



The Initial Valuation For
Bull Creek Village
as of September 30, 2021



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November 11, 2021

Bull Creek Village
Branson, 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 September 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.

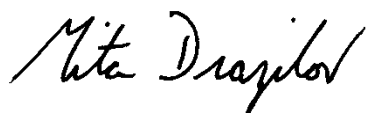
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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.

Bull Creek Village

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	7.70%	0.20%	3.50%	11.40%	9.50%	7.60%	5.70%
L-3	General	9.40	0.30	4.40	14.10	12.20	10.30	8.40
LT-4(65)	General	8.40	0.20	3.90	12.50	10.60	8.70	6.80
LT-5(65)	General	9.90	0.30	4.70	14.90	13.00	11.10	9.20
L-7	General	11.10	0.30	5.30	16.70	14.80	12.90	11.00
LT-8(65)	General	11.50	0.30	5.50	17.30	15.40	13.50	11.60
L-12	General	12.80	0.40	6.20	19.40	17.50	15.60	13.70
LT-14(65)	General	13.00	0.40	6.30	19.70	17.80	15.90	14.00
L-6	General	14.50	0.50	7.00	22.00	20.10	18.20	16.30

* 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.

Bull Creek Village

Employer Contribution Rates 3 Year FAS - Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll						
		Normal Cost Rate	Casualty Rate	Prior Service Cost Rate *	Total Employer Contribution Rate Based Upon the Following Member Contribution Rates			
					0%	2%	4%	6%
L-1	General	7.90%	0.20%	3.60%	11.70%	9.80%	7.90%	6.00%
L-3	General	9.70	0.30	4.50	14.50	12.60	10.70	8.80
LT-4(65)	General	8.70	0.20	4.00	12.90	11.00	9.10	7.20
LT-5(65)	General	10.20	0.30	4.80	15.30	13.40	11.50	9.60
L-7	General	11.50	0.30	5.40	17.20	15.30	13.40	11.50
LT-8(65)	General	11.80	0.30	5.70	17.80	15.90	14.00	12.10
L-12	General	13.20	0.40	6.40	20.00	18.10	16.20	14.30
LT-14(65)	General	13.40	0.40	6.50	20.30	18.40	16.50	14.60
L-6	General	15.00	0.50	7.30	22.80	20.90	19.00	17.10

* 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.

Bull Creek Village

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	7.90%	0.20%	3.70%	11.80%	9.90%	8.00%	6.10%
L-3	General	9.60	0.30	4.60	14.50	12.60	10.70	8.80
LT-4(65)	General	8.70	0.20	4.20	13.10	11.20	9.30	7.40
LT-5(65)	General	10.30	0.30	5.00	15.60	13.70	11.80	9.90
L-7	General	11.40	0.30	5.50	17.20	15.30	13.40	11.50
LT-8(65)	General	11.80	0.30	5.80	17.90	16.00	14.10	12.20
L-12	General	13.10	0.40	6.40	19.90	18.00	16.10	14.20
LT-14(65)	General	13.30	0.40	6.60	20.30	18.40	16.50	14.60
L-6	General	14.80	0.50	7.30	22.60	20.70	18.80	16.90

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.

Bull Creek Village

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	8.10%	0.20%	3.80%	12.10%	10.20%	8.30%	6.40%
L-3	General	9.90	0.30	4.70	14.90	13.00	11.10	9.20
LT-4(65)	General	9.00	0.20	4.40	13.60	11.70	9.80	7.90
LT-5(65)	General	10.60	0.30	5.20	16.10	14.20	12.30	10.40
L-7	General	11.70	0.30	5.70	17.70	15.80	13.90	12.00
LT-8(65)	General	12.10	0.30	6.00	18.40	16.50	14.60	12.70
L-12	General	13.50	0.40	6.60	20.50	18.60	16.70	14.80
LT-14(65)	General	13.70	0.40	6.80	20.90	19.00	17.10	15.20
L-6	General	15.30	0.50	7.60	23.40	21.50	19.60	17.70

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

* 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.

Bull Creek Village

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

Benefit Program	5 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 12,882	\$ 10,735	\$ 8,588	\$ 6,441
L-3	15,933	13,786	11,639	9,492
LT-4(65)	14,125	11,978	9,831	7,684
LT-5(65)	16,837	14,690	12,543	10,396
L-7	18,871	16,724	14,577	12,430
LT-8(65)	19,549	17,402	15,255	13,108
L-12	21,922	19,775	17,628	15,481
LT-14(65)	22,261	20,114	17,967	15,820
L-6	24,860	22,713	20,566	18,419

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 13,221	\$ 11,074	\$ 8,927	\$ 6,780
L-3	16,385	14,238	12,091	9,944
LT-4(65)	14,577	12,430	10,283	8,136
LT-5(65)	17,289	15,142	12,995	10,848
L-7	19,436	17,289	15,142	12,995
LT-8(65)	20,114	17,967	15,820	13,673
L-12	22,600	20,453	18,306	16,159
LT-14(65)	22,939	20,792	18,645	16,498
L-6	25,764	23,617	21,470	19,323

Rule of 80 Retirement Eligibility

Benefit Program	5 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 13,334	\$ 11,187	\$ 9,040	\$ 6,893
L-3	16,385	14,238	12,091	9,944
LT-4(65)	14,803	12,656	10,509	8,362
LT-5(65)	17,628	15,481	13,334	11,187
L-7	19,436	17,289	15,142	12,995
LT-8(65)	20,227	18,080	15,933	13,786
L-12	22,487	20,340	18,193	16,046
LT-14(65)	22,939	20,792	18,645	16,498
L-6	25,538	23,391	21,244	19,097

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 13,673	\$ 11,526	\$ 9,379	\$ 7,232
L-3	16,837	14,690	12,543	10,396
LT-4(65)	15,368	13,221	11,074	8,927
LT-5(65)	18,193	16,046	13,899	11,752
L-7	20,001	17,854	15,707	13,560
LT-8(65)	20,792	18,645	16,498	14,351
L-12	23,165	21,018	18,871	16,724
LT-14(65)	23,617	21,470	19,323	17,176
L-6	26,442	24,295	22,148	20,001

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.

Bull Creek Village

Employees and Payroll Included in the Valuation

	General
Number of Employees	3
Annual Payroll	\$ 113,000

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:

Bull Creek Village

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 68,093	\$ 70,324
L-3	General	85,114	87,884
LT-4(65)	General	75,630	78,138
LT-5(65)	General	90,786	93,751
L-7	General	102,138	105,467
LT-8(65)	General	105,915	109,379
L-12	General	119,146	123,056
LT-14(65)	General	121,030	125,021
L-6	General	136,161	140,634

Bull Creek Village

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	\$ 70,894	\$ 73,237
L-3	General	88,614	91,558
LT-4(65)	General	81,830	84,573
LT-5(65)	General	96,827	100,059
L-7	General	106,332	109,849
LT-8(65)	General	111,805	115,520
L-12	General	124,066	128,165
LT-14(65)	General	126,798	131,006
L-6	General	141,775	146,485

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

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

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

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

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Concluded)

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

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System

Brief Summary of LAGERS

Benefits and Conditions Evaluated and/or Considered as of February 28, 2021

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Member Contributions. Sections 70.690 & 70.705. Each member contributes a percent of compensation beginning after completion of sufficient employment for 6 months of credited service. The law governing LAGERS has a provision for the adoption of a 2%, 4% or 6% member contribution rate.

