



The Initial Valuation For
City of Oronogo
as of November 30, 2021



Table of Contents

	Page
Actuary's Certification Letter	1
Alternate Plans Available	3
Employer Contribution Rates	
Regular Eligibility:	
5-Year Final Average Salary	4
3-Year Final Average Salary	5
Rule of 80 Eligibility:	
5-Year Final Average Salary	6
3-Year Final Average Salary	7
Employer Contribution Dollars	8
Appendix I	
Unfunded Actuarial Accrued Liability	11
Appendix II	
Summary of Financial Assumptions	13
Appendix III	
Summary of LAGERS Provisions	17
Appendix IV	
Benefit Illustrations.....	20
Appendix V	
Age and Service Characteristics of Employees	29
Appendix VI	
Risk Commentary.....	31



December 21, 2021

City of Oronogo
Oronogo, 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 November 30, 2021. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

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

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita 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 Oronogo

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%	4.80%	11.50%	9.60%	7.70%	5.80%
	Police	7.40	0.40	2.40	10.20	8.30	6.40	4.50
L-3	General	7.90	0.30	6.00	14.20	12.30	10.40	8.50
	Police	9.00	0.50	2.90	12.40	10.50	8.60	6.70
LT-4(65)	General	7.20	0.20	5.40	12.80	10.90	9.00	7.10
	Police	8.80	0.40	2.90	12.10	10.20	8.30	6.40
LT-5(65)	General	8.40	0.30	6.40	15.10	13.20	11.30	9.40
	Police	10.00	0.50	3.40	13.90	12.00	10.10	8.20
L-7	General	9.30	0.30	7.20	16.80	14.90	13.00	11.10
	Police	10.60	0.60	3.50	14.70	12.80	10.90	9.00
LT-8(65)	General	9.70	0.30	7.50	17.50	15.60	13.70	11.80
	Police	11.30	0.60	3.80	15.70	13.80	11.90	10.00
L-12	General	10.80	0.40	8.30	19.50	17.60	15.70	13.80
	Police	12.20	0.70	4.10	17.00	15.10	13.20	11.30
LT-14(65)	General	10.90	0.40	8.50	19.80	17.90	16.00	14.10
	Police	12.60	0.70	4.30	17.60	15.70	13.80	11.90
L-6	General	12.20	0.50	9.50	22.20	20.30	18.40	16.50
	Police	13.80	0.80	4.70	19.30	17.40	15.50	13.60

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

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

City of Oronogo

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%	4.90%	11.80%	9.90%	8.00%	6.10%
	Police	7.60	0.40	2.40	10.40	8.50	6.60	4.70
L-3	General	8.20	0.30	6.20	14.70	12.80	10.90	9.00
	Police	9.30	0.50	3.10	12.90	11.00	9.10	7.20
LT-4(65)	General	7.40	0.20	5.60	13.20	11.30	9.40	7.50
	Police	9.10	0.40	3.10	12.60	10.70	8.80	6.90
LT-5(65)	General	8.70	0.30	6.70	15.70	13.80	11.90	10.00
	Police	10.40	0.50	3.50	14.40	12.50	10.60	8.70
L-7	General	9.60	0.30	7.40	17.30	15.40	13.50	11.60
	Police	11.00	0.60	3.70	15.30	13.40	11.50	9.60
LT-8(65)	General	10.00	0.30	7.70	18.00	16.10	14.20	12.30
	Police	11.70	0.60	4.00	16.30	14.40	12.50	10.60
L-12	General	11.10	0.40	8.60	20.10	18.20	16.30	14.40
	Police	12.60	0.70	4.30	17.60	15.70	13.80	11.90
LT-14(65)	General	11.30	0.40	8.80	20.50	18.60	16.70	14.80
	Police	13.00	0.70	4.40	18.10	16.20	14.30	12.40
L-6	General	12.60	0.50	9.90	23.00	21.10	19.20	17.30
	Police	14.30	0.80	4.90	20.00	18.10	16.20	14.30

* 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 Oronogo

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

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	7.00%	0.20%	5.30%	12.50%	10.60%	8.70%	6.80%
	Police	7.60	0.40	2.50	10.50	8.60	6.70	4.80
L-3	General	8.50	0.30	6.60	15.40	13.50	11.60	9.70
	Police	9.30	0.50	3.20	13.00	11.10	9.20	7.30
LT-4(65)	General	8.20	0.20	6.60	15.00	13.10	11.20	9.30
	Police	9.40	0.40	3.40	13.20	11.30	9.40	7.50
LT-5(65)	General	9.40	0.30	7.50	17.20	15.30	13.40	11.50
	Police	10.60	0.50	3.80	14.90	13.00	11.10	9.20
L-7	General	10.00	0.30	7.90	18.20	16.30	14.40	12.50
	Police	10.90	0.60	3.80	15.30	13.40	11.50	9.60
LT-8(65)	General	10.60	0.30	8.50	19.40	17.50	15.60	13.70
	Police	11.80	0.60	4.20	16.60	14.70	12.80	10.90
L-12	General	11.50	0.40	9.20	21.10	19.20	17.30	15.40
	Police	12.60	0.70	4.40	17.70	15.80	13.90	12.00
LT-14(65)	General	11.90	0.40	9.50	21.80	19.90	18.00	16.10
	Police	13.00	0.70	4.60	18.30	16.40	14.50	12.60
L-6	General	13.10	0.50	10.50	24.10	22.20	20.30	18.40
	Police	14.30	0.80	5.00	20.10	18.20	16.30	14.40

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

* 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 Oronogo

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	7.20%	0.20%	5.40%	12.80%	10.90%	9.00%	7.10%
	Police	7.80	0.40	2.60	10.80	8.90	7.00	5.10
L-3	General	8.80	0.30	6.80	15.90	14.00	12.10	10.20
	Police	9.60	0.50	3.30	13.40	11.50	9.60	7.70
LT-4(65)	General	8.50	0.20	6.80	15.50	13.60	11.70	9.80
	Police	9.70	0.40	3.50	13.60	11.70	9.80	7.90
LT-5(65)	General	9.70	0.30	7.80	17.80	15.90	14.00	12.10
	Police	10.90	0.50	3.90	15.30	13.40	11.50	9.60
L-7	General	10.30	0.30	8.20	18.80	16.90	15.00	13.10
	Police	11.30	0.60	3.90	15.80	13.90	12.00	10.10
LT-8(65)	General	11.00	0.30	8.80	20.10	18.20	16.30	14.40
	Police	12.20	0.60	4.40	17.20	15.30	13.40	11.50
L-12	General	11.90	0.40	9.50	21.80	19.90	18.00	16.10
	Police	13.00	0.70	4.60	18.30	16.40	14.50	12.60
LT-14(65)	General	12.20	0.40	9.90	22.50	20.60	18.70	16.80
	Police	13.50	0.70	4.80	19.00	17.10	15.20	13.30
L-6	General	13.50	0.50	10.90	24.90	23.00	21.10	19.20
	Police	14.80	0.80	5.20	20.80	18.90	17.00	15.10

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

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

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

City of Oronogo

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	\$ 28,919	\$ 24,141	\$ 19,363	\$ 14,585
L-3	35,709	30,931	26,153	21,375
LT-4(65)	32,189	27,411	22,633	17,855
LT-5(65)	37,972	33,194	28,416	23,638
L-7	42,247	37,469	32,691	27,914
LT-8(65)	44,008	39,230	34,452	29,674
L-12	49,037	44,259	39,481	34,703
LT-14(65)	49,792	45,014	40,236	35,458
L-6	55,827	51,049	46,271	41,493

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 29,674	\$ 24,896	\$ 20,118	\$ 15,340
L-3	36,967	32,189	27,411	22,633
LT-4(65)	33,194	28,416	23,638	18,860
LT-5(65)	39,481	34,703	29,925	25,147
L-7	43,505	38,727	33,949	29,171
LT-8(65)	45,265	40,487	35,709	30,931
L-12	50,546	45,768	40,990	36,212
LT-14(65)	51,552	46,774	41,996	37,218
L-6	57,839	53,061	48,283	43,505

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 31,434	\$ 26,656	\$ 21,878	\$ 17,100
L-3	38,727	33,949	29,171	24,393
LT-4(65)	37,721	32,943	28,165	23,387
LT-5(65)	43,253	38,475	33,697	28,919
L-7	45,768	40,990	36,212	31,434
LT-8(65)	48,786	44,008	39,230	34,452
L-12	53,061	48,283	43,505	38,727
LT-14(65)	54,821	50,043	45,265	40,487
L-6	60,605	55,827	51,049	46,271

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 32,189	\$ 27,411	\$ 22,633	\$ 17,855
L-3	39,984	35,206	30,428	25,650
LT-4(65)	38,978	34,200	29,422	24,644
LT-5(65)	44,762	39,984	35,206	30,428
L-7	47,277	42,499	37,721	32,943
LT-8(65)	50,546	45,768	40,990	36,212
L-12	54,821	50,043	45,265	40,487
LT-14(65)	56,581	51,803	47,025	42,247
L-6	62,617	57,839	53,061	48,283

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 Oronogo

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	\$ 21,137	\$ 17,200	\$ 13,263	\$ 9,325
L-3	25,696	21,759	17,822	13,884
LT-4(65)	25,075	21,137	17,200	13,263
LT-5(65)	28,805	24,867	20,930	16,993
L-7	30,462	26,525	22,588	18,651
LT-8(65)	32,535	28,597	24,660	20,723
L-12	35,229	31,291	27,354	23,417
LT-14(65)	36,472	32,535	28,597	24,660
L-6	39,995	36,058	32,120	28,183

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 21,552	\$ 17,614	\$ 13,677	\$ 9,740
L-3	26,732	22,795	18,858	14,920
LT-4(65)	26,111	22,173	18,236	14,299
LT-5(65)	29,841	25,903	21,966	18,029
L-7	31,706	27,769	23,831	19,894
LT-8(65)	33,778	29,841	25,903	21,966
L-12	36,472	32,535	28,597	24,660
LT-14(65)	37,508	33,571	29,634	25,696
L-6	41,446	37,508	33,571	29,634

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 21,759	\$ 17,822	\$ 13,884	\$ 9,947
L-3	26,940	23,002	19,065	15,128
LT-4(65)	27,354	23,417	19,479	15,542
LT-5(65)	30,877	26,940	23,002	19,065
L-7	31,706	27,769	23,831	19,894
LT-8(65)	34,400	30,462	26,525	22,588
L-12	36,679	32,742	28,805	24,867
LT-14(65)	37,923	33,985	30,048	26,111
L-6	41,653	37,715	33,778	29,841

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 22,381	\$ 18,443	\$ 14,506	\$ 10,569
L-3	27,769	23,831	19,894	15,957
LT-4(65)	28,183	24,246	20,308	16,371
LT-5(65)	31,706	27,769	23,831	19,894
L-7	32,742	28,805	24,867	20,930
LT-8(65)	35,643	31,706	27,769	23,831
L-12	37,923	33,985	30,048	26,111
LT-14(65)	39,373	35,436	31,499	27,561
L-6	43,103	39,166	35,229	31,291

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 Oronogo

Employees and Payroll Included in the Valuation

	General	Police
Number of Employees	6	6
Annual Payroll	\$ 251,473	\$ 207,228

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 Oronogo

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 205,401	\$ 212,242
	Police	83,687	86,725
L-3	General	256,747	265,274
	Police	104,564	108,423
LT-4(65)	General	232,826	240,615
	Police	104,678	108,456
LT-5(65)	General	277,351	286,575
	Police	120,307	124,742
L-7	General	308,105	318,341
	Police	125,504	130,091
LT-8(65)	General	321,835	332,558
	Police	136,005	140,951
L-12	General	359,440	371,391
	Police	146,416	151,744
LT-14(65)	General	366,318	378,487
	Police	151,659	157,187
L-6	General	410,802	424,455
	Police	167,342	173,434

City of Oronogo

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	\$ 226,901	\$ 234,679
	Police	89,562	92,882
L-3	General	283,636	293,369
	Police	111,913	116,149
LT-4(65)	General	282,286	292,055
	Police	119,704	124,153
LT-5(65)	General	325,175	336,393
	Police	134,521	139,603
L-7	General	340,375	352,058
	Police	134,310	139,370
LT-8(65)	General	368,069	380,720
	Police	149,386	155,013
L-12	General	397,089	410,730
	Police	156,705	162,596
LT-14(65)	General	410,930	425,039
	Police	164,244	170,411
L-6	General	453,805	469,404
	Police	179,081	185,805

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

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

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

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

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Concluded)

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

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System

Brief Summary of LAGERS

Benefits and Conditions Evaluated and/or Considered as of February 28, 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 $\frac{1}{2}$ 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% 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 Oronogo - General

November 30, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29	1							1	\$ 45,760
30-34	1							1	\$ 32,781
35-39									
40-44	1							1	\$ 28,080
45-49			1	1				2	\$ 113,818
50-54									
55-59			1					1	\$ 31,034
60-64									
65-69									
70 & Over									
Totals	3		2	1				6	\$ 251,473

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

Age: 41.8 years.

Benefit Service: 7.2 years.

Annual Pay: \$41,912.

City of Oronogo - Police

November 30, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24	1							1	\$ 27,560
25-29	2							2	\$ 58,760
30-34									
35-39			1					1	\$ 38,229
40-44		1						1	\$ 34,549
45-49									
50-54	1							1	\$ 48,130
55-59									
60-64									
65-69									
70 & Over									
Totals	4	1	1					6	\$ 207,228

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

Age: 34.3 years.

Benefit Service: 4.1 years.

Annual Pay: \$34,538.

APPENDIX VI

RISK COMMENTARY

Risk Commentary

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

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

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

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

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

The computed contribution rates shown on pages 4 thru 7 may be considered as a minimum contribution rate for the selected benefit provisions that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Risk Commentary (Concluded)

PLAN MATURITY MEASURES

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

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

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

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

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

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

DURATION OF ACTUARIAL ACCRUED LIABILITY

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

ADDITIONAL RISK ASSESSMENT

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



December 21, 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 November 30, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Oronogo

Sincerely,

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp



December 21, 2021

City of Oronogo
Oronogo, 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 November 30, 2021 Initial Valuation for the City of Oronogo dated December 21, 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 fluid and cursive, with the first name "Mita" and last name "Drazilov" clearly distinguishable.

