,270
2025	2,630,163	20.9	549,704	5,711,563	21.3	560,225	5,795,964	24.3	639,130	6,526,922
2026	2,702,492	20.9	564,821	5,738,717	21.3	575,631	5,823,519	24.3	656,706	6,557,952
2027	2,776,811	20.9	580,353	5,757,523	21.3	591,461	5,842,603	24.3	674,765	6,579,443
2028	2,853,173	20.9	596,313	5,767,116	21.3	607,726	5,852,338	24.3	693,321	6,590,405
2029	2,931,635	20.9	612,712	5,766,561	21.3	624,438	5,851,775	24.3	712,387	6,589,771
2030	3,012,255	20.9	629,561	5,754,850	21.3	641,610	5,839,891	24.3	731,978	6,576,388

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.



City of Manchester - 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	
2021	\$ 2,359,691	8.8%	\$207,653	\$ 3,162,714	12.3%	\$290,242	\$ 3,953,370	10.2%	\$240,688	\$ 3,489,743
2022	2,424,583	8.8	213,363	3,193,053	12.3	298,224	3,991,293	10.2	247,307	3,523,219
2023	2,491,259	8.8	219,231	3,220,262	12.3	306,425	4,025,303	10.2	254,108	3,553,241
2024	2,559,769	8.8	225,260	3,243,977	12.3	314,852	4,054,946	10.2	261,096	3,579,408
2025	2,630,163	8.8	231,454	3,263,805	12.3	323,510	4,079,731	10.2	268,277	3,601,286
2026	2,702,492	8.8	237,819	3,279,322	12.3	332,407	4,099,127	10.2	275,654	3,618,407
2027	2,776,811	8.8	244,359	3,290,069	12.3	341,548	4,112,560	10.2	283,235	3,630,265
2028	2,853,173	8.8	251,079	3,295,551	12.3	350,940	4,119,412	10.2	291,024	3,636,314
2029	2,931,635	8.8	257,984	3,295,234	12.3	360,591	4,119,016	10.2	299,027	3,635,964
2030	3,012,255	8.8	265,078	3,288,542	12.3	370,507	4,110,651	10.2	307,250	3,628,580

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	13.3%	\$313,839	\$ 4,198,698	15.5%	\$365,752	\$ 4,744,040	16.3%	\$384,630	\$ 4,907,517
2022	2,424,583	13.3	322,470	4,238,975	15.5	375,810	4,789,548	16.3	395,207	4,954,593
2023	2,491,259	13.3	331,337	4,275,096	15.5	386,145	4,830,361	16.3	406,075	4,996,812
2024	2,559,769	13.3	340,449	4,306,579	15.5	396,764	4,865,933	16.3	417,242	5,033,610
2025	2,630,163	13.3	349,812	4,332,902	15.5	407,675	4,895,675	16.3	428,717	5,064,377
2026	2,702,492	13.3	359,431	4,353,501	15.5	418,886	4,918,950	16.3	440,506	5,088,454
2027	2,776,811	13.3	369,316	4,367,768	15.5	430,406	4,935,070	16.3	452,620	5,105,129
2028	2,853,173	13.3	379,472	4,375,045	15.5	442,242	4,943,292	16.3	465,067	5,113,635
2029	2,931,635	13.3	389,907	4,374,624	15.5	454,403	4,942,816	16.3	477,857	5,113,143
2030	3,012,255	13.3	400,630	4,365,740	15.5	466,900	4,932,778	16.3	490,998	5,102,759

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	
2021	\$ 2,359,691	19.0%	\$448,341	\$ 5,534,659	19.4%	\$457,780	\$ 5,616,445	22.4%	\$528,571	\$ 6,324,763
2022	2,424,583	19.0	460,671	5,587,751	19.4	470,369	5,670,322	22.4	543,107	6,385,434
2023	2,491,259	19.0	473,339	5,635,365	19.4	483,304	5,718,640	22.4	558,042	6,439,845
2024	2,559,769	19.0	486,356	5,676,865	19.4	496,595	5,760,753	22.4	573,388	6,487,270
2025	2,630,163	19.0	499,731	5,711,563	19.4	510,252	5,795,964	22.4	589,157	6,526,922
2026	2,702,492	19.0	513,473	5,738,717	19.4	524,283	5,823,519	22.4	605,358	6,557,952
2027	2,776,811	19.0	527,594	5,757,523	19.4	538,701	5,842,603	22.4	622,006	6,579,443
2028	2,853,173	19.0	542,103	5,767,116	19.4	553,516	5,852,338	22.4	639,111	6,590,405
2029	2,931,635	19.0	557,011	5,766,561	19.4	568,737	5,851,775	22.4	656,686	6,589,771
2030	3,012,255	19.0	572,328	5,754,850	19.4	584,377	5,839,891	22.4	674,745	6,576,388

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.



City of Manchester - 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	
2021	\$ 2,359,691	15.0%	\$353,954	\$ 3,266,080	18.5%	\$436,543	\$ 4,082,693	16.4%	\$386,989	\$ 3,604,367
2022	2,424,583	15.0	363,687	3,297,410	18.5	448,548	4,121,857	16.4	397,632	3,638,942
2023	2,491,259	15.0	373,689	3,325,508	18.5	460,883	4,156,980	16.4	408,566	3,669,950
2024	2,559,769	15.0	383,965	3,349,998	18.5	473,557	4,187,593	16.4	419,802	3,696,976
2025	2,630,163	15.0	394,524	3,370,474	18.5	486,580	4,213,189	16.4	431,347	3,719,573
2026	2,702,492	15.0	405,374	3,386,498	18.5	499,961	4,233,219	16.4	443,209	3,737,256
2027	2,776,811	15.0	416,522	3,397,596	18.5	513,710	4,247,092	16.4	455,397	3,749,503
2028	2,853,173	15.0	427,976	3,403,257	18.5	527,837	4,254,168	16.4	467,920	3,755,750
2029	2,931,635	15.0	439,745	3,402,930	18.5	542,352	4,253,759	16.4	480,788	3,755,389
2030	3,012,255	15.0	451,838	3,396,019	18.5	557,267	4,245,120	16.4	494,010	3,747,762

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	19.6%	\$462,499	\$ 4,336,329	21.9%	\$516,772	\$ 4,899,146	22.7%	\$535,650	\$ 5,068,361
2022	2,424,583	19.6	475,218	4,377,926	21.9	530,984	4,946,142	22.7	550,380	5,116,980
2023	2,491,259	19.6	488,287	4,415,231	21.9	545,586	4,988,289	22.7	565,516	5,160,583
2024	2,559,769	19.6	501,715	4,447,746	21.9	560,589	5,025,024	22.7	581,068	5,198,587
2025	2,630,163	19.6	515,512	4,474,932	21.9	576,006	5,055,738	22.7	597,047	5,230,362
2026	2,702,492	19.6	529,688	4,496,207	21.9	591,846	5,079,774	22.7	613,466	5,255,228
2027	2,776,811	19.6	544,255	4,510,941	21.9	608,122	5,096,421	22.7	630,336	5,272,450
2028	2,853,173	19.6	559,222	4,518,457	21.9	624,845	5,104,912	22.7	647,670	5,281,235
2029	2,931,635	19.6	574,600	4,518,022	21.9	642,028	5,104,421	22.7	665,481	5,280,727
2030	3,012,255	19.6	590,402	4,508,847	21.9	659,684	5,094,055	22.7	683,782	5,270,003

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	25.5%	\$601,721	\$ 5,715,784	25.9%	\$611,160	\$ 5,800,337	29.1%	\$686,670	\$ 6,531,680
2022	2,424,583	25.5	618,269	5,770,614	25.9	627,967	5,855,978	29.1	705,554	6,594,336
2023	2,491,259	25.5	635,271	5,819,786	25.9	645,236	5,905,878	29.1	724,956	6,650,527
2024	2,559,769	25.5	652,741	5,862,644	25.9	662,980	5,949,370	29.1	744,893	6,699,503
2025	2,630,163	25.5	670,692	5,898,478	25.9	681,212	5,985,734	29.1	765,377	6,740,452
2026	2,702,492	25.5	689,135	5,926,520	25.9	699,945	6,014,191	29.1	786,425	6,772,497
2027	2,776,811	25.5	708,087	5,945,942	25.9	719,194	6,033,900	29.1	808,052	6,794,691
2028	2,853,173	25.5	727,559	5,955,849	25.9	738,972	6,043,953	29.1	830,273	6,806,012
2029	2,931,635	25.5	747,567	5,955,276	25.9	759,293	6,043,371	29.1	853,106	6,805,357
2030	3,012,255	25.5	768,125	5,943,182	25.9	780,174	6,031,098	29.1	876,566	6,791,536

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.



City of Manchester - 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	
2021	\$ 2,359,691	13.1%	\$309,120	\$ 3,266,080	16.6%	\$391,709	\$ 4,082,693	14.5%	\$342,155	\$ 3,604,367
2022	2,424,583	13.1	317,620	3,297,410	16.6	402,481	4,121,857	14.5	351,565	3,638,942
2023	2,491,259	13.1	326,355	3,325,508	16.6	413,549	4,156,980	14.5	361,233	3,669,950
2024	2,559,769	13.1	335,330	3,349,998	16.6	424,922	4,187,593	14.5	371,167	3,696,976
2025	2,630,163	13.1	344,551	3,370,474	16.6	436,607	4,213,189	14.5	381,374	3,719,573
2026	2,702,492	13.1	354,026	3,386,498	16.6	448,614	4,233,219	14.5	391,861	3,737,256
2027	2,776,811	13.1	363,762	3,397,596	16.6	460,951	4,247,092	14.5	402,638	3,749,503
2028	2,853,173	13.1	373,766	3,403,257	16.6	473,627	4,254,168	14.5	413,710	3,755,750
2029	2,931,635	13.1	384,044	3,402,930	16.6	486,651	4,253,759	14.5	425,087	3,755,389
2030	3,012,255	13.1	394,605	3,396,019	16.6	500,034	4,245,120	14.5	436,777	3,747,762

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	17.7%	\$417,665	\$ 4,336,329	20.0%	\$471,938	\$ 4,899,146	20.8%	\$490,816	\$ 5,068,361
2022	2,424,583	17.7	429,151	4,377,926	20.0	484,917	4,946,142	20.8	504,313	5,116,980
2023	2,491,259	17.7	440,953	4,415,231	20.0	498,252	4,988,289	20.8	518,182	5,160,583
2024	2,559,769	17.7	453,079	4,447,746	20.0	511,954	5,025,024	20.8	532,432	5,198,587
2025	2,630,163	17.7	465,539	4,474,932	20.0	526,033	5,055,738	20.8	547,074	5,230,362
2026	2,702,492	17.7	478,341	4,496,207	20.0	540,498	5,079,774	20.8	562,118	5,255,228
2027	2,776,811	17.7	491,496	4,510,941	20.0	555,362	5,096,421	20.8	577,577	5,272,450
2028	2,853,173	17.7	505,012	4,518,457	20.0	570,635	5,104,912	20.8	593,460	5,281,235
2029	2,931,635	17.7	518,899	4,518,022	20.0	586,327	5,104,421	20.8	609,780	5,280,727
2030	3,012,255	17.7	533,169	4,508,847	20.0	602,451	5,094,055	20.8	626,549	5,270,003

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	23.6%	\$556,887	\$ 5,715,784	24.0%	\$566,326	\$ 5,800,337	27.2%	\$641,836	\$ 6,531,680
2022	2,424,583	23.6	572,202	5,770,614	24.0	581,900	5,855,978	27.2	659,487	6,594,336
2023	2,491,259	23.6	587,937	5,819,786	24.0	597,902	5,905,878	27.2	677,622	6,650,527
2024	2,559,769	23.6	604,105	5,862,644	24.0	614,345	5,949,370	27.2	696,257	6,699,503
2025	2,630,163	23.6	620,718	5,898,478	24.0	631,239	5,985,734	27.2	715,404	6,740,452
2026	2,702,492	23.6	637,788	5,926,520	24.0	648,598	6,014,191	27.2	735,078	6,772,497
2027	2,776,811	23.6	655,327	5,945,942	24.0	666,435	6,033,900	27.2	755,293	6,794,691
2028	2,853,173	23.6	673,349	5,955,849	24.0	684,762	6,043,953	27.2	776,063	6,806,012
2029	2,931,635	23.6	691,866	5,955,276	24.0	703,592	6,043,371	27.2	797,405	6,805,357
2030	3,012,255	23.6	710,892	5,943,182	24.0	722,941	6,031,098	27.2	819,333	6,791,536

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.