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

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

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Missouri LAGERS

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

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

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

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

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

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

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

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

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

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 916	\$1,050	\$1,572	70%	105%
2,000	1,400	875	1,055	1,400	1,930	70%	97%
2,500	1,750	1,094	1,192	1,750	2,286	70%	91%
3,000	2,100	1,313	1,330	2,100	2,643	70%	88%
3,500	2,450	1,531	1,469	2,450	3,000	70%	86%
4,000	2,800	1,750	1,605	2,800	3,355	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 916	\$ 750	\$1,385	50%	92%
2,000	1,000	625	1,055	1,000	1,680	50%	84%
2,500	1,250	781	1,192	1,250	1,973	50%	79%
3,000	1,500	938	1,330	1,500	2,268	50%	76%
3,500	1,750	1,094	1,469	1,750	2,563	50%	73%
4,000	2,000	1,250	1,605	2,000	2,855	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 916	\$ 450	\$1,197	30%	80%
2,000	600	375	1,055	600	1,430	30%	72%
2,500	750	469	1,192	750	1,661	30%	66%
3,000	900	563	1,330	900	1,893	30%	63%
3,500	1,050	656	1,469	1,050	2,125	30%	61%
4,000	1,200	750	1,605	1,200	2,355	30%	59%

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

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

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

Missouri LAGERS

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 916	\$1,050	\$1,704	70%	114%
2,000	1,400	1,050	1,055	1,400	2,105	70%	105%
2,500	1,750	1,313	1,192	1,750	2,505	70%	100%
3,000	2,100	1,575	1,330	2,100	2,905	70%	97%
3,500	2,450	1,838	1,469	2,450	3,307	70%	94%
4,000	2,800	2,100	1,605	2,800	3,705	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 916	\$ 750	\$1,479	50%	99%
2,000	1,000	750	1,055	1,000	1,805	50%	90%
2,500	1,250	938	1,192	1,250	2,130	50%	85%
3,000	1,500	1,125	1,330	1,500	2,455	50%	82%
3,500	1,750	1,313	1,469	1,750	2,782	50%	79%
4,000	2,000	1,500	1,605	2,000	3,105	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 916	\$ 450	\$1,254	30%	84%
2,000	600	450	1,055	600	1,505	30%	75%
2,500	750	563	1,192	750	1,755	30%	70%
3,000	900	675	1,330	900	2,005	30%	67%
3,500	1,050	788	1,469	1,050	2,257	30%	64%
4,000	1,200	900	1,605	1,200	2,505	30%	63%

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

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

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

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

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 916	\$1,050	\$1,835	70%	122%
2,000	1,400	1,225	1,055	1,400	2,280	70%	114%
2,500	1,750	1,531	1,192	1,750	2,723	70%	109%
3,000	2,100	1,838	1,330	2,100	3,168	70%	106%
3,500	2,450	2,144	1,469	2,450	3,613	70%	103%
4,000	2,800	2,450	1,605	2,800	4,055	70%	101%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 916	\$ 750	\$1,572	50%	105%
2,000	1,000	875	1,055	1,000	1,930	50%	97%
2,500	1,250	1,094	1,192	1,250	2,286	50%	91%
3,000	1,500	1,313	1,330	1,500	2,643	50%	88%
3,500	1,750	1,531	1,469	1,750	3,000	50%	86%
4,000	2,000	1,750	1,605	2,000	3,355	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 916	\$ 450	\$1,310	30%	87%
2,000	600	525	1,055	600	1,580	30%	79%
2,500	750	656	1,192	750	1,848	30%	74%
3,000	900	788	1,330	900	2,118	30%	71%
3,500	1,050	919	1,469	1,050	2,388	30%	68%
4,000	1,200	1,050	1,605	1,200	2,655	30%	66%

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

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

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Bull Creek Village - General

September 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									
30-34									
35-39									
40-44									
45-49			1					1	\$ 45,000
50-54	1							1	\$ 38,000
55-59									
60-64									
65-69		1						1	\$ 30,000
70 & Over									
Totals	1	1	1					3	\$ 113,000

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

Age: 55.0 years.

Benefit Service: 5.9 years.

Annual Pay: \$37,667.

APPENDIX VI

RISK COMMENTARY

Risk Commentary

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

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

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

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

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

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

Risk Commentary (Concluded)

PLAN MATURITY MEASURES

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

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

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

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

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

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

DURATION OF ACTUARIAL ACCRUED LIABILITY

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

ADDITIONAL RISK ASSESSMENT

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



November 11, 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 September 30, 2021 Initial Actuarial Valuation of LAGERS benefits for the employees of

Bull Creek Village

Sincerely,

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

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp



November 11, 2021

Bull Creek Village
Branson, 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 September 30, 2021 Initial Valuation for the Bull Creek Village dated November 11, 2021.

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

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

Respectfully submitted,

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

Mita D. Drazilov, ASA, FCA, MAAA

Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	11.4%	\$12,882	\$ 68,093	14.1%	\$15,933	\$ 85,114	12.5%	\$14,125	\$ 75,630
2022	116,108	11.4	13,236	68,746	14.1	16,371	85,930	12.5	14,514	76,355
2023	119,301	11.4	13,600	69,332	14.1	16,821	86,662	12.5	14,913	77,006
2024	122,582	11.4	13,974	69,843	14.1	17,284	87,300	12.5	15,323	77,573
2025	125,953	11.4	14,359	70,270	14.1	17,759	87,834	12.5	15,744	78,047
2026	129,417	11.4	14,754	70,604	14.1	18,248	88,252	12.5	16,177	78,418
2027	132,976	11.4	15,159	70,835	14.1	18,750	88,541	12.5	16,622	78,675
2028	136,633	11.4	15,576	70,953	14.1	19,265	88,689	12.5	17,079	78,806
2029	140,390	11.4	16,004	70,946	14.1	19,795	88,680	12.5	17,549	78,798
2030	144,251	11.4	16,445	70,802	14.1	20,339	88,500	12.5	18,031	78,638

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	\$ 113,000	14.9%	\$16,837	\$ 90,786	16.7%	\$18,871	\$ 102,138	17.3%	\$19,549	\$ 105,915
2022	116,108	14.9	17,300	91,657	16.7	19,390	103,118	17.3	20,087	106,931
2023	119,301	14.9	17,776	92,438	16.7	19,923	103,997	17.3	20,639	107,842
2024	122,582	14.9	18,265	93,119	16.7	20,471	104,763	17.3	21,207	108,636
2025	125,953	14.9	18,767	93,688	16.7	21,034	105,403	17.3	21,790	109,300
2026	129,417	14.9	19,283	94,133	16.7	21,613	105,904	17.3	22,389	109,820
2027	132,976	14.9	19,813	94,441	16.7	22,207	106,251	17.3	23,005	110,180
2028	136,633	14.9	20,358	94,598	16.7	22,818	106,428	17.3	23,638	110,364
2029	140,390	14.9	20,918	94,589	16.7	23,445	106,418	17.3	24,287	110,353
2030	144,251	14.9	21,493	94,397	16.7	24,090	106,202	17.3	24,955	110,129

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	\$ 113,000	19.4%	\$21,922	\$ 119,146	19.7%	\$22,261	\$ 121,030	22.0%	\$24,860	\$ 136,161
2022	116,108	19.4	22,525	120,289	19.7	22,873	122,191	22.0	25,544	137,467
2023	119,301	19.4	23,144	121,314	19.7	23,502	123,232	22.0	26,246	138,638
2024	122,582	19.4	23,781	122,207	19.7	24,149	124,140	22.0	26,968	139,659
2025	125,953	19.4	24,435	122,954	19.7	24,813	124,899	22.0	27,710	140,513
2026	129,417	19.4	25,107	123,539	19.7	25,495	125,493	22.0	28,472	141,181
2027	132,976	19.4	25,797	123,944	19.7	26,196	125,904	22.0	29,255	141,644
2028	136,633	19.4	26,507	124,151	19.7	26,917	126,114	22.0	30,059	141,880
2029	140,390	19.4	27,236	124,139	19.7	27,657	126,102	22.0	30,886	141,866
2030	144,251	19.4	27,985	123,887	19.7	28,417	125,846	22.0	31,735	141,578

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.



Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	9.5%	\$10,735	\$ 68,093	12.2%	\$13,786	\$ 85,114	10.6%	\$11,978	\$ 75,630
2022	116,108	9.5	11,030	68,746	12.2	14,165	85,930	10.6	12,307	76,355
2023	119,301	9.5	11,334	69,332	12.2	14,555	86,662	10.6	12,646	77,006
2024	122,582	9.5	11,645	69,843	12.2	14,955	87,300	10.6	12,994	77,573
2025	125,953	9.5	11,966	70,270	12.2	15,366	87,834	10.6	13,351	78,047
2026	129,417	9.5	12,295	70,604	12.2	15,789	88,252	10.6	13,718	78,418
2027	132,976	9.5	12,633	70,835	12.2	16,223	88,541	10.6	14,095	78,675
2028	136,633	9.5	12,980	70,953	12.2	16,669	88,689	10.6	14,483	78,806
2029	140,390	9.5	13,337	70,946	12.2	17,128	88,680	10.6	14,881	78,798
2030	144,251	9.5	13,704	70,802	12.2	17,599	88,500	10.6	15,291	78,638

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	\$ 113,000	13.0%	\$14,690	\$ 90,786	14.8%	\$16,724	\$ 102,138	15.4%	\$17,402	\$ 105,915
2022	116,108	13.0	15,094	91,657	14.8	17,184	103,118	15.4	17,881	106,931
2023	119,301	13.0	15,509	92,438	14.8	17,657	103,997	15.4	18,372	107,842
2024	122,582	13.0	15,936	93,119	14.8	18,142	104,763	15.4	18,878	108,636
2025	125,953	13.0	16,374	93,688	14.8	18,641	105,403	15.4	19,397	109,300
2026	129,417	13.0	16,824	94,133	14.8	19,154	105,904	15.4	19,930	109,820
2027	132,976	13.0	17,287	94,441	14.8	19,680	106,251	15.4	20,478	110,180
2028	136,633	13.0	17,762	94,598	14.8	20,222	106,428	15.4	21,041	110,364
2029	140,390	13.0	18,251	94,589	14.8	20,778	106,418	15.4	21,620	110,353
2030	144,251	13.0	18,753	94,397	14.8	21,349	106,202	15.4	22,215	110,129

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	\$ 113,000	17.5%	\$19,775	\$ 119,146	17.8%	\$20,114	\$ 121,030	20.1%	\$22,713	\$ 136,161
2022	116,108	17.5	20,319	120,289	17.8	20,667	122,191	20.1	23,338	137,467
2023	119,301	17.5	20,878	121,314	17.8	21,236	123,232	20.1	23,980	138,638
2024	122,582	17.5	21,452	122,207	17.8	21,820	124,140	20.1	24,639	139,659
2025	125,953	17.5	22,042	122,954	17.8	22,420	124,899	20.1	25,317	140,513
2026	129,417	17.5	22,648	123,539	17.8	23,036	125,493	20.1	26,013	141,181
2027	132,976	17.5	23,271	123,944	17.8	23,670	125,904	20.1	26,728	141,644
2028	136,633	17.5	23,911	124,151	17.8	24,321	126,114	20.1	27,463	141,880
2029	140,390	17.5	24,568	124,139	17.8	24,989	126,102	20.1	28,218	141,866
2030	144,251	17.5	25,244	123,887	17.8	25,677	125,846	20.1	28,994	141,578

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.



Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	7.6%	\$8,588	\$ 68,093	10.3%	\$11,639	\$ 85,114	8.7%	\$9,831	\$ 75,630
2022	116,108	7.6	8,824	68,746	10.3	11,959	85,930	8.7	10,101	76,355
2023	119,301	7.6	9,067	69,332	10.3	12,288	86,662	8.7	10,379	77,006
2024	122,582	7.6	9,316	69,843	10.3	12,626	87,300	8.7	10,665	77,573
2025	125,953	7.6	9,572	70,270	10.3	12,973	87,834	8.7	10,958	78,047
2026	129,417	7.6	9,836	70,604	10.3	13,330	88,252	8.7	11,259	78,418
2027	132,976	7.6	10,106	70,835	10.3	13,697	88,541	8.7	11,569	78,675
2028	136,633	7.6	10,384	70,953	10.3	14,073	88,689	8.7	11,887	78,806
2029	140,390	7.6	10,670	70,946	10.3	14,460	88,680	8.7	12,214	78,798
2030	144,251	7.6	10,963	70,802	10.3	14,858	88,500	8.7	12,550	78,638

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	\$ 113,000	11.1%	\$12,543	\$ 90,786	12.9%	\$14,577	\$ 102,138	13.5%	\$15,255	\$ 105,915
2022	116,108	11.1	12,888	91,657	12.9	14,978	103,118	13.5	15,675	106,931
2023	119,301	11.1	13,242	92,438	12.9	15,390	103,997	13.5	16,106	107,842
2024	122,582	11.1	13,607	93,119	12.9	15,813	104,763	13.5	16,549	108,636
2025	125,953	11.1	13,981	93,688	12.9	16,248	105,403	13.5	17,004	109,300
2026	129,417	11.1	14,365	94,133	12.9	16,695	105,904	13.5	17,471	109,820
2027	132,976	11.1	14,760	94,441	12.9	17,154	106,251	13.5	17,952	110,180
2028	136,633	11.1	15,166	94,598	12.9	17,626	106,428	13.5	18,445	110,364
2029	140,390	11.1	15,583	94,589	12.9	18,110	106,418	13.5	18,953	110,353
2030	144,251	11.1	16,012	94,397	12.9	18,608	106,202	13.5	19,474	110,129

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	\$ 113,000	15.6%	\$17,628	\$ 119,146	15.9%	\$17,967	\$ 121,030	18.2%	\$20,566	\$ 136,161
2022	116,108	15.6	18,113	120,289	15.9	18,461	122,191	18.2	21,132	137,467
2023	119,301	15.6	18,611	121,314	15.9	18,969	123,232	18.2	21,713	138,638
2024	122,582	15.6	19,123	122,207	15.9	19,491	124,140	18.2	22,310	139,659
2025	125,953	15.6	19,649	122,954	15.9	20,027	124,899	18.2	22,923	140,513
2026	129,417	15.6	20,189	123,539	15.9	20,577	125,493	18.2	23,554	141,181
2027	132,976	15.6	20,744	123,944	15.9	21,143	125,904	18.2	24,202	141,644
2028	136,633	15.6	21,315	124,151	15.9	21,725	126,114	18.2	24,867	141,880
2029	140,390	15.6	21,901	124,139	15.9	22,322	126,102	18.2	25,551	141,866
2030	144,251	15.6	22,503	123,887	15.9	22,936	125,846	18.2	26,254	141,578

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.



Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	5.7%	\$6,441	\$ 68,093	8.4%	\$9,492	\$ 85,114	6.8%	\$7,684	\$ 75,630
2022	116,108	5.7	6,618	68,746	8.4	9,753	85,930	6.8	7,895	76,355
2023	119,301	5.7	6,800	69,332	8.4	10,021	86,662	6.8	8,112	77,006
2024	122,582	5.7	6,987	69,843	8.4	10,297	87,300	6.8	8,336	77,573
2025	125,953	5.7	7,179	70,270	8.4	10,580	87,834	6.8	8,565	78,047
2026	129,417	5.7	7,377	70,604	8.4	10,871	88,252	6.8	8,800	78,418
2027	132,976	5.7	7,580	70,835	8.4	11,170	88,541	6.8	9,042	78,675
2028	136,633	5.7	7,788	70,953	8.4	11,477	88,689	6.8	9,291	78,806
2029	140,390	5.7	8,002	70,946	8.4	11,793	88,680	6.8	9,547	78,798
2030	144,251	5.7	8,222	70,802	8.4	12,117	88,500	6.8	9,809	78,638

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	\$ 113,000	9.2%	\$10,396	\$ 90,786	11.0%	\$12,430	\$ 102,138	11.6%	\$13,108	\$ 105,915
2022	116,108	9.2	10,682	91,657	11.0	12,772	103,118	11.6	13,469	106,931
2023	119,301	9.2	10,976	92,438	11.0	13,123	103,997	11.6	13,839	107,842
2024	122,582	9.2	11,278	93,119	11.0	13,484	104,763	11.6	14,220	108,636
2025	125,953	9.2	11,588	93,688	11.0	13,855	105,403	11.6	14,611	109,300
2026	129,417	9.2	11,906	94,133	11.0	14,236	105,904	11.6	15,012	109,820
2027	132,976	9.2	12,234	94,441	11.0	14,627	106,251	11.6	15,425	110,180
2028	136,633	9.2	12,570	94,598	11.0	15,030	106,428	11.6	15,849	110,364
2029	140,390	9.2	12,916	94,589	11.0	15,443	106,418	11.6	16,285	110,353
2030	144,251	9.2	13,271	94,397	11.0	15,868	106,202	11.6	16,733	110,129

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	\$ 113,000	13.7%	\$15,481	\$ 119,146	14.0%	\$15,820	\$ 121,030	16.3%	\$18,419	\$ 136,161
2022	116,108	13.7	15,907	120,289	14.0	16,255	122,191	16.3	18,926	137,467
2023	119,301	13.7	16,344	121,314	14.0	16,702	123,232	16.3	19,446	138,638
2024	122,582	13.7	16,794	122,207	14.0	17,161	124,140	16.3	19,981	139,659
2025	125,953	13.7	17,256	122,954	14.0	17,633	124,899	16.3	20,530	140,513
2026	129,417	13.7	17,730	123,539	14.0	18,118	125,493	16.3	21,095	141,181
2027	132,976	13.7	18,218	123,944	14.0	18,617	125,904	16.3	21,675	141,644
2028	136,633	13.7	18,719	124,151	14.0	19,129	126,114	16.3	22,271	141,880
2029	140,390	13.7	19,233	124,139	14.0	19,655	126,102	16.3	22,884	141,866
2030	144,251	13.7	19,762	123,887	14.0	20,195	125,846	16.3	23,513	141,578

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.