Mita D. Drazilov, ASA, FCA, MAAA

City of Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	11.5%	\$28,919	\$ 205,401	14.2%	\$35,709	\$ 256,747	12.8%	\$32,189	\$ 232,826
2022	258,389	11.5	29,715	207,371	14.2	36,691	259,210	12.8	33,074	235,059
2023	265,495	11.5	30,532	209,138	14.2	37,700	261,419	12.8	33,983	237,062
2024	272,796	11.5	31,372	210,678	14.2	38,737	263,344	12.8	34,918	238,808
2025	280,298	11.5	32,234	211,966	14.2	39,802	264,954	12.8	35,878	240,268
2026	288,006	11.5	33,121	212,974	14.2	40,897	266,214	12.8	36,865	241,410
2027	295,926	11.5	34,031	213,672	14.2	42,021	267,086	12.8	37,879	242,201
2028	304,064	11.5	34,967	214,028	14.2	43,177	267,531	12.8	38,920	242,605
2029	312,426	11.5	35,929	214,007	14.2	44,364	267,505	12.8	39,991	242,582
2030	321,018	11.5	36,917	213,572	14.2	45,585	266,962	12.8	41,090	242,089

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	15.1%	\$37,972	\$ 277,351	16.8%	\$42,247	\$ 308,105	17.5%	\$44,008	\$ 321,835
2022	258,389	15.1	39,017	280,012	16.8	43,409	311,061	17.5	45,218	324,922
2023	265,495	15.1	40,090	282,398	16.8	44,603	313,712	17.5	46,462	327,691
2024	272,796	15.1	41,192	284,478	16.8	45,830	316,022	17.5	47,739	330,104
2025	280,298	15.1	42,325	286,217	16.8	47,090	317,954	17.5	49,052	332,122
2026	288,006	15.1	43,489	287,578	16.8	48,385	319,466	17.5	50,401	333,701
2027	295,926	15.1	44,685	288,520	16.8	49,716	320,513	17.5	51,787	334,795
2028	304,064	15.1	45,914	289,001	16.8	51,083	321,047	17.5	53,211	335,353
2029	312,426	15.1	47,176	288,973	16.8	52,488	321,016	17.5	54,675	335,321
2030	321,018	15.1	48,474	288,386	16.8	53,931	320,364	17.5	56,178	334,640

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	19.5%	\$49,037	\$ 359,440	19.8%	\$49,792	\$ 366,318	22.2%	\$55,827	\$ 410,802
2022	258,389	19.5	50,386	362,888	19.8	51,161	369,832	22.2	57,362	414,743
2023	265,495	19.5	51,772	365,980	19.8	52,568	372,983	22.2	58,940	418,277
2024	272,796	19.5	53,195	368,675	19.8	54,014	375,730	22.2	60,561	421,357
2025	280,298	19.5	54,658	370,928	19.8	55,499	378,027	22.2	62,226	423,932
2026	288,006	19.5	56,161	372,691	19.8	57,025	379,824	22.2	63,937	425,947
2027	295,926	19.5	57,706	373,912	19.8	58,593	381,069	22.2	65,696	427,343
2028	304,064	19.5	59,292	374,535	19.8	60,205	381,704	22.2	67,502	428,055
2029	312,426	19.5	60,923	374,499	19.8	61,860	381,667	22.2	69,359	428,014
2030	321,018	19.5	62,599	373,738	19.8	63,562	380,892	22.2	71,266	427,145

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	9.6%	\$24,141	\$ 205,401	12.3%	\$30,931	\$ 256,747	10.9%	\$27,411	\$ 232,826
2022	258,389	9.6	24,805	207,371	12.3	31,782	259,210	10.9	28,164	235,059
2023	265,495	9.6	25,488	209,138	12.3	32,656	261,419	10.9	28,939	237,062
2024	272,796	9.6	26,188	210,678	12.3	33,554	263,344	10.9	29,735	238,808
2025	280,298	9.6	26,909	211,966	12.3	34,477	264,954	10.9	30,552	240,268
2026	288,006	9.6	27,649	212,974	12.3	35,425	266,214	10.9	31,393	241,410
2027	295,926	9.6	28,409	213,672	12.3	36,399	267,086	10.9	32,256	242,201
2028	304,064	9.6	29,190	214,028	12.3	37,400	267,531	10.9	33,143	242,605
2029	312,426	9.6	29,993	214,007	12.3	38,428	267,505	10.9	34,054	242,582
2030	321,018	9.6	30,818	213,572	12.3	39,485	266,962	10.9	34,991	242,089

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	13.2%	\$33,194	\$ 277,351	14.9%	\$37,469	\$ 308,105	15.6%	\$39,230	\$ 321,835
2022	258,389	13.2	34,107	280,012	14.9	38,500	311,061	15.6	40,309	324,922
2023	265,495	13.2	35,045	282,398	14.9	39,559	313,712	15.6	41,417	327,691
2024	272,796	13.2	36,009	284,478	14.9	40,647	316,022	15.6	42,556	330,104
2025	280,298	13.2	36,999	286,217	14.9	41,764	317,954	15.6	43,726	332,122
2026	288,006	13.2	38,017	287,578	14.9	42,913	319,466	15.6	44,929	333,701
2027	295,926	13.2	39,062	288,520	14.9	44,093	320,513	15.6	46,164	334,795
2028	304,064	13.2	40,136	289,001	14.9	45,306	321,047	15.6	47,434	335,353
2029	312,426	13.2	41,240	288,973	14.9	46,551	321,016	15.6	48,738	335,321
2030	321,018	13.2	42,374	288,386	14.9	47,832	320,364	15.6	50,079	334,640

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	17.6%	\$44,259	\$ 359,440	17.9%	\$45,014	\$ 366,318	20.3%	\$51,049	\$ 410,802
2022	258,389	17.6	45,476	362,888	17.9	46,252	369,832	20.3	52,453	414,743
2023	265,495	17.6	46,727	365,980	17.9	47,524	372,983	20.3	53,895	418,277
2024	272,796	17.6	48,012	368,675	17.9	48,830	375,730	20.3	55,378	421,357
2025	280,298	17.6	49,332	370,928	17.9	50,173	378,027	20.3	56,900	423,932
2026	288,006	17.6	50,689	372,691	17.9	51,553	379,824	20.3	58,465	425,947
2027	295,926	17.6	52,083	373,912	17.9	52,971	381,069	20.3	60,073	427,343
2028	304,064	17.6	53,515	374,535	17.9	54,427	381,704	20.3	61,725	428,055
2029	312,426	17.6	54,987	374,499	17.9	55,924	381,667	20.3	63,422	428,014
2030	321,018	17.6	56,499	373,738	17.9	57,462	380,892	20.3	65,167	427,145

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	7.7%	\$19,363	\$ 205,401	10.4%	\$26,153	\$ 256,747	9.0%	\$22,633	\$ 232,826
2022	258,389	7.7	19,896	207,371	10.4	26,872	259,210	9.0	23,255	235,059
2023	265,495	7.7	20,443	209,138	10.4	27,611	261,419	9.0	23,895	237,062
2024	272,796	7.7	21,005	210,678	10.4	28,371	263,344	9.0	24,552	238,808
2025	280,298	7.7	21,583	211,966	10.4	29,151	264,954	9.0	25,227	240,268
2026	288,006	7.7	22,176	212,974	10.4	29,953	266,214	9.0	25,921	241,410
2027	295,926	7.7	22,786	213,672	10.4	30,776	267,086	9.0	26,633	242,201
2028	304,064	7.7	23,413	214,028	10.4	31,623	267,531	9.0	27,366	242,605
2029	312,426	7.7	24,057	214,007	10.4	32,492	267,505	9.0	28,118	242,582
2030	321,018	7.7	24,718	213,572	10.4	33,386	266,962	9.0	28,892	242,089

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	11.3%	\$28,416	\$ 277,351	13.0%	\$32,691	\$ 308,105	13.7%	\$34,452	\$ 321,835
2022	258,389	11.3	29,198	280,012	13.0	33,591	311,061	13.7	35,399	324,922
2023	265,495	11.3	30,001	282,398	13.0	34,514	313,712	13.7	36,373	327,691
2024	272,796	11.3	30,826	284,478	13.0	35,463	316,022	13.7	37,373	330,104
2025	280,298	11.3	31,674	286,217	13.0	36,439	317,954	13.7	38,401	332,122
2026	288,006	11.3	32,545	287,578	13.0	37,441	319,466	13.7	39,457	333,701
2027	295,926	11.3	33,440	288,520	13.0	38,470	320,513	13.7	40,542	334,795
2028	304,064	11.3	34,359	289,001	13.0	39,528	321,047	13.7	41,657	335,353
2029	312,426	11.3	35,304	288,973	13.0	40,615	321,016	13.7	42,802	335,321
2030	321,018	11.3	36,275	288,386	13.0	41,732	320,364	13.7	43,979	334,640

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	15.7%	\$39,481	\$ 359,440	16.0%	\$40,236	\$ 366,318	18.4%	\$46,271	\$ 410,802
2022	258,389	15.7	40,567	362,888	16.0	41,342	369,832	18.4	47,544	414,743
2023	265,495	15.7	41,683	365,980	16.0	42,479	372,983	18.4	48,851	418,277
2024	272,796	15.7	42,829	368,675	16.0	43,647	375,730	18.4	50,194	421,357
2025	280,298	15.7	44,007	370,928	16.0	44,848	378,027	18.4	51,575	423,932
2026	288,006	15.7	45,217	372,691	16.0	46,081	379,824	18.4	52,993	425,947
2027	295,926	15.7	46,460	373,912	16.0	47,348	381,069	18.4	54,450	427,343
2028	304,064	15.7	47,738	374,535	16.0	48,650	381,704	18.4	55,948	428,055
2029	312,426	15.7	49,051	374,499	16.0	49,988	381,667	18.4	57,486	428,014
2030	321,018	15.7	50,400	373,738	16.0	51,363	380,892	18.4	59,067	427,145

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	5.8%	\$14,585	\$ 205,401	8.5%	\$21,375	\$ 256,747	7.1%	\$17,855	\$ 232,826
2022	258,389	5.8	14,987	207,371	8.5	21,963	259,210	7.1	18,346	235,059
2023	265,495	5.8	15,399	209,138	8.5	22,567	261,419	7.1	18,850	237,062
2024	272,796	5.8	15,822	210,678	8.5	23,188	263,344	7.1	19,369	238,808
2025	280,298	5.8	16,257	211,966	8.5	23,825	264,954	7.1	19,901	240,268
2026	288,006	5.8	16,704	212,974	8.5	24,481	266,214	7.1	20,448	241,410
2027	295,926	5.8	17,164	213,672	8.5	25,154	267,086	7.1	21,011	242,201
2028	304,064	5.8	17,636	214,028	8.5	25,845	267,531	7.1	21,589	242,605
2029	312,426	5.8	18,121	214,007	8.5	26,556	267,505	7.1	22,182	242,582
2030	321,018	5.8	18,619	213,572	8.5	27,287	266,962	7.1	22,792	242,089

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	9.4%	\$23,638	\$ 277,351	11.1%	\$27,914	\$ 308,105	11.8%	\$29,674	\$ 321,835
2022	258,389	9.4	24,289	280,012	11.1	28,681	311,061	11.8	30,490	324,922
2023	265,495	9.4	24,957	282,398	11.1	29,470	313,712	11.8	31,328	327,691
2024	272,796	9.4	25,643	284,478	11.1	30,280	316,022	11.8	32,190	330,104
2025	280,298	9.4	26,348	286,217	11.1	31,113	317,954	11.8	33,075	332,122
2026	288,006	9.4	27,073	287,578	11.1	31,969	319,466	11.8	33,985	333,701
2027	295,926	9.4	27,817	288,520	11.1	32,848	320,513	11.8	34,919	334,795
2028	304,064	9.4	28,582	289,001	11.1	33,751	321,047	11.8	35,880	335,353
2029	312,426	9.4	29,368	288,973	11.1	34,679	321,016	11.8	36,866	335,321
2030	321,018	9.4	30,176	288,386	11.1	35,633	320,364	11.8	37,880	334,640

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	13.8%	\$34,703	\$ 359,440	14.1%	\$35,458	\$ 366,318	16.5%	\$41,493	\$ 410,802
2022	258,389	13.8	35,658	362,888	14.1	36,433	369,832	16.5	42,634	414,743
2023	265,495	13.8	36,638	365,980	14.1	37,435	372,983	16.5	43,807	418,277
2024	272,796	13.8	37,646	368,675	14.1	38,464	375,730	16.5	45,011	421,357
2025	280,298	13.8	38,681	370,928	14.1	39,522	378,027	16.5	46,249	423,932
2026	288,006	13.8	39,745	372,691	14.1	40,609	379,824	16.5	47,521	425,947
2027	295,926	13.8	40,838	373,912	14.1	41,726	381,069	16.5	48,828	427,343
2028	304,064	13.8	41,961	374,535	14.1	42,873	381,704	16.5	50,171	428,055
2029	312,426	13.8	43,115	374,499	14.1	44,052	381,667	16.5	51,550	428,014
2030	321,018	13.8	44,300	373,738	14.1	45,264	380,892	16.5	52,968	427,145

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 Oronogo - 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	\$ 251,473	11.8%	\$29,674	\$ 212,242	14.7%	\$36,967	\$ 265,274	13.2%	\$33,194	\$ 240,615
2022	258,389	11.8	30,490	214,278	14.7	37,983	267,819	13.2	34,107	242,923
2023	265,495	11.8	31,328	216,104	14.7	39,028	270,101	13.2	35,045	244,993
2024	272,796	11.8	32,190	217,695	14.7	40,101	272,090	13.2	36,009	246,797
2025	280,298	11.8	33,075	219,026	14.7	41,204	273,753	13.2	36,999	248,305
2026	288,006	11.8	33,985	220,067	14.7	42,337	275,054	13.2	38,017	249,485
2027	295,926	11.8	34,919	220,788	14.7	43,501	275,955	13.2	39,062	250,303
2028	304,064	11.8	35,880	221,156	14.7	44,697	276,415	13.2	40,136	250,720
2029	312,426	11.8	36,866	221,135	14.7	45,927	276,388	13.2	41,240	250,696
2030	321,018	11.8	37,880	220,686	14.7	47,190	275,827	13.2	42,374	250,187

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	\$ 251,473	15.7%	\$39,481	\$ 286,575	17.3%	\$43,505	\$ 318,341	18.0%	\$45,265	\$ 332,558
2022	258,389	15.7	40,567	289,324	17.3	44,701	321,395	18.0	46,510	335,748
2023	265,495	15.7	41,683	291,789	17.3	45,931	324,134	18.0	47,789	338,609
2024	272,796	15.7	42,829	293,938	17.3	47,194	326,521	18.0	49,103	341,103
2025	280,298	15.7	44,007	295,735	17.3	48,492	328,517	18.0	50,454	343,188
2026	288,006	15.7	45,217	297,141	17.3	49,825	330,079	18.0	51,841	344,820
2027	295,926	15.7	46,460	298,115	17.3	51,195	331,161	18.0	53,267	345,950
2028	304,064	15.7	47,738	298,612	17.3	52,603	331,713	18.0	54,732	346,526
2029	312,426	15.7	49,051	298,583	17.3	54,050	331,681	18.0	56,237	346,493
2030	321,018	15.7	50,400	297,977	17.3	55,536	331,007	18.0	57,783	345,789

