



The Initial Valuation For

Central Cass County Fire Protection District

as of January 31, 2022



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March 16, 2022

Central Cass County Fire Protection District
Harrisonville, 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 January 31, 2022. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

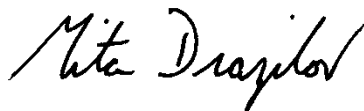
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Mita D. Drazilov, ASA, FCA, MAAA



Alternate Plan Provisions Affecting Employer Contribution Rates

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

Member Contribution Rate - 0% Plan. Under the 0% plan, there is no individual employee contribution to the plan, no individual account maintained for each employee, and no refund paid to employees who terminate before being eligible for a benefit.

Member Contribution Rate - 2%, 4% or 6% Plan. Under any plan other than 0%, each covered member contributes a percentage of compensation to LAGERS. If an employee terminates before being eligible for an immediate benefit, the member's contributions, plus any interest credited to the member's individual account, are refunded upon request.

The law further provides for nine different benefit programs (benefit formula factors) and allows an employer to elect "rule of 80" eligibility for benefits. Under the rule of 80, employees are eligible for unreduced benefits at the earlier of (i) attainment of their minimum service retirement age or (ii) such time as their years of age plus years of LAGERS credited service equals 80.

In total this allows for 144 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program which they feel best suits their particular situation.

The applicable combinations of these items may be changed from time to time, however, there are limitations on the frequency of changes. A more detailed description of plan provisions may be found in Appendix III of this report.

Central Cass County Fire Protection District

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	Fire	8.30%	0.60%	1.60%	10.50%	8.60%	6.70%	4.80%
L-3	Fire	10.20	0.70	2.00	12.90	11.00	9.10	7.20
LT-4(65)	Fire	9.90	0.60	1.90	12.40	10.50	8.60	6.70
LT-5(65)	Fire	11.40	0.70	2.20	14.30	12.40	10.50	8.60
L-7	Fire	12.10	0.80	2.40	15.30	13.40	11.50	9.60
LT-8(65)	Fire	12.80	0.80	2.50	16.10	14.20	12.30	10.40
L-12	Fire	13.90	0.90	2.80	17.60	15.70	13.80	11.90
LT-14(65)	Fire	14.30	0.90	2.80	18.00	16.10	14.20	12.30
L-6	Fire	15.80	1.00	3.20	20.00	18.10	16.20	14.30

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

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

Central Cass County Fire Protection District

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	Fire	8.60%	0.60%	1.60%	10.80%	8.90%	7.00%	5.10%
L-3	Fire	10.50	0.70	2.00	13.20	11.30	9.40	7.50
LT-4(65)	Fire	10.20	0.60	1.90	12.70	10.80	8.90	7.00
LT-5(65)	Fire	11.70	0.70	2.30	14.70	12.80	10.90	9.00
L-7	Fire	12.40	0.80	2.50	15.70	13.80	11.90	10.00
LT-8(65)	Fire	13.20	0.80	2.60	16.60	14.70	12.80	10.90
L-12	Fire	14.40	0.90	2.90	18.20	16.30	14.40	12.50
LT-14(65)	Fire	14.80	0.90	2.90	18.60	16.70	14.80	12.90
L-6	Fire	16.30	1.00	3.30	20.60	18.70	16.80	14.90

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

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

Central Cass County Fire Protection District

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	Fire	8.80%	0.60%	1.60%	11.00%	9.10%	7.20%	5.30%
L-3	Fire	10.80	0.70	2.00	13.50	11.60	9.70	7.80
LT-4(65)	Fire	11.00	0.60	2.00	13.60	11.70	9.80	7.90
LT-5(65)	Fire	12.40	0.70	2.30	15.40	13.50	11.60	9.70
L-7	Fire	12.80	0.80	2.40	16.00	14.10	12.20	10.30
LT-8(65)	Fire	13.90	0.80	2.60	17.30	15.40	13.50	11.60
L-12	Fire	14.70	0.90	2.80	18.40	16.50	14.60	12.70
LT-14(65)	Fire	15.30	0.90	2.90	19.10	17.20	15.30	13.40
L-6	Fire	16.70	1.00	3.20	20.90	19.00	17.10	15.20

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.

Central Cass County Fire Protection District

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	Fire	9.10%	0.60%	1.70%	11.40%	9.50%	7.60%	5.70%
L-3	Fire	11.10	0.70	2.10	13.90	12.00	10.10	8.20
LT-4(65)	Fire	11.30	0.60	2.00	13.90	12.00	10.10	8.20
LT-5(65)	Fire	12.80	0.70	2.40	15.90	14.00	12.10	10.20
L-7	Fire	13.20	0.80	2.50	16.50	14.60	12.70	10.80
LT-8(65)	Fire	14.30	0.80	2.70	17.80	15.90	14.00	12.10
L-12	Fire	15.20	0.90	2.90	19.00	17.10	15.20	13.30
LT-14(65)	Fire	15.80	0.90	3.00	19.70	17.80	15.90	14.00
L-6	Fire	17.20	1.00	3.40	21.60	19.70	17.80	15.90

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.

Central Cass County Fire Protection District

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	\$ 61,437	\$ 50,320	\$ 39,203	\$ 28,086
L-3	75,480	64,363	53,246	42,128
LT-4(65)	72,555	61,437	50,320	39,203
LT-5(65)	83,672	72,555	61,437	50,320
L-7	89,523	78,406	67,288	56,171
LT-8(65)	94,204	83,087	71,969	60,852
L-12	102,981	91,863	80,746	69,629
LT-14(65)	105,321	94,204	83,087	71,969
L-6	117,023	105,906	94,789	83,672

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 63,193	\$ 52,075	\$ 40,958	\$ 29,841
L-3	77,235	66,118	55,001	43,884
LT-4(65)	74,310	63,193	52,075	40,958
LT-5(65)	86,012	74,895	63,778	52,661
L-7	91,863	80,746	69,629	58,512
LT-8(65)	97,129	86,012	74,895	63,778
L-12	106,491	95,374	84,257	73,140
LT-14(65)	108,832	97,715	86,597	75,480
L-6	120,534	109,417	98,300	87,182

Rule of 80 Retirement Eligibility

Benefit Program	5 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 64,363	\$ 53,246	\$ 42,128	\$ 31,011
L-3	78,991	67,874	56,756	45,639
LT-4(65)	79,576	68,459	57,341	46,224
LT-5(65)	90,108	78,991	67,874	56,756
L-7	93,619	82,501	71,384	60,267
LT-8(65)	101,225	90,108	78,991	67,874
L-12	107,662	96,544	85,427	74,310
LT-14(65)	111,757	100,640	89,523	78,406
L-6	122,289	111,172	100,055	88,938

Benefit Program	3 Year FAS			
	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 66,703	\$ 55,586	\$ 44,469	\$ 33,352
L-3	81,331	70,214	59,097	47,980
LT-4(65)	81,331	70,214	59,097	47,980
LT-5(65)	93,034	81,916	70,799	59,682
L-7	96,544	85,427	74,310	63,193
LT-8(65)	104,151	93,034	81,916	70,799
L-12	111,172	100,055	88,938	77,821
LT-14(65)	115,268	104,151	93,034	81,916
L-6	126,385	115,268	104,151	93,034

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.