Bull Creek Village - 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	\$ 113,000	11.7%	\$13,221	\$ 70,324	14.5%	\$16,385	\$ 87,884	12.9%	\$14,577	\$ 78,138
2022	116,108	11.7	13,585	70,999	14.5	16,836	88,727	12.9	14,978	78,888
2023	119,301	11.7	13,958	71,604	14.5	17,299	89,483	12.9	15,390	79,560
2024	122,582	11.7	14,342	72,131	14.5	17,774	90,142	12.9	15,813	80,146
2025	125,953	11.7	14,737	72,572	14.5	18,263	90,693	12.9	16,248	80,636
2026	129,417	11.7	15,142	72,917	14.5	18,765	91,124	12.9	16,695	81,019
2027	132,976	11.7	15,558	73,156	14.5	19,282	91,423	12.9	17,154	81,285
2028	136,633	11.7	15,986	73,278	14.5	19,812	91,575	12.9	17,626	81,420
2029	140,390	11.7	16,426	73,271	14.5	20,357	91,566	12.9	18,110	81,412
2030	144,251	11.7	16,877	73,122	14.5	20,916	91,380	12.9	18,608	81,247

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	\$ 113,000	15.3%	\$17,289	\$ 93,751	17.2%	\$19,436	\$ 105,467	17.8%	\$20,114	\$ 109,379
2022	116,108	15.3	17,765	94,650	17.2	19,971	106,479	17.8	20,667	110,428
2023	119,301	15.3	18,253	95,457	17.2	20,520	107,386	17.8	21,236	111,369
2024	122,582	15.3	18,755	96,160	17.2	21,084	108,177	17.8	21,820	112,189
2025	125,953	15.3	19,271	96,748	17.2	21,664	108,838	17.8	22,420	112,875
2026	129,417	15.3	19,801	97,208	17.2	22,260	109,355	17.8	23,036	113,412
2027	132,976	15.3	20,345	97,527	17.2	22,872	109,713	17.8	23,670	113,784
2028	136,633	15.3	20,905	97,689	17.2	23,501	109,896	17.8	24,321	113,974
2029	140,390	15.3	21,480	97,680	17.2	24,147	109,885	17.8	24,989	113,963
2030	144,251	15.3	22,070	97,482	17.2	24,811	109,662	17.8	25,677	113,732

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	\$ 113,000	20.0%	\$22,600	\$ 123,056	20.3%	\$22,939	\$ 125,021	22.8%	\$25,764	\$ 140,634
2022	116,108	20.0	23,222	124,236	20.3	23,570	126,220	22.8	26,473	141,983
2023	119,301	20.0	23,860	125,295	20.3	24,218	127,296	22.8	27,201	143,193
2024	122,582	20.0	24,516	126,218	20.3	24,884	128,233	22.8	27,949	144,248
2025	125,953	20.0	25,191	126,989	20.3	25,568	129,017	22.8	28,717	145,130
2026	129,417	20.0	25,883	127,593	20.3	26,272	129,630	22.8	29,507	145,820
2027	132,976	20.0	26,595	128,011	20.3	26,994	130,055	22.8	30,319	146,298
2028	136,633	20.0	27,327	128,224	20.3	27,736	130,272	22.8	31,152	146,542
2029	140,390	20.0	28,078	128,212	20.3	28,499	130,259	22.8	32,009	146,528
2030	144,251	20.0	28,850	127,952	20.3	29,283	129,994	22.8	32,889	146,230

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.



Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	9.8%	\$11,074	\$ 70,324	12.6%	\$14,238	\$ 87,884	11.0%	\$12,430	\$ 78,138
2022	116,108	9.8	11,379	70,999	12.6	14,630	88,727	11.0	12,772	78,888
2023	119,301	9.8	11,691	71,604	12.6	15,032	89,483	11.0	13,123	79,560
2024	122,582	9.8	12,013	72,131	12.6	15,445	90,142	11.0	13,484	80,146
2025	125,953	9.8	12,343	72,572	12.6	15,870	90,693	11.0	13,855	80,636
2026	129,417	9.8	12,683	72,917	12.6	16,307	91,124	11.0	14,236	81,019
2027	132,976	9.8	13,032	73,156	12.6	16,755	91,423	11.0	14,627	81,285
2028	136,633	9.8	13,390	73,278	12.6	17,216	91,575	11.0	15,030	81,420
2029	140,390	9.8	13,758	73,271	12.6	17,689	91,566	11.0	15,443	81,412
2030	144,251	9.8	14,137	73,122	12.6	18,176	91,380	11.0	15,868	81,247

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	\$ 113,000	13.4%	\$15,142	\$ 93,751	15.3%	\$17,289	\$ 105,467	15.9%	\$17,967	\$ 109,379
2022	116,108	13.4	15,558	94,650	15.3	17,765	106,479	15.9	18,461	110,428
2023	119,301	13.4	15,986	95,457	15.3	18,253	107,386	15.9	18,969	111,369
2024	122,582	13.4	16,426	96,160	15.3	18,755	108,177	15.9	19,491	112,189
2025	125,953	13.4	16,878	96,748	15.3	19,271	108,838	15.9	20,027	112,875
2026	129,417	13.4	17,342	97,208	15.3	19,801	109,355	15.9	20,577	113,412
2027	132,976	13.4	17,819	97,527	15.3	20,345	109,713	15.9	21,143	113,784
2028	136,633	13.4	18,309	97,689	15.3	20,905	109,896	15.9	21,725	113,974
2029	140,390	13.4	18,812	97,680	15.3	21,480	109,885	15.9	22,322	113,963
2030	144,251	13.4	19,330	97,482	15.3	22,070	109,662	15.9	22,936	113,732

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	\$ 113,000	18.1%	\$20,453	\$ 123,056	18.4%	\$20,792	\$ 125,021	20.9%	\$23,617	\$ 140,634
2022	116,108	18.1	21,016	124,236	18.4	21,364	126,220	20.9	24,267	141,983
2023	119,301	18.1	21,593	125,295	18.4	21,951	127,296	20.9	24,934	143,193
2024	122,582	18.1	22,187	126,218	18.4	22,555	128,233	20.9	25,620	144,248
2025	125,953	18.1	22,797	126,989	18.4	23,175	129,017	20.9	26,324	145,130
2026	129,417	18.1	23,424	127,593	18.4	23,813	129,630	20.9	27,048	145,820
2027	132,976	18.1	24,069	128,011	18.4	24,468	130,055	20.9	27,792	146,298
2028	136,633	18.1	24,731	128,224	18.4	25,140	130,272	20.9	28,556	146,542
2029	140,390	18.1	25,411	128,212	18.4	25,832	130,259	20.9	29,342	146,528
2030	144,251	18.1	26,109	127,952	18.4	26,542	129,994	20.9	30,148	146,230

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.