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	\$ 251,473	20.1%	\$50,546	\$ 371,391	20.5%	\$51,552	\$ 378,487	23.0%	\$57,839	\$ 424,455
2022	258,389	20.1	51,936	374,954	20.5	52,970	382,118	23.0	59,429	428,527
2023	265,495	20.1	53,364	378,149	20.5	54,426	385,374	23.0	61,064	432,179
2024	272,796	20.1	54,832	380,934	20.5	55,923	388,212	23.0	62,743	435,362
2025	280,298	20.1	56,340	383,262	20.5	57,461	390,585	23.0	64,469	438,023
2026	288,006	20.1	57,889	385,084	20.5	59,041	392,442	23.0	66,241	440,105
2027	295,926	20.1	59,481	386,346	20.5	60,665	393,728	23.0	68,063	441,547
2028	304,064	20.1	61,117	386,990	20.5	62,333	394,384	23.0	69,935	442,283
2029	312,426	20.1	62,798	386,953	20.5	64,047	394,346	23.0	71,858	442,240
2030	321,018	20.1	64,525	386,167	20.5	65,809	393,545	23.0	73,834	441,342

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	9.9%	\$24,896	\$ 212,242	12.8%	\$32,189	\$ 265,274	11.3%	\$28,416	\$ 240,615
2022	258,389	9.9	25,581	214,278	12.8	33,074	267,819	11.3	29,198	242,923
2023	265,495	9.9	26,284	216,104	12.8	33,983	270,101	11.3	30,001	244,993
2024	272,796	9.9	27,007	217,695	12.8	34,918	272,090	11.3	30,826	246,797
2025	280,298	9.9	27,750	219,026	12.8	35,878	273,753	11.3	31,674	248,305
2026	288,006	9.9	28,513	220,067	12.8	36,865	275,054	11.3	32,545	249,485
2027	295,926	9.9	29,297	220,788	12.8	37,879	275,955	11.3	33,440	250,303
2028	304,064	9.9	30,102	221,156	12.8	38,920	276,415	11.3	34,359	250,720
2029	312,426	9.9	30,930	221,135	12.8	39,991	276,388	11.3	35,304	250,696
2030	321,018	9.9	31,781	220,686	12.8	41,090	275,827	11.3	36,275	250,187

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	13.8%	\$34,703	\$ 286,575	15.4%	\$38,727	\$ 318,341	16.1%	\$40,487	\$ 332,558
2022	258,389	13.8	35,658	289,324	15.4	39,792	321,395	16.1	41,601	335,748
2023	265,495	13.8	36,638	291,789	15.4	40,886	324,134	16.1	42,745	338,609
2024	272,796	13.8	37,646	293,938	15.4	42,011	326,521	16.1	43,920	341,103
2025	280,298	13.8	38,681	295,735	15.4	43,166	328,517	16.1	45,128	343,188
2026	288,006	13.8	39,745	297,141	15.4	44,353	330,079	16.1	46,369	344,820
2027	295,926	13.8	40,838	298,115	15.4	45,573	331,161	16.1	47,644	345,950
2028	304,064	13.8	41,961	298,612	15.4	46,826	331,713	16.1	48,954	346,526
2029	312,426	13.8	43,115	298,583	15.4	48,114	331,681	16.1	50,301	346,493
2030	321,018	13.8	44,300	297,977	15.4	49,437	331,007	16.1	51,684	345,789

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	18.2%	\$45,768	\$ 371,391	18.6%	\$46,774	\$ 378,487	21.1%	\$53,061	\$ 424,455
2022	258,389	18.2	47,027	374,954	18.6	48,060	382,118	21.1	54,520	428,527
2023	265,495	18.2	48,320	378,149	18.6	49,382	385,374	21.1	56,019	432,179
2024	272,796	18.2	49,649	380,934	18.6	50,740	388,212	21.1	57,560	435,362
2025	280,298	18.2	51,014	383,262	18.6	52,135	390,585	21.1	59,143	438,023
2026	288,006	18.2	52,417	385,084	18.6	53,569	392,442	21.1	60,769	440,105
2027	295,926	18.2	53,859	386,346	18.6	55,042	393,728	21.1	62,440	441,547
2028	304,064	18.2	55,340	386,990	18.6	56,556	394,384	21.1	64,158	442,283
2029	312,426	18.2	56,862	386,953	18.6	58,111	394,346	21.1	65,922	442,240
2030	321,018	18.2	58,425	386,167	18.6	59,709	393,545	21.1	67,735	441,342

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	8.0%	\$20,118	\$ 212,242	10.9%	\$27,411	\$ 265,274	9.4%	\$23,638	\$ 240,615
2022	258,389	8.0	20,671	214,278	10.9	28,164	267,819	9.4	24,289	242,923
2023	265,495	8.0	21,240	216,104	10.9	28,939	270,101	9.4	24,957	244,993
2024	272,796	8.0	21,824	217,695	10.9	29,735	272,090	9.4	25,643	246,797
2025	280,298	8.0	22,424	219,026	10.9	30,552	273,753	9.4	26,348	248,305
2026	288,006	8.0	23,040	220,067	10.9	31,393	275,054	9.4	27,073	249,485
2027	295,926	8.0	23,674	220,788	10.9	32,256	275,955	9.4	27,817	250,303
2028	304,064	8.0	24,325	221,156	10.9	33,143	276,415	9.4	28,582	250,720
2029	312,426	8.0	24,994	221,135	10.9	34,054	276,388	9.4	29,368	250,696
2030	321,018	8.0	25,681	220,686	10.9	34,991	275,827	9.4	30,176	250,187

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	11.9%	\$29,925	\$ 286,575	13.5%	\$33,949	\$ 318,341	14.2%	\$35,709	\$ 332,558
2022	258,389	11.9	30,748	289,324	13.5	34,883	321,395	14.2	36,691	335,748
2023	265,495	11.9	31,594	291,789	13.5	35,842	324,134	14.2	37,700	338,609
2024	272,796	11.9	32,463	293,938	13.5	36,827	326,521	14.2	38,737	341,103
2025	280,298	11.9	33,355	295,735	13.5	37,840	328,517	14.2	39,802	343,188
2026	288,006	11.9	34,273	297,141	13.5	38,881	330,079	14.2	40,897	344,820
2027	295,926	11.9	35,215	298,115	13.5	39,950	331,161	14.2	42,021	345,950
2028	304,064	11.9	36,184	298,612	13.5	41,049	331,713	14.2	43,177	346,526
2029	312,426	11.9	37,179	298,583	13.5	42,178	331,681	14.2	44,364	346,493
2030	321,018	11.9	38,201	297,977	13.5	43,337	331,007	14.2	45,585	345,789

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	16.3%	\$40,990	\$ 371,391	16.7%	\$41,996	\$ 378,487	19.2%	\$48,283	\$ 424,455
2022	258,389	16.3	42,117	374,954	16.7	43,151	382,118	19.2	49,611	428,527
2023	265,495	16.3	43,276	378,149	16.7	44,338	385,374	19.2	50,975	432,179
2024	272,796	16.3	44,466	380,934	16.7	45,557	388,212	19.2	52,377	435,362
2025	280,298	16.3	45,689	383,262	16.7	46,810	390,585	19.2	53,817	438,023
2026	288,006	16.3	46,945	385,084	16.7	48,097	392,442	19.2	55,297	440,105
2027	295,926	16.3	48,236	386,346	16.7	49,420	393,728	19.2	56,818	441,547
2028	304,064	16.3	49,562	386,990	16.7	50,779	394,384	19.2	58,380	442,283
2029	312,426	16.3	50,925	386,953	16.7	52,175	394,346	19.2	59,986	442,240
2030	321,018	16.3	52,326	386,167	16.7	53,610	393,545	19.2	61,635	441,342

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 Oronogo - 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	\$ 251,473	6.1%	\$15,340	\$ 212,242	9.0%	\$22,633	\$ 265,274	7.5%	\$18,860	\$ 240,615
2022	258,389	6.1	15,762	214,278	9.0	23,255	267,819	7.5	19,379	242,923
2023	265,495	6.1	16,195	216,104	9.0	23,895	270,101	7.5	19,912	244,993
2024	272,796	6.1	16,641	217,695	9.0	24,552	272,090	7.5	20,460	246,797
2025	280,298	6.1	17,098	219,026	9.0	25,227	273,753	7.5	21,022	248,305
2026	288,006	6.1	17,568	220,067	9.0	25,921	275,054	7.5	21,600	249,485
2027	295,926	6.1	18,051	220,788	9.0	26,633	275,955	7.5	22,194	250,303
2028	304,064	6.1	18,548	221,156	9.0	27,366	276,415	7.5	22,805	250,720
2029	312,426	6.1	19,058	221,135	9.0	28,118	276,388	7.5	23,432	250,696
2030	321,018	6.1	19,582	220,686	9.0	28,892	275,827	7.5	24,076	250,187

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	\$ 251,473	10.0%	\$25,147	\$ 286,575	11.6%	\$29,171	\$ 318,341	12.3%	\$30,931	\$ 332,558
2022	258,389	10.0	25,839	289,324	11.6	29,973	321,395	12.3	31,782	335,748
2023	265,495	10.0	26,550	291,789	11.6	30,797	324,134	12.3	32,656	338,609
2024	272,796	10.0	27,280	293,938	11.6	31,644	326,521	12.3	33,554	341,103
2025	280,298	10.0	28,030	295,735	11.6	32,515	328,517	12.3	34,477	343,188
2026	288,006	10.0	28,801	297,141	11.6	33,409	330,079	12.3	35,425	344,820
2027	295,926	10.0	29,593	298,115	11.6	34,327	331,161	12.3	36,399	345,950
2028	304,064	10.0	30,406	298,612	11.6	35,271	331,713	12.3	37,400	346,526
2029	312,426	10.0	31,243	298,583	11.6	36,241	331,681	12.3	38,428	346,493
2030	321,018	10.0	32,102	297,977	11.6	37,238	331,007	12.3	39,485	345,789

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	\$ 251,473	14.4%	\$36,212	\$ 371,391	14.8%	\$37,218	\$ 378,487	17.3%	\$43,505	\$ 424,455
2022	258,389	14.4	37,208	374,954	14.8	38,242	382,118	17.3	44,701	428,527
2023	265,495	14.4	38,231	378,149	14.8	39,293	385,374	17.3	45,931	432,179
2024	272,796	14.4	39,283	380,934	14.8	40,374	388,212	17.3	47,194	435,362
2025	280,298	14.4	40,363	383,262	14.8	41,484	390,585	17.3	48,492	438,023
2026	288,006	14.4	41,473	385,084	14.8	42,625	392,442	17.3	49,825	440,105
2027	295,926	14.4	42,613	386,346	14.8	43,797	393,728	17.3	51,195	441,547
2028	304,064	14.4	43,785	386,990	14.8	45,001	394,384	17.3	52,603	442,283
2029	312,426	14.4	44,989	386,953	14.8	46,239	394,346	17.3	54,050	442,240
2030	321,018	14.4	46,227	386,167	14.8	47,511	393,545	17.3	55,536	441,342

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	12.5%	\$31,434	\$ 226,901	15.4%	\$38,727	\$ 283,636	15.0%	\$37,721	\$ 282,286
2022	258,389	12.5	32,299	229,078	15.4	39,792	286,357	15.0	38,758	284,994
2023	265,495	12.5	33,187	231,030	15.4	40,886	288,797	15.0	39,824	287,422
2024	272,796	12.5	34,100	232,731	15.4	42,011	290,924	15.0	40,919	289,539
2025	280,298	12.5	35,037	234,154	15.4	43,166	292,702	15.0	42,045	291,309
2026	288,006	12.5	36,001	235,267	15.4	44,353	294,094	15.0	43,201	292,694
2027	295,926	12.5	36,991	236,038	15.4	45,573	295,058	15.0	44,389	293,653
2028	304,064	12.5	38,008	236,431	15.4	46,826	295,550	15.0	45,610	294,142
2029	312,426	12.5	39,053	236,408	15.4	48,114	295,522	15.0	46,864	294,114
2030	321,018	12.5	40,127	235,928	15.4	49,437	294,922	15.0	48,153	293,517

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	17.2%	\$43,253	\$ 325,175	18.2%	\$45,768	\$ 340,375	19.4%	\$48,786	\$ 368,069
2022	258,389	17.2	44,443	328,294	18.2	47,027	343,640	19.4	50,127	371,600
2023	265,495	17.2	45,665	331,091	18.2	48,320	346,568	19.4	51,506	374,766
2024	272,796	17.2	46,921	333,529	18.2	49,649	349,120	19.4	52,922	377,526
2025	280,298	17.2	48,211	335,568	18.2	51,014	351,254	19.4	54,378	379,834
2026	288,006	17.2	49,537	337,163	18.2	52,417	352,924	19.4	55,873	381,640
2027	295,926	17.2	50,899	338,268	18.2	53,859	354,081	19.4	57,410	382,891
2028	304,064	17.2	52,299	338,832	18.2	55,340	354,671	19.4	58,988	383,529
2029	312,426	17.2	53,737	338,799	18.2	56,862	354,637	19.4	60,611	383,492
2030	321,018	17.2	55,215	338,111	18.2	58,425	353,917	19.4	62,277	382,713

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	21.1%	\$53,061	\$ 397,089	21.8%	\$54,821	\$ 410,930	24.1%	\$60,605	\$ 453,805
2022	258,389	21.1	54,520	400,898	21.8	56,329	414,872	24.1	62,272	458,158
2023	265,495	21.1	56,019	404,314	21.8	57,878	418,407	24.1	63,984	462,062
2024	272,796	21.1	57,560	407,291	21.8	59,470	421,488	24.1	65,744	465,465
2025	280,298	21.1	59,143	409,780	21.8	61,105	424,064	24.1	67,552	468,310
2026	288,006	21.1	60,769	411,728	21.8	62,785	426,080	24.1	69,409	470,536
2027	295,926	21.1	62,440	413,077	21.8	64,512	427,476	24.1	71,318	472,078
2028	304,064	21.1	64,158	413,765	21.8	66,286	428,188	24.1	73,279	472,865
2029	312,426	21.1	65,922	413,725	21.8	68,109	428,147	24.1	75,295	472,819
2030	321,018	21.1	67,735	412,885	21.8	69,982	427,278	24.1	77,365	471,859

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2021	\$ 251,473	10.6%	\$26,656	\$ 226,901	13.5%	\$33,949	\$ 283,636	13.1%	\$32,943	\$ 282,286
2022	258,389	10.6	27,389	229,078	13.5	34,883	286,357	13.1	33,849	284,994
2023	265,495	10.6	28,142	231,030	13.5	35,842	288,797	13.1	34,780	287,422
2024	272,796	10.6	28,916	232,731	13.5	36,827	290,924	13.1	35,736	289,539
2025	280,298	10.6	29,712	234,154	13.5	37,840	292,702	13.1	36,719	291,309
2026	288,006	10.6	30,529	235,267	13.5	38,881	294,094	13.1	37,729	292,694
2027	295,926	10.6	31,368	236,038	13.5	39,950	295,058	13.1	38,766	293,653
2028	304,064	10.6	32,231	236,431	13.5	41,049	295,550	13.1	39,832	294,142
2029	312,426	10.6	33,117	236,408	13.5	42,178	295,522	13.1	40,928	294,114
2030	321,018	10.6	34,028	235,928	13.5	43,337	294,922	13.1	42,053	293,517