Central Cass County Fire Protection District

Employees and Payroll Included in the Valuation

	Fire
Number of Employees	13
Annual Payroll	\$ 585,117

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:

Central Cass County Fire Protection District

Regular Retirement Eligibility

Benefit Group	Employee Group	Member Contribution Rate - 0%	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	Fire	\$ 159,044	\$ 163,879
L-3	Fire	198,785	204,863
LT-4(65)	Fire	188,109	193,844
LT-5(65)	Fire	220,554	227,316
L-7	Fire	238,504	245,825
LT-8(65)	Fire	253,079	260,814
L-12	Fire	278,296	286,771
LT-14(65)	Fire	285,554	294,319
L-6	Fire	318,087	327,704

Central Cass County Fire Protection District

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	Fire	\$ 162,760	\$ 167,874
L-3	Fire	203,504	209,880
LT-4(65)	Fire	197,263	203,546
LT-5(65)	Fire	229,402	236,607
L-7	Fire	244,200	251,802
LT-8(65)	Fire	261,460	269,619
L-12	Fire	284,920	293,812
LT-14(65)	Fire	293,535	302,749
L-6	Fire	325,623	335,767

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

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

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

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

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Concluded)

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

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System

Brief Summary of LAGERS

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

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

The early allowance amount, payable monthly for life, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of early retirement, but reduced to reflect the fact that the age when payments begin is younger than the minimum service retirement age. The amount of the reduction is 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		Estimated	Estimated	
Average	LAGERS	Social	Monthly Total	
Salary (FAS) ¹	BENEFIT ³	Security ²	\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 916	\$1,835	122%
2,000	1,225	1,055	2,280	114%
2,500	1,531	1,192	2,723	109%
3,000	1,838	1,330	3,168	106%
3,500	2,144	1,469	3,613	103%
4,000	2,450	1,605	4,055	101%
25 Years of Service:				
\$1,500	\$ 656	\$ 916	\$1,572	105%
2,000	875	1,055	1,930	97%
2,500	1,094	1,192	2,286	91%
3,000	1,313	1,330	2,643	88%
3,500	1,531	1,469	3,000	86%
4,000	1,750	1,605	3,355	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 916	\$1,310	87%
2,000	525	1,055	1,580	79%
2,500	656	1,192	1,848	74%
3,000	788	1,330	2,118	71%
3,500	919	1,469	2,388	68%
4,000	1,050	1,605	2,655	66%

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

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

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

Missouri LAGERS

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

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

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

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

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

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

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

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

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

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

Missouri LAGERS

Illustrations of Age and Service Allowance Amounts

For Sample Combinations of Service & Salary

(LT-5(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹ to age 65)
1.25% of FAS ¹ at age 65)

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

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

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

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

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

Final Average Salary (FAS) ¹	LAGERS		Estimated Social Security ²	Estimated		Percent	
	BENEFIT ³			Monthly Total		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

Central Cass County Fire Protection District - General

January 31, 2022

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	2							2	\$ 77,366
20-24	4							4	\$ 160,844
25-29	1							1	\$ 52,031
30-34									
35-39									
40-44	1	1						2	\$ 84,076
45-49									
50-54									
55-59	2	2						4	\$ 210,800
60-64									
65-69									
70 & Over									
Totals	10	3						13	\$ 585,117

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

Age: 35.6 years.

Benefit Service: 2.5 years.

Annual Pay: \$45,009.

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.



March 16, 2022 E-mail

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

Dear Bob:

Enclosed is the report of the January 31, 2022 Initial Actuarial Valuation of LAGERS benefits for the employees of

Central Cass County Fire Protection District

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



March 16, 2022

Central Cass County Fire Protection District
Harrisonville, 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 January 31, 2022 Initial Valuation for the Central Cass County Fire Protection District dated March 16, 2022.

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

A handwritten signature in black ink that reads "Mita Drazilov". The signature is fluid and cursive, with the first name "Mita" and last name "Drazilov" clearly distinguishable.

Mita D. Drazilov, ASA, FCA, MAAA

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	10.5%	\$61,437	\$ 159,044	12.9%	\$75,480	\$ 198,785	12.4%	\$72,555	\$ 188,109
2023	601,208	10.5	63,127	160,570	12.9	77,556	200,692	12.4	74,550	189,913
2024	617,741	10.5	64,863	161,938	12.9	79,689	202,402	12.4	76,600	191,531
2025	634,729	10.5	66,647	163,131	12.9	81,880	203,893	12.4	78,706	192,941
2026	652,184	10.5	68,479	164,128	12.9	84,132	205,139	12.4	80,871	194,120
2027	670,119	10.5	70,362	164,908	12.9	86,445	206,114	12.4	83,095	195,043
2028	688,547	10.5	72,297	165,448	12.9	88,823	206,789	12.4	85,380	195,682
2029	707,482	10.5	74,286	165,724	12.9	91,265	207,134	12.4	87,728	196,008
2030	726,938	10.5	76,328	165,708	12.9	93,775	207,114	12.4	90,140	195,989
2031	746,929	10.5	78,428	165,371	12.9	96,354	206,693	12.4	92,619	195,591

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	14.3%	\$83,672	\$ 220,554	15.3%	\$89,523	\$ 238,504	16.1%	\$94,204	\$ 253,079
2023	601,208	14.3	85,973	222,670	15.3	91,985	240,792	16.1	96,794	255,507
2024	617,741	14.3	88,337	224,567	15.3	94,514	242,844	16.1	99,456	257,684
2025	634,729	14.3	90,766	226,221	15.3	97,114	244,632	16.1	102,191	259,582
2026	652,184	14.3	93,262	227,604	15.3	99,784	246,127	16.1	105,002	261,169
2027	670,119	14.3	95,827	228,686	15.3	102,528	247,297	16.1	107,889	262,411
2028	688,547	14.3	98,462	229,435	15.3	105,348	248,107	16.1	110,856	263,271
2029	707,482	14.3	101,170	229,817	15.3	108,245	248,520	16.1	113,905	263,710
2030	726,938	14.3	103,952	229,795	15.3	111,222	248,496	16.1	117,037	263,685
2031	746,929	14.3	106,811	229,328	15.3	114,280	247,991	16.1	120,256	263,149

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	17.6%	\$102,981	\$ 278,296	18.0%	\$105,321	\$ 285,554	20.0%	\$117,023	\$ 318,087
2023	601,208	17.6	105,813	280,966	18.0	108,217	288,293	20.0	120,242	321,138
2024	617,741	17.6	108,722	283,360	18.0	111,193	290,750	20.0	123,548	323,874
2025	634,729	17.6	111,712	285,447	18.0	114,251	292,891	20.0	126,946	326,259
2026	652,184	17.6	114,784	287,192	18.0	117,393	294,681	20.0	130,437	328,253
2027	670,119	17.6	117,941	288,557	18.0	120,621	296,082	20.0	134,024	329,814
2028	688,547	17.6	121,184	289,503	18.0	123,938	297,052	20.0	137,709	330,895
2029	707,482	17.6	124,517	289,985	18.0	127,347	297,547	20.0	141,496	331,446
2030	726,938	17.6	127,941	289,957	18.0	130,849	297,518	20.0	145,388	331,414
2031	746,929	17.6	131,460	289,368	18.0	134,447	296,914	20.0	149,386	330,741