City of Manchester - 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	
2021	\$ 2,359,691	11.2%	\$264,285	\$ 3,266,080	14.7%	\$346,875	\$ 4,082,693	12.6%	\$297,321	\$ 3,604,367
2022	2,424,583	11.2	271,553	3,297,410	14.7	356,414	4,121,857	12.6	305,497	3,638,942
2023	2,491,259	11.2	279,021	3,325,508	14.7	366,215	4,156,980	12.6	313,899	3,669,950
2024	2,559,769	11.2	286,694	3,349,998	14.7	376,286	4,187,593	12.6	322,531	3,696,976
2025	2,630,163	11.2	294,578	3,370,474	14.7	386,634	4,213,189	12.6	331,401	3,719,573
2026	2,702,492	11.2	302,679	3,386,498	14.7	397,266	4,233,219	12.6	340,514	3,737,256
2027	2,776,811	11.2	311,003	3,397,596	14.7	408,191	4,247,092	12.6	349,878	3,749,503
2028	2,853,173	11.2	319,555	3,403,257	14.7	419,416	4,254,168	12.6	359,500	3,755,750
2029	2,931,635	11.2	328,343	3,402,930	14.7	430,950	4,253,759	12.6	369,386	3,755,389
2030	3,012,255	11.2	337,373	3,396,019	14.7	442,801	4,245,120	12.6	379,544	3,747,762

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	15.8%	\$372,831	\$ 4,336,329	18.1%	\$427,104	\$ 4,899,146	18.9%	\$445,982	\$ 5,068,361
2022	2,424,583	15.8	383,084	4,377,926	18.1	438,850	4,946,142	18.9	458,246	5,116,980
2023	2,491,259	15.8	393,619	4,415,231	18.1	450,918	4,988,289	18.9	470,848	5,160,583
2024	2,559,769	15.8	404,444	4,447,746	18.1	463,318	5,025,024	18.9	483,796	5,198,587
2025	2,630,163	15.8	415,566	4,474,932	18.1	476,060	5,055,738	18.9	497,101	5,230,362
2026	2,702,492	15.8	426,994	4,496,207	18.1	489,151	5,079,774	18.9	510,771	5,255,228
2027	2,776,811	15.8	438,736	4,510,941	18.1	502,603	5,096,421	18.9	524,817	5,272,450
2028	2,853,173	15.8	450,801	4,518,457	18.1	516,424	5,104,912	18.9	539,250	5,281,235
2029	2,931,635	15.8	463,198	4,518,022	18.1	530,626	5,104,421	18.9	554,079	5,280,727
2030	3,012,255	15.8	475,936	4,508,847	18.1	545,218	5,094,055	18.9	569,316	5,270,003

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	21.7%	\$512,053	\$ 5,715,784	22.1%	\$521,492	\$ 5,800,337	25.3%	\$597,002	\$ 6,531,680
2022	2,424,583	21.7	526,135	5,770,614	22.1	535,833	5,855,978	25.3	613,419	6,594,336
2023	2,491,259	21.7	540,603	5,819,786	22.1	550,568	5,905,878	25.3	630,289	6,650,527
2024	2,559,769	21.7	555,470	5,862,644	22.1	565,709	5,949,370	25.3	647,622	6,699,503
2025	2,630,163	21.7	570,745	5,898,478	22.1	581,266	5,985,734	25.3	665,431	6,740,452
2026	2,702,492	21.7	586,441	5,926,520	22.1	597,251	6,014,191	25.3	683,730	6,772,497
2027	2,776,811	21.7	602,568	5,945,942	22.1	613,675	6,033,900	25.3	702,533	6,794,691
2028	2,853,173	21.7	619,139	5,955,849	22.1	630,551	6,043,953	25.3	721,853	6,806,012
2029	2,931,635	21.7	636,165	5,955,276	22.1	647,891	6,043,371	25.3	741,704	6,805,357
2030	3,012,255	21.7	653,659	5,943,182	22.1	665,708	6,031,098	25.3	762,101	6,791,536

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.



City of Manchester - 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	
2021	\$ 2,359,691	9.3%	\$219,451	\$ 3,266,080	12.8%	\$302,040	\$ 4,082,693	10.7%	\$252,487	\$ 3,604,367
2022	2,424,583	9.3	225,486	3,297,410	12.8	310,347	4,121,857	10.7	259,430	3,638,942
2023	2,491,259	9.3	231,687	3,325,508	12.8	318,881	4,156,980	10.7	266,565	3,669,950
2024	2,559,769	9.3	238,059	3,349,998	12.8	327,650	4,187,593	10.7	273,895	3,696,976
2025	2,630,163	9.3	244,605	3,370,474	12.8	336,661	4,213,189	10.7	281,427	3,719,573
2026	2,702,492	9.3	251,332	3,386,498	12.8	345,919	4,233,219	10.7	289,167	3,737,256
2027	2,776,811	9.3	258,243	3,397,596	12.8	355,432	4,247,092	10.7	297,119	3,749,503
2028	2,853,173	9.3	265,345	3,403,257	12.8	365,206	4,254,168	10.7	305,290	3,755,750
2029	2,931,635	9.3	272,642	3,402,930	12.8	375,249	4,253,759	10.7	313,685	3,755,389
2030	3,012,255	9.3	280,140	3,396,019	12.8	385,569	4,245,120	10.7	322,311	3,747,762

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	13.9%	\$327,997	\$ 4,336,329	16.2%	\$382,270	\$ 4,899,146	17.0%	\$401,147	\$ 5,068,361
2022	2,424,583	13.9	337,017	4,377,926	16.2	392,782	4,946,142	17.0	412,179	5,116,980
2023	2,491,259	13.9	346,285	4,415,231	16.2	403,584	4,988,289	17.0	423,514	5,160,583
2024	2,559,769	13.9	355,808	4,447,746	16.2	414,683	5,025,024	17.0	435,161	5,198,587
2025	2,630,163	13.9	365,593	4,474,932	16.2	426,086	5,055,738	17.0	447,128	5,230,362
2026	2,702,492	13.9	375,646	4,496,207	16.2	437,804	5,079,774	17.0	459,424	5,255,228
2027	2,776,811	13.9	385,977	4,510,941	16.2	449,843	5,096,421	17.0	472,058	5,272,450
2028	2,853,173	13.9	396,591	4,518,457	16.2	462,214	5,104,912	17.0	485,039	5,281,235
2029	2,931,635	13.9	407,497	4,518,022	16.2	474,925	5,104,421	17.0	498,378	5,280,727
2030	3,012,255	13.9	418,703	4,508,847	16.2	487,985	5,094,055	17.0	512,083	5,270,003

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	19.8%	\$467,219	\$ 5,715,784	20.2%	\$476,658	\$ 5,800,337	23.4%	\$552,168	\$ 6,531,680
2022	2,424,583	19.8	480,067	5,770,614	20.2	489,766	5,855,978	23.4	567,352	6,594,336
2023	2,491,259	19.8	493,269	5,819,786	20.2	503,234	5,905,878	23.4	582,955	6,650,527
2024	2,559,769	19.8	506,834	5,862,644	20.2	517,073	5,949,370	23.4	598,986	6,699,503
2025	2,630,163	19.8	520,772	5,898,478	20.2	531,293	5,985,734	23.4	615,458	6,740,452
2026	2,702,492	19.8	535,093	5,926,520	20.2	545,903	6,014,191	23.4	632,383	6,772,497
2027	2,776,811	19.8	549,809	5,945,942	20.2	560,916	6,033,900	23.4	649,774	6,794,691
2028	2,853,173	19.8	564,928	5,955,849	20.2	576,341	6,043,953	23.4	667,642	6,806,012
2029	2,931,635	19.8	580,464	5,955,276	20.2	592,190	6,043,371	23.4	686,003	6,805,357
2030	3,012,255	19.8	596,426	5,943,182	20.2	608,476	6,031,098	23.4	704,868	6,791,536

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.



City of Manchester - 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	
2021	\$ 2,359,691	15.3%	\$361,033	\$ 3,347,269	19.0%	\$448,341	\$ 4,184,106	17.8%	\$420,025	\$ 3,898,366
2022	2,424,583	15.3	370,961	3,379,378	19.0	460,671	4,224,243	17.8	431,576	3,935,762
2023	2,491,259	15.3	381,163	3,408,174	19.0	473,339	4,260,238	17.8	443,444	3,969,299
2024	2,559,769	15.3	391,645	3,433,273	19.0	486,356	4,291,611	17.8	455,639	3,998,530
2025	2,630,163	15.3	402,415	3,454,258	19.0	499,731	4,317,842	17.8	468,169	4,022,970
2026	2,702,492	15.3	413,481	3,470,680	19.0	513,473	4,338,370	17.8	481,044	4,042,096
2027	2,776,811	15.3	424,852	3,482,054	19.0	527,594	4,352,587	17.8	494,272	4,055,342
2028	2,853,173	15.3	436,535	3,487,856	19.0	542,103	4,359,839	17.8	507,865	4,062,099
2029	2,931,635	15.3	448,540	3,487,520	19.0	557,011	4,359,419	17.8	521,831	4,061,708
2030	3,012,255	15.3	460,875	3,480,437	19.0	572,328	4,350,566	17.8	536,181	4,053,459

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	20.9%	\$493,175	\$ 4,597,373	22.5%	\$530,930	\$ 5,020,842	23.8%	\$561,606	\$ 5,296,385
2022	2,424,583	20.9	506,738	4,641,474	22.5	545,531	5,069,005	23.8	577,051	5,347,191
2023	2,491,259	20.9	520,673	4,681,025	22.5	560,533	5,112,199	23.8	592,920	5,392,755
2024	2,559,769	20.9	534,992	4,715,497	22.5	575,948	5,149,846	23.8	609,225	5,432,469
2025	2,630,163	20.9	549,704	4,744,319	22.5	591,787	5,181,323	23.8	625,979	5,465,674
2026	2,702,492	20.9	564,821	4,766,874	22.5	608,061	5,205,956	23.8	643,193	5,491,659
2027	2,776,811	20.9	580,353	4,782,495	22.5	624,782	5,223,016	23.8	660,881	5,509,656
2028	2,853,173	20.9	596,313	4,790,463	22.5	641,964	5,231,718	23.8	679,055	5,518,836
2029	2,931,635	20.9	612,712	4,790,002	22.5	659,618	5,231,215	23.8	697,729	5,518,305
2030	3,012,255	20.9	629,561	4,780,274	22.5	677,757	5,220,591	23.8	716,917	5,507,098

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	26.2%	\$618,239	\$ 5,857,763	26.8%	\$632,397	\$ 5,995,488	29.8%	\$703,188	\$ 6,694,237
2022	2,424,583	26.2	635,241	5,913,955	26.8	649,788	6,053,001	29.8	722,526	6,758,453
2023	2,491,259	26.2	652,710	5,964,349	26.8	667,657	6,104,580	29.8	742,395	6,816,043
2024	2,559,769	26.2	670,659	6,008,272	26.8	686,018	6,149,536	29.8	762,811	6,866,238
2025	2,630,163	26.2	689,103	6,044,996	26.8	704,884	6,187,123	29.8	783,789	6,908,206
2026	2,702,492	26.2	708,053	6,073,735	26.8	724,268	6,216,538	29.8	805,343	6,941,049
2027	2,776,811	26.2	727,524	6,093,639	26.8	744,185	6,236,910	29.8	827,490	6,963,795
2028	2,853,173	26.2	747,531	6,103,792	26.8	764,650	6,247,302	29.8	850,246	6,975,398
2029	2,931,635	26.2	768,088	6,103,205	26.8	785,678	6,246,701	29.8	873,627	6,974,727
2030	3,012,255	26.2	789,211	6,090,810	26.8	807,284	6,234,015	29.8	897,652	6,960,562

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.



City of Manchester - 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	
2021	\$ 2,359,691	13.4%	\$316,199	\$ 3,347,269	17.1%	\$403,507	\$ 4,184,106	15.9%	\$375,191	\$ 3,898,366
2022	2,424,583	13.4	324,894	3,379,378	17.1	414,604	4,224,243	15.9	385,509	3,935,762
2023	2,491,259	13.4	333,829	3,408,174	17.1	426,005	4,260,238	15.9	396,110	3,969,299
2024	2,559,769	13.4	343,009	3,433,273	17.1	437,720	4,291,611	15.9	407,003	3,998,530
2025	2,630,163	13.4	352,442	3,454,258	17.1	449,758	4,317,842	15.9	418,196	4,022,970
2026	2,702,492	13.4	362,134	3,470,680	17.1	462,126	4,338,370	15.9	429,696	4,042,096
2027	2,776,811	13.4	372,093	3,482,054	17.1	474,835	4,352,587	15.9	441,513	4,055,342
2028	2,853,173	13.4	382,325	3,487,856	17.1	487,893	4,359,839	15.9	453,655	4,062,099
2029	2,931,635	13.4	392,839	3,487,520	17.1	501,310	4,359,419	15.9	466,130	4,061,708
2030	3,012,255	13.4	403,642	3,480,437	17.1	515,096	4,350,566	15.9	478,949	4,053,459

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	19.0%	\$448,341	\$ 4,597,373	20.6%	\$486,096	\$ 5,020,842	21.9%	\$516,772	\$ 5,296,385
2022	2,424,583	19.0	460,671	4,641,474	20.6	499,464	5,069,005	21.9	530,984	5,347,191
2023	2,491,259	19.0	473,339	4,681,025	20.6	513,199	5,112,199	21.9	545,586	5,392,755
2024	2,559,769	19.0	486,356	4,715,497	20.6	527,312	5,149,846	21.9	560,589	5,432,469
2025	2,630,163	19.0	499,731	4,744,319	20.6	541,814	5,181,323	21.9	576,006	5,465,674
2026	2,702,492	19.0	513,473	4,766,874	20.6	556,713	5,205,956	21.9	591,846	5,491,659
2027	2,776,811	19.0	527,594	4,782,495	20.6	572,023	5,223,016	21.9	608,122	5,509,656
2028	2,853,173	19.0	542,103	4,790,463	20.6	587,754	5,231,718	21.9	624,845	5,518,836
2029	2,931,635	19.0	557,011	4,790,002	20.6	603,917	5,231,215	21.9	642,028	5,518,305
2030	3,012,255	19.0	572,328	4,780,274	20.6	620,525	5,220,591	21.9	659,684	5,507,098

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	24.3%	\$573,405	\$ 5,857,763	24.9%	\$587,563	\$ 5,995,488	27.9%	\$658,354	\$ 6,694,237
2022	2,424,583	24.3	589,174	5,913,955	24.9	603,721	6,053,001	27.9	676,459	6,758,453
2023	2,491,259	24.3	605,376	5,964,349	24.9	620,323	6,104,580	27.9	695,061	6,816,043
2024	2,559,769	24.3	622,024	6,008,272	24.9	637,382	6,149,536	27.9	714,176	6,866,238
2025	2,630,163	24.3	639,130	6,044,996	24.9	654,911	6,187,123	27.9	733,815	6,908,206
2026	2,702,492	24.3	656,706	6,073,735	24.9	672,921	6,216,538	27.9	753,995	6,941,049
2027	2,776,811	24.3	674,765	6,093,639	24.9	691,426	6,236,910	27.9	774,730	6,963,795
2028	2,853,173	24.3	693,321	6,103,792	24.9	710,440	6,247,302	27.9	796,035	6,975,398
2029	2,931,635	24.3	712,387	6,103,205	24.9	729,977	6,246,701	27.9	817,926	6,974,727
2030	3,012,255	24.3	731,978	6,090,810	24.9	750,051	6,234,015	27.9	840,419	6,960,562

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.