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 251,473	15.3%	\$38,475	\$ 325,175	16.3%	\$40,990	\$ 340,375	17.5%	\$44,008	\$ 368,069
2022	258,389	15.3	39,534	328,294	16.3	42,117	343,640	17.5	45,218	371,600
2023	265,495	15.3	40,621	331,091	16.3	43,276	346,568	17.5	46,462	374,766
2024	272,796	15.3	41,738	333,529	16.3	44,466	349,120	17.5	47,739	377,526
2025	280,298	15.3	42,886	335,568	16.3	45,689	351,254	17.5	49,052	379,834
2026	288,006	15.3	44,065	337,163	16.3	46,945	352,924	17.5	50,401	381,640
2027	295,926	15.3	45,277	338,268	16.3	48,236	354,081	17.5	51,787	382,891
2028	304,064	15.3	46,522	338,832	16.3	49,562	354,671	17.5	53,211	383,529
2029	312,426	15.3	47,801	338,799	16.3	50,925	354,637	17.5	54,675	383,492
2030	321,018	15.3	49,116	338,111	16.3	52,326	353,917	17.5	56,178	382,713

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 251,473	19.2%	\$48,283	\$ 397,089	19.9%	\$50,043	\$ 410,930	22.2%	\$55,827	\$ 453,805
2022	258,389	19.2	49,611	400,898	19.9	51,419	414,872	22.2	57,362	458,158
2023	265,495	19.2	50,975	404,314	19.9	52,834	418,407	22.2	58,940	462,062
2024	272,796	19.2	52,377	407,291	19.9	54,286	421,488	22.2	60,561	465,465
2025	280,298	19.2	53,817	409,780	19.9	55,779	424,064	22.2	62,226	468,310
2026	288,006	19.2	55,297	411,728	19.9	57,313	426,080	22.2	63,937	470,536
2027	295,926	19.2	56,818	413,077	19.9	58,889	427,476	22.2	65,696	472,078
2028	304,064	19.2	58,380	413,765	19.9	60,509	428,188	22.2	67,502	472,865
2029	312,426	19.2	59,986	413,725	19.9	62,173	428,147	22.2	69,359	472,819
2030	321,018	19.2	61,635	412,885	19.9	63,883	427,278	22.2	71,266	471,859

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	8.7%	\$21,878	\$ 226,901	11.6%	\$29,171	\$ 283,636	11.2%	\$28,165	\$ 282,286
2022	258,389	8.7	22,480	229,078	11.6	29,973	286,357	11.2	28,940	284,994
2023	265,495	8.7	23,098	231,030	11.6	30,797	288,797	11.2	29,735	287,422
2024	272,796	8.7	23,733	232,731	11.6	31,644	290,924	11.2	30,553	289,539
2025	280,298	8.7	24,386	234,154	11.6	32,515	292,702	11.2	31,393	291,309
2026	288,006	8.7	25,057	235,267	11.6	33,409	294,094	11.2	32,257	292,694
2027	295,926	8.7	25,746	236,038	11.6	34,327	295,058	11.2	33,144	293,653
2028	304,064	8.7	26,454	236,431	11.6	35,271	295,550	11.2	34,055	294,142
2029	312,426	8.7	27,181	236,408	11.6	36,241	295,522	11.2	34,992	294,114
2030	321,018	8.7	27,929	235,928	11.6	37,238	294,922	11.2	35,954	293,517

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	13.4%	\$33,697	\$ 325,175	14.4%	\$36,212	\$ 340,375	15.6%	\$39,230	\$ 368,069
2022	258,389	13.4	34,624	328,294	14.4	37,208	343,640	15.6	40,309	371,600
2023	265,495	13.4	35,576	331,091	14.4	38,231	346,568	15.6	41,417	374,766
2024	272,796	13.4	36,555	333,529	14.4	39,283	349,120	15.6	42,556	377,526
2025	280,298	13.4	37,560	335,568	14.4	40,363	351,254	15.6	43,726	379,834
2026	288,006	13.4	38,593	337,163	14.4	41,473	352,924	15.6	44,929	381,640
2027	295,926	13.4	39,654	338,268	14.4	42,613	354,081	15.6	46,164	382,891
2028	304,064	13.4	40,745	338,832	14.4	43,785	354,671	15.6	47,434	383,529
2029	312,426	13.4	41,865	338,799	14.4	44,989	354,637	15.6	48,738	383,492
2030	321,018	13.4	43,016	338,111	14.4	46,227	353,917	15.6	50,079	382,713

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	17.3%	\$43,505	\$ 397,089	18.0%	\$45,265	\$ 410,930	20.3%	\$51,049	\$ 453,805
2022	258,389	17.3	44,701	400,898	18.0	46,510	414,872	20.3	52,453	458,158
2023	265,495	17.3	45,931	404,314	18.0	47,789	418,407	20.3	53,895	462,062
2024	272,796	17.3	47,194	407,291	18.0	49,103	421,488	20.3	55,378	465,465
2025	280,298	17.3	48,492	409,780	18.0	50,454	424,064	20.3	56,900	468,310
2026	288,006	17.3	49,825	411,728	18.0	51,841	426,080	20.3	58,465	470,536
2027	295,926	17.3	51,195	413,077	18.0	53,267	427,476	20.3	60,073	472,078
2028	304,064	17.3	52,603	413,765	18.0	54,732	428,188	20.3	61,725	472,865
2029	312,426	17.3	54,050	413,725	18.0	56,237	428,147	20.3	63,422	472,819
2030	321,018	17.3	55,536	412,885	18.0	57,783	427,278	20.3	65,167	471,859

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	6.8%	\$17,100	\$ 226,901	9.7%	\$24,393	\$ 283,636	9.3%	\$23,387	\$ 282,286
2022	258,389	6.8	17,570	229,078	9.7	25,064	286,357	9.3	24,030	284,994
2023	265,495	6.8	18,054	231,030	9.7	25,753	288,797	9.3	24,691	287,422
2024	272,796	6.8	18,550	232,731	9.7	26,461	290,924	9.3	25,370	289,539
2025	280,298	6.8	19,060	234,154	9.7	27,189	292,702	9.3	26,068	291,309
2026	288,006	6.8	19,584	235,267	9.7	27,937	294,094	9.3	26,785	292,694
2027	295,926	6.8	20,123	236,038	9.7	28,705	295,058	9.3	27,521	293,653
2028	304,064	6.8	20,676	236,431	9.7	29,494	295,550	9.3	28,278	294,142
2029	312,426	6.8	21,245	236,408	9.7	30,305	295,522	9.3	29,056	294,114
2030	321,018	6.8	21,829	235,928	9.7	31,139	294,922	9.3	29,855	293,517

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	11.5%	\$28,919	\$ 325,175	12.5%	\$31,434	\$ 340,375	13.7%	\$34,452	\$ 368,069
2022	258,389	11.5	29,715	328,294	12.5	32,299	343,640	13.7	35,399	371,600
2023	265,495	11.5	30,532	331,091	12.5	33,187	346,568	13.7	36,373	374,766
2024	272,796	11.5	31,372	333,529	12.5	34,100	349,120	13.7	37,373	377,526
2025	280,298	11.5	32,234	335,568	12.5	35,037	351,254	13.7	38,401	379,834
2026	288,006	11.5	33,121	337,163	12.5	36,001	352,924	13.7	39,457	381,640
2027	295,926	11.5	34,031	338,268	12.5	36,991	354,081	13.7	40,542	382,891
2028	304,064	11.5	34,967	338,832	12.5	38,008	354,671	13.7	41,657	383,529
2029	312,426	11.5	35,929	338,799	12.5	39,053	354,637	13.7	42,802	383,492
2030	321,018	11.5	36,917	338,111	12.5	40,127	353,917	13.7	43,979	382,713

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	15.4%	\$38,727	\$ 397,089	16.1%	\$40,487	\$ 410,930	18.4%	\$46,271	\$ 453,805
2022	258,389	15.4	39,792	400,898	16.1	41,601	414,872	18.4	47,544	458,158
2023	265,495	15.4	40,886	404,314	16.1	42,745	418,407	18.4	48,851	462,062
2024	272,796	15.4	42,011	407,291	16.1	43,920	421,488	18.4	50,194	465,465
2025	280,298	15.4	43,166	409,780	16.1	45,128	424,064	18.4	51,575	468,310
2026	288,006	15.4	44,353	411,728	16.1	46,369	426,080	18.4	52,993	470,536
2027	295,926	15.4	45,573	413,077	16.1	47,644	427,476	18.4	54,450	472,078
2028	304,064	15.4	46,826	413,765	16.1	48,954	428,188	18.4	55,948	472,865
2029	312,426	15.4	48,114	413,725	16.1	50,301	428,147	18.4	57,486	472,819
2030	321,018	15.4	49,437	412,885	16.1	51,684	427,278	18.4	59,067	471,859

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	12.8%	\$32,189	\$ 234,679	15.9%	\$39,984	\$ 293,369	15.5%	\$38,978	\$ 292,055
2022	258,389	12.8	33,074	236,930	15.9	41,084	296,183	15.5	40,050	294,857
2023	265,495	12.8	33,983	238,949	15.9	42,214	298,707	15.5	41,152	297,370
2024	272,796	12.8	34,918	240,709	15.9	43,375	300,907	15.5	42,283	299,560
2025	280,298	12.8	35,878	242,180	15.9	44,567	302,746	15.5	43,446	301,391
2026	288,006	12.8	36,865	243,331	15.9	45,793	304,185	15.5	44,641	302,824
2027	295,926	12.8	37,879	244,128	15.9	47,052	305,182	15.5	45,869	303,816
2028	304,064	12.8	38,920	244,535	15.9	48,346	305,690	15.5	47,130	304,322
2029	312,426	12.8	39,991	244,511	15.9	49,676	305,661	15.5	48,426	304,293
2030	321,018	12.8	41,090	244,014	15.9	51,042	305,040	15.5	49,758	303,675

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	17.8%	\$44,762	\$ 336,393	18.8%	\$47,277	\$ 352,058	20.1%	\$50,546	\$ 380,720
2022	258,389	17.8	45,993	339,620	18.8	48,577	355,435	20.1	51,936	384,372
2023	265,495	17.8	47,258	342,514	18.8	49,913	358,464	20.1	53,364	387,647
2024	272,796	17.8	48,558	345,036	18.8	51,286	361,104	20.1	54,832	390,502
2025	280,298	17.8	49,893	347,145	18.8	52,696	363,311	20.1	56,340	392,889
2026	288,006	17.8	51,265	348,795	18.8	54,145	365,038	20.1	57,889	394,757
2027	295,926	17.8	52,675	349,938	18.8	55,634	366,234	20.1	59,481	396,051
2028	304,064	17.8	54,123	350,521	18.8	57,164	366,844	20.1	61,117	396,711
2029	312,426	17.8	55,612	350,487	18.8	58,736	366,809	20.1	62,798	396,673
2030	321,018	17.8	57,141	349,775	18.8	60,351	366,064	20.1	64,525	395,867

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	21.8%	\$54,821	\$ 410,730	22.5%	\$56,581	\$ 425,039	24.9%	\$62,617	\$ 469,404
2022	258,389	21.8	56,329	414,670	22.5	58,138	429,116	24.9	64,339	473,907
2023	265,495	21.8	57,878	418,203	22.5	59,736	432,773	24.9	66,108	477,945
2024	272,796	21.8	59,470	421,283	22.5	61,379	435,960	24.9	67,926	481,465
2025	280,298	21.8	61,105	423,858	22.5	63,067	438,625	24.9	69,794	484,408
2026	288,006	21.8	62,785	425,873	22.5	64,801	440,710	24.9	71,713	486,711
2027	295,926	21.8	64,512	427,269	22.5	66,583	442,154	24.9	73,686	488,306
2028	304,064	21.8	66,286	427,981	22.5	68,414	442,891	24.9	75,712	489,120
2029	312,426	21.8	68,109	427,940	22.5	70,296	442,848	24.9	77,794	489,073
2030	321,018	21.8	69,982	427,071	22.5	72,229	441,949	24.9	79,933	488,080

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 Oronogo - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2021	\$ 251,473	10.9%	\$27,411	\$ 234,679	14.0%	\$35,206	\$ 293,369	13.6%	\$34,200	\$ 292,055
2022	258,389	10.9	28,164	236,930	14.0	36,174	296,183	13.6	35,141	294,857
2023	265,495	10.9	28,939	238,949	14.0	37,169	298,707	13.6	36,107	297,370
2024	272,796	10.9	29,735	240,709	14.0	38,191	300,907	13.6	37,100	299,560
2025	280,298	10.9	30,552	242,180	14.0	39,242	302,746	13.6	38,121	301,391
2026	288,006	10.9	31,393	243,331	14.0	40,321	304,185	13.6	39,169	302,824
2027	295,926	10.9	32,256	244,128	14.0	41,430	305,182	13.6	40,246	303,816
2028	304,064	10.9	33,143	244,535	14.0	42,569	305,690	13.6	41,353	304,322
2029	312,426	10.9	34,054	244,511	14.0	43,740	305,661	13.6	42,490	304,293
2030	321,018	10.9	34,991	244,014	14.0	44,943	305,040	13.6	43,658	303,675

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 251,473	15.9%	\$39,984	\$ 336,393	16.9%	\$42,499	\$ 352,058	18.2%	\$45,768	\$ 380,720
2022	258,389	15.9	41,084	339,620	16.9	43,668	355,435	18.2	47,027	384,372
2023	265,495	15.9	42,214	342,514	16.9	44,869	358,464	18.2	48,320	387,647
2024	272,796	15.9	43,375	345,036	16.9	46,103	361,104	18.2	49,649	390,502
2025	280,298	15.9	44,567	347,145	16.9	47,370	363,311	18.2	51,014	392,889
2026	288,006	15.9	45,793	348,795	16.9	48,673	365,038	18.2	52,417	394,757
2027	295,926	15.9	47,052	349,938	16.9	50,011	366,234	18.2	53,859	396,051
2028	304,064	15.9	48,346	350,521	16.9	51,387	366,844	18.2	55,340	396,711
2029	312,426	15.9	49,676	350,487	16.9	52,800	366,809	18.2	56,862	396,673
2030	321,018	15.9	51,042	349,775	16.9	54,252	366,064	18.2	58,425	395,867