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	8.6%	\$50,320	\$ 159,044	11.0%	\$64,363	\$ 198,785	10.5%	\$61,437	\$ 188,109
2023	601,208	8.6	51,704	160,570	11.0	66,133	200,692	10.5	63,127	189,913
2024	617,741	8.6	53,126	161,938	11.0	67,952	202,402	10.5	64,863	191,531
2025	634,729	8.6	54,587	163,131	11.0	69,820	203,893	10.5	66,647	192,941
2026	652,184	8.6	56,088	164,128	11.0	71,740	205,139	10.5	68,479	194,120
2027	670,119	8.6	57,630	164,908	11.0	73,713	206,114	10.5	70,362	195,043
2028	688,547	8.6	59,215	165,448	11.0	75,740	206,789	10.5	72,297	195,682
2029	707,482	8.6	60,843	165,724	11.0	77,823	207,134	10.5	74,286	196,008
2030	726,938	8.6	62,517	165,708	11.0	79,963	207,114	10.5	76,328	195,989
2031	746,929	8.6	64,236	165,371	11.0	82,162	206,693	10.5	78,428	195,591

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	12.4%	\$72,555	\$ 220,554	13.4%	\$78,406	\$ 238,504	14.2%	\$83,087	\$ 253,079
2023	601,208	12.4	74,550	222,670	13.4	80,562	240,792	14.2	85,372	255,507
2024	617,741	12.4	76,600	224,567	13.4	82,777	242,844	14.2	87,719	257,684
2025	634,729	12.4	78,706	226,221	13.4	85,054	244,632	14.2	90,132	259,582
2026	652,184	12.4	80,871	227,604	13.4	87,393	246,127	14.2	92,610	261,169
2027	670,119	12.4	83,095	228,686	13.4	89,796	247,297	14.2	95,157	262,411
2028	688,547	12.4	85,380	229,435	13.4	92,265	248,107	14.2	97,774	263,271
2029	707,482	12.4	87,728	229,817	13.4	94,803	248,520	14.2	100,462	263,710
2030	726,938	12.4	90,140	229,795	13.4	97,410	248,496	14.2	103,225	263,685
2031	746,929	12.4	92,619	229,328	13.4	100,088	247,991	14.2	106,064	263,149

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	15.7%	\$91,863	\$ 278,296	16.1%	\$94,204	\$ 285,554	18.1%	\$105,906	\$ 318,087
2023	601,208	15.7	94,390	280,966	16.1	96,794	288,293	18.1	108,819	321,138
2024	617,741	15.7	96,985	283,360	16.1	99,456	290,750	18.1	111,811	323,874
2025	634,729	15.7	99,652	285,447	16.1	102,191	292,891	18.1	114,886	326,259
2026	652,184	15.7	102,393	287,192	16.1	105,002	294,681	18.1	118,045	328,253
2027	670,119	15.7	105,209	288,557	16.1	107,889	296,082	18.1	121,292	329,814
2028	688,547	15.7	108,102	289,503	16.1	110,856	297,052	18.1	124,627	330,895
2029	707,482	15.7	111,075	289,985	16.1	113,905	297,547	18.1	128,054	331,446
2030	726,938	15.7	114,129	289,957	16.1	117,037	297,518	18.1	131,576	331,414
2031	746,929	15.7	117,268	289,368	16.1	120,256	296,914	18.1	135,194	330,741

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	6.7%	\$39,203	\$ 159,044	9.1%	\$53,246	\$ 198,785	8.6%	\$50,320	\$ 188,109
2023	601,208	6.7	40,281	160,570	9.1	54,710	200,692	8.6	51,704	189,913
2024	617,741	6.7	41,389	161,938	9.1	56,214	202,402	8.6	53,126	191,531
2025	634,729	6.7	42,527	163,131	9.1	57,760	203,893	8.6	54,587	192,941
2026	652,184	6.7	43,696	164,128	9.1	59,349	205,139	8.6	56,088	194,120
2027	670,119	6.7	44,898	164,908	9.1	60,981	206,114	8.6	57,630	195,043
2028	688,547	6.7	46,133	165,448	9.1	62,658	206,789	8.6	59,215	195,682
2029	707,482	6.7	47,401	165,724	9.1	64,381	207,134	8.6	60,843	196,008
2030	726,938	6.7	48,705	165,708	9.1	66,151	207,114	8.6	62,517	195,989
2031	746,929	6.7	50,044	165,371	9.1	67,971	206,693	8.6	64,236	195,591

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	10.5%	\$61,437	\$ 220,554	11.5%	\$67,288	\$ 238,504	12.3%	\$71,969	\$ 253,079
2023	601,208	10.5	63,127	222,670	11.5	69,139	240,792	12.3	73,949	255,507
2024	617,741	10.5	64,863	224,567	11.5	71,040	242,844	12.3	75,982	257,684
2025	634,729	10.5	66,647	226,221	11.5	72,994	244,632	12.3	78,072	259,582
2026	652,184	10.5	68,479	227,604	11.5	75,001	246,127	12.3	80,219	261,169
2027	670,119	10.5	70,362	228,686	11.5	77,064	247,297	12.3	82,425	262,411
2028	688,547	10.5	72,297	229,435	11.5	79,183	248,107	12.3	84,691	263,271
2029	707,482	10.5	74,286	229,817	11.5	81,360	248,520	12.3	87,020	263,710
2030	726,938	10.5	76,328	229,795	11.5	83,598	248,496	12.3	89,413	263,685
2031	746,929	10.5	78,428	229,328	11.5	85,897	247,991	12.3	91,872	263,149

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	13.8%	\$80,746	\$ 278,296	14.2%	\$83,087	\$ 285,554	16.2%	\$94,789	\$ 318,087
2023	601,208	13.8	82,967	280,966	14.2	85,372	288,293	16.2	97,396	321,138
2024	617,741	13.8	85,248	283,360	14.2	87,719	290,750	16.2	100,074	323,874
2025	634,729	13.8	87,593	285,447	14.2	90,132	292,891	16.2	102,826	326,259
2026	652,184	13.8	90,001	287,192	14.2	92,610	294,681	16.2	105,654	328,253
2027	670,119	13.8	92,476	288,557	14.2	95,157	296,082	16.2	108,559	329,814
2028	688,547	13.8	95,019	289,503	14.2	97,774	297,052	16.2	111,545	330,895
2029	707,482	13.8	97,633	289,985	14.2	100,462	297,547	16.2	114,612	331,446
2030	726,938	13.8	100,317	289,957	14.2	103,225	297,518	16.2	117,764	331,414
2031	746,929	13.8	103,076	289,368	14.2	106,064	296,914	16.2	121,002	330,741

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	4.8%	\$28,086	\$ 159,044	7.2%	\$42,128	\$ 198,785	6.7%	\$39,203	\$ 188,109
2023	601,208	4.8	28,858	160,570	7.2	43,287	200,692	6.7	40,281	189,913
2024	617,741	4.8	29,652	161,938	7.2	44,477	202,402	6.7	41,389	191,531
2025	634,729	4.8	30,467	163,131	7.2	45,700	203,893	6.7	42,527	192,941
2026	652,184	4.8	31,305	164,128	7.2	46,957	205,139	6.7	43,696	194,120
2027	670,119	4.8	32,166	164,908	7.2	48,249	206,114	6.7	44,898	195,043
2028	688,547	4.8	33,050	165,448	7.2	49,575	206,789	6.7	46,133	195,682
2029	707,482	4.8	33,959	165,724	7.2	50,939	207,134	6.7	47,401	196,008
2030	726,938	4.8	34,893	165,708	7.2	52,340	207,114	6.7	48,705	195,989
2031	746,929	4.8	35,853	165,371	7.2	53,779	206,693	6.7	50,044	195,591