City of Manchester - 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	
2021	\$ 2,359,691	11.5%	\$271,364	\$ 3,347,269	15.2%	\$358,673	\$ 4,184,106	14.0%	\$330,357	\$ 3,898,366
2022	2,424,583	11.5	278,827	3,379,378	15.2	368,537	4,224,243	14.0	339,442	3,935,762
2023	2,491,259	11.5	286,495	3,408,174	15.2	378,671	4,260,238	14.0	348,776	3,969,299
2024	2,559,769	11.5	294,373	3,433,273	15.2	389,085	4,291,611	14.0	358,368	3,998,530
2025	2,630,163	11.5	302,469	3,454,258	15.2	399,785	4,317,842	14.0	368,223	4,022,970
2026	2,702,492	11.5	310,787	3,470,680	15.2	410,779	4,338,370	14.0	378,349	4,042,096
2027	2,776,811	11.5	319,333	3,482,054	15.2	422,075	4,352,587	14.0	388,754	4,055,342
2028	2,853,173	11.5	328,115	3,487,856	15.2	433,682	4,359,839	14.0	399,444	4,062,099
2029	2,931,635	11.5	337,138	3,487,520	15.2	445,609	4,359,419	14.0	410,429	4,061,708
2030	3,012,255	11.5	346,409	3,480,437	15.2	457,863	4,350,566	14.0	421,716	4,053,459

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	17.1%	\$403,507	\$ 4,597,373	18.7%	\$441,262	\$ 5,020,842	20.0%	\$471,938	\$ 5,296,385
2022	2,424,583	17.1	414,604	4,641,474	18.7	453,397	5,069,005	20.0	484,917	5,347,191
2023	2,491,259	17.1	426,005	4,681,025	18.7	465,865	5,112,199	20.0	498,252	5,392,755
2024	2,559,769	17.1	437,720	4,715,497	18.7	478,677	5,149,846	20.0	511,954	5,432,469
2025	2,630,163	17.1	449,758	4,744,319	18.7	491,840	5,181,323	20.0	526,033	5,465,674
2026	2,702,492	17.1	462,126	4,766,874	18.7	505,366	5,205,956	20.0	540,498	5,491,659
2027	2,776,811	17.1	474,835	4,782,495	18.7	519,264	5,223,016	20.0	555,362	5,509,656
2028	2,853,173	17.1	487,893	4,790,463	18.7	533,543	5,231,718	20.0	570,635	5,518,836
2029	2,931,635	17.1	501,310	4,790,002	18.7	548,216	5,231,215	20.0	586,327	5,518,305
2030	3,012,255	17.1	515,096	4,780,274	18.7	563,292	5,220,591	20.0	602,451	5,507,098

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	22.4%	\$528,571	\$ 5,857,763	23.0%	\$542,729	\$ 5,995,488	26.0%	\$613,520	\$ 6,694,237
2022	2,424,583	22.4	543,107	5,913,955	23.0	557,654	6,053,001	26.0	630,392	6,758,453
2023	2,491,259	22.4	558,042	5,964,349	23.0	572,990	6,104,580	26.0	647,727	6,816,043
2024	2,559,769	22.4	573,388	6,008,272	23.0	588,747	6,149,536	26.0	665,540	6,866,238
2025	2,630,163	22.4	589,157	6,044,996	23.0	604,937	6,187,123	26.0	683,842	6,908,206
2026	2,702,492	22.4	605,358	6,073,735	23.0	621,573	6,216,538	26.0	702,648	6,941,049
2027	2,776,811	22.4	622,006	6,093,639	23.0	638,667	6,236,910	26.0	721,971	6,963,795
2028	2,853,173	22.4	639,111	6,103,792	23.0	656,230	6,247,302	26.0	741,825	6,975,398
2029	2,931,635	22.4	656,686	6,103,205	23.0	674,276	6,246,701	26.0	762,225	6,974,727
2030	3,012,255	22.4	674,745	6,090,810	23.0	692,819	6,234,015	26.0	783,186	6,960,562

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.



City of Manchester - 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	
2021	\$ 2,359,691	9.6%	\$226,530	\$ 3,347,269	13.3%	\$313,839	\$ 4,184,106	12.1%	\$285,523	\$ 3,898,366
2022	2,424,583	9.6	232,760	3,379,378	13.3	322,470	4,224,243	12.1	293,375	3,935,762
2023	2,491,259	9.6	239,161	3,408,174	13.3	331,337	4,260,238	12.1	301,442	3,969,299
2024	2,559,769	9.6	245,738	3,433,273	13.3	340,449	4,291,611	12.1	309,732	3,998,530
2025	2,630,163	9.6	252,496	3,454,258	13.3	349,812	4,317,842	12.1	318,250	4,022,970
2026	2,702,492	9.6	259,439	3,470,680	13.3	359,431	4,338,370	12.1	327,002	4,042,096
2027	2,776,811	9.6	266,574	3,482,054	13.3	369,316	4,352,587	12.1	335,994	4,055,342
2028	2,853,173	9.6	273,905	3,487,856	13.3	379,472	4,359,839	12.1	345,234	4,062,099
2029	2,931,635	9.6	281,437	3,487,520	13.3	389,907	4,359,419	12.1	354,728	4,061,708
2030	3,012,255	9.6	289,176	3,480,437	13.3	400,630	4,350,566	12.1	364,483	4,053,459

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	15.2%	\$358,673	\$ 4,597,373	16.8%	\$396,428	\$ 5,020,842	18.1%	\$427,104	\$ 5,296,385
2022	2,424,583	15.2	368,537	4,641,474	16.8	407,330	5,069,005	18.1	438,850	5,347,191
2023	2,491,259	15.2	378,671	4,681,025	16.8	418,532	5,112,199	18.1	450,918	5,392,755
2024	2,559,769	15.2	389,085	4,715,497	16.8	430,041	5,149,846	18.1	463,318	5,432,469
2025	2,630,163	15.2	399,785	4,744,319	16.8	441,867	5,181,323	18.1	476,060	5,465,674
2026	2,702,492	15.2	410,779	4,766,874	16.8	454,019	5,205,956	18.1	489,151	5,491,659
2027	2,776,811	15.2	422,075	4,782,495	16.8	466,504	5,223,016	18.1	502,603	5,509,656
2028	2,853,173	15.2	433,682	4,790,463	16.8	479,333	5,231,718	18.1	516,424	5,518,836
2029	2,931,635	15.2	445,609	4,790,002	16.8	492,515	5,231,215	18.1	530,626	5,518,305
2030	3,012,255	15.2	457,863	4,780,274	16.8	506,059	5,220,591	18.1	545,218	5,507,098

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	20.5%	\$483,737	\$ 5,857,763	21.1%	\$497,895	\$ 5,995,488	24.1%	\$568,686	\$ 6,694,237
2022	2,424,583	20.5	497,040	5,913,955	21.1	511,587	6,053,001	24.1	584,325	6,758,453
2023	2,491,259	20.5	510,708	5,964,349	21.1	525,656	6,104,580	24.1	600,393	6,816,043
2024	2,559,769	20.5	524,753	6,008,272	21.1	540,111	6,149,536	24.1	616,904	6,866,238
2025	2,630,163	20.5	539,183	6,044,996	21.1	554,964	6,187,123	24.1	633,869	6,908,206
2026	2,702,492	20.5	554,011	6,073,735	21.1	570,226	6,216,538	24.1	651,301	6,941,049
2027	2,776,811	20.5	569,246	6,093,639	21.1	585,907	6,236,910	24.1	669,211	6,963,795
2028	2,853,173	20.5	584,900	6,103,792	21.1	602,020	6,247,302	24.1	687,615	6,975,398
2029	2,931,635	20.5	600,985	6,103,205	21.1	618,575	6,246,701	24.1	706,524	6,974,727
2030	3,012,255	20.5	617,512	6,090,810	21.1	635,586	6,234,015	24.1	725,953	6,960,562

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.



City of Manchester - 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	
2021	\$ 2,359,691	15.8%	\$372,831	\$ 3,458,987	19.6%	\$462,499	\$ 4,323,722	18.4%	\$434,183	\$ 4,029,422
2022	2,424,583	15.8	383,084	3,492,168	19.6	475,218	4,365,198	18.4	446,123	4,068,075
2023	2,491,259	15.8	393,619	3,521,925	19.6	488,287	4,402,395	18.4	458,392	4,102,740
2024	2,559,769	15.8	404,444	3,547,861	19.6	501,715	4,434,815	18.4	470,997	4,132,954
2025	2,630,163	15.8	415,566	3,569,546	19.6	515,512	4,461,922	18.4	483,950	4,158,216
2026	2,702,492	15.8	426,994	3,586,516	19.6	529,688	4,483,135	18.4	497,259	4,177,985
2027	2,776,811	15.8	438,736	3,598,269	19.6	544,255	4,497,827	18.4	510,933	4,191,677
2028	2,853,173	15.8	450,801	3,604,264	19.6	559,222	4,505,321	18.4	524,984	4,198,661
2029	2,931,635	15.8	463,198	3,603,917	19.6	574,600	4,504,887	18.4	539,421	4,198,257
2030	3,012,255	15.8	475,936	3,596,598	19.6	590,402	4,495,738	18.4	554,255	4,189,731

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	21.6%	\$509,693	\$ 4,751,520	23.2%	\$547,448	\$ 5,188,534	24.5%	\$578,124	\$ 5,473,702
2022	2,424,583	21.6	523,710	4,797,100	23.2	562,503	5,238,306	24.5	594,023	5,526,209
2023	2,491,259	21.6	538,112	4,837,977	23.2	577,972	5,282,942	24.5	610,358	5,573,299
2024	2,559,769	21.6	552,910	4,873,605	23.2	593,866	5,321,847	24.5	627,143	5,614,342
2025	2,630,163	21.6	568,115	4,903,394	23.2	610,198	5,354,375	24.5	644,390	5,648,658
2026	2,702,492	21.6	583,738	4,926,706	23.2	626,978	5,379,831	24.5	662,111	5,675,513
2027	2,776,811	21.6	599,791	4,942,851	23.2	644,220	5,397,461	24.5	680,319	5,694,112
2028	2,853,173	21.6	616,285	4,951,086	23.2	661,936	5,406,454	24.5	699,027	5,703,599
2029	2,931,635	21.6	633,233	4,950,610	23.2	680,139	5,405,934	24.5	718,251	5,703,050
2030	3,012,255	21.6	650,647	4,940,556	23.2	698,843	5,394,955	24.5	738,002	5,691,468

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	27.0%	\$637,117	\$ 6,053,274	27.6%	\$651,275	\$ 6,195,942	30.8%	\$726,785	\$ 6,917,733
2022	2,424,583	27.0	654,637	6,111,341	27.6	669,185	6,255,378	30.8	746,772	6,984,092
2023	2,491,259	27.0	672,640	6,163,417	27.6	687,587	6,308,681	30.8	767,308	7,043,605
2024	2,559,769	27.0	691,138	6,208,806	27.6	706,496	6,355,140	30.8	788,409	7,095,476
2025	2,630,163	27.0	710,144	6,246,756	27.6	725,925	6,393,984	30.8	810,090	7,138,845
2026	2,702,492	27.0	729,673	6,276,454	27.6	745,888	6,424,382	30.8	832,368	7,172,784
2027	2,776,811	27.0	749,739	6,297,022	27.6	766,400	6,445,435	30.8	855,258	7,196,290
2028	2,853,173	27.0	770,357	6,307,514	27.6	787,476	6,456,174	30.8	878,777	7,208,280
2029	2,931,635	27.0	791,541	6,306,907	27.6	809,131	6,455,553	30.8	902,944	7,207,586
2030	3,012,255	27.0	813,309	6,294,099	27.6	831,382	6,442,443	30.8	927,775	7,192,949

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.



City of Manchester - 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	13.9%	\$327,997	\$ 3,458,987	17.7%	\$417,665	\$ 4,323,722	16.5%	\$389,349	\$ 4,029,422
2022	2,424,583	13.9	337,017	3,492,168	17.7	429,151	4,365,198	16.5	400,056	4,068,075
2023	2,491,259	13.9	346,285	3,521,925	17.7	440,953	4,402,395	16.5	411,058	4,102,740
2024	2,559,769	13.9	355,808	3,547,861	17.7	453,079	4,434,815	16.5	422,362	4,132,954
2025	2,630,163	13.9	365,593	3,569,546	17.7	465,539	4,461,922	16.5	433,977	4,158,216
2026	2,702,492	13.9	375,646	3,586,516	17.7	478,341	4,483,135	16.5	445,911	4,177,985
2027	2,776,811	13.9	385,977	3,598,269	17.7	491,496	4,497,827	16.5	458,174	4,191,677
2028	2,853,173	13.9	396,591	3,604,264	17.7	505,012	4,505,321	16.5	470,774	4,198,661
2029	2,931,635	13.9	407,497	3,603,917	17.7	518,899	4,504,887	16.5	483,720	4,198,257
2030	3,012,255	13.9	418,703	3,596,598	17.7	533,169	4,495,738	16.5	497,022	4,189,731

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	19.7%	\$464,859	\$ 4,751,520	21.3%	\$502,614	\$ 5,188,534	22.6%	\$533,290	\$ 5,473,702
2022	2,424,583	19.7	477,643	4,797,100	21.3	516,436	5,238,306	22.6	547,956	5,526,209
2023	2,491,259	19.7	490,778	4,837,977	21.3	530,638	5,282,942	22.6	563,025	5,573,299
2024	2,559,769	19.7	504,274	4,873,605	21.3	545,231	5,321,847	22.6	578,508	5,614,342
2025	2,630,163	19.7	518,142	4,903,394	21.3	560,225	5,354,375	22.6	594,417	5,648,658
2026	2,702,492	19.7	532,391	4,926,706	21.3	575,631	5,379,831	22.6	610,763	5,675,513
2027	2,776,811	19.7	547,032	4,942,851	21.3	591,461	5,397,461	22.6	627,559	5,694,112
2028	2,853,173	19.7	562,075	4,951,086	21.3	607,726	5,406,454	22.6	644,817	5,703,599
2029	2,931,635	19.7	577,532	4,950,610	21.3	624,438	5,405,934	22.6	662,550	5,703,050
2030	3,012,255	19.7	593,414	4,940,556	21.3	641,610	5,394,955	22.6	680,770	5,691,468

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	25.1%	\$592,282	\$ 6,053,274	25.7%	\$606,441	\$ 6,195,942	28.9%	\$681,951	\$ 6,917,733
2022	2,424,583	25.1	608,570	6,111,341	25.7	623,118	6,255,378	28.9	700,704	6,984,092
2023	2,491,259	25.1	625,306	6,163,417	25.7	640,254	6,308,681	28.9	719,974	7,043,605
2024	2,559,769	25.1	642,502	6,208,806	25.7	657,861	6,355,140	28.9	739,773	7,095,476
2025	2,630,163	25.1	660,171	6,246,756	25.7	675,952	6,393,984	28.9	760,117	7,138,845
2026	2,702,492	25.1	678,325	6,276,454	25.7	694,540	6,424,382	28.9	781,020	7,172,784
2027	2,776,811	25.1	696,980	6,297,022	25.7	713,640	6,445,435	28.9	802,498	7,196,290
2028	2,853,173	25.1	716,146	6,307,514	25.7	733,265	6,456,174	28.9	824,567	7,208,280
2029	2,931,635	25.1	735,840	6,306,907	25.7	753,430	6,455,553	28.9	847,243	7,207,586
2030	3,012,255	25.1	756,076	6,294,099	25.7	774,150	6,442,443	28.9	870,542	7,192,949

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.