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 251,473	19.9%	\$50,043	\$ 410,730	20.6%	\$51,803	\$ 425,039	23.0%	\$57,839	\$ 469,404
2022	258,389	19.9	51,419	414,670	20.6	53,228	429,116	23.0	59,429	473,907
2023	265,495	19.9	52,834	418,203	20.6	54,692	432,773	23.0	61,064	477,945
2024	272,796	19.9	54,286	421,283	20.6	56,196	435,960	23.0	62,743	481,465
2025	280,298	19.9	55,779	423,858	20.6	57,741	438,625	23.0	64,469	484,408
2026	288,006	19.9	57,313	425,873	20.6	59,329	440,710	23.0	66,241	486,711
2027	295,926	19.9	58,889	427,269	20.6	60,961	442,154	23.0	68,063	488,306
2028	304,064	19.9	60,509	427,981	20.6	62,637	442,891	23.0	69,935	489,120
2029	312,426	19.9	62,173	427,940	20.6	64,360	442,848	23.0	71,858	489,073
2030	321,018	19.9	63,883	427,071	20.6	66,130	441,949	23.0	73,834	488,080

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	9.0%	\$22,633	\$ 234,679	12.1%	\$30,428	\$ 293,369	11.7%	\$29,422	\$ 292,055
2022	258,389	9.0	23,255	236,930	12.1	31,265	296,183	11.7	30,232	294,857
2023	265,495	9.0	23,895	238,949	12.1	32,125	298,707	11.7	31,063	297,370
2024	272,796	9.0	24,552	240,709	12.1	33,008	300,907	11.7	31,917	299,560
2025	280,298	9.0	25,227	242,180	12.1	33,916	302,746	11.7	32,795	301,391
2026	288,006	9.0	25,921	243,331	12.1	34,849	304,185	11.7	33,697	302,824
2027	295,926	9.0	26,633	244,128	12.1	35,807	305,182	11.7	34,623	303,816
2028	304,064	9.0	27,366	244,535	12.1	36,792	305,690	11.7	35,575	304,322
2029	312,426	9.0	28,118	244,511	12.1	37,804	305,661	11.7	36,554	304,293
2030	321,018	9.0	28,892	244,014	12.1	38,843	305,040	11.7	37,559	303,675

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	14.0%	\$35,206	\$ 336,393	15.0%	\$37,721	\$ 352,058	16.3%	\$40,990	\$ 380,720
2022	258,389	14.0	36,174	339,620	15.0	38,758	355,435	16.3	42,117	384,372
2023	265,495	14.0	37,169	342,514	15.0	39,824	358,464	16.3	43,276	387,647
2024	272,796	14.0	38,191	345,036	15.0	40,919	361,104	16.3	44,466	390,502
2025	280,298	14.0	39,242	347,145	15.0	42,045	363,311	16.3	45,689	392,889
2026	288,006	14.0	40,321	348,795	15.0	43,201	365,038	16.3	46,945	394,757
2027	295,926	14.0	41,430	349,938	15.0	44,389	366,234	16.3	48,236	396,051
2028	304,064	14.0	42,569	350,521	15.0	45,610	366,844	16.3	49,562	396,711
2029	312,426	14.0	43,740	350,487	15.0	46,864	366,809	16.3	50,925	396,673
2030	321,018	14.0	44,943	349,775	15.0	48,153	366,064	16.3	52,326	395,867

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	18.0%	\$45,265	\$ 410,730	18.7%	\$47,025	\$ 425,039	21.1%	\$53,061	\$ 469,404
2022	258,389	18.0	46,510	414,670	18.7	48,319	429,116	21.1	54,520	473,907
2023	265,495	18.0	47,789	418,203	18.7	49,648	432,773	21.1	56,019	477,945
2024	272,796	18.0	49,103	421,283	18.7	51,013	435,960	21.1	57,560	481,465
2025	280,298	18.0	50,454	423,858	18.7	52,416	438,625	21.1	59,143	484,408
2026	288,006	18.0	51,841	425,873	18.7	53,857	440,710	21.1	60,769	486,711
2027	295,926	18.0	53,267	427,269	18.7	55,338	442,154	21.1	62,440	488,306
2028	304,064	18.0	54,732	427,981	18.7	56,860	442,891	21.1	64,158	489,120
2029	312,426	18.0	56,237	427,940	18.7	58,424	442,848	21.1	65,922	489,073
2030	321,018	18.0	57,783	427,071	18.7	60,030	441,949	21.1	67,735	488,080

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	7.1%	\$17,855	\$ 234,679	10.2%	\$25,650	\$ 293,369	9.8%	\$24,644	\$ 292,055
2022	258,389	7.1	18,346	236,930	10.2	26,356	296,183	9.8	25,322	294,857
2023	265,495	7.1	18,850	238,949	10.2	27,080	298,707	9.8	26,019	297,370
2024	272,796	7.1	19,369	240,709	10.2	27,825	300,907	9.8	26,734	299,560
2025	280,298	7.1	19,901	242,180	10.2	28,590	302,746	9.8	27,469	301,391
2026	288,006	7.1	20,448	243,331	10.2	29,377	304,185	9.8	28,225	302,824
2027	295,926	7.1	21,011	244,128	10.2	30,184	305,182	9.8	29,001	303,816
2028	304,064	7.1	21,589	244,535	10.2	31,015	305,690	9.8	29,798	304,322
2029	312,426	7.1	22,182	244,511	10.2	31,867	305,661	9.8	30,618	304,293
2030	321,018	7.1	22,792	244,014	10.2	32,744	305,040	9.8	31,460	303,675

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	12.1%	\$30,428	\$ 336,393	13.1%	\$32,943	\$ 352,058	14.4%	\$36,212	\$ 380,720
2022	258,389	12.1	31,265	339,620	13.1	33,849	355,435	14.4	37,208	384,372
2023	265,495	12.1	32,125	342,514	13.1	34,780	358,464	14.4	38,231	387,647
2024	272,796	12.1	33,008	345,036	13.1	35,736	361,104	14.4	39,283	390,502
2025	280,298	12.1	33,916	347,145	13.1	36,719	363,311	14.4	40,363	392,889
2026	288,006	12.1	34,849	348,795	13.1	37,729	365,038	14.4	41,473	394,757
2027	295,926	12.1	35,807	349,938	13.1	38,766	366,234	14.4	42,613	396,051
2028	304,064	12.1	36,792	350,521	13.1	39,832	366,844	14.4	43,785	396,711
2029	312,426	12.1	37,804	350,487	13.1	40,928	366,809	14.4	44,989	396,673
2030	321,018	12.1	38,843	349,775	13.1	42,053	366,064	14.4	46,227	395,867

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 251,473	16.1%	\$40,487	\$ 410,730	16.8%	\$42,247	\$ 425,039	19.2%	\$48,283	\$ 469,404
2022	258,389	16.1	41,601	414,670	16.8	43,409	429,116	19.2	49,611	473,907
2023	265,495	16.1	42,745	418,203	16.8	44,603	432,773	19.2	50,975	477,945
2024	272,796	16.1	43,920	421,283	16.8	45,830	435,960	19.2	52,377	481,465
2025	280,298	16.1	45,128	423,858	16.8	47,090	438,625	19.2	53,817	484,408
2026	288,006	16.1	46,369	425,873	16.8	48,385	440,710	19.2	55,297	486,711
2027	295,926	16.1	47,644	427,269	16.8	49,716	442,154	19.2	56,818	488,306
2028	304,064	16.1	48,954	427,981	16.8	51,083	442,891	19.2	58,380	489,120
2029	312,426	16.1	50,301	427,940	16.8	52,488	442,848	19.2	59,986	489,073
2030	321,018	16.1	51,684	427,071	16.8	53,931	441,949	19.2	61,635	488,080

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.2%	\$21,137	\$ 83,687	12.4%	\$25,696	\$ 104,564	12.1%	\$25,075	\$ 104,678
2022	212,927	10.2	21,719	84,490	12.4	26,403	105,567	12.1	25,764	105,682
2023	218,782	10.2	22,316	85,210	12.4	27,129	106,467	12.1	26,473	106,583
2024	224,799	10.2	22,929	85,838	12.4	27,875	107,251	12.1	27,201	107,368
2025	230,981	10.2	23,560	86,363	12.4	28,642	107,907	12.1	27,949	108,024
2026	237,333	10.2	24,208	86,774	12.4	29,429	108,420	12.1	28,717	108,538
2027	243,860	10.2	24,874	87,058	12.4	30,239	108,775	12.1	29,507	108,894
2028	250,566	10.2	25,558	87,203	12.4	31,070	108,956	12.1	30,318	109,075
2029	257,457	10.2	26,261	87,195	12.4	31,925	108,946	12.1	31,152	109,065
2030	264,537	10.2	26,983	87,018	12.4	32,803	108,725	12.1	32,009	108,844

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	13.9%	\$28,805	\$ 120,307	14.7%	\$30,462	\$ 125,504	15.7%	\$32,535	\$ 136,005
2022	212,927	13.9	29,597	121,461	14.7	31,300	126,708	15.7	33,430	137,310
2023	218,782	13.9	30,411	122,496	14.7	32,161	127,788	15.7	34,349	138,480
2024	224,799	13.9	31,247	123,398	14.7	33,045	128,729	15.7	35,293	139,500
2025	230,981	13.9	32,106	124,152	14.7	33,954	129,516	15.7	36,264	140,353
2026	237,333	13.9	32,989	124,742	14.7	34,888	130,132	15.7	37,261	141,020
2027	243,860	13.9	33,897	125,151	14.7	35,847	130,558	15.7	38,286	141,482
2028	250,566	13.9	34,829	125,360	14.7	36,833	130,776	15.7	39,339	141,718
2029	257,457	13.9	35,787	125,348	14.7	37,846	130,763	15.7	40,421	141,704
2030	264,537	13.9	36,771	125,093	14.7	38,887	130,497	15.7	41,532	141,416

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	17.0%	\$35,229	\$ 146,416	17.6%	\$36,472	\$ 151,659	19.3%	\$39,995	\$ 167,342
2022	212,927	17.0	36,198	147,821	17.6	37,475	153,114	19.3	41,095	168,947
2023	218,782	17.0	37,193	149,081	17.6	38,506	154,419	19.3	42,225	170,387
2024	224,799	17.0	38,216	150,179	17.6	39,565	155,556	19.3	43,386	171,642
2025	230,981	17.0	39,267	151,097	17.6	40,653	156,507	19.3	44,579	172,691
2026	237,333	17.0	40,347	151,815	17.6	41,771	157,251	19.3	45,805	173,512
2027	243,860	17.0	41,456	152,313	17.6	42,919	157,766	19.3	47,065	174,081
2028	250,566	17.0	42,596	152,567	17.6	44,100	158,029	19.3	48,359	174,371
2029	257,457	17.0	43,768	152,552	17.6	45,312	158,014	19.3	49,689	174,354
2030	264,537	17.0	44,971	152,242	17.6	46,559	157,693	19.3	51,056	174,000

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	8.3%	\$17,200	\$ 83,687	10.5%	\$21,759	\$ 104,564	10.2%	\$21,137	\$ 104,678
2022	212,927	8.3	17,673	84,490	10.5	22,357	105,567	10.2	21,719	105,682
2023	218,782	8.3	18,159	85,210	10.5	22,972	106,467	10.2	22,316	106,583
2024	224,799	8.3	18,658	85,838	10.5	23,604	107,251	10.2	22,929	107,368
2025	230,981	8.3	19,171	86,363	10.5	24,253	107,907	10.2	23,560	108,024
2026	237,333	8.3	19,699	86,774	10.5	24,920	108,420	10.2	24,208	108,538
2027	243,860	8.3	20,240	87,058	10.5	25,605	108,775	10.2	24,874	108,894
2028	250,566	8.3	20,797	87,203	10.5	26,309	108,956	10.2	25,558	109,075
2029	257,457	8.3	21,369	87,195	10.5	27,033	108,946	10.2	26,261	109,065
2030	264,537	8.3	21,957	87,018	10.5	27,776	108,725	10.2	26,983	108,844

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	12.0%	\$24,867	\$ 120,307	12.8%	\$26,525	\$ 125,504	13.8%	\$28,597	\$ 136,005
2022	212,927	12.0	25,551	121,461	12.8	27,255	126,708	13.8	29,384	137,310
2023	218,782	12.0	26,254	122,496	12.8	28,004	127,788	13.8	30,192	138,480
2024	224,799	12.0	26,976	123,398	12.8	28,774	128,729	13.8	31,022	139,500
2025	230,981	12.0	27,718	124,152	12.8	29,566	129,516	13.8	31,875	140,353
2026	237,333	12.0	28,480	124,742	12.8	30,379	130,132	13.8	32,752	141,020
2027	243,860	12.0	29,263	125,151	12.8	31,214	130,558	13.8	33,653	141,482
2028	250,566	12.0	30,068	125,360	12.8	32,072	130,776	13.8	34,578	141,718
2029	257,457	12.0	30,895	125,348	12.8	32,954	130,763	13.8	35,529	141,704
2030	264,537	12.0	31,744	125,093	12.8	33,861	130,497	13.8	36,506	141,416

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	15.1%	\$31,291	\$ 146,416	15.7%	\$32,535	\$ 151,659	17.4%	\$36,058	\$ 167,342
2022	212,927	15.1	32,152	147,821	15.7	33,430	153,114	17.4	37,049	168,947
2023	218,782	15.1	33,036	149,081	15.7	34,349	154,419	17.4	38,068	170,387
2024	224,799	15.1	33,945	150,179	15.7	35,293	155,556	17.4	39,115	171,642
2025	230,981	15.1	34,878	151,097	15.7	36,264	156,507	17.4	40,191	172,691
2026	237,333	15.1	35,837	151,815	15.7	37,261	157,251	17.4	41,296	173,512
2027	243,860	15.1	36,823	152,313	15.7	38,286	157,766	17.4	42,432	174,081
2028	250,566	15.1	37,835	152,567	15.7	39,339	158,029	17.4	43,598	174,371
2029	257,457	15.1	38,876	152,552	15.7	40,421	158,014	17.4	44,798	174,354
2030	264,537	15.1	39,945	152,242	15.7	41,532	157,693	17.4	46,029	174,000

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	6.4%	\$13,263	\$ 83,687	8.6%	\$17,822	\$ 104,564	8.3%	\$17,200	\$ 104,678
2022	212,927	6.4	13,627	84,490	8.6	18,312	105,567	8.3	17,673	105,682
2023	218,782	6.4	14,002	85,210	8.6	18,815	106,467	8.3	18,159	106,583
2024	224,799	6.4	14,387	85,838	8.6	19,333	107,251	8.3	18,658	107,368
2025	230,981	6.4	14,783	86,363	8.6	19,864	107,907	8.3	19,171	108,024
2026	237,333	6.4	15,189	86,774	8.6	20,411	108,420	8.3	19,699	108,538
2027	243,860	6.4	15,607	87,058	8.6	20,972	108,775	8.3	20,240	108,894
2028	250,566	6.4	16,036	87,203	8.6	21,549	108,956	8.3	20,797	109,075
2029	257,457	6.4	16,477	87,195	8.6	22,141	108,946	8.3	21,369	109,065
2030	264,537	6.4	16,930	87,018	8.6	22,750	108,725	8.3	21,957	108,844