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	8.6%	\$50,320	\$ 220,554	9.6%	\$56,171	\$ 238,504	10.4%	\$60,852	\$ 253,079
2023	601,208	8.6	51,704	222,670	9.6	57,716	240,792	10.4	62,526	255,507
2024	617,741	8.6	53,126	224,567	9.6	59,303	242,844	10.4	64,245	257,684
2025	634,729	8.6	54,587	226,221	9.6	60,934	244,632	10.4	66,012	259,582
2026	652,184	8.6	56,088	227,604	9.6	62,610	246,127	10.4	67,827	261,169
2027	670,119	8.6	57,630	228,686	9.6	64,331	247,297	10.4	69,692	262,411
2028	688,547	8.6	59,215	229,435	9.6	66,101	248,107	10.4	71,609	263,271
2029	707,482	8.6	60,843	229,817	9.6	67,918	248,520	10.4	73,578	263,710
2030	726,938	8.6	62,517	229,795	9.6	69,786	248,496	10.4	75,602	263,685
2031	746,929	8.6	64,236	229,328	9.6	71,705	247,991	10.4	77,681	263,149

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	11.9%	\$69,629	\$ 278,296	12.3%	\$71,969	\$ 285,554	14.3%	\$83,672	\$ 318,087
2023	601,208	11.9	71,544	280,966	12.3	73,949	288,293	14.3	85,973	321,138
2024	617,741	11.9	73,511	283,360	12.3	75,982	290,750	14.3	88,337	323,874
2025	634,729	11.9	75,533	285,447	12.3	78,072	292,891	14.3	90,766	326,259
2026	652,184	11.9	77,610	287,192	12.3	80,219	294,681	14.3	93,262	328,253
2027	670,119	11.9	79,744	288,557	12.3	82,425	296,082	14.3	95,827	329,814
2028	688,547	11.9	81,937	289,503	12.3	84,691	297,052	14.3	98,462	330,895
2029	707,482	11.9	84,190	289,985	12.3	87,020	297,547	14.3	101,170	331,446
2030	726,938	11.9	86,506	289,957	12.3	89,413	297,518	14.3	103,952	331,414
2031	746,929	11.9	88,885	289,368	12.3	91,872	296,914	14.3	106,811	330,741

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.



Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	10.8%	\$63,193	\$ 163,879	13.2%	\$77,235	\$ 204,863	12.7%	\$74,310	\$ 193,844
2023	601,208	10.8	64,930	165,451	13.2	79,359	206,828	12.7	76,353	195,703
2024	617,741	10.8	66,716	166,861	13.2	81,542	208,590	12.7	78,453	197,371
2025	634,729	10.8	68,551	168,090	13.2	83,784	210,126	12.7	80,611	198,824
2026	652,184	10.8	70,436	169,117	13.2	86,088	211,410	12.7	82,827	200,039
2027	670,119	10.8	72,373	169,921	13.2	88,456	212,415	12.7	85,105	200,990
2028	688,547	10.8	74,363	170,478	13.2	90,888	213,111	12.7	87,445	201,649
2029	707,482	10.8	76,408	170,762	13.2	93,388	213,466	12.7	89,850	201,985
2030	726,938	10.8	78,509	170,746	13.2	95,956	213,445	12.7	92,321	201,966
2031	746,929	10.8	80,668	170,399	13.2	98,595	213,012	12.7	94,860	201,556

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	14.7%	\$86,012	\$ 227,316	15.7%	\$91,863	\$ 245,825	16.6%	\$97,129	\$ 260,814
2023	601,208	14.7	88,378	229,497	15.7	94,390	248,183	16.6	99,801	263,316
2024	617,741	14.7	90,808	231,453	15.7	96,985	250,298	16.6	102,545	265,560
2025	634,729	14.7	93,305	233,157	15.7	99,652	252,141	16.6	105,365	267,516
2026	652,184	14.7	95,871	234,582	15.7	102,393	253,682	16.6	108,263	269,151
2027	670,119	14.7	98,507	235,697	15.7	105,209	254,888	16.6	111,240	270,431
2028	688,547	14.7	101,216	236,469	15.7	108,102	255,723	16.6	114,299	271,317
2029	707,482	14.7	104,000	236,863	15.7	111,075	256,149	16.6	117,442	271,769
2030	726,938	14.7	106,860	236,840	15.7	114,129	256,124	16.6	120,672	271,743
2031	746,929	14.7	109,799	236,359	15.7	117,268	255,604	16.6	123,990	271,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	18.2%	\$106,491	\$ 286,771	18.6%	\$108,832	\$ 294,319	20.6%	\$120,534	\$ 327,704
2023	601,208	18.2	109,420	289,522	18.6	111,825	297,142	20.6	123,849	330,848
2024	617,741	18.2	112,429	291,989	18.6	114,900	299,674	20.6	127,255	333,667
2025	634,729	18.2	115,521	294,139	18.6	118,060	301,881	20.6	130,754	336,124
2026	652,184	18.2	118,697	295,937	18.6	121,306	303,726	20.6	134,350	338,178
2027	670,119	18.2	121,962	297,344	18.6	124,642	305,170	20.6	138,045	339,786
2028	688,547	18.2	125,316	298,318	18.6	128,070	306,170	20.6	141,841	340,900
2029	707,482	18.2	128,762	298,815	18.6	131,592	306,680	20.6	145,741	341,468
2030	726,938	18.2	132,303	298,786	18.6	135,210	306,650	20.6	149,749	341,435
2031	746,929	18.2	135,941	298,179	18.6	138,929	306,027	20.6	153,867	340,742

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	8.9%	\$52,075	\$ 163,879	11.3%	\$66,118	\$ 204,863	10.8%	\$63,193	\$ 193,844
2023	601,208	8.9	53,508	165,451	11.3	67,937	206,828	10.8	64,930	195,703
2024	617,741	8.9	54,979	166,861	11.3	69,805	208,590	10.8	66,716	197,371
2025	634,729	8.9	56,491	168,090	11.3	71,724	210,126	10.8	68,551	198,824
2026	652,184	8.9	58,044	169,117	11.3	73,697	211,410	10.8	70,436	200,039
2027	670,119	8.9	59,641	169,921	11.3	75,723	212,415	10.8	72,373	200,990
2028	688,547	8.9	61,281	170,478	11.3	77,806	213,111	10.8	74,363	201,649
2029	707,482	8.9	62,966	170,762	11.3	79,945	213,466	10.8	76,408	201,985
2030	726,938	8.9	64,697	170,746	11.3	82,144	213,445	10.8	78,509	201,966
2031	746,929	8.9	66,477	170,399	11.3	84,403	213,012	10.8	80,668	201,556