City of Manchester - 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	
2021	\$ 2,359,691	12.0%	\$283,163	\$ 3,458,987	15.8%	\$372,831	\$ 4,323,722	14.6%	\$344,515	\$ 4,029,422
2022	2,424,583	12.0	290,950	3,492,168	15.8	383,084	4,365,198	14.6	353,989	4,068,075
2023	2,491,259	12.0	298,951	3,521,925	15.8	393,619	4,402,395	14.6	363,724	4,102,740
2024	2,559,769	12.0	307,172	3,547,861	15.8	404,444	4,434,815	14.6	373,726	4,132,954
2025	2,630,163	12.0	315,620	3,569,546	15.8	415,566	4,461,922	14.6	384,004	4,158,216
2026	2,702,492	12.0	324,299	3,586,516	15.8	426,994	4,483,135	14.6	394,564	4,177,985
2027	2,776,811	12.0	333,217	3,598,269	15.8	438,736	4,497,827	14.6	405,414	4,191,677
2028	2,853,173	12.0	342,381	3,604,264	15.8	450,801	4,505,321	14.6	416,563	4,198,661
2029	2,931,635	12.0	351,796	3,603,917	15.8	463,198	4,504,887	14.6	428,019	4,198,257
2030	3,012,255	12.0	361,471	3,596,598	15.8	475,936	4,495,738	14.6	439,789	4,189,731

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	17.8%	\$420,025	\$ 4,751,520	19.4%	\$457,780	\$ 5,188,534	20.7%	\$488,456	\$ 5,473,702
2022	2,424,583	17.8	431,576	4,797,100	19.4	470,369	5,238,306	20.7	501,889	5,526,209
2023	2,491,259	17.8	443,444	4,837,977	19.4	483,304	5,282,942	20.7	515,691	5,573,299
2024	2,559,769	17.8	455,639	4,873,605	19.4	496,595	5,321,847	20.7	529,872	5,614,342
2025	2,630,163	17.8	468,169	4,903,394	19.4	510,252	5,354,375	20.7	544,444	5,648,658
2026	2,702,492	17.8	481,044	4,926,706	19.4	524,283	5,379,831	20.7	559,416	5,675,513
2027	2,776,811	17.8	494,272	4,942,851	19.4	538,701	5,397,461	20.7	574,800	5,694,112
2028	2,853,173	17.8	507,865	4,951,086	19.4	553,516	5,406,454	20.7	590,607	5,703,599
2029	2,931,635	17.8	521,831	4,950,610	19.4	568,737	5,405,934	20.7	606,848	5,703,050
2030	3,012,255	17.8	536,181	4,940,556	19.4	584,377	5,394,955	20.7	623,537	5,691,468

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	23.2%	\$547,448	\$ 6,053,274	23.8%	\$561,606	\$ 6,195,942	27.0%	\$637,117	\$ 6,917,733
2022	2,424,583	23.2	562,503	6,111,341	23.8	577,051	6,255,378	27.0	654,637	6,984,092
2023	2,491,259	23.2	577,972	6,163,417	23.8	592,920	6,308,681	27.0	672,640	7,043,605
2024	2,559,769	23.2	593,866	6,208,806	23.8	609,225	6,355,140	27.0	691,138	7,095,476
2025	2,630,163	23.2	610,198	6,246,756	23.8	625,979	6,393,984	27.0	710,144	7,138,845
2026	2,702,492	23.2	626,978	6,276,454	23.8	643,193	6,424,382	27.0	729,673	7,172,784
2027	2,776,811	23.2	644,220	6,297,022	23.8	660,881	6,445,435	27.0	749,739	7,196,290
2028	2,853,173	23.2	661,936	6,307,514	23.8	679,055	6,456,174	27.0	770,357	7,208,280
2029	2,931,635	23.2	680,139	6,306,907	23.8	697,729	6,455,553	27.0	791,541	7,207,586
2030	3,012,255	23.2	698,843	6,294,099	23.8	716,917	6,442,443	27.0	813,309	7,192,949

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.



City of Manchester - 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	
2021	\$ 2,359,691	10.1%	\$238,329	\$ 3,458,987	13.9%	\$327,997	\$ 4,323,722	12.7%	\$299,681	\$ 4,029,422
2022	2,424,583	10.1	244,883	3,492,168	13.9	337,017	4,365,198	12.7	307,922	4,068,075
2023	2,491,259	10.1	251,617	3,521,925	13.9	346,285	4,402,395	12.7	316,390	4,102,740
2024	2,559,769	10.1	258,537	3,547,861	13.9	355,808	4,434,815	12.7	325,091	4,132,954
2025	2,630,163	10.1	265,646	3,569,546	13.9	365,593	4,461,922	12.7	334,031	4,158,216
2026	2,702,492	10.1	272,952	3,586,516	13.9	375,646	4,483,135	12.7	343,216	4,177,985
2027	2,776,811	10.1	280,458	3,598,269	13.9	385,977	4,497,827	12.7	352,655	4,191,677
2028	2,853,173	10.1	288,170	3,604,264	13.9	396,591	4,505,321	12.7	362,353	4,198,661
2029	2,931,635	10.1	296,095	3,603,917	13.9	407,497	4,504,887	12.7	372,318	4,198,257
2030	3,012,255	10.1	304,238	3,596,598	13.9	418,703	4,495,738	12.7	382,556	4,189,731

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	15.9%	\$375,191	\$ 4,751,520	17.5%	\$412,946	\$ 5,188,534	18.8%	\$443,622	\$ 5,473,702
2022	2,424,583	15.9	385,509	4,797,100	17.5	424,302	5,238,306	18.8	455,822	5,526,209
2023	2,491,259	15.9	396,110	4,837,977	17.5	435,970	5,282,942	18.8	468,357	5,573,299
2024	2,559,769	15.9	407,003	4,873,605	17.5	447,960	5,321,847	18.8	481,237	5,614,342
2025	2,630,163	15.9	418,196	4,903,394	17.5	460,279	5,354,375	18.8	494,471	5,648,658
2026	2,702,492	15.9	429,696	4,926,706	17.5	472,936	5,379,831	18.8	508,068	5,675,513
2027	2,776,811	15.9	441,513	4,942,851	17.5	485,942	5,397,461	18.8	522,040	5,694,112
2028	2,853,173	15.9	453,655	4,951,086	17.5	499,305	5,406,454	18.8	536,397	5,703,599
2029	2,931,635	15.9	466,130	4,950,610	17.5	513,036	5,405,934	18.8	551,147	5,703,050
2030	3,012,255	15.9	478,949	4,940,556	17.5	527,145	5,394,955	18.8	566,304	5,691,468

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,359,691	21.3%	\$502,614	\$ 6,053,274	21.9%	\$516,772	\$ 6,195,942	25.1%	\$592,282	\$ 6,917,733
2022	2,424,583	21.3	516,436	6,111,341	21.9	530,984	6,255,378	25.1	608,570	6,984,092
2023	2,491,259	21.3	530,638	6,163,417	21.9	545,586	6,308,681	25.1	625,306	7,043,605
2024	2,559,769	21.3	545,231	6,208,806	21.9	560,589	6,355,140	25.1	642,502	7,095,476
2025	2,630,163	21.3	560,225	6,246,756	21.9	576,006	6,393,984	25.1	660,171	7,138,845
2026	2,702,492	21.3	575,631	6,276,454	21.9	591,846	6,424,382	25.1	678,325	7,172,784
2027	2,776,811	21.3	591,461	6,297,022	21.9	608,122	6,445,435	25.1	696,980	7,196,290
2028	2,853,173	21.3	607,726	6,307,514	21.9	624,845	6,456,174	25.1	716,146	7,208,280
2029	2,931,635	21.3	624,438	6,306,907	21.9	642,028	6,455,553	25.1	735,840	7,207,586
2030	3,012,255	21.3	641,610	6,294,099	21.9	659,684	6,442,443	25.1	756,076	7,192,949

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	13.3%	\$305,851	\$ 2,213,094	16.4%	\$377,139	\$ 2,766,525	16.0%	\$367,941	\$ 2,727,039
2022	2,362,869	13.3	314,262	2,234,323	16.4	387,511	2,793,063	16.0	378,059	2,753,199
2023	2,427,848	13.3	322,904	2,253,362	16.4	398,167	2,816,863	16.0	388,456	2,776,659
2024	2,494,614	13.3	331,784	2,269,956	16.4	409,117	2,837,607	16.0	399,138	2,797,107
2025	2,563,216	13.3	340,908	2,283,831	16.4	420,367	2,854,951	16.0	410,115	2,814,204
2026	2,633,704	13.3	350,283	2,294,689	16.4	431,927	2,868,524	16.0	421,393	2,827,583
2027	2,706,131	13.3	359,915	2,302,209	16.4	443,805	2,877,924	16.0	432,981	2,836,849
2028	2,780,550	13.3	369,813	2,306,045	16.4	456,010	2,882,719	16.0	444,888	2,841,576
2029	2,857,015	13.3	379,983	2,305,823	16.4	468,550	2,882,442	16.0	457,122	2,841,303
2030	2,935,583	13.3	390,433	2,301,140	16.4	481,436	2,876,588	16.0	469,693	2,835,533

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	18.5%	\$425,431	\$ 3,151,944	19.5%	\$448,428	\$ 3,319,848	20.9%	\$480,622	\$ 3,576,841
2022	2,362,869	18.5	437,131	3,182,180	19.5	460,759	3,351,694	20.9	493,840	3,611,152
2023	2,427,848	18.5	449,152	3,209,296	19.5	473,430	3,380,254	20.9	507,420	3,641,923
2024	2,494,614	18.5	461,504	3,232,930	19.5	486,450	3,405,147	20.9	521,374	3,668,743
2025	2,563,216	18.5	474,195	3,252,690	19.5	499,827	3,425,960	20.9	535,712	3,691,167
2026	2,633,704	18.5	487,235	3,268,154	19.5	513,572	3,442,248	20.9	550,444	3,708,715
2027	2,706,131	18.5	500,634	3,278,864	19.5	527,696	3,453,529	20.9	565,581	3,720,869
2028	2,780,550	18.5	514,402	3,284,327	19.5	542,207	3,459,283	20.9	581,135	3,727,068
2029	2,857,015	18.5	528,548	3,284,011	19.5	557,118	3,458,950	20.9	597,116	3,726,709
2030	2,935,583	18.5	543,083	3,277,342	19.5	572,439	3,451,925	20.9	613,537	3,719,141

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	22.6%	\$519,716	\$ 3,873,152	23.4%	\$538,113	\$ 4,001,625	25.7%	\$591,005	\$ 4,426,482
2022	2,362,869	22.6	534,008	3,910,306	23.4	552,911	4,040,011	25.7	607,257	4,468,944
2023	2,427,848	22.6	548,694	3,943,626	23.4	568,116	4,074,437	25.7	623,957	4,507,025
2024	2,494,614	22.6	563,783	3,972,668	23.4	583,740	4,104,442	25.7	641,116	4,540,216
2025	2,563,216	22.6	579,287	3,996,950	23.4	599,793	4,129,529	25.7	658,747	4,567,967
2026	2,633,704	22.6	595,217	4,015,952	23.4	616,287	4,149,161	25.7	676,862	4,589,684
2027	2,706,131	22.6	611,586	4,029,113	23.4	633,235	4,162,758	25.7	695,476	4,604,725
2028	2,780,550	22.6	628,404	4,035,826	23.4	650,649	4,169,694	25.7	714,601	4,612,397
2029	2,857,015	22.6	645,685	4,035,438	23.4	668,542	4,169,293	25.7	734,253	4,611,953
2030	2,935,583	22.6	663,442	4,027,243	23.4	686,926	4,160,826	25.7	754,445	4,602,587

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.