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.1%	\$20,930	\$ 120,307	10.9%	\$22,588	\$ 125,504	11.9%	\$24,660	\$ 136,005
2022	212,927	10.1	21,506	121,461	10.9	23,209	126,708	11.9	25,338	137,310
2023	218,782	10.1	22,097	122,496	10.9	23,847	127,788	11.9	26,035	138,480
2024	224,799	10.1	22,705	123,398	10.9	24,503	128,729	11.9	26,751	139,500
2025	230,981	10.1	23,329	124,152	10.9	25,177	129,516	11.9	27,487	140,353
2026	237,333	10.1	23,971	124,742	10.9	25,869	130,132	11.9	28,243	141,020
2027	243,860	10.1	24,630	125,151	10.9	26,581	130,558	11.9	29,019	141,482
2028	250,566	10.1	25,307	125,360	10.9	27,312	130,776	11.9	29,817	141,718
2029	257,457	10.1	26,003	125,348	10.9	28,063	130,763	11.9	30,637	141,704
2030	264,537	10.1	26,718	125,093	10.9	28,835	130,497	11.9	31,480	141,416

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	13.2%	\$27,354	\$ 146,416	13.8%	\$28,597	\$ 151,659	15.5%	\$32,120	\$ 167,342
2022	212,927	13.2	28,106	147,821	13.8	29,384	153,114	15.5	33,004	168,947
2023	218,782	13.2	28,879	149,081	13.8	30,192	154,419	15.5	33,911	170,387
2024	224,799	13.2	29,673	150,179	13.8	31,022	155,556	15.5	34,844	171,642
2025	230,981	13.2	30,489	151,097	13.8	31,875	156,507	15.5	35,802	172,691
2026	237,333	13.2	31,328	151,815	13.8	32,752	157,251	15.5	36,787	173,512
2027	243,860	13.2	32,190	152,313	13.8	33,653	157,766	15.5	37,798	174,081
2028	250,566	13.2	33,075	152,567	13.8	34,578	158,029	15.5	38,838	174,371
2029	257,457	13.2	33,984	152,552	13.8	35,529	158,014	15.5	39,906	174,354
2030	264,537	13.2	34,919	152,242	13.8	36,506	157,693	15.5	41,003	174,000

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	4.5%	\$9,325	\$ 83,687	6.7%	\$13,884	\$ 104,564	6.4%	\$13,263	\$ 104,678
2022	212,927	4.5	9,582	84,490	6.7	14,266	105,567	6.4	13,627	105,682
2023	218,782	4.5	9,845	85,210	6.7	14,658	106,467	6.4	14,002	106,583
2024	224,799	4.5	10,116	85,838	6.7	15,062	107,251	6.4	14,387	107,368
2025	230,981	4.5	10,394	86,363	6.7	15,476	107,907	6.4	14,783	108,024
2026	237,333	4.5	10,680	86,774	6.7	15,901	108,420	6.4	15,189	108,538
2027	243,860	4.5	10,974	87,058	6.7	16,339	108,775	6.4	15,607	108,894
2028	250,566	4.5	11,275	87,203	6.7	16,788	108,956	6.4	16,036	109,075
2029	257,457	4.5	11,586	87,195	6.7	17,250	108,946	6.4	16,477	109,065
2030	264,537	4.5	11,904	87,018	6.7	17,724	108,725	6.4	16,930	108,844

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	8.2%	\$16,993	\$ 120,307	9.0%	\$18,651	\$ 125,504	10.0%	\$20,723	\$ 136,005
2022	212,927	8.2	17,460	121,461	9.0	19,163	126,708	10.0	21,293	137,310
2023	218,782	8.2	17,940	122,496	9.0	19,690	127,788	10.0	21,878	138,480
2024	224,799	8.2	18,434	123,398	9.0	20,232	128,729	10.0	22,480	139,500
2025	230,981	8.2	18,940	124,152	9.0	20,788	129,516	10.0	23,098	140,353
2026	237,333	8.2	19,461	124,742	9.0	21,360	130,132	10.0	23,733	141,020
2027	243,860	8.2	19,997	125,151	9.0	21,947	130,558	10.0	24,386	141,482
2028	250,566	8.2	20,546	125,360	9.0	22,551	130,776	10.0	25,057	141,718
2029	257,457	8.2	21,111	125,348	9.0	23,171	130,763	10.0	25,746	141,704
2030	264,537	8.2	21,692	125,093	9.0	23,808	130,497	10.0	26,454	141,416

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	11.3%	\$23,417	\$ 146,416	11.9%	\$24,660	\$ 151,659	13.6%	\$28,183	\$ 167,342
2022	212,927	11.3	24,061	147,821	11.9	25,338	153,114	13.6	28,958	168,947
2023	218,782	11.3	24,722	149,081	11.9	26,035	154,419	13.6	29,754	170,387
2024	224,799	11.3	25,402	150,179	11.9	26,751	155,556	13.6	30,573	171,642
2025	230,981	11.3	26,101	151,097	11.9	27,487	156,507	13.6	31,413	172,691
2026	237,333	11.3	26,819	151,815	11.9	28,243	157,251	13.6	32,277	173,512
2027	243,860	11.3	27,556	152,313	11.9	29,019	157,766	13.6	33,165	174,081
2028	250,566	11.3	28,314	152,567	11.9	29,817	158,029	13.6	34,077	174,371
2029	257,457	11.3	29,093	152,552	11.9	30,637	158,014	13.6	35,014	174,354
2030	264,537	11.3	29,893	152,242	11.9	31,480	157,693	13.6	35,977	174,000

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.4%	\$21,552	\$ 86,725	12.9%	\$26,732	\$ 108,423	12.6%	\$26,111	\$ 108,456
2022	212,927	10.4	22,144	87,557	12.9	27,468	109,463	12.6	26,829	109,496
2023	218,782	10.4	22,753	88,303	12.9	28,223	110,396	12.6	27,567	110,429
2024	224,799	10.4	23,379	88,953	12.9	28,999	111,209	12.6	28,325	111,242
2025	230,981	10.4	24,022	89,497	12.9	29,797	111,889	12.6	29,104	111,922
2026	237,333	10.4	24,683	89,922	12.9	30,616	112,421	12.6	29,904	112,454
2027	243,860	10.4	25,361	90,217	12.9	31,458	112,789	12.6	30,726	112,823
2028	250,566	10.4	26,059	90,367	12.9	32,323	112,977	12.6	31,571	113,011
2029	257,457	10.4	26,776	90,358	12.9	33,212	112,966	12.6	32,440	113,000
2030	264,537	10.4	27,512	90,174	12.9	34,125	112,737	12.6	33,332	112,771

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	14.4%	\$29,841	\$ 124,742	15.3%	\$31,706	\$ 130,091	16.3%	\$33,778	\$ 140,951
2022	212,927	14.4	30,661	125,939	15.3	32,578	131,339	16.3	34,707	142,303
2023	218,782	14.4	31,505	127,012	15.3	33,474	132,458	16.3	35,661	143,516
2024	224,799	14.4	32,371	127,947	15.3	34,394	133,433	16.3	36,642	144,573
2025	230,981	14.4	33,261	128,729	15.3	35,340	134,249	16.3	37,650	145,457
2026	237,333	14.4	34,176	129,341	15.3	36,312	134,887	16.3	38,685	146,149
2027	243,860	14.4	35,116	129,765	15.3	37,311	135,329	16.3	39,749	146,628
2028	250,566	14.4	36,082	129,981	15.3	38,337	135,554	16.3	40,842	146,872
2029	257,457	14.4	37,074	129,968	15.3	39,391	135,541	16.3	41,965	146,858
2030	264,537	14.4	38,093	129,704	15.3	40,474	135,266	16.3	43,120	146,560

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	17.6%	\$36,472	\$ 151,744	18.1%	\$37,508	\$ 157,187	20.0%	\$41,446	\$ 173,434
2022	212,927	17.6	37,475	153,200	18.1	38,540	158,695	20.0	42,585	175,098
2023	218,782	17.6	38,506	154,505	18.1	39,600	160,047	20.0	43,756	176,590
2024	224,799	17.6	39,565	155,643	18.1	40,689	161,226	20.0	44,960	177,890
2025	230,981	17.6	40,653	156,594	18.1	41,808	162,211	20.0	46,196	178,977
2026	237,333	17.6	41,771	157,338	18.1	42,957	162,982	20.0	47,467	179,828
2027	243,860	17.6	42,919	157,854	18.1	44,139	163,516	20.0	48,772	180,417
2028	250,566	17.6	44,100	158,117	18.1	45,352	163,788	20.0	50,113	180,718
2029	257,457	17.6	45,312	158,102	18.1	46,600	163,772	20.0	51,491	180,701
2030	264,537	17.6	46,559	157,781	18.1	47,881	163,439	20.0	52,907	180,334

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	8.5%	\$17,614	\$ 86,725	11.0%	\$22,795	\$ 108,423	10.7%	\$22,173	\$ 108,456
2022	212,927	8.5	18,099	87,557	11.0	23,422	109,463	10.7	22,783	109,496
2023	218,782	8.5	18,596	88,303	11.0	24,066	110,396	10.7	23,410	110,429
2024	224,799	8.5	19,108	88,953	11.0	24,728	111,209	10.7	24,053	111,242
2025	230,981	8.5	19,633	89,497	11.0	25,408	111,889	10.7	24,715	111,922
2026	237,333	8.5	20,173	89,922	11.0	26,107	112,421	10.7	25,395	112,454
2027	243,860	8.5	20,728	90,217	11.0	26,825	112,789	10.7	26,093	112,823
2028	250,566	8.5	21,298	90,367	11.0	27,562	112,977	10.7	26,811	113,011
2029	257,457	8.5	21,884	90,358	11.0	28,320	112,966	10.7	27,548	113,000
2030	264,537	8.5	22,486	90,174	11.0	29,099	112,737	10.7	28,305	112,771

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	12.5%	\$25,903	\$ 124,742	13.4%	\$27,769	\$ 130,091	14.4%	\$29,841	\$ 140,951
2022	212,927	12.5	26,616	125,939	13.4	28,532	131,339	14.4	30,661	142,303
2023	218,782	12.5	27,348	127,012	13.4	29,317	132,458	14.4	31,505	143,516
2024	224,799	12.5	28,100	127,947	13.4	30,123	133,433	14.4	32,371	144,573
2025	230,981	12.5	28,873	128,729	13.4	30,951	134,249	14.4	33,261	145,457
2026	237,333	12.5	29,667	129,341	13.4	31,803	134,887	14.4	34,176	146,149
2027	243,860	12.5	30,483	129,765	13.4	32,677	135,329	14.4	35,116	146,628
2028	250,566	12.5	31,321	129,981	13.4	33,576	135,554	14.4	36,082	146,872
2029	257,457	12.5	32,182	129,968	13.4	34,499	135,541	14.4	37,074	146,858
2030	264,537	12.5	33,067	129,704	13.4	35,448	135,266	14.4	38,093	146,560

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	15.7%	\$32,535	\$ 151,744	16.2%	\$33,571	\$ 157,187	18.1%	\$37,508	\$ 173,434
2022	212,927	15.7	33,430	153,200	16.2	34,494	158,695	18.1	38,540	175,098
2023	218,782	15.7	34,349	154,505	16.2	35,443	160,047	18.1	39,600	176,590
2024	224,799	15.7	35,293	155,643	16.2	36,417	161,226	18.1	40,689	177,890
2025	230,981	15.7	36,264	156,594	16.2	37,419	162,211	18.1	41,808	178,977
2026	237,333	15.7	37,261	157,338	16.2	38,448	162,982	18.1	42,957	179,828
2027	243,860	15.7	38,286	157,854	16.2	39,505	163,516	18.1	44,139	180,417
2028	250,566	15.7	39,339	158,117	16.2	40,592	163,788	18.1	45,352	180,718
2029	257,457	15.7	40,421	158,102	16.2	41,708	163,772	18.1	46,600	180,701
2030	264,537	15.7	41,532	157,781	16.2	42,855	163,439	18.1	47,881	180,334

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	6.6%	\$13,677	\$ 86,725	9.1%	\$18,858	\$ 108,423	8.8%	\$18,236	\$ 108,456
2022	212,927	6.6	14,053	87,557	9.1	19,376	109,463	8.8	18,738	109,496
2023	218,782	6.6	14,440	88,303	9.1	19,909	110,396	8.8	19,253	110,429
2024	224,799	6.6	14,837	88,953	9.1	20,457	111,209	8.8	19,782	111,242
2025	230,981	6.6	15,245	89,497	9.1	21,019	111,889	8.8	20,326	111,922
2026	237,333	6.6	15,664	89,922	9.1	21,597	112,421	8.8	20,885	112,454
2027	243,860	6.6	16,095	90,217	9.1	22,191	112,789	8.8	21,460	112,823
2028	250,566	6.6	16,537	90,367	9.1	22,802	112,977	8.8	22,050	113,011
2029	257,457	6.6	16,992	90,358	9.1	23,429	112,966	8.8	22,656	113,000
2030	264,537	6.6	17,459	90,174	9.1	24,073	112,737	8.8	23,279	112,771

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.6%	\$21,966	\$ 124,742	11.5%	\$23,831	\$ 130,091	12.5%	\$25,903	\$ 140,951
2022	212,927	10.6	22,570	125,939	11.5	24,487	131,339	12.5	26,616	142,303
2023	218,782	10.6	23,191	127,012	11.5	25,160	132,458	12.5	27,348	143,516
2024	224,799	10.6	23,829	127,947	11.5	25,852	133,433	12.5	28,100	144,573
2025	230,981	10.6	24,484	128,729	11.5	26,563	134,249	12.5	28,873	145,457
2026	237,333	10.6	25,157	129,341	11.5	27,293	134,887	12.5	29,667	146,149
2027	243,860	10.6	25,849	129,765	11.5	28,044	135,329	12.5	30,483	146,628
2028	250,566	10.6	26,560	129,981	11.5	28,815	135,554	12.5	31,321	146,872
2029	257,457	10.6	27,290	129,968	11.5	29,608	135,541	12.5	32,182	146,858
2030	264,537	10.6	28,041	129,704	11.5	30,422	135,266	12.5	33,067	146,560

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	13.8%	\$28,597	\$ 151,744	14.3%	\$29,634	\$ 157,187	16.2%	\$33,571	\$ 173,434
2022	212,927	13.8	29,384	153,200	14.3	30,449	158,695	16.2	34,494	175,098
2023	218,782	13.8	30,192	154,505	14.3	31,286	160,047	16.2	35,443	176,590
2024	224,799	13.8	31,022	155,643	14.3	32,146	161,226	16.2	36,417	177,890
2025	230,981	13.8	31,875	156,594	14.3	33,030	162,211	16.2	37,419	178,977
2026	237,333	13.8	32,752	157,338	14.3	33,939	162,982	16.2	38,448	179,828
2027	243,860	13.8	33,653	157,854	14.3	34,872	163,516	16.2	39,505	180,417
2028	250,566	13.8	34,578	158,117	14.3	35,831	163,788	16.2	40,592	180,718
2029	257,457	13.8	35,529	158,102	14.3	36,816	163,772	16.2	41,708	180,701
2030	264,537	13.8	36,506	157,781	14.3	37,829	163,439	16.2	42,855	180,334