Bull Creek Village - General

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	7.9%	\$8,927	\$ 70,324	10.7%	\$12,091	\$ 87,884	9.1%	\$10,283	\$ 78,138
2022	116,108	7.9	9,173	70,999	10.7	12,424	88,727	9.1	10,566	78,888
2023	119,301	7.9	9,425	71,604	10.7	12,765	89,483	9.1	10,856	79,560
2024	122,582	7.9	9,684	72,131	10.7	13,116	90,142	9.1	11,155	80,146
2025	125,953	7.9	9,950	72,572	10.7	13,477	90,693	9.1	11,462	80,636
2026	129,417	7.9	10,224	72,917	10.7	13,848	91,124	9.1	11,777	81,019
2027	132,976	7.9	10,505	73,156	10.7	14,228	91,423	9.1	12,101	81,285
2028	136,633	7.9	10,794	73,278	10.7	14,620	91,575	9.1	12,434	81,420
2029	140,390	7.9	11,091	73,271	10.7	15,022	91,566	9.1	12,775	81,412
2030	144,251	7.9	11,396	73,122	10.7	15,435	91,380	9.1	13,127	81,247

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	\$ 113,000	11.5%	\$12,995	\$ 93,751	13.4%	\$15,142	\$ 105,467	14.0%	\$15,820	\$ 109,379
2022	116,108	11.5	13,352	94,650	13.4	15,558	106,479	14.0	16,255	110,428
2023	119,301	11.5	13,720	95,457	13.4	15,986	107,386	14.0	16,702	111,369
2024	122,582	11.5	14,097	96,160	13.4	16,426	108,177	14.0	17,161	112,189
2025	125,953	11.5	14,485	96,748	13.4	16,878	108,838	14.0	17,633	112,875
2026	129,417	11.5	14,883	97,208	13.4	17,342	109,355	14.0	18,118	113,412
2027	132,976	11.5	15,292	97,527	13.4	17,819	109,713	14.0	18,617	113,784
2028	136,633	11.5	15,713	97,689	13.4	18,309	109,896	14.0	19,129	113,974
2029	140,390	11.5	16,145	97,680	13.4	18,812	109,885	14.0	19,655	113,963
2030	144,251	11.5	16,589	97,482	13.4	19,330	109,662	14.0	20,195	113,732

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	\$ 113,000	16.2%	\$18,306	\$ 123,056	16.5%	\$18,645	\$ 125,021	19.0%	\$21,470	\$ 140,634
2022	116,108	16.2	18,809	124,236	16.5	19,158	126,220	19.0	22,061	141,983
2023	119,301	16.2	19,327	125,295	16.5	19,685	127,296	19.0	22,667	143,193
2024	122,582	16.2	19,858	126,218	16.5	20,226	128,233	19.0	23,291	144,248
2025	125,953	16.2	20,404	126,989	16.5	20,782	129,017	19.0	23,931	145,130
2026	129,417	16.2	20,966	127,593	16.5	21,354	129,630	19.0	24,589	145,820
2027	132,976	16.2	21,542	128,011	16.5	21,941	130,055	19.0	25,265	146,298
2028	136,633	16.2	22,135	128,224	16.5	22,544	130,272	19.0	25,960	146,542
2029	140,390	16.2	22,743	128,212	16.5	23,164	130,259	19.0	26,674	146,528
2030	144,251	16.2	23,369	127,952	16.5	23,801	129,994	19.0	27,408	146,230

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.



Bull Creek Village - 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	\$ 113,000	6.0%	\$6,780	\$ 70,324	8.8%	\$9,944	\$ 87,884	7.2%	\$8,136	\$ 78,138
2022	116,108	6.0	6,966	70,999	8.8	10,218	88,727	7.2	8,360	78,888
2023	119,301	6.0	7,158	71,604	8.8	10,498	89,483	7.2	8,590	79,560
2024	122,582	6.0	7,355	72,131	8.8	10,787	90,142	7.2	8,826	80,146
2025	125,953	6.0	7,557	72,572	8.8	11,084	90,693	7.2	9,069	80,636
2026	129,417	6.0	7,765	72,917	8.8	11,389	91,124	7.2	9,318	81,019
2027	132,976	6.0	7,979	73,156	8.8	11,702	91,423	7.2	9,574	81,285
2028	136,633	6.0	8,198	73,278	8.8	12,024	91,575	7.2	9,838	81,420
2029	140,390	6.0	8,423	73,271	8.8	12,354	91,566	7.2	10,108	81,412
2030	144,251	6.0	8,655	73,122	8.8	12,694	91,380	7.2	10,386	81,247

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	\$ 113,000	9.6%	\$10,848	\$ 93,751	11.5%	\$12,995	\$ 105,467	12.1%	\$13,673	\$ 109,379
2022	116,108	9.6	11,146	94,650	11.5	13,352	106,479	12.1	14,049	110,428
2023	119,301	9.6	11,453	95,457	11.5	13,720	107,386	12.1	14,435	111,369
2024	122,582	9.6	11,768	96,160	11.5	14,097	108,177	12.1	14,832	112,189
2025	125,953	9.6	12,091	96,748	11.5	14,485	108,838	12.1	15,240	112,875
2026	129,417	9.6	12,424	97,208	11.5	14,883	109,355	12.1	15,659	113,412
2027	132,976	9.6	12,766	97,527	11.5	15,292	109,713	12.1	16,090	113,784
2028	136,633	9.6	13,117	97,689	11.5	15,713	109,896	12.1	16,533	113,974
2029	140,390	9.6	13,477	97,680	11.5	16,145	109,885	12.1	16,987	113,963
2030	144,251	9.6	13,848	97,482	11.5	16,589	109,662	12.1	17,454	113,732

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	\$ 113,000	14.3%	\$16,159	\$ 123,056	14.6%	\$16,498	\$ 125,021	17.1%	\$19,323	\$ 140,634
2022	116,108	14.3	16,603	124,236	14.6	16,952	126,220	17.1	19,854	141,983
2023	119,301	14.3	17,060	125,295	14.6	17,418	127,296	17.1	20,400	143,193
2024	122,582	14.3	17,529	126,218	14.6	17,897	128,233	17.1	20,962	144,248
2025	125,953	14.3	18,011	126,989	14.6	18,389	129,017	17.1	21,538	145,130
2026	129,417	14.3	18,507	127,593	14.6	18,895	129,630	17.1	22,130	145,820
2027	132,976	14.3	19,016	128,011	14.6	19,414	130,055	17.1	22,739	146,298
2028	136,633	14.3	19,539	128,224	14.6	19,948	130,272	17.1	23,364	146,542
2029	140,390	14.3	20,076	128,212	14.6	20,497	130,259	17.1	24,007	146,528
2030	144,251	14.3	20,628	127,952	14.6	21,061	129,994	17.1	24,667	146,230

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	11.8%	\$13,334	\$ 70,894	14.5%	\$16,385	\$ 88,614	13.1%	\$14,803	\$ 81,830
2022	116,108	11.8	13,701	71,574	14.5	16,836	89,464	13.1	15,210	82,615
2023	119,301	11.8	14,078	72,184	14.5	17,299	90,226	13.1	15,628	83,319
2024	122,582	11.8	14,465	72,716	14.5	17,774	90,890	13.1	16,058	83,933
2025	125,953	11.8	14,862	73,160	14.5	18,263	91,446	13.1	16,500	84,446
2026	129,417	11.8	15,271	73,508	14.5	18,765	91,881	13.1	16,954	84,847
2027	132,976	11.8	15,691	73,749	14.5	19,282	92,182	13.1	17,420	85,125
2028	136,633	11.8	16,123	73,872	14.5	19,812	92,336	13.1	17,899	85,267
2029	140,390	11.8	16,566	73,865	14.5	20,357	92,327	13.1	18,391	85,259
2030	144,251	11.8	17,022	73,715	14.5	20,916	92,139	13.1	18,897	85,086

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	\$ 113,000	15.6%	\$17,628	\$ 96,827	17.2%	\$19,436	\$ 106,332	17.9%	\$20,227	\$ 111,805
2022	116,108	15.6	18,113	97,756	17.2	19,971	107,352	17.9	20,783	112,878
2023	119,301	15.6	18,611	98,589	17.2	20,520	108,267	17.9	21,355	113,840
2024	122,582	15.6	19,123	99,315	17.2	21,084	109,064	17.9	21,942	114,678
2025	125,953	15.6	19,649	99,922	17.2	21,664	109,731	17.9	22,546	115,379
2026	129,417	15.6	20,189	100,397	17.2	22,260	110,253	17.9	23,166	115,928
2027	132,976	15.6	20,744	100,726	17.2	22,872	110,614	17.9	23,803	116,308
2028	136,633	15.6	21,315	100,894	17.2	23,501	110,798	17.9	24,457	116,502
2029	140,390	15.6	21,901	100,884	17.2	24,147	110,787	17.9	25,130	116,491
2030	144,251	15.6	22,503	100,679	17.2	24,811	110,562	17.9	25,821	116,254