City of Manchester - Police

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	11.4%	\$262,158	\$ 2,213,094	14.5%	\$333,446	\$ 2,766,525	14.1%	\$324,248	\$ 2,727,039
2022	2,362,869	11.4	269,367	2,234,323	14.5	342,616	2,793,063	14.1	333,165	2,753,199
2023	2,427,848	11.4	276,775	2,253,362	14.5	352,038	2,816,863	14.1	342,327	2,776,659
2024	2,494,614	11.4	284,386	2,269,956	14.5	361,719	2,837,607	14.1	351,741	2,797,107
2025	2,563,216	11.4	292,207	2,283,831	14.5	371,666	2,854,951	14.1	361,413	2,814,204
2026	2,633,704	11.4	300,242	2,294,689	14.5	381,887	2,868,524	14.1	371,352	2,827,583
2027	2,706,131	11.4	308,499	2,302,209	14.5	392,389	2,877,924	14.1	381,564	2,836,849
2028	2,780,550	11.4	316,983	2,306,045	14.5	403,180	2,882,719	14.1	392,058	2,841,576
2029	2,857,015	11.4	325,700	2,305,823	14.5	414,267	2,882,442	14.1	402,839	2,841,303
2030	2,935,583	11.4	334,656	2,301,140	14.5	425,660	2,876,588	14.1	413,917	2,835,533

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	16.6%	\$381,738	\$ 3,151,944	17.6%	\$404,735	\$ 3,319,848	19.0%	\$436,930	\$ 3,576,841
2022	2,362,869	16.6	392,236	3,182,180	17.6	415,865	3,351,694	19.0	448,945	3,611,152
2023	2,427,848	16.6	403,023	3,209,296	17.6	427,301	3,380,254	19.0	461,291	3,641,923
2024	2,494,614	16.6	414,106	3,232,930	17.6	439,052	3,405,147	19.0	473,977	3,668,743
2025	2,563,216	16.6	425,494	3,252,690	17.6	451,126	3,425,960	19.0	487,011	3,691,167
2026	2,633,704	16.6	437,195	3,268,154	17.6	463,532	3,442,248	19.0	500,404	3,708,715
2027	2,706,131	16.6	449,218	3,278,864	17.6	476,279	3,453,529	19.0	514,165	3,720,869
2028	2,780,550	16.6	461,571	3,284,327	17.6	489,377	3,459,283	19.0	528,305	3,727,068
2029	2,857,015	16.6	474,264	3,284,011	17.6	502,835	3,458,950	19.0	542,833	3,726,709
2030	2,935,583	16.6	487,307	3,277,342	17.6	516,663	3,451,925	19.0	557,761	3,719,141

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	20.7%	\$476,023	\$ 3,873,152	21.5%	\$494,420	\$ 4,001,625	23.8%	\$547,312	\$ 4,426,482
2022	2,362,869	20.7	489,114	3,910,306	21.5	508,017	4,040,011	23.8	562,363	4,468,944
2023	2,427,848	20.7	502,565	3,943,626	21.5	521,987	4,074,437	23.8	577,828	4,507,025
2024	2,494,614	20.7	516,385	3,972,668	21.5	536,342	4,104,442	23.8	593,718	4,540,216
2025	2,563,216	20.7	530,586	3,996,950	21.5	551,091	4,129,529	23.8	610,045	4,567,967
2026	2,633,704	20.7	545,177	4,015,952	21.5	566,246	4,149,161	23.8	626,822	4,589,684
2027	2,706,131	20.7	560,169	4,029,113	21.5	581,818	4,162,758	23.8	644,059	4,604,725
2028	2,780,550	20.7	575,574	4,035,826	21.5	597,818	4,169,694	23.8	661,771	4,612,397
2029	2,857,015	20.7	591,402	4,035,438	21.5	614,258	4,169,293	23.8	679,970	4,611,953
2030	2,935,583	20.7	607,666	4,027,243	21.5	631,150	4,160,826	23.8	698,669	4,602,587

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.



City of Manchester - Police

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	9.5%	\$218,465	\$ 2,213,094	12.6%	\$289,753	\$ 2,766,525	12.2%	\$280,555	\$ 2,727,039
2022	2,362,869	9.5	224,473	2,234,323	12.6	297,721	2,793,063	12.2	288,270	2,753,199
2023	2,427,848	9.5	230,646	2,253,362	12.6	305,909	2,816,863	12.2	296,197	2,776,659
2024	2,494,614	9.5	236,988	2,269,956	12.6	314,321	2,837,607	12.2	304,343	2,797,107
2025	2,563,216	9.5	243,506	2,283,831	12.6	322,965	2,854,951	12.2	312,712	2,814,204
2026	2,633,704	9.5	250,202	2,294,689	12.6	331,847	2,868,524	12.2	321,312	2,827,583
2027	2,706,131	9.5	257,082	2,302,209	12.6	340,973	2,877,924	12.2	330,148	2,836,849
2028	2,780,550	9.5	264,152	2,306,045	12.6	350,349	2,882,719	12.2	339,227	2,841,576
2029	2,857,015	9.5	271,416	2,305,823	12.6	359,984	2,882,442	12.2	348,556	2,841,303
2030	2,935,583	9.5	278,880	2,301,140	12.6	369,883	2,876,588	12.2	358,141	2,835,533

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	14.7%	\$338,045	\$ 3,151,944	15.7%	\$361,042	\$ 3,319,848	17.1%	\$393,237	\$ 3,576,841
2022	2,362,869	14.7	347,342	3,182,180	15.7	370,970	3,351,694	17.1	404,051	3,611,152
2023	2,427,848	14.7	356,894	3,209,296	15.7	381,172	3,380,254	17.1	415,162	3,641,923
2024	2,494,614	14.7	366,708	3,232,930	15.7	391,654	3,405,147	17.1	426,579	3,668,743
2025	2,563,216	14.7	376,793	3,252,690	15.7	402,425	3,425,960	17.1	438,310	3,691,167
2026	2,633,704	14.7	387,154	3,268,154	15.7	413,492	3,442,248	17.1	450,363	3,708,715
2027	2,706,131	14.7	397,801	3,278,864	15.7	424,863	3,453,529	17.1	462,748	3,720,869
2028	2,780,550	14.7	408,741	3,284,327	15.7	436,546	3,459,283	17.1	475,474	3,727,068
2029	2,857,015	14.7	419,981	3,284,011	15.7	448,551	3,458,950	17.1	488,550	3,726,709
2030	2,935,583	14.7	431,531	3,277,342	15.7	460,887	3,451,925	17.1	501,985	3,719,141

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	18.8%	\$432,330	\$ 3,873,152	19.6%	\$450,727	\$ 4,001,625	21.9%	\$503,619	\$ 4,426,482
2022	2,362,869	18.8	444,219	3,910,306	19.6	463,122	4,040,011	21.9	517,468	4,468,944
2023	2,427,848	18.8	456,435	3,943,626	19.6	475,858	4,074,437	21.9	531,699	4,507,025
2024	2,494,614	18.8	468,987	3,972,668	19.6	488,944	4,104,442	21.9	546,320	4,540,216
2025	2,563,216	18.8	481,885	3,996,950	19.6	502,390	4,129,529	21.9	561,344	4,567,967
2026	2,633,704	18.8	495,136	4,015,952	19.6	516,206	4,149,161	21.9	576,781	4,589,684
2027	2,706,131	18.8	508,753	4,029,113	19.6	530,402	4,162,758	21.9	592,643	4,604,725
2028	2,780,550	18.8	522,743	4,035,826	19.6	544,988	4,169,694	21.9	608,940	4,612,397
2029	2,857,015	18.8	537,119	4,035,438	19.6	559,975	4,169,293	21.9	625,686	4,611,953
2030	2,935,583	18.8	551,890	4,027,243	19.6	575,374	4,160,826	21.9	642,893	4,602,587

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	7.6%	\$174,772	\$ 2,213,094	10.7%	\$246,060	\$ 2,766,525	10.3%	\$236,862	\$ 2,727,039
2022	2,362,869	7.6	179,578	2,234,323	10.7	252,827	2,793,063	10.3	243,376	2,753,199
2023	2,427,848	7.6	184,516	2,253,362	10.7	259,780	2,816,863	10.3	250,068	2,776,659
2024	2,494,614	7.6	189,591	2,269,956	10.7	266,924	2,837,607	10.3	256,945	2,797,107
2025	2,563,216	7.6	194,804	2,283,831	10.7	274,264	2,854,951	10.3	264,011	2,814,204
2026	2,633,704	7.6	200,162	2,294,689	10.7	281,806	2,868,524	10.3	271,272	2,827,583
2027	2,706,131	7.6	205,666	2,302,209	10.7	289,556	2,877,924	10.3	278,731	2,836,849
2028	2,780,550	7.6	211,322	2,306,045	10.7	297,519	2,882,719	10.3	286,397	2,841,576
2029	2,857,015	7.6	217,133	2,305,823	10.7	305,701	2,882,442	10.3	294,273	2,841,303
2030	2,935,583	7.6	223,104	2,301,140	10.7	314,107	2,876,588	10.3	302,365	2,835,533

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	12.8%	\$294,353	\$ 3,151,944	13.8%	\$317,349	\$ 3,319,848	15.2%	\$349,544	\$ 3,576,841
2022	2,362,869	12.8	302,447	3,182,180	13.8	326,076	3,351,694	15.2	359,156	3,611,152
2023	2,427,848	12.8	310,765	3,209,296	13.8	335,043	3,380,254	15.2	369,033	3,641,923
2024	2,494,614	12.8	319,311	3,232,930	13.8	344,257	3,405,147	15.2	379,181	3,668,743
2025	2,563,216	12.8	328,092	3,252,690	13.8	353,724	3,425,960	15.2	389,609	3,691,167
2026	2,633,704	12.8	337,114	3,268,154	13.8	363,451	3,442,248	15.2	400,323	3,708,715
2027	2,706,131	12.8	346,385	3,278,864	13.8	373,446	3,453,529	15.2	411,332	3,720,869
2028	2,780,550	12.8	355,910	3,284,327	13.8	383,716	3,459,283	15.2	422,644	3,727,068
2029	2,857,015	12.8	365,698	3,284,011	13.8	394,268	3,458,950	15.2	434,266	3,726,709
2030	2,935,583	12.8	375,755	3,277,342	13.8	405,110	3,451,925	15.2	446,209	3,719,141

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	16.9%	\$388,637	\$ 3,873,152	17.7%	\$407,034	\$ 4,001,625	20.0%	\$459,926	\$ 4,426,482
2022	2,362,869	16.9	399,325	3,910,306	17.7	418,228	4,040,011	20.0	472,574	4,468,944
2023	2,427,848	16.9	410,306	3,943,626	17.7	429,729	4,074,437	20.0	485,570	4,507,025
2024	2,494,614	16.9	421,590	3,972,668	17.7	441,547	4,104,442	20.0	498,923	4,540,216
2025	2,563,216	16.9	433,184	3,996,950	17.7	453,689	4,129,529	20.0	512,643	4,567,967
2026	2,633,704	16.9	445,096	4,015,952	17.7	466,166	4,149,161	20.0	526,741	4,589,684
2027	2,706,131	16.9	457,336	4,029,113	17.7	478,985	4,162,758	20.0	541,226	4,604,725
2028	2,780,550	16.9	469,913	4,035,826	17.7	492,157	4,169,694	20.0	556,110	4,612,397
2029	2,857,015	16.9	482,836	4,035,438	17.7	505,692	4,169,293	20.0	571,403	4,611,953
2030	2,935,583	16.9	496,114	4,027,243	17.7	519,598	4,160,826	20.0	587,117	4,602,587

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	13.7%	\$315,049	\$ 2,290,392	17.0%	\$390,937	\$ 2,863,075	16.6%	\$381,738	\$ 2,822,767
2022	2,362,869	13.7	323,713	2,312,363	17.0	401,688	2,890,540	16.6	392,236	2,849,845
2023	2,427,848	13.7	332,615	2,332,067	17.0	412,734	2,915,171	16.6	403,023	2,874,129
2024	2,494,614	13.7	341,762	2,349,241	17.0	424,084	2,936,639	16.6	414,106	2,895,295
2025	2,563,216	13.7	351,161	2,363,600	17.0	435,747	2,954,588	16.6	425,494	2,912,992
2026	2,633,704	13.7	360,817	2,374,837	17.0	447,730	2,968,635	16.6	437,195	2,926,841
2027	2,706,131	13.7	370,740	2,382,620	17.0	460,042	2,978,363	16.6	449,218	2,936,432
2028	2,780,550	13.7	380,935	2,386,590	17.0	472,694	2,983,325	16.6	461,571	2,941,324
2029	2,857,015	13.7	391,411	2,386,360	17.0	485,693	2,983,038	16.6	474,264	2,941,041
2030	2,935,583	13.7	402,175	2,381,514	17.0	499,049	2,976,980	16.6	487,307	2,935,068

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	19.1%	\$439,229	\$ 3,262,317	20.2%	\$464,525	\$ 3,435,763	21.6%	\$496,720	\$ 3,701,890
2022	2,362,869	19.1	451,308	3,293,611	20.2	477,300	3,468,721	21.6	510,380	3,737,401
2023	2,427,848	19.1	463,719	3,321,676	20.2	490,425	3,498,279	21.6	524,415	3,769,248
2024	2,494,614	19.1	476,471	3,346,138	20.2	503,912	3,524,041	21.6	538,837	3,797,006
2025	2,563,216	19.1	489,574	3,366,590	20.2	517,770	3,545,581	21.6	553,655	3,820,214
2026	2,633,704	19.1	503,037	3,382,595	20.2	532,008	3,562,437	21.6	568,880	3,838,376
2027	2,706,131	19.1	516,871	3,393,680	20.2	546,638	3,574,111	21.6	584,524	3,850,955
2028	2,780,550	19.1	531,085	3,399,334	20.2	561,671	3,580,066	21.6	600,599	3,857,371
2029	2,857,015	19.1	545,690	3,399,007	20.2	577,117	3,579,721	21.6	617,115	3,857,000
2030	2,935,583	19.1	560,696	3,392,104	20.2	592,988	3,572,451	21.6	634,086	3,849,167

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	23.4%	\$538,113	\$ 4,008,356	24.1%	\$554,211	\$ 4,141,453	26.6%	\$611,701	\$ 4,580,923
2022	2,362,869	23.4	552,911	4,046,807	24.1	569,451	4,181,181	26.6	628,523	4,624,866
2023	2,427,848	23.4	568,116	4,081,291	24.1	585,111	4,216,810	26.6	645,808	4,664,275
2024	2,494,614	23.4	583,740	4,111,347	24.1	601,202	4,247,864	26.6	663,567	4,698,624
2025	2,563,216	23.4	599,793	4,136,477	24.1	617,735	4,273,828	26.6	681,815	4,727,343
2026	2,633,704	23.4	616,287	4,156,143	24.1	634,723	4,294,146	26.6	700,565	4,749,818
2027	2,706,131	23.4	633,235	4,169,763	24.1	652,178	4,308,218	26.6	719,831	4,765,384
2028	2,780,550	23.4	650,649	4,176,710	24.1	670,113	4,315,396	26.6	739,626	4,773,324
2029	2,857,015	23.4	668,542	4,176,308	24.1	688,541	4,314,981	26.6	759,966	4,772,865
2030	2,935,583	23.4	686,926	4,167,827	24.1	707,476	4,306,218	26.6	780,865	4,763,172