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	4.7%	\$9,740	\$ 86,725	7.2%	\$14,920	\$ 108,423	6.9%	\$14,299	\$ 108,456
2022	212,927	4.7	10,008	87,557	7.2	15,331	109,463	6.9	14,692	109,496
2023	218,782	4.7	10,283	88,303	7.2	15,752	110,396	6.9	15,096	110,429
2024	224,799	4.7	10,566	88,953	7.2	16,186	111,209	6.9	15,511	111,242
2025	230,981	4.7	10,856	89,497	7.2	16,631	111,889	6.9	15,938	111,922
2026	237,333	4.7	11,155	89,922	7.2	17,088	112,421	6.9	16,376	112,454
2027	243,860	4.7	11,461	90,217	7.2	17,558	112,789	6.9	16,826	112,823
2028	250,566	4.7	11,777	90,367	7.2	18,041	112,977	6.9	17,289	113,011
2029	257,457	4.7	12,100	90,358	7.2	18,537	112,966	6.9	17,765	113,000
2030	264,537	4.7	12,433	90,174	7.2	19,047	112,737	6.9	18,253	112,771

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	8.7%	\$18,029	\$ 124,742	9.6%	\$19,894	\$ 130,091	10.6%	\$21,966	\$ 140,951
2022	212,927	8.7	18,525	125,939	9.6	20,441	131,339	10.6	22,570	142,303
2023	218,782	8.7	19,034	127,012	9.6	21,003	132,458	10.6	23,191	143,516
2024	224,799	8.7	19,558	127,947	9.6	21,581	133,433	10.6	23,829	144,573
2025	230,981	8.7	20,095	128,729	9.6	22,174	134,249	10.6	24,484	145,457
2026	237,333	8.7	20,648	129,341	9.6	22,784	134,887	10.6	25,157	146,149
2027	243,860	8.7	21,216	129,765	9.6	23,411	135,329	10.6	25,849	146,628
2028	250,566	8.7	21,799	129,981	9.6	24,054	135,554	10.6	26,560	146,872
2029	257,457	8.7	22,399	129,968	9.6	24,716	135,541	10.6	27,290	146,858
2030	264,537	8.7	23,015	129,704	9.6	25,396	135,266	10.6	28,041	146,560

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	11.9%	\$24,660	\$ 151,744	12.4%	\$25,696	\$ 157,187	14.3%	\$29,634	\$ 173,434
2022	212,927	11.9	25,338	153,200	12.4	26,403	158,695	14.3	30,449	175,098
2023	218,782	11.9	26,035	154,505	12.4	27,129	160,047	14.3	31,286	176,590
2024	224,799	11.9	26,751	155,643	12.4	27,875	161,226	14.3	32,146	177,890
2025	230,981	11.9	27,487	156,594	12.4	28,642	162,211	14.3	33,030	178,977
2026	237,333	11.9	28,243	157,338	12.4	29,429	162,982	14.3	33,939	179,828
2027	243,860	11.9	29,019	157,854	12.4	30,239	163,516	14.3	34,872	180,417
2028	250,566	11.9	29,817	158,117	12.4	31,070	163,788	14.3	35,831	180,718
2029	257,457	11.9	30,637	158,102	12.4	31,925	163,772	14.3	36,816	180,701
2030	264,537	11.9	31,480	157,781	12.4	32,803	163,439	14.3	37,829	180,334

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.5%	\$21,759	\$ 89,562	13.0%	\$26,940	\$ 111,913	13.2%	\$27,354	\$ 119,704
2022	212,927	10.5	22,357	90,421	13.0	27,681	112,987	13.2	28,106	120,852
2023	218,782	10.5	22,972	91,191	13.0	28,442	113,950	13.2	28,879	121,882
2024	224,799	10.5	23,604	91,863	13.0	29,224	114,789	13.2	29,673	122,780
2025	230,981	10.5	24,253	92,424	13.0	30,028	115,491	13.2	30,489	123,530
2026	237,333	10.5	24,920	92,863	13.0	30,853	116,040	13.2	31,328	124,117
2027	243,860	10.5	25,605	93,167	13.0	31,702	116,420	13.2	32,190	124,524
2028	250,566	10.5	26,309	93,322	13.0	32,574	116,614	13.2	33,075	124,731
2029	257,457	10.5	27,033	93,313	13.0	33,469	116,603	13.2	33,984	124,719
2030	264,537	10.5	27,776	93,123	13.0	34,390	116,366	13.2	34,919	124,466

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	14.9%	\$30,877	\$ 134,521	15.3%	\$31,706	\$ 134,310	16.6%	\$34,400	\$ 149,386
2022	212,927	14.9	31,726	135,811	15.3	32,578	135,598	16.6	35,346	150,819
2023	218,782	14.9	32,599	136,968	15.3	33,474	136,753	16.6	36,318	152,104
2024	224,799	14.9	33,495	137,977	15.3	34,394	137,760	16.6	37,317	153,224
2025	230,981	14.9	34,416	138,820	15.3	35,340	138,602	16.6	38,343	154,161
2026	237,333	14.9	35,363	139,480	15.3	36,312	139,261	16.6	39,397	154,894
2027	243,860	14.9	36,335	139,937	15.3	37,311	139,717	16.6	40,481	155,402
2028	250,566	14.9	37,334	140,170	15.3	38,337	139,950	16.6	41,594	155,661
2029	257,457	14.9	38,361	140,157	15.3	39,391	139,937	16.6	42,738	155,646
2030	264,537	14.9	39,416	139,872	15.3	40,474	139,653	16.6	43,913	155,330

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	17.7%	\$36,679	\$ 156,705	18.3%	\$37,923	\$ 164,244	20.1%	\$41,653	\$ 179,081
2022	212,927	17.7	37,688	158,208	18.3	38,966	165,820	20.1	42,798	180,799
2023	218,782	17.7	38,724	159,556	18.3	40,037	167,233	20.1	43,975	182,340
2024	224,799	17.7	39,789	160,731	18.3	41,138	168,465	20.1	45,185	183,683
2025	230,981	17.7	40,884	161,713	18.3	42,270	169,495	20.1	46,427	184,806
2026	237,333	17.7	42,008	162,482	18.3	43,432	170,301	20.1	47,704	185,685
2027	243,860	17.7	43,163	163,014	18.3	44,626	170,859	20.1	49,016	186,294
2028	250,566	17.7	44,350	163,286	18.3	45,854	171,144	20.1	50,364	186,604
2029	257,457	17.7	45,570	163,270	18.3	47,115	171,128	20.1	51,749	186,586
2030	264,537	17.7	46,823	162,938	18.3	48,410	170,780	20.1	53,172	186,207

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 Oronogo - Police

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

Rule of 80 Retirement Eligibility

		L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
Valuation Year	Estimated Projected Payroll	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	\$ 207,228	8.6%	\$17,822	\$ 89,562	11.1%	\$23,002	\$ 111,913	11.3%	\$23,417	\$ 119,704
2022	212,927	8.6	18,312	90,421	11.1	23,635	112,987	11.3	24,061	120,852
2023	218,782	8.6	18,815	91,191	11.1	24,285	113,950	11.3	24,722	121,882
2024	224,799	8.6	19,333	91,863	11.1	24,953	114,789	11.3	25,402	122,780
2025	230,981	8.6	19,864	92,424	11.1	25,639	115,491	11.3	26,101	123,530
2026	237,333	8.6	20,411	92,863	11.1	26,344	116,040	11.3	26,819	124,117
2027	243,860	8.6	20,972	93,167	11.1	27,068	116,420	11.3	27,556	124,524
2028	250,566	8.6	21,549	93,322	11.1	27,813	116,614	11.3	28,314	124,731
2029	257,457	8.6	22,141	93,313	11.1	28,578	116,603	11.3	29,093	124,719
2030	264,537	8.6	22,750	93,123	11.1	29,364	116,366	11.3	29,893	124,466

		LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
Valuation Year	Estimated Projected Payroll	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	\$ 207,228	13.0%	\$26,940	\$ 134,521	13.4%	\$27,769	\$ 134,310	14.7%	\$30,462	\$ 149,386
2022	212,927	13.0	27,681	135,811	13.4	28,532	135,598	14.7	31,300	150,819
2023	218,782	13.0	28,442	136,968	13.4	29,317	136,753	14.7	32,161	152,104
2024	224,799	13.0	29,224	137,977	13.4	30,123	137,760	14.7	33,045	153,224
2025	230,981	13.0	30,028	138,820	13.4	30,951	138,602	14.7	33,954	154,161
2026	237,333	13.0	30,853	139,480	13.4	31,803	139,261	14.7	34,888	154,894
2027	243,860	13.0	31,702	139,937	13.4	32,677	139,717	14.7	35,847	155,402
2028	250,566	13.0	32,574	140,170	13.4	33,576	139,950	14.7	36,833	155,661
2029	257,457	13.0	33,469	140,157	13.4	34,499	139,937	14.7	37,846	155,646
2030	264,537	13.0	34,390	139,872	13.4	35,448	139,653	14.7	38,887	155,330

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
Valuation Year	Estimated Projected Payroll	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	\$ 207,228	15.8%	\$32,742	\$ 156,705	16.4%	\$33,985	\$ 164,244	18.2%	\$37,715	\$ 179,081
2022	212,927	15.8	33,642	158,208	16.4	34,920	165,820	18.2	38,753	180,799
2023	218,782	15.8	34,568	159,556	16.4	35,880	167,233	18.2	39,818	182,340
2024	224,799	15.8	35,518	160,731	16.4	36,867	168,465	18.2	40,913	183,683
2025	230,981	15.8	36,495	161,713	16.4	37,881	169,495	18.2	42,039	184,806
2026	237,333	15.8	37,499	162,482	16.4	38,923	170,301	18.2	43,195	185,685
2027	243,860	15.8	38,530	163,014	16.4	39,993	170,859	18.2	44,383	186,294
2028	250,566	15.8	39,589	163,286	16.4	41,093	171,144	18.2	45,603	186,604
2029	257,457	15.8	40,678	163,270	16.4	42,223	171,128	18.2	46,857	186,586
2030	264,537	15.8	41,797	162,938	16.4	43,384	170,780	18.2	48,146	186,207

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	6.7%	\$13,884	\$ 89,562	9.2%	\$19,065	\$ 111,913	9.4%	\$19,479	\$ 119,704
2022	212,927	6.7	14,266	90,421	9.2	19,589	112,987	9.4	20,015	120,852
2023	218,782	6.7	14,658	91,191	9.2	20,128	113,950	9.4	20,566	121,882
2024	224,799	6.7	15,062	91,863	9.2	20,682	114,789	9.4	21,131	122,780
2025	230,981	6.7	15,476	92,424	9.2	21,250	115,491	9.4	21,712	123,530
2026	237,333	6.7	15,901	92,863	9.2	21,835	116,040	9.4	22,309	124,117
2027	243,860	6.7	16,339	93,167	9.2	22,435	116,420	9.4	22,923	124,524
2028	250,566	6.7	16,788	93,322	9.2	23,052	116,614	9.4	23,553	124,731
2029	257,457	6.7	17,250	93,313	9.2	23,686	116,603	9.4	24,201	124,719
2030	264,537	6.7	17,724	93,123	9.2	24,337	116,366	9.4	24,866	124,466

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	11.1%	\$23,002	\$ 134,521	11.5%	\$23,831	\$ 134,310	12.8%	\$26,525	\$ 149,386
2022	212,927	11.1	23,635	135,811	11.5	24,487	135,598	12.8	27,255	150,819
2023	218,782	11.1	24,285	136,968	11.5	25,160	136,753	12.8	28,004	152,104
2024	224,799	11.1	24,953	137,977	11.5	25,852	137,760	12.8	28,774	153,224
2025	230,981	11.1	25,639	138,820	11.5	26,563	138,602	12.8	29,566	154,161
2026	237,333	11.1	26,344	139,480	11.5	27,293	139,261	12.8	30,379	154,894
2027	243,860	11.1	27,068	139,937	11.5	28,044	139,717	12.8	31,214	155,402
2028	250,566	11.1	27,813	140,170	11.5	28,815	139,950	12.8	32,072	155,661
2029	257,457	11.1	28,578	140,157	11.5	29,608	139,937	12.8	32,954	155,646
2030	264,537	11.1	29,364	139,872	11.5	30,422	139,653	12.8	33,861	155,330

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	13.9%	\$28,805	\$ 156,705	14.5%	\$30,048	\$ 164,244	16.3%	\$33,778	\$ 179,081
2022	212,927	13.9	29,597	158,208	14.5	30,874	165,820	16.3	34,707	180,799
2023	218,782	13.9	30,411	159,556	14.5	31,723	167,233	16.3	35,661	182,340
2024	224,799	13.9	31,247	160,731	14.5	32,596	168,465	16.3	36,642	183,683
2025	230,981	13.9	32,106	161,713	14.5	33,492	169,495	16.3	37,650	184,806
2026	237,333	13.9	32,989	162,482	14.5	34,413	170,301	16.3	38,685	185,685
2027	243,860	13.9	33,897	163,014	14.5	35,360	170,859	16.3	39,749	186,294
2028	250,566	13.9	34,829	163,286	14.5	36,332	171,144	16.3	40,842	186,604
2029	257,457	13.9	35,787	163,270	14.5	37,331	171,128	16.3	41,965	186,586
2030	264,537	13.9	36,771	162,938	14.5	38,358	170,780	16.3	43,120	186,207

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2021	\$ 207,228	4.8%	\$9,947	\$ 89,562	7.3%	\$15,128	\$ 111,913	7.5%	\$15,542	\$ 119,704
2022	212,927	4.8	10,220	90,421	7.3	15,544	112,987	7.5	15,970	120,852
2023	218,782	4.8	10,502	91,191	7.3	15,971	113,950	7.5	16,409	121,882
2024	224,799	4.8	10,790	91,863	7.3	16,410	114,789	7.5	16,860	122,780
2025	230,981	4.8	11,087	92,424	7.3	16,862	115,491	7.5	17,324	123,530
2026	237,333	4.8	11,392	92,863	7.3	17,325	116,040	7.5	17,800	124,117
2027	243,860	4.8	11,705	93,167	7.3	17,802	116,420	7.5	18,290	124,524
2028	250,566	4.8	12,027	93,322	7.3	18,291	116,614	7.5	18,792	124,731
2029	257,457	4.8	12,358	93,313	7.3	18,794	116,603	7.5	19,309	124,719
2030	264,537	4.8	12,698	93,123	7.3	19,311	116,366	7.5	19,840	124,466