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	19.9%	\$22,487	\$ 124,066	20.3%	\$22,939	\$ 126,798	22.6%	\$25,538	\$ 141,775
2022	116,108	19.9	23,105	125,256	20.3	23,570	128,014	22.6	26,240	143,135
2023	119,301	19.9	23,741	126,323	20.3	24,218	129,105	22.6	26,962	144,355
2024	122,582	19.9	24,394	127,253	20.3	24,884	130,056	22.6	27,704	145,418
2025	125,953	19.9	25,065	128,031	20.3	25,568	130,851	22.6	28,465	146,307
2026	129,417	19.9	25,754	128,640	20.3	26,272	131,473	22.6	29,248	147,003
2027	132,976	19.9	26,462	129,062	20.3	26,994	131,904	22.6	30,053	147,485
2028	136,633	19.9	27,190	129,277	20.3	27,736	132,124	22.6	30,879	147,731
2029	140,390	19.9	27,938	129,265	20.3	28,499	132,111	22.6	31,728	147,717
2030	144,251	19.9	28,706	129,002	20.3	29,283	131,843	22.6	32,601	147,417

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	9.9%	\$11,187	\$ 70,894	12.6%	\$14,238	\$ 88,614	11.2%	\$12,656	\$ 81,830
2022	116,108	9.9	11,495	71,574	12.6	14,630	89,464	11.2	13,004	82,615
2023	119,301	9.9	11,811	72,184	12.6	15,032	90,226	11.2	13,362	83,319
2024	122,582	9.9	12,136	72,716	12.6	15,445	90,890	11.2	13,729	83,933
2025	125,953	9.9	12,469	73,160	12.6	15,870	91,446	11.2	14,107	84,446
2026	129,417	9.9	12,812	73,508	12.6	16,307	91,881	11.2	14,495	84,847
2027	132,976	9.9	13,165	73,749	12.6	16,755	92,182	11.2	14,893	85,125
2028	136,633	9.9	13,527	73,872	12.6	17,216	92,336	11.2	15,303	85,267
2029	140,390	9.9	13,899	73,865	12.6	17,689	92,327	11.2	15,724	85,259
2030	144,251	9.9	14,281	73,715	12.6	18,176	92,139	11.2	16,156	85,086

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	\$ 113,000	13.7%	\$15,481	\$ 96,827	15.3%	\$17,289	\$ 106,332	16.0%	\$18,080	\$ 111,805
2022	116,108	13.7	15,907	97,756	15.3	17,765	107,352	16.0	18,577	112,878
2023	119,301	13.7	16,344	98,589	15.3	18,253	108,267	16.0	19,088	113,840
2024	122,582	13.7	16,794	99,315	15.3	18,755	109,064	16.0	19,613	114,678
2025	125,953	13.7	17,256	99,922	15.3	19,271	109,731	16.0	20,152	115,379
2026	129,417	13.7	17,730	100,397	15.3	19,801	110,253	16.0	20,707	115,928
2027	132,976	13.7	18,218	100,726	15.3	20,345	110,614	16.0	21,276	116,308
2028	136,633	13.7	18,719	100,894	15.3	20,905	110,798	16.0	21,861	116,502
2029	140,390	13.7	19,233	100,884	15.3	21,480	110,787	16.0	22,462	116,491
2030	144,251	13.7	19,762	100,679	15.3	22,070	110,562	16.0	23,080	116,254

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	18.0%	\$20,340	\$ 124,066	18.4%	\$20,792	\$ 126,798	20.7%	\$23,391	\$ 141,775
2022	116,108	18.0	20,899	125,256	18.4	21,364	128,014	20.7	24,034	143,135
2023	119,301	18.0	21,474	126,323	18.4	21,951	129,105	20.7	24,695	144,355
2024	122,582	18.0	22,065	127,253	18.4	22,555	130,056	20.7	25,374	145,418
2025	125,953	18.0	22,672	128,031	18.4	23,175	130,851	20.7	26,072	146,307
2026	129,417	18.0	23,295	128,640	18.4	23,813	131,473	20.7	26,789	147,003
2027	132,976	18.0	23,936	129,062	18.4	24,468	131,904	20.7	27,526	147,485
2028	136,633	18.0	24,594	129,277	18.4	25,140	132,124	20.7	28,283	147,731
2029	140,390	18.0	25,270	129,265	18.4	25,832	132,111	20.7	29,061	147,717
2030	144,251	18.0	25,965	129,002	18.4	26,542	131,843	20.7	29,860	147,417

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	8.0%	\$9,040	\$ 70,894	10.7%	\$12,091	\$ 88,614	9.3%	\$10,509	\$ 81,830
2022	116,108	8.0	9,289	71,574	10.7	12,424	89,464	9.3	10,798	82,615
2023	119,301	8.0	9,544	72,184	10.7	12,765	90,226	9.3	11,095	83,319
2024	122,582	8.0	9,807	72,716	10.7	13,116	90,890	9.3	11,400	83,933
2025	125,953	8.0	10,076	73,160	10.7	13,477	91,446	9.3	11,714	84,446
2026	129,417	8.0	10,353	73,508	10.7	13,848	91,881	9.3	12,036	84,847
2027	132,976	8.0	10,638	73,749	10.7	14,228	92,182	9.3	12,367	85,125
2028	136,633	8.0	10,931	73,872	10.7	14,620	92,336	9.3	12,707	85,267
2029	140,390	8.0	11,231	73,865	10.7	15,022	92,327	9.3	13,056	85,259
2030	144,251	8.0	11,540	73,715	10.7	15,435	92,139	9.3	13,415	85,086

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	\$ 113,000	11.8%	\$13,334	\$ 96,827	13.4%	\$15,142	\$ 106,332	14.1%	\$15,933	\$ 111,805
2022	116,108	11.8	13,701	97,756	13.4	15,558	107,352	14.1	16,371	112,878
2023	119,301	11.8	14,078	98,589	13.4	15,986	108,267	14.1	16,821	113,840
2024	122,582	11.8	14,465	99,315	13.4	16,426	109,064	14.1	17,284	114,678
2025	125,953	11.8	14,862	99,922	13.4	16,878	109,731	14.1	17,759	115,379
2026	129,417	11.8	15,271	100,397	13.4	17,342	110,253	14.1	18,248	115,928
2027	132,976	11.8	15,691	100,726	13.4	17,819	110,614	14.1	18,750	116,308
2028	136,633	11.8	16,123	100,894	13.4	18,309	110,798	14.1	19,265	116,502
2029	140,390	11.8	16,566	100,884	13.4	18,812	110,787	14.1	19,795	116,491
2030	144,251	11.8	17,022	100,679	13.4	19,330	110,562	14.1	20,339	116,254

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	16.1%	\$18,193	\$ 124,066	16.5%	\$18,645	\$ 126,798	18.8%	\$21,244	\$ 141,775
2022	116,108	16.1	18,693	125,256	16.5	19,158	128,014	18.8	21,828	143,135
2023	119,301	16.1	19,207	126,323	16.5	19,685	129,105	18.8	22,429	144,355
2024	122,582	16.1	19,736	127,253	16.5	20,226	130,056	18.8	23,045	145,418
2025	125,953	16.1	20,278	128,031	16.5	20,782	130,851	18.8	23,679	146,307
2026	129,417	16.1	20,836	128,640	16.5	21,354	131,473	18.8	24,330	147,003
2027	132,976	16.1	21,409	129,062	16.5	21,941	131,904	18.8	24,999	147,485
2028	136,633	16.1	21,998	129,277	16.5	22,544	132,124	18.8	25,687	147,731
2029	140,390	16.1	22,603	129,265	16.5	23,164	132,111	18.8	26,393	147,717
2030	144,251	16.1	23,224	129,002	16.5	23,801	131,843	18.8	27,119	147,417