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	11.8%	\$271,356	\$ 2,290,392	15.1%	\$347,244	\$ 2,863,075	14.7%	\$338,045	\$ 2,822,767
2022	2,362,869	11.8	278,819	2,312,363	15.1	356,793	2,890,540	14.7	347,342	2,849,845
2023	2,427,848	11.8	286,486	2,332,067	15.1	366,605	2,915,171	14.7	356,894	2,874,129
2024	2,494,614	11.8	294,364	2,349,241	15.1	376,687	2,936,639	14.7	366,708	2,895,295
2025	2,563,216	11.8	302,459	2,363,600	15.1	387,046	2,954,588	14.7	376,793	2,912,992
2026	2,633,704	11.8	310,777	2,374,837	15.1	397,689	2,968,635	14.7	387,154	2,926,841
2027	2,706,131	11.8	319,323	2,382,620	15.1	408,626	2,978,363	14.7	397,801	2,936,432
2028	2,780,550	11.8	328,105	2,386,590	15.1	419,863	2,983,325	14.7	408,741	2,941,324
2029	2,857,015	11.8	337,128	2,386,360	15.1	431,409	2,983,038	14.7	419,981	2,941,041
2030	2,935,583	11.8	346,399	2,381,514	15.1	443,273	2,976,980	14.7	431,531	2,935,068

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	17.2%	\$395,536	\$ 3,262,317	18.3%	\$420,832	\$ 3,435,763	19.7%	\$453,027	\$ 3,701,890
2022	2,362,869	17.2	406,413	3,293,611	18.3	432,405	3,468,721	19.7	465,485	3,737,401
2023	2,427,848	17.2	417,590	3,321,676	18.3	444,296	3,498,279	19.7	478,286	3,769,248
2024	2,494,614	17.2	429,074	3,346,138	18.3	456,514	3,524,041	19.7	491,439	3,797,006
2025	2,563,216	17.2	440,873	3,366,590	18.3	469,069	3,545,581	19.7	504,954	3,820,214
2026	2,633,704	17.2	452,997	3,382,595	18.3	481,968	3,562,437	19.7	518,840	3,838,376
2027	2,706,131	17.2	465,455	3,393,680	18.3	495,222	3,574,111	19.7	533,108	3,850,955
2028	2,780,550	17.2	478,255	3,399,334	18.3	508,841	3,580,066	19.7	547,768	3,857,371
2029	2,857,015	17.2	491,407	3,399,007	18.3	522,834	3,579,721	19.7	562,832	3,857,000
2030	2,935,583	17.2	504,920	3,392,104	18.3	537,212	3,572,451	19.7	578,310	3,849,167

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	21.5%	\$494,420	\$ 4,008,356	22.2%	\$510,518	\$ 4,141,453	24.7%	\$568,008	\$ 4,580,923
2022	2,362,869	21.5	508,017	4,046,807	22.2	524,557	4,181,181	24.7	583,629	4,624,866
2023	2,427,848	21.5	521,987	4,081,291	22.2	538,982	4,216,810	24.7	599,678	4,664,275
2024	2,494,614	21.5	536,342	4,111,347	22.2	553,804	4,247,864	24.7	616,170	4,698,624
2025	2,563,216	21.5	551,091	4,136,477	22.2	569,034	4,273,828	24.7	633,114	4,727,343
2026	2,633,704	21.5	566,246	4,156,143	22.2	584,682	4,294,146	24.7	650,525	4,749,818
2027	2,706,131	21.5	581,818	4,169,763	22.2	600,761	4,308,218	24.7	668,414	4,765,384
2028	2,780,550	21.5	597,818	4,176,710	22.2	617,282	4,315,396	24.7	686,796	4,773,324
2029	2,857,015	21.5	614,258	4,176,308	22.2	634,257	4,314,981	24.7	705,683	4,772,865
2030	2,935,583	21.5	631,150	4,167,827	22.2	651,699	4,306,218	24.7	725,089	4,763,172

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.



City of Manchester - Police

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	9.9%	\$227,663	\$ 2,290,392	13.2%	\$303,551	\$ 2,863,075	12.8%	\$294,353	\$ 2,822,767
2022	2,362,869	9.9	233,924	2,312,363	13.2	311,899	2,890,540	12.8	302,447	2,849,845
2023	2,427,848	9.9	240,357	2,332,067	13.2	320,476	2,915,171	12.8	310,765	2,874,129
2024	2,494,614	9.9	246,967	2,349,241	13.2	329,289	2,936,639	12.8	319,311	2,895,295
2025	2,563,216	9.9	253,758	2,363,600	13.2	338,345	2,954,588	12.8	328,092	2,912,992
2026	2,633,704	9.9	260,737	2,374,837	13.2	347,649	2,968,635	12.8	337,114	2,926,841
2027	2,706,131	9.9	267,907	2,382,620	13.2	357,209	2,978,363	12.8	346,385	2,936,432
2028	2,780,550	9.9	275,274	2,386,590	13.2	367,033	2,983,325	12.8	355,910	2,941,324
2029	2,857,015	9.9	282,844	2,386,360	13.2	377,126	2,983,038	12.8	365,698	2,941,041
2030	2,935,583	9.9	290,623	2,381,514	13.2	387,497	2,976,980	12.8	375,755	2,935,068

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	15.3%	\$351,843	\$ 3,262,317	16.4%	\$377,139	\$ 3,435,763	17.8%	\$409,334	\$ 3,701,890
2022	2,362,869	15.3	361,519	3,293,611	16.4	387,511	3,468,721	17.8	420,591	3,737,401
2023	2,427,848	15.3	371,461	3,321,676	16.4	398,167	3,498,279	17.8	432,157	3,769,248
2024	2,494,614	15.3	381,676	3,346,138	16.4	409,117	3,524,041	17.8	444,041	3,797,006
2025	2,563,216	15.3	392,172	3,366,590	16.4	420,367	3,545,581	17.8	456,252	3,820,214
2026	2,633,704	15.3	402,957	3,382,595	16.4	431,927	3,562,437	17.8	468,799	3,838,376
2027	2,706,131	15.3	414,038	3,393,680	16.4	443,805	3,574,111	17.8	481,691	3,850,955
2028	2,780,550	15.3	425,424	3,399,334	16.4	456,010	3,580,066	17.8	494,938	3,857,371
2029	2,857,015	15.3	437,123	3,399,007	16.4	468,550	3,579,721	17.8	508,549	3,857,000
2030	2,935,583	15.3	449,144	3,392,104	16.4	481,436	3,572,451	17.8	522,534	3,849,167

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	19.6%	\$450,727	\$ 4,008,356	20.3%	\$466,825	\$ 4,141,453	22.8%	\$524,315	\$ 4,580,923
2022	2,362,869	19.6	463,122	4,046,807	20.3	479,662	4,181,181	22.8	538,734	4,624,866
2023	2,427,848	19.6	475,858	4,081,291	20.3	492,853	4,216,810	22.8	553,549	4,664,275
2024	2,494,614	19.6	488,944	4,111,347	20.3	506,407	4,247,864	22.8	568,772	4,698,624
2025	2,563,216	19.6	502,390	4,136,477	20.3	520,333	4,273,828	22.8	584,413	4,727,343
2026	2,633,704	19.6	516,206	4,156,143	20.3	534,642	4,294,146	22.8	600,485	4,749,818
2027	2,706,131	19.6	530,402	4,169,763	20.3	549,345	4,308,218	22.8	616,998	4,765,384
2028	2,780,550	19.6	544,988	4,176,710	20.3	564,452	4,315,396	22.8	633,965	4,773,324
2029	2,857,015	19.6	559,975	4,176,308	20.3	579,974	4,314,981	22.8	651,399	4,772,865
2030	2,935,583	19.6	575,374	4,167,827	20.3	595,923	4,306,218	22.8	669,313	4,763,172

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.



City of Manchester - Police

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	8.0%	\$183,970	\$ 2,290,392	11.3%	\$259,858	\$ 2,863,075	10.9%	\$250,660	\$ 2,822,767
2022	2,362,869	8.0	189,030	2,312,363	11.3	267,004	2,890,540	10.9	257,553	2,849,845
2023	2,427,848	8.0	194,228	2,332,067	11.3	274,347	2,915,171	10.9	264,635	2,874,129
2024	2,494,614	8.0	199,569	2,349,241	11.3	281,891	2,936,639	10.9	271,913	2,895,295
2025	2,563,216	8.0	205,057	2,363,600	11.3	289,643	2,954,588	10.9	279,391	2,912,992
2026	2,633,704	8.0	210,696	2,374,837	11.3	297,609	2,968,635	10.9	287,074	2,926,841
2027	2,706,131	8.0	216,490	2,382,620	11.3	305,793	2,978,363	10.9	294,968	2,936,432
2028	2,780,550	8.0	222,444	2,386,590	11.3	314,202	2,983,325	10.9	303,080	2,941,324
2029	2,857,015	8.0	228,561	2,386,360	11.3	322,843	2,983,038	10.9	311,415	2,941,041
2030	2,935,583	8.0	234,847	2,381,514	11.3	331,721	2,976,980	10.9	319,979	2,935,068

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	13.4%	\$308,150	\$ 3,262,317	14.5%	\$333,446	\$ 3,435,763	15.9%	\$365,641	\$ 3,701,890
2022	2,362,869	13.4	316,624	3,293,611	14.5	342,616	3,468,721	15.9	375,696	3,737,401
2023	2,427,848	13.4	325,332	3,321,676	14.5	352,038	3,498,279	15.9	386,028	3,769,248
2024	2,494,614	13.4	334,278	3,346,138	14.5	361,719	3,524,041	15.9	396,644	3,797,006
2025	2,563,216	13.4	343,471	3,366,590	14.5	371,666	3,545,581	15.9	407,551	3,820,214
2026	2,633,704	13.4	352,916	3,382,595	14.5	381,887	3,562,437	15.9	418,759	3,838,376
2027	2,706,131	13.4	362,622	3,393,680	14.5	392,389	3,574,111	15.9	430,275	3,850,955
2028	2,780,550	13.4	372,594	3,399,334	14.5	403,180	3,580,066	15.9	442,107	3,857,371
2029	2,857,015	13.4	382,840	3,399,007	14.5	414,267	3,579,721	15.9	454,265	3,857,000
2030	2,935,583	13.4	393,368	3,392,104	14.5	425,660	3,572,451	15.9	466,758	3,849,167

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	17.7%	\$407,034	\$ 4,008,356	18.4%	\$423,132	\$ 4,141,453	20.9%	\$480,622	\$ 4,580,923
2022	2,362,869	17.7	418,228	4,046,807	18.4	434,768	4,181,181	20.9	493,840	4,624,866
2023	2,427,848	17.7	429,729	4,081,291	18.4	446,724	4,216,810	20.9	507,420	4,664,275
2024	2,494,614	17.7	441,547	4,111,347	18.4	459,009	4,247,864	20.9	521,374	4,698,624
2025	2,563,216	17.7	453,689	4,136,477	18.4	471,632	4,273,828	20.9	535,712	4,727,343
2026	2,633,704	17.7	466,166	4,156,143	18.4	484,602	4,294,146	20.9	550,444	4,749,818
2027	2,706,131	17.7	478,985	4,169,763	18.4	497,928	4,308,218	20.9	565,581	4,765,384
2028	2,780,550	17.7	492,157	4,176,710	18.4	511,621	4,315,396	20.9	581,135	4,773,324
2029	2,857,015	17.7	505,692	4,176,308	18.4	525,691	4,314,981	20.9	597,116	4,772,865
2030	2,935,583	17.7	519,598	4,167,827	18.4	540,147	4,306,218	20.9	613,537	4,763,172

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	13.7%	\$315,049	\$ 2,306,629	16.9%	\$388,637	\$ 2,883,411	16.9%	\$388,637	\$ 2,967,045
2022	2,362,869	13.7	323,713	2,328,756	16.9	399,325	2,911,071	16.9	399,325	2,995,507
2023	2,427,848	13.7	332,615	2,348,600	16.9	410,306	2,935,877	16.9	410,306	3,021,032
2024	2,494,614	13.7	341,762	2,365,896	16.9	421,590	2,957,498	16.9	421,590	3,043,280
2025	2,563,216	13.7	351,161	2,380,357	16.9	433,184	2,975,575	16.9	433,184	3,061,881
2026	2,633,704	13.7	360,817	2,391,674	16.9	445,096	2,989,721	16.9	445,096	3,076,438
2027	2,706,131	13.7	370,740	2,399,512	16.9	457,336	2,999,519	16.9	457,336	3,086,520
2028	2,780,550	13.7	380,935	2,403,510	16.9	469,913	3,004,517	16.9	469,913	3,091,663
2029	2,857,015	13.7	391,411	2,403,279	16.9	482,836	3,004,228	16.9	482,836	3,091,365
2030	2,935,583	13.7	402,175	2,398,398	16.9	496,114	2,998,127	16.9	496,114	3,085,087

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	19.4%	\$446,128	\$ 3,378,672	20.1%	\$462,225	\$ 3,460,059	21.7%	\$499,019	\$ 3,790,296
2022	2,362,869	19.4	458,397	3,411,082	20.1	474,937	3,493,250	21.7	512,743	3,826,655
2023	2,427,848	19.4	471,003	3,440,148	20.1	487,997	3,523,017	21.7	526,843	3,859,263
2024	2,494,614	19.4	483,955	3,465,482	20.1	501,417	3,548,961	21.7	541,331	3,887,684
2025	2,563,216	19.4	497,264	3,486,664	20.1	515,206	3,570,653	21.7	556,218	3,911,446
2026	2,633,704	19.4	510,939	3,503,240	20.1	529,375	3,587,628	21.7	571,514	3,930,042
2027	2,706,131	19.4	524,989	3,514,720	20.1	543,932	3,599,385	21.7	587,230	3,942,921
2028	2,780,550	19.4	539,427	3,520,576	20.1	558,891	3,605,382	21.7	603,379	3,949,490
2029	2,857,015	19.4	554,261	3,520,237	20.1	574,260	3,605,035	21.7	619,972	3,949,110
2030	2,935,583	19.4	569,503	3,513,088	20.1	590,052	3,597,714	21.7	637,022	3,941,090