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	12.8%	\$74,895	\$ 227,316	13.8%	\$80,746	\$ 245,825	14.7%	\$86,012	\$ 260,814
2023	601,208	12.8	76,955	229,497	13.8	82,967	248,183	14.7	88,378	263,316
2024	617,741	12.8	79,071	231,453	13.8	85,248	250,298	14.7	90,808	265,560
2025	634,729	12.8	81,245	233,157	13.8	87,593	252,141	14.7	93,305	267,516
2026	652,184	12.8	83,480	234,582	13.8	90,001	253,682	14.7	95,871	269,151
2027	670,119	12.8	85,775	235,697	13.8	92,476	254,888	14.7	98,507	270,431
2028	688,547	12.8	88,134	236,469	13.8	95,019	255,723	14.7	101,216	271,317
2029	707,482	12.8	90,558	236,863	13.8	97,633	256,149	14.7	104,000	271,769
2030	726,938	12.8	93,048	236,840	13.8	100,317	256,124	14.7	106,860	271,743
2031	746,929	12.8	95,607	236,359	13.8	103,076	255,604	14.7	109,799	271,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	16.3%	\$95,374	\$ 286,771	16.7%	\$97,715	\$ 294,319	18.7%	\$109,417	\$ 327,704
2023	601,208	16.3	97,997	289,522	16.7	100,402	297,142	18.7	112,426	330,848
2024	617,741	16.3	100,692	291,989	16.7	103,163	299,674	18.7	115,518	333,667
2025	634,729	16.3	103,461	294,139	16.7	106,000	301,881	18.7	118,694	336,124
2026	652,184	16.3	106,306	295,937	16.7	108,915	303,726	18.7	121,958	338,178
2027	670,119	16.3	109,229	297,344	16.7	111,910	305,170	18.7	125,312	339,786
2028	688,547	16.3	112,233	298,318	16.7	114,987	306,170	18.7	128,758	340,900
2029	707,482	16.3	115,320	298,815	16.7	118,149	306,680	18.7	132,299	341,468
2030	726,938	16.3	118,491	298,786	16.7	121,399	306,650	18.7	135,937	341,435
2031	746,929	16.3	121,749	298,179	16.7	124,737	306,027	18.7	139,676	340,742

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	7.0%	\$40,958	\$ 163,879	9.4%	\$55,001	\$ 204,863	8.9%	\$52,075	\$ 193,844
2023	601,208	7.0	42,085	165,451	9.4	56,514	206,828	8.9	53,508	195,703
2024	617,741	7.0	43,242	166,861	9.4	58,068	208,590	8.9	54,979	197,371
2025	634,729	7.0	44,431	168,090	9.4	59,665	210,126	8.9	56,491	198,824
2026	652,184	7.0	45,653	169,117	9.4	61,305	211,410	8.9	58,044	200,039
2027	670,119	7.0	46,908	169,921	9.4	62,991	212,415	8.9	59,641	200,990
2028	688,547	7.0	48,198	170,478	9.4	64,723	213,111	8.9	61,281	201,649
2029	707,482	7.0	49,524	170,762	9.4	66,503	213,466	8.9	62,966	201,985
2030	726,938	7.0	50,886	170,746	9.4	68,332	213,445	8.9	64,697	201,966
2031	746,929	7.0	52,285	170,399	9.4	70,211	213,012	8.9	66,477	201,556

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	10.9%	\$63,778	\$ 227,316	11.9%	\$69,629	\$ 245,825	12.8%	\$74,895	\$ 260,814
2023	601,208	10.9	65,532	229,497	11.9	71,544	248,183	12.8	76,955	263,316
2024	617,741	10.9	67,334	231,453	11.9	73,511	250,298	12.8	79,071	265,560
2025	634,729	10.9	69,185	233,157	11.9	75,533	252,141	12.8	81,245	267,516
2026	652,184	10.9	71,088	234,582	11.9	77,610	253,682	12.8	83,480	269,151
2027	670,119	10.9	73,043	235,697	11.9	79,744	254,888	12.8	85,775	270,431
2028	688,547	10.9	75,052	236,469	11.9	81,937	255,723	12.8	88,134	271,317
2029	707,482	10.9	77,116	236,863	11.9	84,190	256,149	12.8	90,558	271,769
2030	726,938	10.9	79,236	236,840	11.9	86,506	256,124	12.8	93,048	271,743
2031	746,929	10.9	81,415	236,359	11.9	88,885	255,604	12.8	95,607	271,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	14.4%	\$84,257	\$ 286,771	14.8%	\$86,597	\$ 294,319	16.8%	\$98,300	\$ 327,704
2023	601,208	14.4	86,574	289,522	14.8	88,979	297,142	16.8	101,003	330,848
2024	617,741	14.4	88,955	291,989	14.8	91,426	299,674	16.8	103,780	333,667
2025	634,729	14.4	91,401	294,139	14.8	93,940	301,881	16.8	106,634	336,124
2026	652,184	14.4	93,914	295,937	14.8	96,523	303,726	16.8	109,567	338,178
2027	670,119	14.4	96,497	297,344	14.8	99,178	305,170	16.8	112,580	339,786
2028	688,547	14.4	99,151	298,318	14.8	101,905	306,170	16.8	115,676	340,900
2029	707,482	14.4	101,877	298,815	14.8	104,707	306,680	16.8	118,857	341,468
2030	726,938	14.4	104,679	298,786	14.8	107,587	306,650	16.8	122,126	341,435
2031	746,929	14.4	107,558	298,179	14.8	110,545	306,027	16.8	125,484	340,742

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.

Central Cass County Fire Protection District - Fire

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

Regular Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	\$ 585,117	5.1%	\$29,841	\$ 163,879	7.5%	\$43,884	\$ 204,863	7.0%	\$40,958	\$ 193,844
2023	601,208	5.1	30,662	165,451	7.5	45,091	206,828	7.0	42,085	195,703
2024	617,741	5.1	31,505	166,861	7.5	46,331	208,590	7.0	43,242	197,371
2025	634,729	5.1	32,371	168,090	7.5	47,605	210,126	7.0	44,431	198,824
2026	652,184	5.1	33,261	169,117	7.5	48,914	211,410	7.0	45,653	200,039
2027	670,119	5.1	34,176	169,921	7.5	50,259	212,415	7.0	46,908	200,990
2028	688,547	5.1	35,116	170,478	7.5	51,641	213,111	7.0	48,198	201,649
2029	707,482	5.1	36,082	170,762	7.5	53,061	213,466	7.0	49,524	201,985
2030	726,938	5.1	37,074	170,746	7.5	54,520	213,445	7.0	50,886	201,966
2031	746,929	5.1	38,093	170,399	7.5	56,020	213,012	7.0	52,285	201,556

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	\$ 585,117	9.0%	\$52,661	\$ 227,316	10.0%	\$58,512	\$ 245,825	10.9%	\$63,778	\$ 260,814
2023	601,208	9.0	54,109	229,497	10.0	60,121	248,183	10.9	65,532	263,316
2024	617,741	9.0	55,597	231,453	10.0	61,774	250,298	10.9	67,334	265,560
2025	634,729	9.0	57,126	233,157	10.0	63,473	252,141	10.9	69,185	267,516
2026	652,184	9.0	58,697	234,582	10.0	65,218	253,682	10.9	71,088	269,151
2027	670,119	9.0	60,311	235,697	10.0	67,012	254,888	10.9	73,043	270,431
2028	688,547	9.0	61,969	236,469	10.0	68,855	255,723	10.9	75,052	271,317
2029	707,482	9.0	63,673	236,863	10.0	70,748	256,149	10.9	77,116	271,769
2030	726,938	9.0	65,424	236,840	10.0	72,694	256,124	10.9	79,236	271,743
2031	746,929	9.0	67,224	236,359	10.0	74,693	255,604	10.9	81,415	271,191