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	6.1%	\$6,893	\$ 70,894	8.8%	\$9,944	\$ 88,614	7.4%	\$8,362	\$ 81,830
2022	116,108	6.1	7,083	71,574	8.8	10,218	89,464	7.4	8,592	82,615
2023	119,301	6.1	7,277	72,184	8.8	10,498	90,226	7.4	8,828	83,319
2024	122,582	6.1	7,478	72,716	8.8	10,787	90,890	7.4	9,071	83,933
2025	125,953	6.1	7,683	73,160	8.8	11,084	91,446	7.4	9,321	84,446
2026	129,417	6.1	7,894	73,508	8.8	11,389	91,881	7.4	9,577	84,847
2027	132,976	6.1	8,112	73,749	8.8	11,702	92,182	7.4	9,840	85,125
2028	136,633	6.1	8,335	73,872	8.8	12,024	92,336	7.4	10,111	85,267
2029	140,390	6.1	8,564	73,865	8.8	12,354	92,327	7.4	10,389	85,259
2030	144,251	6.1	8,799	73,715	8.8	12,694	92,139	7.4	10,675	85,086

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	\$ 113,000	9.9%	\$11,187	\$ 96,827	11.5%	\$12,995	\$ 106,332	12.2%	\$13,786	\$ 111,805
2022	116,108	9.9	11,495	97,756	11.5	13,352	107,352	12.2	14,165	112,878
2023	119,301	9.9	11,811	98,589	11.5	13,720	108,267	12.2	14,555	113,840
2024	122,582	9.9	12,136	99,315	11.5	14,097	109,064	12.2	14,955	114,678
2025	125,953	9.9	12,469	99,922	11.5	14,485	109,731	12.2	15,366	115,379
2026	129,417	9.9	12,812	100,397	11.5	14,883	110,253	12.2	15,789	115,928
2027	132,976	9.9	13,165	100,726	11.5	15,292	110,614	12.2	16,223	116,308
2028	136,633	9.9	13,527	100,894	11.5	15,713	110,798	12.2	16,669	116,502
2029	140,390	9.9	13,899	100,884	11.5	16,145	110,787	12.2	17,128	116,491
2030	144,251	9.9	14,281	100,679	11.5	16,589	110,562	12.2	17,599	116,254

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	14.2%	\$16,046	\$ 124,066	14.6%	\$16,498	\$ 126,798	16.9%	\$19,097	\$ 141,775
2022	116,108	14.2	16,487	125,256	14.6	16,952	128,014	16.9	19,622	143,135
2023	119,301	14.2	16,941	126,323	14.6	17,418	129,105	16.9	20,162	144,355
2024	122,582	14.2	17,407	127,253	14.6	17,897	130,056	16.9	20,716	145,418
2025	125,953	14.2	17,885	128,031	14.6	18,389	130,851	16.9	21,286	146,307
2026	129,417	14.2	18,377	128,640	14.6	18,895	131,473	16.9	21,871	147,003
2027	132,976	14.2	18,883	129,062	14.6	19,414	131,904	16.9	22,473	147,485
2028	136,633	14.2	19,402	129,277	14.6	19,948	132,124	16.9	23,091	147,731
2029	140,390	14.2	19,935	129,265	14.6	20,497	132,111	16.9	23,726	147,717
2030	144,251	14.2	20,484	129,002	14.6	21,061	131,843	16.9	24,378	147,417

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	12.1%	\$13,673	\$ 73,237	14.9%	\$16,837	\$ 91,558	13.6%	\$15,368	\$ 84,573
2022	116,108	12.1	14,049	73,940	14.9	17,300	92,436	13.6	15,791	85,384
2023	119,301	12.1	14,435	74,570	14.9	17,776	93,224	13.6	16,225	86,112
2024	122,582	12.1	14,832	75,119	14.9	18,265	93,911	13.6	16,671	86,746
2025	125,953	12.1	15,240	75,578	14.9	18,767	94,485	13.6	17,130	87,276
2026	129,417	12.1	15,659	75,937	14.9	19,283	94,934	13.6	17,601	87,691
2027	132,976	12.1	16,090	76,186	14.9	19,813	95,245	13.6	18,085	87,978
2028	136,633	12.1	16,533	76,313	14.9	20,358	95,404	13.6	18,582	88,125
2029	140,390	12.1	16,987	76,306	14.9	20,918	95,395	13.6	19,093	88,117
2030	144,251	12.1	17,454	76,151	14.9	21,493	95,201	13.6	19,618	87,938

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	\$ 113,000	16.1%	\$18,193	\$ 100,059	17.7%	\$20,001	\$ 109,849	18.4%	\$20,792	\$ 115,520
2022	116,108	16.1	18,693	101,019	17.7	20,551	110,903	18.4	21,364	116,628
2023	119,301	16.1	19,207	101,880	17.7	21,116	111,848	18.4	21,951	117,622
2024	122,582	16.1	19,736	102,630	17.7	21,697	112,672	18.4	22,555	118,488
2025	125,953	16.1	20,278	103,257	17.7	22,294	113,361	18.4	23,175	119,212
2026	129,417	16.1	20,836	103,748	17.7	22,907	113,900	18.4	23,813	119,779
2027	132,976	16.1	21,409	104,088	17.7	23,537	114,273	18.4	24,468	120,172
2028	136,633	16.1	21,998	104,261	17.7	24,184	114,463	18.4	25,140	120,372
2029	140,390	16.1	22,603	104,251	17.7	24,849	114,452	18.4	25,832	120,360
2030	144,251	16.1	23,224	104,039	17.7	25,532	114,220	18.4	26,542	120,116

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	\$ 113,000	20.5%	\$23,165	\$ 128,165	20.9%	\$23,617	\$ 131,006	23.4%	\$26,442	\$ 146,485
2022	116,108	20.5	23,802	129,394	20.9	24,267	132,263	23.4	27,169	147,890
2023	119,301	20.5	24,457	130,497	20.9	24,934	133,390	23.4	27,916	149,150
2024	122,582	20.5	25,129	131,458	20.9	25,620	134,372	23.4	28,684	150,248
2025	125,953	20.5	25,820	132,262	20.9	26,324	135,193	23.4	29,473	151,166
2026	129,417	20.5	26,530	132,891	20.9	27,048	135,836	23.4	30,284	151,885
2027	132,976	20.5	27,260	133,326	20.9	27,792	136,281	23.4	31,116	152,383
2028	136,633	20.5	28,010	133,548	20.9	28,556	136,508	23.4	31,972	152,637
2029	140,390	20.5	28,780	133,535	20.9	29,342	136,495	23.4	32,851	152,622
2030	144,251	20.5	29,571	133,264	20.9	30,148	136,218	23.4	33,755	152,312

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	10.2%	\$11,526	\$ 73,237	13.0%	\$14,690	\$ 91,558	11.7%	\$13,221	\$ 84,573
2022	116,108	10.2	11,843	73,940	13.0	15,094	92,436	11.7	13,585	85,384
2023	119,301	10.2	12,169	74,570	13.0	15,509	93,224	11.7	13,958	86,112
2024	122,582	10.2	12,503	75,119	13.0	15,936	93,911	11.7	14,342	86,746
2025	125,953	10.2	12,847	75,578	13.0	16,374	94,485	11.7	14,737	87,276
2026	129,417	10.2	13,201	75,937	13.0	16,824	94,934	11.7	15,142	87,691
2027	132,976	10.2	13,564	76,186	13.0	17,287	95,245	11.7	15,558	87,978
2028	136,633	10.2	13,937	76,313	13.0	17,762	95,404	11.7	15,986	88,125
2029	140,390	10.2	14,320	76,306	13.0	18,251	95,395	11.7	16,426	88,117
2030	144,251	10.2	14,714	76,151	13.0	18,753	95,201	11.7	16,877	87,938

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	\$ 113,000	14.2%	\$16,046	\$ 100,059	15.8%	\$17,854	\$ 109,849	16.5%	\$18,645	\$ 115,520
2022	116,108	14.2	16,487	101,019	15.8	18,345	110,903	16.5	19,158	116,628
2023	119,301	14.2	16,941	101,880	15.8	18,850	111,848	16.5	19,685	117,622
2024	122,582	14.2	17,407	102,630	15.8	19,368	112,672	16.5	20,226	118,488
2025	125,953	14.2	17,885	103,257	15.8	19,901	113,361	16.5	20,782	119,212
2026	129,417	14.2	18,377	103,748	15.8	20,448	113,900	16.5	21,354	119,779
2027	132,976	14.2	18,883	104,088	15.8	21,010	114,273	16.5	21,941	120,172
2028	136,633	14.2	19,402	104,261	15.8	21,588	114,463	16.5	22,544	120,372
2029	140,390	14.2	19,935	104,251	15.8	22,182	114,452	16.5	23,164	120,360
2030	144,251	14.2	20,484	104,039	15.8	22,792	114,220	16.5	23,801	120,116