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	23.2%	\$533,514	\$ 4,036,683	24.1%	\$554,211	\$ 4,201,789	26.5%	\$609,402	\$ 4,613,442
2022	2,362,869	23.2	548,186	4,075,406	24.1	569,451	4,242,095	26.5	626,160	4,657,697
2023	2,427,848	23.2	563,261	4,110,133	24.1	585,111	4,278,243	26.5	643,380	4,697,386
2024	2,494,614	23.2	578,750	4,140,401	24.1	601,202	4,309,749	26.5	661,073	4,731,979
2025	2,563,216	23.2	594,666	4,165,708	24.1	617,735	4,336,091	26.5	679,252	4,760,902
2026	2,633,704	23.2	611,019	4,185,512	24.1	634,723	4,356,706	26.5	697,932	4,783,536
2027	2,706,131	23.2	627,822	4,199,228	24.1	652,178	4,370,983	26.5	717,125	4,799,212
2028	2,780,550	23.2	645,088	4,206,224	24.1	670,113	4,378,266	26.5	736,846	4,807,208
2029	2,857,015	23.2	662,827	4,205,819	24.1	688,541	4,377,845	26.5	757,109	4,806,745
2030	2,935,583	23.2	681,055	4,197,278	24.1	707,476	4,368,954	26.5	777,929	4,796,983

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	11.8%	\$271,356	\$ 2,306,629	15.0%	\$344,944	\$ 2,883,411	15.0%	\$344,944	\$ 2,967,045
2022	2,362,869	11.8	278,819	2,328,756	15.0	354,430	2,911,071	15.0	354,430	2,995,507
2023	2,427,848	11.8	286,486	2,348,600	15.0	364,177	2,935,877	15.0	364,177	3,021,032
2024	2,494,614	11.8	294,364	2,365,896	15.0	374,192	2,957,498	15.0	374,192	3,043,280
2025	2,563,216	11.8	302,459	2,380,357	15.0	384,482	2,975,575	15.0	384,482	3,061,881
2026	2,633,704	11.8	310,777	2,391,674	15.0	395,056	2,989,721	15.0	395,056	3,076,438
2027	2,706,131	11.8	319,323	2,399,512	15.0	405,920	2,999,519	15.0	405,920	3,086,520
2028	2,780,550	11.8	328,105	2,403,510	15.0	417,083	3,004,517	15.0	417,083	3,091,663
2029	2,857,015	11.8	337,128	2,403,279	15.0	428,552	3,004,228	15.0	428,552	3,091,365
2030	2,935,583	11.8	346,399	2,398,398	15.0	440,337	2,998,127	15.0	440,337	3,085,087

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	17.5%	\$402,435	\$ 3,378,672	18.2%	\$418,532	\$ 3,460,059	19.8%	\$455,327	\$ 3,790,296
2022	2,362,869	17.5	413,502	3,411,082	18.2	430,042	3,493,250	19.8	467,848	3,826,655
2023	2,427,848	17.5	424,873	3,440,148	18.2	441,868	3,523,017	19.8	480,714	3,859,263
2024	2,494,614	17.5	436,557	3,465,482	18.2	454,020	3,548,961	19.8	493,934	3,887,684
2025	2,563,216	17.5	448,563	3,486,664	18.2	466,505	3,570,653	19.8	507,517	3,911,446
2026	2,633,704	17.5	460,898	3,503,240	18.2	479,334	3,587,628	19.8	521,473	3,930,042
2027	2,706,131	17.5	473,573	3,514,720	18.2	492,516	3,599,385	19.8	535,814	3,942,921
2028	2,780,550	17.5	486,596	3,520,576	18.2	506,060	3,605,382	19.8	550,549	3,949,490
2029	2,857,015	17.5	499,978	3,520,237	18.2	519,977	3,605,035	19.8	565,689	3,949,110
2030	2,935,583	17.5	513,727	3,513,088	18.2	534,276	3,597,714	19.8	581,245	3,941,090

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	21.3%	\$489,821	\$ 4,036,683	22.2%	\$510,518	\$ 4,201,789	24.6%	\$565,709	\$ 4,613,442
2022	2,362,869	21.3	503,291	4,075,406	22.2	524,557	4,242,095	24.6	581,266	4,657,697
2023	2,427,848	21.3	517,132	4,110,133	22.2	538,982	4,278,243	24.6	597,251	4,697,386
2024	2,494,614	21.3	531,353	4,140,401	22.2	553,804	4,309,749	24.6	613,675	4,731,979
2025	2,563,216	21.3	545,965	4,165,708	22.2	569,034	4,336,091	24.6	630,551	4,760,902
2026	2,633,704	21.3	560,979	4,185,512	22.2	584,682	4,356,706	24.6	647,891	4,783,536
2027	2,706,131	21.3	576,406	4,199,228	22.2	600,761	4,370,983	24.6	665,708	4,799,212
2028	2,780,550	21.3	592,257	4,206,224	22.2	617,282	4,378,266	24.6	684,015	4,807,208
2029	2,857,015	21.3	608,544	4,205,819	22.2	634,257	4,377,845	24.6	702,826	4,806,745
2030	2,935,583	21.3	625,279	4,197,278	22.2	651,699	4,368,954	24.6	722,153	4,796,983

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.



City of Manchester - Police

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	9.9%	\$227,663	\$ 2,306,629	13.1%	\$301,251	\$ 2,883,411	13.1%	\$301,251	\$ 2,967,045
2022	2,362,869	9.9	233,924	2,328,756	13.1	309,536	2,911,071	13.1	309,536	2,995,507
2023	2,427,848	9.9	240,357	2,348,600	13.1	318,048	2,935,877	13.1	318,048	3,021,032
2024	2,494,614	9.9	246,967	2,365,896	13.1	326,794	2,957,498	13.1	326,794	3,043,280
2025	2,563,216	9.9	253,758	2,380,357	13.1	335,781	2,975,575	13.1	335,781	3,061,881
2026	2,633,704	9.9	260,737	2,391,674	13.1	345,015	2,989,721	13.1	345,015	3,076,438
2027	2,706,131	9.9	267,907	2,399,512	13.1	354,503	2,999,519	13.1	354,503	3,086,520
2028	2,780,550	9.9	275,274	2,403,510	13.1	364,252	3,004,517	13.1	364,252	3,091,663
2029	2,857,015	9.9	282,844	2,403,279	13.1	374,269	3,004,228	13.1	374,269	3,091,365
2030	2,935,583	9.9	290,623	2,398,398	13.1	384,561	2,998,127	13.1	384,561	3,085,087

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	15.6%	\$358,742	\$ 3,378,672	16.3%	\$374,840	\$ 3,460,059	17.9%	\$411,634	\$ 3,790,296
2022	2,362,869	15.6	368,608	3,411,082	16.3	385,148	3,493,250	17.9	422,954	3,826,655
2023	2,427,848	15.6	378,744	3,440,148	16.3	395,739	3,523,017	17.9	434,585	3,859,263
2024	2,494,614	15.6	389,160	3,465,482	16.3	406,622	3,548,961	17.9	446,536	3,887,684
2025	2,563,216	15.6	399,862	3,486,664	16.3	417,804	3,570,653	17.9	458,816	3,911,446
2026	2,633,704	15.6	410,858	3,503,240	16.3	429,294	3,587,628	17.9	471,433	3,930,042
2027	2,706,131	15.6	422,156	3,514,720	16.3	441,099	3,599,385	17.9	484,397	3,942,921
2028	2,780,550	15.6	433,766	3,520,576	16.3	453,230	3,605,382	17.9	497,718	3,949,490
2029	2,857,015	15.6	445,694	3,520,237	16.3	465,693	3,605,035	17.9	511,406	3,949,110
2030	2,935,583	15.6	457,951	3,513,088	16.3	478,500	3,597,714	17.9	525,469	3,941,090

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	19.4%	\$446,128	\$ 4,036,683	20.3%	\$466,825	\$ 4,201,789	22.7%	\$522,016	\$ 4,613,442
2022	2,362,869	19.4	458,397	4,075,406	20.3	479,662	4,242,095	22.7	536,371	4,657,697
2023	2,427,848	19.4	471,003	4,110,133	20.3	492,853	4,278,243	22.7	551,121	4,697,386
2024	2,494,614	19.4	483,955	4,140,401	20.3	506,407	4,309,749	22.7	566,277	4,731,979
2025	2,563,216	19.4	497,264	4,165,708	20.3	520,333	4,336,091	22.7	581,850	4,760,902
2026	2,633,704	19.4	510,939	4,185,512	20.3	534,642	4,356,706	22.7	597,851	4,783,536
2027	2,706,131	19.4	524,989	4,199,228	20.3	549,345	4,370,983	22.7	614,292	4,799,212
2028	2,780,550	19.4	539,427	4,206,224	20.3	564,452	4,378,266	22.7	631,185	4,807,208
2029	2,857,015	19.4	554,261	4,205,819	20.3	579,974	4,377,845	22.7	648,542	4,806,745
2030	2,935,583	19.4	569,503	4,197,278	20.3	595,923	4,368,954	22.7	666,377	4,796,983

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	8.0%	\$183,970	\$ 2,306,629	11.2%	\$257,558	\$ 2,883,411	11.2%	\$257,558	\$ 2,967,045
2022	2,362,869	8.0	189,030	2,328,756	11.2	264,641	2,911,071	11.2	264,641	2,995,507
2023	2,427,848	8.0	194,228	2,348,600	11.2	271,919	2,935,877	11.2	271,919	3,021,032
2024	2,494,614	8.0	199,569	2,365,896	11.2	279,397	2,957,498	11.2	279,397	3,043,280
2025	2,563,216	8.0	205,057	2,380,357	11.2	287,080	2,975,575	11.2	287,080	3,061,881
2026	2,633,704	8.0	210,696	2,391,674	11.2	294,975	2,989,721	11.2	294,975	3,076,438
2027	2,706,131	8.0	216,490	2,399,512	11.2	303,087	2,999,519	11.2	303,087	3,086,520
2028	2,780,550	8.0	222,444	2,403,510	11.2	311,422	3,004,517	11.2	311,422	3,091,663
2029	2,857,015	8.0	228,561	2,403,279	11.2	319,986	3,004,228	11.2	319,986	3,091,365
2030	2,935,583	8.0	234,847	2,398,398	11.2	328,785	2,998,127	11.2	328,785	3,085,087

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	13.7%	\$315,049	\$ 3,378,672	14.4%	\$331,147	\$ 3,460,059	16.0%	\$367,941	\$ 3,790,296
2022	2,362,869	13.7	323,713	3,411,082	14.4	340,253	3,493,250	16.0	378,059	3,826,655
2023	2,427,848	13.7	332,615	3,440,148	14.4	349,610	3,523,017	16.0	388,456	3,859,263
2024	2,494,614	13.7	341,762	3,465,482	14.4	359,224	3,548,961	16.0	399,138	3,887,684
2025	2,563,216	13.7	351,161	3,486,664	14.4	369,103	3,570,653	16.0	410,115	3,911,446
2026	2,633,704	13.7	360,817	3,503,240	14.4	379,253	3,587,628	16.0	421,393	3,930,042
2027	2,706,131	13.7	370,740	3,514,720	14.4	389,683	3,599,385	16.0	432,981	3,942,921
2028	2,780,550	13.7	380,935	3,520,576	14.4	400,399	3,605,382	16.0	444,888	3,949,490
2029	2,857,015	13.7	391,411	3,520,237	14.4	411,410	3,605,035	16.0	457,122	3,949,110
2030	2,935,583	13.7	402,175	3,513,088	14.4	422,724	3,597,714	16.0	469,693	3,941,090

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	17.5%	\$402,435	\$ 4,036,683	18.4%	\$423,132	\$ 4,201,789	20.8%	\$478,323	\$ 4,613,442
2022	2,362,869	17.5	413,502	4,075,406	18.4	434,768	4,242,095	20.8	491,477	4,657,697
2023	2,427,848	17.5	424,873	4,110,133	18.4	446,724	4,278,243	20.8	504,992	4,697,386
2024	2,494,614	17.5	436,557	4,140,401	18.4	459,009	4,309,749	20.8	518,880	4,731,979
2025	2,563,216	17.5	448,563	4,165,708	18.4	471,632	4,336,091	20.8	533,149	4,760,902
2026	2,633,704	17.5	460,898	4,185,512	18.4	484,602	4,356,706	20.8	547,810	4,783,536
2027	2,706,131	17.5	473,573	4,199,228	18.4	497,928	4,370,983	20.8	562,875	4,799,212
2028	2,780,550	17.5	486,596	4,206,224	18.4	511,621	4,378,266	20.8	578,354	4,807,208
2029	2,857,015	17.5	499,978	4,205,819	18.4	525,691	4,377,845	20.8	594,259	4,806,745
2030	2,935,583	17.5	513,727	4,197,278	18.4	540,147	4,368,954	20.8	610,601	4,796,983

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	14.2%	\$326,547	\$ 2,388,478	17.5%	\$402,435	\$ 2,985,676	17.6%	\$404,735	\$ 3,072,931
2022	2,362,869	14.2	335,527	2,411,390	17.5	413,502	3,014,317	17.6	415,865	3,102,409
2023	2,427,848	14.2	344,754	2,431,938	17.5	424,873	3,040,003	17.6	427,301	3,128,845
2024	2,494,614	14.2	354,235	2,449,847	17.5	436,557	3,062,390	17.6	439,052	3,151,887
2025	2,563,216	14.2	363,977	2,464,821	17.5	448,563	3,081,108	17.6	451,126	3,171,152
2026	2,633,704	14.2	373,986	2,476,539	17.5	460,898	3,095,756	17.6	463,532	3,186,228
2027	2,706,131	14.2	384,271	2,484,655	17.5	473,573	3,105,901	17.6	476,279	3,196,670
2028	2,780,550	14.2	394,838	2,488,795	17.5	486,596	3,111,076	17.6	489,377	3,201,996
2029	2,857,015	14.2	405,696	2,488,556	17.5	499,978	3,110,777	17.6	502,835	3,201,688
2030	2,935,583	14.2	416,853	2,483,502	17.5	513,727	3,104,460	17.6	516,663	3,195,186