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 207,228	9.2%	\$19,065	\$ 134,521	9.6%	\$19,894	\$ 134,310	10.9%	\$22,588	\$ 149,386
2022	212,927	9.2	19,589	135,811	9.6	20,441	135,598	10.9	23,209	150,819
2023	218,782	9.2	20,128	136,968	9.6	21,003	136,753	10.9	23,847	152,104
2024	224,799	9.2	20,682	137,977	9.6	21,581	137,760	10.9	24,503	153,224
2025	230,981	9.2	21,250	138,820	9.6	22,174	138,602	10.9	25,177	154,161
2026	237,333	9.2	21,835	139,480	9.6	22,784	139,261	10.9	25,869	154,894
2027	243,860	9.2	22,435	139,937	9.6	23,411	139,717	10.9	26,581	155,402
2028	250,566	9.2	23,052	140,170	9.6	24,054	139,950	10.9	27,312	155,661
2029	257,457	9.2	23,686	140,157	9.6	24,716	139,937	10.9	28,063	155,646
2030	264,537	9.2	24,337	139,872	9.6	25,396	139,653	10.9	28,835	155,330

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2021	\$ 207,228	12.0%	\$24,867	\$ 156,705	12.6%	\$26,111	\$ 164,244	14.4%	\$29,841	\$ 179,081
2022	212,927	12.0	25,551	158,208	12.6	26,829	165,820	14.4	30,661	180,799
2023	218,782	12.0	26,254	159,556	12.6	27,567	167,233	14.4	31,505	182,340
2024	224,799	12.0	26,976	160,731	12.6	28,325	168,465	14.4	32,371	183,683
2025	230,981	12.0	27,718	161,713	12.6	29,104	169,495	14.4	33,261	184,806
2026	237,333	12.0	28,480	162,482	12.6	29,904	170,301	14.4	34,176	185,685
2027	243,860	12.0	29,263	163,014	12.6	30,726	170,859	14.4	35,116	186,294
2028	250,566	12.0	30,068	163,286	12.6	31,571	171,144	14.4	36,082	186,604
2029	257,457	12.0	30,895	163,270	12.6	32,440	171,128	14.4	37,074	186,586
2030	264,537	12.0	31,744	162,938	12.6	33,332	170,780	14.4	38,093	186,207

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	10.8%	\$22,381	\$ 92,882	13.4%	\$27,769	\$ 116,149	13.6%	\$28,183	\$ 124,153
2022	212,927	10.8	22,996	93,773	13.4	28,532	117,263	13.6	28,958	125,344
2023	218,782	10.8	23,628	94,572	13.4	29,317	118,262	13.6	29,754	126,412
2024	224,799	10.8	24,278	95,268	13.4	30,123	119,133	13.6	30,573	127,343
2025	230,981	10.8	24,946	95,850	13.4	30,951	119,861	13.6	31,413	128,121
2026	237,333	10.8	25,632	96,306	13.4	31,803	120,431	13.6	32,277	128,730
2027	243,860	10.8	26,337	96,622	13.4	32,677	120,826	13.6	33,165	129,152
2028	250,566	10.8	27,061	96,783	13.4	33,576	121,027	13.6	34,077	129,367
2029	257,457	10.8	27,805	96,774	13.4	34,499	121,015	13.6	35,014	129,355
2030	264,537	10.8	28,570	96,577	13.4	35,448	120,769	13.6	35,977	129,092

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	15.3%	\$31,706	\$ 139,603	15.8%	\$32,742	\$ 139,370	17.2%	\$35,643	\$ 155,013
2022	212,927	15.3	32,578	140,942	15.8	33,642	140,707	17.2	36,623	156,500
2023	218,782	15.3	33,474	142,143	15.8	34,568	141,906	17.2	37,631	157,834
2024	224,799	15.3	34,394	143,190	15.8	35,518	142,951	17.2	38,665	158,996
2025	230,981	15.3	35,340	144,065	15.8	36,495	143,825	17.2	39,729	159,968
2026	237,333	15.3	36,312	144,750	15.8	37,499	144,509	17.2	40,821	160,729
2027	243,860	15.3	37,311	145,224	15.8	38,530	144,983	17.2	41,944	161,256
2028	250,566	15.3	38,337	145,466	15.8	39,589	145,225	17.2	43,097	161,525
2029	257,457	15.3	39,391	145,452	15.8	40,678	145,211	17.2	44,283	161,509
2030	264,537	15.3	40,474	145,157	15.8	41,797	144,916	17.2	45,500	161,181

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	18.3%	\$37,923	\$ 162,596	19.0%	\$39,373	\$ 170,411	20.8%	\$43,103	\$ 185,805
2022	212,927	18.3	38,966	164,156	19.0	40,456	172,046	20.8	44,289	187,587
2023	218,782	18.3	40,037	165,555	19.0	41,569	173,512	20.8	45,507	189,185
2024	224,799	18.3	41,138	166,774	19.0	42,712	174,790	20.8	46,758	190,578
2025	230,981	18.3	42,270	167,793	19.0	43,886	175,858	20.8	48,044	191,743
2026	237,333	18.3	43,432	168,591	19.0	45,093	176,694	20.8	49,365	192,655
2027	243,860	18.3	44,626	169,143	19.0	46,333	177,273	20.8	50,723	193,286
2028	250,566	18.3	45,854	169,425	19.0	47,608	177,568	20.8	52,118	193,608
2029	257,457	18.3	47,115	169,409	19.0	48,917	177,551	20.8	53,551	193,589
2030	264,537	18.3	48,410	169,065	19.0	50,262	177,190	20.8	55,024	193,196

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	8.9%	\$18,443	\$ 92,882	11.5%	\$23,831	\$ 116,149	11.7%	\$24,246	\$ 124,153
2022	212,927	8.9	18,951	93,773	11.5	24,487	117,263	11.7	24,912	125,344
2023	218,782	8.9	19,472	94,572	11.5	25,160	118,262	11.7	25,597	126,412
2024	224,799	8.9	20,007	95,268	11.5	25,852	119,133	11.7	26,301	127,343
2025	230,981	8.9	20,557	95,850	11.5	26,563	119,861	11.7	27,025	128,121
2026	237,333	8.9	21,123	96,306	11.5	27,293	120,431	11.7	27,768	128,730
2027	243,860	8.9	21,704	96,622	11.5	28,044	120,826	11.7	28,532	129,152
2028	250,566	8.9	22,300	96,783	11.5	28,815	121,027	11.7	29,316	129,367
2029	257,457	8.9	22,914	96,774	11.5	29,608	121,015	11.7	30,122	129,355
2030	264,537	8.9	23,544	96,577	11.5	30,422	120,769	11.7	30,951	129,092

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	13.4%	\$27,769	\$ 139,603	13.9%	\$28,805	\$ 139,370	15.3%	\$31,706	\$ 155,013
2022	212,927	13.4	28,532	140,942	13.9	29,597	140,707	15.3	32,578	156,500
2023	218,782	13.4	29,317	142,143	13.9	30,411	141,906	15.3	33,474	157,834
2024	224,799	13.4	30,123	143,190	13.9	31,247	142,951	15.3	34,394	158,996
2025	230,981	13.4	30,951	144,065	13.9	32,106	143,825	15.3	35,340	159,968
2026	237,333	13.4	31,803	144,750	13.9	32,989	144,509	15.3	36,312	160,729
2027	243,860	13.4	32,677	145,224	13.9	33,897	144,983	15.3	37,311	161,256
2028	250,566	13.4	33,576	145,466	13.9	34,829	145,225	15.3	38,337	161,525
2029	257,457	13.4	34,499	145,452	13.9	35,787	145,211	15.3	39,391	161,509
2030	264,537	13.4	35,448	145,157	13.9	36,771	144,916	15.3	40,474	161,181

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	16.4%	\$33,985	\$ 162,596	17.1%	\$35,436	\$ 170,411	18.9%	\$39,166	\$ 185,805
2022	212,927	16.4	34,920	164,156	17.1	36,411	172,046	18.9	40,243	187,587
2023	218,782	16.4	35,880	165,555	17.1	37,412	173,512	18.9	41,350	189,185
2024	224,799	16.4	36,867	166,774	17.1	38,441	174,790	18.9	42,487	190,578
2025	230,981	16.4	37,881	167,793	17.1	39,498	175,858	18.9	43,655	191,743
2026	237,333	16.4	38,923	168,591	17.1	40,584	176,694	18.9	44,856	192,655
2027	243,860	16.4	39,993	169,143	17.1	41,700	177,273	18.9	46,090	193,286
2028	250,566	16.4	41,093	169,425	17.1	42,847	177,568	18.9	47,357	193,608
2029	257,457	16.4	42,223	169,409	17.1	44,025	177,551	18.9	48,659	193,589
2030	264,537	16.4	43,384	169,065	17.1	45,236	177,190	18.9	49,997	193,196

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	7.0%	\$14,506	\$ 92,882	9.6%	\$19,894	\$ 116,149	9.8%	\$20,308	\$ 124,153
2022	212,927	7.0	14,905	93,773	9.6	20,441	117,263	9.8	20,867	125,344
2023	218,782	7.0	15,315	94,572	9.6	21,003	118,262	9.8	21,441	126,412
2024	224,799	7.0	15,736	95,268	9.6	21,581	119,133	9.8	22,030	127,343
2025	230,981	7.0	16,169	95,850	9.6	22,174	119,861	9.8	22,636	128,121
2026	237,333	7.0	16,613	96,306	9.6	22,784	120,431	9.8	23,259	128,730
2027	243,860	7.0	17,070	96,622	9.6	23,411	120,826	9.8	23,898	129,152
2028	250,566	7.0	17,540	96,783	9.6	24,054	121,027	9.8	24,555	129,367
2029	257,457	7.0	18,022	96,774	9.6	24,716	121,015	9.8	25,231	129,355
2030	264,537	7.0	18,518	96,577	9.6	25,396	120,769	9.8	25,925	129,092

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	11.5%	\$23,831	\$ 139,603	12.0%	\$24,867	\$ 139,370	13.4%	\$27,769	\$ 155,013
2022	212,927	11.5	24,487	140,942	12.0	25,551	140,707	13.4	28,532	156,500
2023	218,782	11.5	25,160	142,143	12.0	26,254	141,906	13.4	29,317	157,834
2024	224,799	11.5	25,852	143,190	12.0	26,976	142,951	13.4	30,123	158,996
2025	230,981	11.5	26,563	144,065	12.0	27,718	143,825	13.4	30,951	159,968
2026	237,333	11.5	27,293	144,750	12.0	28,480	144,509	13.4	31,803	160,729
2027	243,860	11.5	28,044	145,224	12.0	29,263	144,983	13.4	32,677	161,256
2028	250,566	11.5	28,815	145,466	12.0	30,068	145,225	13.4	33,576	161,525
2029	257,457	11.5	29,608	145,452	12.0	30,895	145,211	13.4	34,499	161,509
2030	264,537	11.5	30,422	145,157	12.0	31,744	144,916	13.4	35,448	161,181

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	14.5%	\$30,048	\$ 162,596	15.2%	\$31,499	\$ 170,411	17.0%	\$35,229	\$ 185,805
2022	212,927	14.5	30,874	164,156	15.2	32,365	172,046	17.0	36,198	187,587
2023	218,782	14.5	31,723	165,555	15.2	33,255	173,512	17.0	37,193	189,185
2024	224,799	14.5	32,596	166,774	15.2	34,169	174,790	17.0	38,216	190,578
2025	230,981	14.5	33,492	167,793	15.2	35,109	175,858	17.0	39,267	191,743
2026	237,333	14.5	34,413	168,591	15.2	36,075	176,694	17.0	40,347	192,655
2027	243,860	14.5	35,360	169,143	15.2	37,067	177,273	17.0	41,456	193,286
2028	250,566	14.5	36,332	169,425	15.2	38,086	177,568	17.0	42,596	193,608
2029	257,457	14.5	37,331	169,409	15.2	39,133	177,551	17.0	43,768	193,589
2030	264,537	14.5	38,358	169,065	15.2	40,210	177,190	17.0	44,971	193,196

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 Oronogo - 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	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	5.1%	\$10,569	\$ 92,882	7.7%	\$15,957	\$ 116,149	7.9%	\$16,371	\$ 124,153
2022	212,927	5.1	10,859	93,773	7.7	16,395	117,263	7.9	16,821	125,344
2023	218,782	5.1	11,158	94,572	7.7	16,846	118,262	7.9	17,284	126,412
2024	224,799	5.1	11,465	95,268	7.7	17,310	119,133	7.9	17,759	127,343
2025	230,981	5.1	11,780	95,850	7.7	17,786	119,861	7.9	18,247	128,121
2026	237,333	5.1	12,104	96,306	7.7	18,275	120,431	7.9	18,749	128,730
2027	243,860	5.1	12,437	96,622	7.7	18,777	120,826	7.9	19,265	129,152
2028	250,566	5.1	12,779	96,783	7.7	19,294	121,027	7.9	19,795	129,367
2029	257,457	5.1	13,130	96,774	7.7	19,824	121,015	7.9	20,339	129,355
2030	264,537	5.1	13,491	96,577	7.7	20,369	120,769	7.9	20,898	129,092

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	9.6%	\$19,894	\$ 139,603	10.1%	\$20,930	\$ 139,370	11.5%	\$23,831	\$ 155,013
2022	212,927	9.6	20,441	140,942	10.1	21,506	140,707	11.5	24,487	156,500
2023	218,782	9.6	21,003	142,143	10.1	22,097	141,906	11.5	25,160	157,834
2024	224,799	9.6	21,581	143,190	10.1	22,705	142,951	11.5	25,852	158,996
2025	230,981	9.6	22,174	144,065	10.1	23,329	143,825	11.5	26,563	159,968
2026	237,333	9.6	22,784	144,750	10.1	23,971	144,509	11.5	27,293	160,729
2027	243,860	9.6	23,411	145,224	10.1	24,630	144,983	11.5	28,044	161,256
2028	250,566	9.6	24,054	145,466	10.1	25,307	145,225	11.5	28,815	161,525
2029	257,457	9.6	24,716	145,452	10.1	26,003	145,211	11.5	29,608	161,509
2030	264,537	9.6	25,396	145,157	10.1	26,718	144,916	11.5	30,422	161,181

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 207,228	12.6%	\$26,111	\$ 162,596	13.3%	\$27,561	\$ 170,411	15.1%	\$31,291	\$ 185,805
2022	212,927	12.6	26,829	164,156	13.3	28,319	172,046	15.1	32,152	187,587
2023	218,782	12.6	27,567	165,555	13.3	29,098	173,512	15.1	33,036	189,185
2024	224,799	12.6	28,325	166,774	13.3	29,898	174,790	15.1	33,945	190,578
2025	230,981	12.6	29,104	167,793	13.3	30,720	175,858	15.1	34,878	191,743
2026	237,333	12.6	29,904	168,591	13.3	31,565	176,694	15.1	35,837	192,655
2027	243,860	12.6	30,726	169,143	13.3	32,433	177,273	15.1	36,823	193,286
2028	250,566	12.6	31,571	169,425	13.3	33,325	177,568	15.1	37,835	193,608
2029	257,457	12.6	32,440	169,409	13.3	34,242	177,551	15.1	38,876	193,589
2030	264,537	12.6	33,332	169,065	13.3	35,183	177,190	15.1	39,945	193,196

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.