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2022	\$ 585,117	12.5%	\$73,140	\$ 286,771	12.9%	\$75,480	\$ 294,319	14.9%	\$87,182	\$ 327,704
2023	601,208	12.5	75,151	289,522	12.9	77,556	297,142	14.9	89,580	330,848
2024	617,741	12.5	77,218	291,989	12.9	79,689	299,674	14.9	92,043	333,667
2025	634,729	12.5	79,341	294,139	12.9	81,880	301,881	14.9	94,575	336,124
2026	652,184	12.5	81,523	295,937	12.9	84,132	303,726	14.9	97,175	338,178
2027	670,119	12.5	83,765	297,344	12.9	86,445	305,170	14.9	99,848	339,786
2028	688,547	12.5	86,068	298,318	12.9	88,823	306,170	14.9	102,594	340,900
2029	707,482	12.5	88,435	298,815	12.9	91,265	306,680	14.9	105,415	341,468
2030	726,938	12.5	90,867	298,786	12.9	93,775	306,650	14.9	108,314	341,435
2031	746,929	12.5	93,366	298,179	12.9	96,354	306,027	14.9	111,292	340,742

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	11.0%	\$64,363	\$ 162,760	13.5%	\$78,991	\$ 203,504	13.6%	\$79,576	\$ 197,263
2023	601,208	11.0	66,133	164,321	13.5	81,163	205,456	13.6	81,764	199,155
2024	617,741	11.0	67,952	165,721	13.5	83,395	207,207	13.6	84,013	200,852
2025	634,729	11.0	69,820	166,941	13.5	85,688	208,733	13.6	86,323	202,331
2026	652,184	11.0	71,740	167,961	13.5	88,045	210,009	13.6	88,697	203,568
2027	670,119	11.0	73,713	168,760	13.5	90,466	211,007	13.6	91,136	204,536
2028	688,547	11.0	75,740	169,313	13.5	92,954	211,698	13.6	93,642	205,206
2029	707,482	11.0	77,823	169,595	13.5	95,510	212,051	13.6	96,218	205,548
2030	726,938	11.0	79,963	169,579	13.5	98,137	212,031	13.6	98,864	205,528
2031	746,929	11.0	82,162	169,235	13.5	100,835	211,600	13.6	101,582	205,111

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	15.4%	\$90,108	\$ 229,402	16.0%	\$93,619	\$ 244,200	17.3%	\$101,225	\$ 261,460
2023	601,208	15.4	92,586	231,603	16.0	96,193	246,543	17.3	104,009	263,968
2024	617,741	15.4	95,132	233,577	16.0	98,839	248,644	17.3	106,869	266,217
2025	634,729	15.4	97,748	235,297	16.0	101,557	250,475	17.3	109,808	268,177
2026	652,184	15.4	100,436	236,735	16.0	104,349	252,006	17.3	112,828	269,816
2027	670,119	15.4	103,198	237,860	16.0	107,219	253,204	17.3	115,931	271,099
2028	688,547	15.4	106,036	238,639	16.0	110,168	254,034	17.3	119,119	271,987
2029	707,482	15.4	108,952	239,037	16.0	113,197	254,457	17.3	122,394	272,440
2030	726,938	15.4	111,948	239,014	16.0	116,310	254,433	17.3	125,760	272,414
2031	746,929	15.4	115,027	238,529	16.0	119,509	253,916	17.3	129,219	271,861

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	18.4%	\$107,662	\$ 284,920	19.1%	\$111,757	\$ 293,535	20.9%	\$122,289	\$ 325,623
2023	601,208	18.4	110,622	287,653	19.1	114,831	296,351	20.9	125,652	328,747
2024	617,741	18.4	113,664	290,104	19.1	117,989	298,876	20.9	129,108	331,548
2025	634,729	18.4	116,790	292,240	19.1	121,233	301,077	20.9	132,658	333,990
2026	652,184	18.4	120,002	294,026	19.1	124,567	302,917	20.9	136,306	336,031
2027	670,119	18.4	123,302	295,424	19.1	127,993	304,357	20.9	140,055	337,629
2028	688,547	18.4	126,693	296,392	19.1	131,512	305,354	20.9	143,906	338,735
2029	707,482	18.4	130,177	296,886	19.1	135,129	305,863	20.9	147,864	339,299
2030	726,938	18.4	133,757	296,857	19.1	138,845	305,834	20.9	151,930	339,266
2031	746,929	18.4	137,435	296,254	19.1	142,663	305,213	20.9	156,108	338,577

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	9.1%	\$53,246	\$ 162,760	11.6%	\$67,874	\$ 203,504	11.7%	\$68,459	\$ 197,263
2023	601,208	9.1	54,710	164,321	11.6	69,740	205,456	11.7	70,341	199,155
2024	617,741	9.1	56,214	165,721	11.6	71,658	207,207	11.7	72,276	200,852
2025	634,729	9.1	57,760	166,941	11.6	73,629	208,733	11.7	74,263	202,331
2026	652,184	9.1	59,349	167,961	11.6	75,653	210,009	11.7	76,306	203,568
2027	670,119	9.1	60,981	168,760	11.6	77,734	211,007	11.7	78,404	204,536
2028	688,547	9.1	62,658	169,313	11.6	79,871	211,698	11.7	80,560	205,206
2029	707,482	9.1	64,381	169,595	11.6	82,068	212,051	11.7	82,775	205,548
2030	726,938	9.1	66,151	169,579	11.6	84,325	212,031	11.7	85,052	205,528
2031	746,929	9.1	67,971	169,235	11.6	86,644	211,600	11.7	87,391	205,111

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	13.5%	\$78,991	\$ 229,402	14.1%	\$82,501	\$ 244,200	15.4%	\$90,108	\$ 261,460
2023	601,208	13.5	81,163	231,603	14.1	84,770	246,543	15.4	92,586	263,968
2024	617,741	13.5	83,395	233,577	14.1	87,101	248,644	15.4	95,132	266,217
2025	634,729	13.5	85,688	235,297	14.1	89,497	250,475	15.4	97,748	268,177
2026	652,184	13.5	88,045	236,735	14.1	91,958	252,006	15.4	100,436	269,816
2027	670,119	13.5	90,466	237,860	14.1	94,487	253,204	15.4	103,198	271,099
2028	688,547	13.5	92,954	238,639	14.1	97,085	254,034	15.4	106,036	271,987
2029	707,482	13.5	95,510	239,037	14.1	99,755	254,457	15.4	108,952	272,440
2030	726,938	13.5	98,137	239,014	14.1	102,498	254,433	15.4	111,948	272,414
2031	746,929	13.5	100,835	238,529	14.1	105,317	253,916	15.4	115,027	271,861

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	16.5%	\$96,544	\$ 284,920	17.2%	\$100,640	\$ 293,535	19.0%	\$111,172	\$ 325,623
2023	601,208	16.5	99,199	287,653	17.2	103,408	296,351	19.0	114,230	328,747
2024	617,741	16.5	101,927	290,104	17.2	106,251	298,876	19.0	117,371	331,548
2025	634,729	16.5	104,730	292,240	17.2	109,173	301,077	19.0	120,599	333,990
2026	652,184	16.5	107,610	294,026	17.2	112,176	302,917	19.0	123,915	336,031
2027	670,119	16.5	110,570	295,424	17.2	115,260	304,357	19.0	127,323	337,629
2028	688,547	16.5	113,610	296,392	17.2	118,430	305,354	19.0	130,824	338,735
2029	707,482	16.5	116,735	296,886	17.2	121,687	305,863	19.0	134,422	339,299
2030	726,938	16.5	119,945	296,857	17.2	125,033	305,834	19.0	138,118	339,266
2031	746,929	16.5	123,243	296,254	17.2	128,472	305,213	19.0	141,917	338,577