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	20.0%	\$459,926	\$ 3,498,953	20.8%	\$478,323	\$ 3,582,871	22.5%	\$517,417	\$ 3,925,046
2022	2,362,869	20.0	472,574	3,532,517	20.8	491,477	3,617,240	22.5	531,646	3,962,698
2023	2,427,848	20.0	485,570	3,562,618	20.8	504,992	3,648,063	22.5	546,266	3,996,465
2024	2,494,614	20.0	498,923	3,588,854	20.8	518,880	3,674,928	22.5	561,288	4,025,896
2025	2,563,216	20.0	512,643	3,610,790	20.8	533,149	3,697,390	22.5	576,724	4,050,503
2026	2,633,704	20.0	526,741	3,627,956	20.8	547,810	3,714,968	22.5	592,583	4,069,760
2027	2,706,131	20.0	541,226	3,639,845	20.8	562,875	3,727,142	22.5	608,879	4,083,097
2028	2,780,550	20.0	556,110	3,645,909	20.8	578,354	3,733,352	22.5	625,624	4,089,900
2029	2,857,015	20.0	571,403	3,645,558	20.8	594,259	3,732,993	22.5	642,828	4,089,506
2030	2,935,583	20.0	587,117	3,638,154	20.8	610,601	3,725,412	22.5	660,506	4,081,201

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	24.1%	\$554,211	\$ 4,179,982	24.9%	\$572,608	\$ 4,351,064	27.3%	\$627,799	\$ 4,777,130
2022	2,362,869	24.1	569,451	4,220,079	24.9	588,354	4,392,802	27.3	645,063	4,822,955
2023	2,427,848	24.1	585,111	4,256,039	24.9	604,534	4,430,234	27.3	662,803	4,864,052
2024	2,494,614	24.1	601,202	4,287,381	24.9	621,159	4,462,859	27.3	681,030	4,899,872
2025	2,563,216	24.1	617,735	4,313,586	24.9	638,241	4,490,137	27.3	699,758	4,929,821
2026	2,633,704	24.1	634,723	4,334,094	24.9	655,792	4,511,484	27.3	719,001	4,953,258
2027	2,706,131	24.1	652,178	4,348,297	24.9	673,827	4,526,268	27.3	738,774	4,969,490
2028	2,780,550	24.1	670,113	4,355,542	24.9	692,357	4,533,809	27.3	759,090	4,977,770
2029	2,857,015	24.1	688,541	4,355,123	24.9	711,397	4,533,373	27.3	779,965	4,977,291
2030	2,935,583	24.1	707,476	4,346,278	24.9	730,960	4,524,166	27.3	801,414	4,967,183

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	12.3%	\$282,854	\$ 2,388,478	15.6%	\$358,742	\$ 2,985,676	15.7%	\$361,042	\$ 3,072,931
2022	2,362,869	12.3	290,633	2,411,390	15.6	368,608	3,014,317	15.7	370,970	3,102,409
2023	2,427,848	12.3	298,625	2,431,938	15.6	378,744	3,040,003	15.7	381,172	3,128,845
2024	2,494,614	12.3	306,838	2,449,847	15.6	389,160	3,062,390	15.7	391,654	3,151,887
2025	2,563,216	12.3	315,276	2,464,821	15.6	399,862	3,081,108	15.7	402,425	3,171,152
2026	2,633,704	12.3	323,946	2,476,539	15.6	410,858	3,095,756	15.7	413,492	3,186,228
2027	2,706,131	12.3	332,854	2,484,655	15.6	422,156	3,105,901	15.7	424,863	3,196,670
2028	2,780,550	12.3	342,008	2,488,795	15.6	433,766	3,111,076	15.7	436,546	3,201,996
2029	2,857,015	12.3	351,413	2,488,556	15.6	445,694	3,110,777	15.7	448,551	3,201,688
2030	2,935,583	12.3	361,077	2,483,502	15.6	457,951	3,104,460	15.7	460,887	3,195,186

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	18.1%	\$416,233	\$ 3,498,953	18.9%	\$434,630	\$ 3,582,871	20.6%	\$473,724	\$ 3,925,046
2022	2,362,869	18.1	427,679	3,532,517	18.9	446,582	3,617,240	20.6	486,751	3,962,698
2023	2,427,848	18.1	439,440	3,562,618	18.9	458,863	3,648,063	20.6	500,137	3,996,465
2024	2,494,614	18.1	451,525	3,588,854	18.9	471,482	3,674,928	20.6	513,890	4,025,896
2025	2,563,216	18.1	463,942	3,610,790	18.9	484,448	3,697,390	20.6	528,022	4,050,503
2026	2,633,704	18.1	476,700	3,627,956	18.9	497,770	3,714,968	20.6	542,543	4,069,760
2027	2,706,131	18.1	489,810	3,639,845	18.9	511,459	3,727,142	20.6	557,463	4,083,097
2028	2,780,550	18.1	503,280	3,645,909	18.9	525,524	3,733,352	20.6	572,793	4,089,900
2029	2,857,015	18.1	517,120	3,645,558	18.9	539,976	3,732,993	20.6	588,545	4,089,506
2030	2,935,583	18.1	531,341	3,638,154	18.9	554,825	3,725,412	20.6	604,730	4,081,201

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	22.2%	\$510,518	\$ 4,179,982	23.0%	\$528,915	\$ 4,351,064	25.4%	\$584,106	\$ 4,777,130
2022	2,362,869	22.2	524,557	4,220,079	23.0	543,460	4,392,802	25.4	600,169	4,822,955
2023	2,427,848	22.2	538,982	4,256,039	23.0	558,405	4,430,234	25.4	616,673	4,864,052
2024	2,494,614	22.2	553,804	4,287,381	23.0	573,761	4,462,859	25.4	633,632	4,899,872
2025	2,563,216	22.2	569,034	4,313,586	23.0	589,540	4,490,137	25.4	651,057	4,929,821
2026	2,633,704	22.2	584,682	4,334,094	23.0	605,752	4,511,484	25.4	668,961	4,953,258
2027	2,706,131	22.2	600,761	4,348,297	23.0	622,410	4,526,268	25.4	687,357	4,969,490
2028	2,780,550	22.2	617,282	4,355,542	23.0	639,527	4,533,809	25.4	706,260	4,977,770
2029	2,857,015	22.2	634,257	4,355,123	23.0	657,113	4,533,373	25.4	725,682	4,977,291
2030	2,935,583	22.2	651,699	4,346,278	23.0	675,184	4,524,166	25.4	745,638	4,967,183

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.



City of Manchester - Police

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	10.4%	\$239,161	\$ 2,388,478	13.7%	\$315,049	\$ 2,985,676	13.8%	\$317,349	\$ 3,072,931
2022	2,362,869	10.4	245,738	2,411,390	13.7	323,713	3,014,317	13.8	326,076	3,102,409
2023	2,427,848	10.4	252,496	2,431,938	13.7	332,615	3,040,003	13.8	335,043	3,128,845
2024	2,494,614	10.4	259,440	2,449,847	13.7	341,762	3,062,390	13.8	344,257	3,151,887
2025	2,563,216	10.4	266,574	2,464,821	13.7	351,161	3,081,108	13.8	353,724	3,171,152
2026	2,633,704	10.4	273,905	2,476,539	13.7	360,817	3,095,756	13.8	363,451	3,186,228
2027	2,706,131	10.4	281,438	2,484,655	13.7	370,740	3,105,901	13.8	373,446	3,196,670
2028	2,780,550	10.4	289,177	2,488,795	13.7	380,935	3,111,076	13.8	383,716	3,201,996
2029	2,857,015	10.4	297,130	2,488,556	13.7	391,411	3,110,777	13.8	394,268	3,201,688
2030	2,935,583	10.4	305,301	2,483,502	13.7	402,175	3,104,460	13.8	405,110	3,195,186

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	16.2%	\$372,540	\$ 3,498,953	17.0%	\$390,937	\$ 3,582,871	18.7%	\$430,031	\$ 3,925,046
2022	2,362,869	16.2	382,785	3,532,517	17.0	401,688	3,617,240	18.7	441,857	3,962,698
2023	2,427,848	16.2	393,311	3,562,618	17.0	412,734	3,648,063	18.7	454,008	3,996,465
2024	2,494,614	16.2	404,127	3,588,854	17.0	424,084	3,674,928	18.7	466,493	4,025,896
2025	2,563,216	16.2	415,241	3,610,790	17.0	435,747	3,697,390	18.7	479,321	4,050,503
2026	2,633,704	16.2	426,660	3,627,956	17.0	447,730	3,714,968	18.7	492,503	4,069,760
2027	2,706,131	16.2	438,393	3,639,845	17.0	460,042	3,727,142	18.7	506,046	4,083,097
2028	2,780,550	16.2	450,449	3,645,909	17.0	472,694	3,733,352	18.7	519,963	4,089,900
2029	2,857,015	16.2	462,836	3,645,558	17.0	485,693	3,732,993	18.7	534,262	4,089,506
2030	2,935,583	16.2	475,564	3,638,154	17.0	499,049	3,725,412	18.7	548,954	4,081,201

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	20.3%	\$466,825	\$ 4,179,982	21.1%	\$485,222	\$ 4,351,064	23.5%	\$540,413	\$ 4,777,130
2022	2,362,869	20.3	479,662	4,220,079	21.1	498,565	4,392,802	23.5	555,274	4,822,955
2023	2,427,848	20.3	492,853	4,256,039	21.1	512,276	4,430,234	23.5	570,544	4,864,052
2024	2,494,614	20.3	506,407	4,287,381	21.1	526,364	4,462,859	23.5	586,234	4,899,872
2025	2,563,216	20.3	520,333	4,313,586	21.1	540,839	4,490,137	23.5	602,356	4,929,821
2026	2,633,704	20.3	534,642	4,334,094	21.1	555,712	4,511,484	23.5	618,920	4,953,258
2027	2,706,131	20.3	549,345	4,348,297	21.1	570,994	4,526,268	23.5	635,941	4,969,490
2028	2,780,550	20.3	564,452	4,355,542	21.1	586,696	4,533,809	23.5	653,429	4,977,770
2029	2,857,015	20.3	579,974	4,355,123	21.1	602,830	4,533,373	23.5	671,399	4,977,291
2030	2,935,583	20.3	595,923	4,346,278	21.1	619,408	4,524,166	23.5	689,862	4,967,183

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.



City of Manchester - Police

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	
2021	\$ 2,299,629	8.5%	\$195,468	\$ 2,388,478	11.8%	\$271,356	\$ 2,985,676	11.9%	\$273,656	\$ 3,072,931
2022	2,362,869	8.5	200,844	2,411,390	11.8	278,819	3,014,317	11.9	281,181	3,102,409
2023	2,427,848	8.5	206,367	2,431,938	11.8	286,486	3,040,003	11.9	288,914	3,128,845
2024	2,494,614	8.5	212,042	2,449,847	11.8	294,364	3,062,390	11.9	296,859	3,151,887
2025	2,563,216	8.5	217,873	2,464,821	11.8	302,459	3,081,108	11.9	305,023	3,171,152
2026	2,633,704	8.5	223,865	2,476,539	11.8	310,777	3,095,756	11.9	313,411	3,186,228
2027	2,706,131	8.5	230,021	2,484,655	11.8	319,323	3,105,901	11.9	322,030	3,196,670
2028	2,780,550	8.5	236,347	2,488,795	11.8	328,105	3,111,076	11.9	330,885	3,201,996
2029	2,857,015	8.5	242,846	2,488,556	11.8	337,128	3,110,777	11.9	339,985	3,201,688
2030	2,935,583	8.5	249,525	2,483,502	11.8	346,399	3,104,460	11.9	349,334	3,195,186

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	14.3%	\$328,847	\$ 3,498,953	15.1%	\$347,244	\$ 3,582,871	16.8%	\$386,338	\$ 3,925,046
2022	2,362,869	14.3	337,890	3,532,517	15.1	356,793	3,617,240	16.8	396,962	3,962,698
2023	2,427,848	14.3	347,182	3,562,618	15.1	366,605	3,648,063	16.8	407,878	3,996,465
2024	2,494,614	14.3	356,730	3,588,854	15.1	376,687	3,674,928	16.8	419,095	4,025,896
2025	2,563,216	14.3	366,540	3,610,790	15.1	387,046	3,697,390	16.8	430,620	4,050,503
2026	2,633,704	14.3	376,620	3,627,956	15.1	397,689	3,714,968	16.8	442,462	4,069,760
2027	2,706,131	14.3	386,977	3,639,845	15.1	408,626	3,727,142	16.8	454,630	4,083,097
2028	2,780,550	14.3	397,619	3,645,909	15.1	419,863	3,733,352	16.8	467,132	4,089,900
2029	2,857,015	14.3	408,553	3,645,558	15.1	431,409	3,732,993	16.8	479,979	4,089,506
2030	2,935,583	14.3	419,788	3,638,154	15.1	443,273	3,725,412	16.8	493,178	4,081,201

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 2,299,629	18.4%	\$423,132	\$ 4,179,982	19.2%	\$441,529	\$ 4,351,064	21.6%	\$496,720	\$ 4,777,130
2022	2,362,869	18.4	434,768	4,220,079	19.2	453,671	4,392,802	21.6	510,380	4,822,955
2023	2,427,848	18.4	446,724	4,256,039	19.2	466,147	4,430,234	21.6	524,415	4,864,052
2024	2,494,614	18.4	459,009	4,287,381	19.2	478,966	4,462,859	21.6	538,837	4,899,872
2025	2,563,216	18.4	471,632	4,313,586	19.2	492,137	4,490,137	21.6	553,655	4,929,821
2026	2,633,704	18.4	484,602	4,334,094	19.2	505,671	4,511,484	21.6	568,880	4,953,258
2027	2,706,131	18.4	497,928	4,348,297	19.2	519,577	4,526,268	21.6	584,524	4,969,490
2028	2,780,550	18.4	511,621	4,355,542	19.2	533,866	4,533,809	21.6	600,599	4,977,770
2029	2,857,015	18.4	525,691	4,355,123	19.2	548,547	4,533,373	21.6	617,115	4,977,291
2030	2,935,583	18.4	540,147	4,346,278	19.2	563,632	4,524,166	21.6	634,086	4,967,183

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.
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