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	\$ 113,000	18.6%	\$21,018	\$ 128,165	19.0%	\$21,470	\$ 131,006	21.5%	\$24,295	\$ 146,485
2022	116,108	18.6	21,596	129,394	19.0	22,061	132,263	21.5	24,963	147,890
2023	119,301	18.6	22,190	130,497	19.0	22,667	133,390	21.5	25,650	149,150
2024	122,582	18.6	22,800	131,458	19.0	23,291	134,372	21.5	26,355	150,248
2025	125,953	18.6	23,427	132,262	19.0	23,931	135,193	21.5	27,080	151,166
2026	129,417	18.6	24,072	132,891	19.0	24,589	135,836	21.5	27,825	151,885
2027	132,976	18.6	24,734	133,326	19.0	25,265	136,281	21.5	28,590	152,383
2028	136,633	18.6	25,414	133,548	19.0	25,960	136,508	21.5	29,376	152,637
2029	140,390	18.6	26,113	133,535	19.0	26,674	136,495	21.5	30,184	152,622
2030	144,251	18.6	26,831	133,264	19.0	27,408	136,218	21.5	31,014	152,312

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	8.3%	\$9,379	\$ 73,237	11.1%	\$12,543	\$ 91,558	9.8%	\$11,074	\$ 84,573
2022	116,108	8.3	9,637	73,940	11.1	12,888	92,436	9.8	11,379	85,384
2023	119,301	8.3	9,902	74,570	11.1	13,242	93,224	9.8	11,691	86,112
2024	122,582	8.3	10,174	75,119	11.1	13,607	93,911	9.8	12,013	86,746
2025	125,953	8.3	10,454	75,578	11.1	13,981	94,485	9.8	12,343	87,276
2026	129,417	8.3	10,742	75,937	11.1	14,365	94,934	9.8	12,683	87,691
2027	132,976	8.3	11,037	76,186	11.1	14,760	95,245	9.8	13,032	87,978
2028	136,633	8.3	11,341	76,313	11.1	15,166	95,404	9.8	13,390	88,125
2029	140,390	8.3	11,652	76,306	11.1	15,583	95,395	9.8	13,758	88,117
2030	144,251	8.3	11,973	76,151	11.1	16,012	95,201	9.8	14,137	87,938

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	\$ 113,000	12.3%	\$13,899	\$ 100,059	13.9%	\$15,707	\$ 109,849	14.6%	\$16,498	\$ 115,520
2022	116,108	12.3	14,281	101,019	13.9	16,139	110,903	14.6	16,952	116,628
2023	119,301	12.3	14,674	101,880	13.9	16,583	111,848	14.6	17,418	117,622
2024	122,582	12.3	15,078	102,630	13.9	17,039	112,672	14.6	17,897	118,488
2025	125,953	12.3	15,492	103,257	13.9	17,507	113,361	14.6	18,389	119,212
2026	129,417	12.3	15,918	103,748	13.9	17,989	113,900	14.6	18,895	119,779
2027	132,976	12.3	16,356	104,088	13.9	18,484	114,273	14.6	19,414	120,172
2028	136,633	12.3	16,806	104,261	13.9	18,992	114,463	14.6	19,948	120,372
2029	140,390	12.3	17,268	104,251	13.9	19,514	114,452	14.6	20,497	120,360
2030	144,251	12.3	17,743	104,039	13.9	20,051	114,220	14.6	21,061	120,116

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	\$ 113,000	16.7%	\$18,871	\$ 128,165	17.1%	\$19,323	\$ 131,006	19.6%	\$22,148	\$ 146,485
2022	116,108	16.7	19,390	129,394	17.1	19,854	132,263	19.6	22,757	147,890
2023	119,301	16.7	19,923	130,497	17.1	20,400	133,390	19.6	23,383	149,150
2024	122,582	16.7	20,471	131,458	17.1	20,962	134,372	19.6	24,026	150,248
2025	125,953	16.7	21,034	132,262	17.1	21,538	135,193	19.6	24,687	151,166
2026	129,417	16.7	21,613	132,891	17.1	22,130	135,836	19.6	25,366	151,885
2027	132,976	16.7	22,207	133,326	17.1	22,739	136,281	19.6	26,063	152,383
2028	136,633	16.7	22,818	133,548	17.1	23,364	136,508	19.6	26,780	152,637
2029	140,390	16.7	23,445	133,535	17.1	24,007	136,495	19.6	27,516	152,622
2030	144,251	16.7	24,090	133,264	17.1	24,667	136,218	19.6	28,273	152,312

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.



Bull Creek Village - General

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 113,000	6.4%	\$7,232	\$ 73,237	9.2%	\$10,396	\$ 91,558	7.9%	\$8,927	\$ 84,573
2022	116,108	6.4	7,431	73,940	9.2	10,682	92,436	7.9	9,173	85,384
2023	119,301	6.4	7,635	74,570	9.2	10,976	93,224	7.9	9,425	86,112
2024	122,582	6.4	7,845	75,119	9.2	11,278	93,911	7.9	9,684	86,746
2025	125,953	6.4	8,061	75,578	9.2	11,588	94,485	7.9	9,950	87,276
2026	129,417	6.4	8,283	75,937	9.2	11,906	94,934	7.9	10,224	87,691
2027	132,976	6.4	8,510	76,186	9.2	12,234	95,245	7.9	10,505	87,978
2028	136,633	6.4	8,745	76,313	9.2	12,570	95,404	7.9	10,794	88,125
2029	140,390	6.4	8,985	76,306	9.2	12,916	95,395	7.9	11,091	88,117
2030	144,251	6.4	9,232	76,151	9.2	13,271	95,201	7.9	11,396	87,938

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	\$ 113,000	10.4%	\$11,752	\$ 100,059	12.0%	\$13,560	\$ 109,849	12.7%	\$14,351	\$ 115,520
2022	116,108	10.4	12,075	101,019	12.0	13,933	110,903	12.7	14,746	116,628
2023	119,301	10.4	12,407	101,880	12.0	14,316	111,848	12.7	15,151	117,622
2024	122,582	10.4	12,749	102,630	12.0	14,710	112,672	12.7	15,568	118,488
2025	125,953	10.4	13,099	103,257	12.0	15,114	113,361	12.7	15,996	119,212
2026	129,417	10.4	13,459	103,748	12.0	15,530	113,900	12.7	16,436	119,779
2027	132,976	10.4	13,830	104,088	12.0	15,957	114,273	12.7	16,888	120,172
2028	136,633	10.4	14,210	104,261	12.0	16,396	114,463	12.7	17,352	120,372
2029	140,390	10.4	14,601	104,251	12.0	16,847	114,452	12.7	17,830	120,360
2030	144,251	10.4	15,002	104,039	12.0	17,310	114,220	12.7	18,320	120,116

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	\$ 113,000	14.8%	\$16,724	\$ 128,165	15.2%	\$17,176	\$ 131,006	17.7%	\$20,001	\$ 146,485
2022	116,108	14.8	17,184	129,394	15.2	17,648	132,263	17.7	20,551	147,890
2023	119,301	14.8	17,657	130,497	15.2	18,134	133,390	17.7	21,116	149,150
2024	122,582	14.8	18,142	131,458	15.2	18,632	134,372	17.7	21,697	150,248
2025	125,953	14.8	18,641	132,262	15.2	19,145	135,193	17.7	22,294	151,166
2026	129,417	14.8	19,154	132,891	15.2	19,671	135,836	17.7	22,907	151,885
2027	132,976	14.8	19,680	133,326	15.2	20,212	136,281	17.7	23,537	152,383
2028	136,633	14.8	20,222	133,548	15.2	20,768	136,508	17.7	24,184	152,637
2029	140,390	14.8	20,778	133,535	15.2	21,339	136,495	17.7	24,849	152,622
2030	144,251	14.8	21,349	133,264	15.2	21,926	136,218	17.7	25,532	152,312

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.