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	7.2%	\$42,128	\$ 162,760	9.7%	\$56,756	\$ 203,504	9.8%	\$57,341	\$ 197,263
2023	601,208	7.2	43,287	164,321	9.7	58,317	205,456	9.8	58,918	199,155
2024	617,741	7.2	44,477	165,721	9.7	59,921	207,207	9.8	60,539	200,852
2025	634,729	7.2	45,700	166,941	9.7	61,569	208,733	9.8	62,203	202,331
2026	652,184	7.2	46,957	167,961	9.7	63,262	210,009	9.8	63,914	203,568
2027	670,119	7.2	48,249	168,760	9.7	65,002	211,007	9.8	65,672	204,536
2028	688,547	7.2	49,575	169,313	9.7	66,789	211,698	9.8	67,478	205,206
2029	707,482	7.2	50,939	169,595	9.7	68,626	212,051	9.8	69,333	205,548
2030	726,938	7.2	52,340	169,579	9.7	70,513	212,031	9.8	71,240	205,528
2031	746,929	7.2	53,779	169,235	9.7	72,452	211,600	9.8	73,199	205,111

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	11.6%	\$67,874	\$ 229,402	12.2%	\$71,384	\$ 244,200	13.5%	\$78,991	\$ 261,460
2023	601,208	11.6	69,740	231,603	12.2	73,347	246,543	13.5	81,163	263,968
2024	617,741	11.6	71,658	233,577	12.2	75,364	248,644	13.5	83,395	266,217
2025	634,729	11.6	73,629	235,297	12.2	77,437	250,475	13.5	85,688	268,177
2026	652,184	11.6	75,653	236,735	12.2	79,566	252,006	13.5	88,045	269,816
2027	670,119	11.6	77,734	237,860	12.2	81,755	253,204	13.5	90,466	271,099
2028	688,547	11.6	79,871	238,639	12.2	84,003	254,034	13.5	92,954	271,987
2029	707,482	11.6	82,068	239,037	12.2	86,313	254,457	13.5	95,510	272,440
2030	726,938	11.6	84,325	239,014	12.2	88,686	254,433	13.5	98,137	272,414
2031	746,929	11.6	86,644	238,529	12.2	91,125	253,916	13.5	100,835	271,861

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	14.6%	\$85,427	\$ 284,920	15.3%	\$89,523	\$ 293,535	17.1%	\$100,055	\$ 325,623
2023	601,208	14.6	87,776	287,653	15.3	91,985	296,351	17.1	102,807	328,747
2024	617,741	14.6	90,190	290,104	15.3	94,514	298,876	17.1	105,634	331,548
2025	634,729	14.6	92,670	292,240	15.3	97,114	301,077	17.1	108,539	333,990
2026	652,184	14.6	95,219	294,026	15.3	99,784	302,917	17.1	111,523	336,031
2027	670,119	14.6	97,837	295,424	15.3	102,528	304,357	17.1	114,590	337,629
2028	688,547	14.6	100,528	296,392	15.3	105,348	305,354	17.1	117,742	338,735
2029	707,482	14.6	103,292	296,886	15.3	108,245	305,863	17.1	120,979	339,299
2030	726,938	14.6	106,133	296,857	15.3	111,222	305,834	17.1	124,306	339,266
2031	746,929	14.6	109,052	296,254	15.3	114,280	305,213	17.1	127,725	338,577

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	5.3%	\$31,011	\$ 162,760	7.8%	\$45,639	\$ 203,504	7.9%	\$46,224	\$ 197,263
2023	601,208	5.3	31,864	164,321	7.8	46,894	205,456	7.9	47,495	199,155
2024	617,741	5.3	32,740	165,721	7.8	48,184	207,207	7.9	48,802	200,852
2025	634,729	5.3	33,641	166,941	7.8	49,509	208,733	7.9	50,144	202,331
2026	652,184	5.3	34,566	167,961	7.8	50,870	210,009	7.9	51,523	203,568
2027	670,119	5.3	35,516	168,760	7.8	52,269	211,007	7.9	52,939	204,536
2028	688,547	5.3	36,493	169,313	7.8	53,707	211,698	7.9	54,395	205,206
2029	707,482	5.3	37,497	169,595	7.8	55,184	212,051	7.9	55,891	205,548
2030	726,938	5.3	38,528	169,579	7.8	56,701	212,031	7.9	57,428	205,528
2031	746,929	5.3	39,587	169,235	7.8	58,260	211,600	7.9	59,007	205,111

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	9.7%	\$56,756	\$ 229,402	10.3%	\$60,267	\$ 244,200	11.6%	\$67,874	\$ 261,460
2023	601,208	9.7	58,317	231,603	10.3	61,924	246,543	11.6	69,740	263,968
2024	617,741	9.7	59,921	233,577	10.3	63,627	248,644	11.6	71,658	266,217
2025	634,729	9.7	61,569	235,297	10.3	65,377	250,475	11.6	73,629	268,177
2026	652,184	9.7	63,262	236,735	10.3	67,175	252,006	11.6	75,653	269,816
2027	670,119	9.7	65,002	237,860	10.3	69,022	253,204	11.6	77,734	271,099
2028	688,547	9.7	66,789	238,639	10.3	70,920	254,034	11.6	79,871	271,987
2029	707,482	9.7	68,626	239,037	10.3	72,871	254,457	11.6	82,068	272,440
2030	726,938	9.7	70,513	239,014	10.3	74,875	254,433	11.6	84,325	272,414
2031	746,929	9.7	72,452	238,529	10.3	76,934	253,916	11.6	86,644	271,861

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	12.7%	\$74,310	\$ 284,920	13.4%	\$78,406	\$ 293,535	15.2%	\$88,938	\$ 325,623
2023	601,208	12.7	76,353	287,653	13.4	80,562	296,351	15.2	91,384	328,747
2024	617,741	12.7	78,453	290,104	13.4	82,777	298,876	15.2	93,897	331,548
2025	634,729	12.7	80,611	292,240	13.4	85,054	301,077	15.2	96,479	333,990
2026	652,184	12.7	82,827	294,026	13.4	87,393	302,917	15.2	99,132	336,031
2027	670,119	12.7	85,105	295,424	13.4	89,796	304,357	15.2	101,858	337,629
2028	688,547	12.7	87,445	296,392	13.4	92,265	305,354	15.2	104,659	338,735
2029	707,482	12.7	89,850	296,886	13.4	94,803	305,863	15.2	107,537	339,299
2030	726,938	12.7	92,321	296,857	13.4	97,410	305,834	15.2	110,495	339,266
2031	746,929	12.7	94,860	296,254	13.4	100,088	305,213	15.2	113,533	338,577

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	11.4%	\$66,703	\$ 167,874	13.9%	\$81,331	\$ 209,880	13.9%	\$81,331	\$ 203,546
2023	601,208	11.4	68,538	169,484	13.9	83,568	211,893	13.9	83,568	205,499
2024	617,741	11.4	70,422	170,928	13.9	85,866	213,699	13.9	85,866	207,250
2025	634,729	11.4	72,359	172,187	13.9	88,227	215,273	13.9	88,227	208,776
2026	652,184	11.4	74,349	173,239	13.9	90,654	216,589	13.9	90,654	210,052
2027	670,119	11.4	76,394	174,063	13.9	93,147	217,619	13.9	93,147	211,051
2028	688,547	11.4	78,494	174,633	13.9	95,708	218,332	13.9	95,708	211,743
2029	707,482	11.4	80,653	174,924	13.9	98,340	218,696	13.9	98,340	212,096
2030	726,938	11.4	82,871	174,907	13.9	101,044	218,675	13.9	101,044	212,076
2031	746,929	11.4	85,150	174,552	13.9	103,823	218,231	13.9	103,823	211,645

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	15.9%	\$93,034	\$ 236,607	16.5%	\$96,544	\$ 251,802	17.8%	\$104,151	\$ 269,619
2023	601,208	15.9	95,592	238,877	16.5	99,199	254,217	17.8	107,015	272,205
2024	617,741	15.9	98,221	240,913	16.5	101,927	256,383	17.8	109,958	274,525
2025	634,729	15.9	100,922	242,687	16.5	104,730	258,271	17.8	112,982	276,547
2026	652,184	15.9	103,697	244,170	16.5	107,610	259,850	17.8	116,089	278,237
2027	670,119	15.9	106,549	245,331	16.5	110,570	261,085	17.8	119,281	279,560
2028	688,547	15.9	109,479	246,135	16.5	113,610	261,941	17.8	122,561	280,476
2029	707,482	15.9	112,490	246,545	16.5	116,735	262,377	17.8	125,932	280,943
2030	726,938	15.9	115,583	246,521	16.5	119,945	262,352	17.8	129,395	280,916
2031	746,929	15.9	118,762	246,020	16.5	123,243	261,819	17.8	132,953	280,346

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	19.0%	\$111,172	\$ 293,812	19.7%	\$115,268	\$ 302,749	21.6%	\$126,385	\$ 335,767
2023	601,208	19.0	114,230	296,630	19.7	118,438	305,653	21.6	129,861	338,988
2024	617,741	19.0	117,371	299,158	19.7	121,695	308,258	21.6	133,432	341,877
2025	634,729	19.0	120,599	301,361	19.7	125,042	310,528	21.6	137,101	344,395
2026	652,184	19.0	123,915	303,203	19.7	128,480	312,426	21.6	140,872	346,500
2027	670,119	19.0	127,323	304,644	19.7	132,013	313,911	21.6	144,746	348,147
2028	688,547	19.0	130,824	305,642	19.7	135,644	314,940	21.6	148,726	349,288
2029	707,482	19.0	134,422	306,151	19.7	139,374	315,465	21.6	152,816	349,870
2030	726,938	19.0	138,118	306,122	19.7	143,207	315,435	21.6	157,019	349,836
2031	746,929	19.0	141,917	305,500	19.7	147,145	314,794	21.6	161,337	349,126

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	9.5%	\$55,586	\$ 167,874	12.0%	\$70,214	\$ 209,880	12.0%	\$70,214	\$ 203,546
2023	601,208	9.5	57,115	169,484	12.0	72,145	211,893	12.0	72,145	205,499
2024	617,741	9.5	58,685	170,928	12.0	74,129	213,699	12.0	74,129	207,250
2025	634,729	9.5	60,299	172,187	12.0	76,167	215,273	12.0	76,167	208,776
2026	652,184	9.5	61,957	173,239	12.0	78,262	216,589	12.0	78,262	210,052
2027	670,119	9.5	63,661	174,063	12.0	80,414	217,619	12.0	80,414	211,051
2028	688,547	9.5	65,412	174,633	12.0	82,626	218,332	12.0	82,626	211,743
2029	707,482	9.5	67,211	174,924	12.0	84,898	218,696	12.0	84,898	212,096
2030	726,938	9.5	69,059	174,907	12.0	87,233	218,675	12.0	87,233	212,076
2031	746,929	9.5	70,958	174,552	12.0	89,631	218,231	12.0	89,631	211,645

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	14.0%	\$81,916	\$ 236,607	14.6%	\$85,427	\$ 251,802	15.9%	\$93,034	\$ 269,619
2023	601,208	14.0	84,169	238,877	14.6	87,776	254,217	15.9	95,592	272,205
2024	617,741	14.0	86,484	240,913	14.6	90,190	256,383	15.9	98,221	274,525
2025	634,729	14.0	88,862	242,687	14.6	92,670	258,271	15.9	100,922	276,547
2026	652,184	14.0	91,306	244,170	14.6	95,219	259,850	15.9	103,697	278,237
2027	670,119	14.0	93,817	245,331	14.6	97,837	261,085	15.9	106,549	279,560
2028	688,547	14.0	96,397	246,135	14.6	100,528	261,941	15.9	109,479	280,476
2029	707,482	14.0	99,047	246,545	14.6	103,292	262,377	15.9	112,490	280,943
2030	726,938	14.0	101,771	246,521	14.6	106,133	262,352	15.9	115,583	280,916
2031	746,929	14.0	104,570	246,020	14.6	109,052	261,819	15.9	118,762	280,346

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	17.1%	\$100,055	\$ 293,812	17.8%	\$104,151	\$ 302,749	19.7%	\$115,268	\$ 335,767
2023	601,208	17.1	102,807	296,630	17.8	107,015	305,653	19.7	118,438	338,988
2024	617,741	17.1	105,634	299,158	17.8	109,958	308,258	19.7	121,695	341,877
2025	634,729	17.1	108,539	301,361	17.8	112,982	310,528	19.7	125,042	344,395
2026	652,184	17.1	111,523	303,203	17.8	116,089	312,426	19.7	128,480	346,500
2027	670,119	17.1	114,590	304,644	17.8	119,281	313,911	19.7	132,013	348,147
2028	688,547	17.1	117,742	305,642	17.8	122,561	314,940	19.7	135,644	349,288
2029	707,482	17.1	120,979	306,151	17.8	125,932	315,465	19.7	139,374	349,870
2030	726,938	17.1	124,306	306,122	17.8	129,395	315,435	19.7	143,207	349,836
2031	746,929	17.1	127,725	305,500	17.8	132,953	314,794	19.7	147,145	349,126

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	7.6%	\$44,469	\$ 167,874	10.1%	\$59,097	\$ 209,880	10.1%	\$59,097	\$ 203,546
2023	601,208	7.6	45,692	169,484	10.1	60,722	211,893	10.1	60,722	205,499
2024	617,741	7.6	46,948	170,928	10.1	62,392	213,699	10.1	62,392	207,250
2025	634,729	7.6	48,239	172,187	10.1	64,108	215,273	10.1	64,108	208,776
2026	652,184	7.6	49,566	173,239	10.1	65,871	216,589	10.1	65,871	210,052
2027	670,119	7.6	50,929	174,063	10.1	67,682	217,619	10.1	67,682	211,051
2028	688,547	7.6	52,330	174,633	10.1	69,543	218,332	10.1	69,543	211,743
2029	707,482	7.6	53,769	174,924	10.1	71,456	218,696	10.1	71,456	212,096
2030	726,938	7.6	55,247	174,907	10.1	73,421	218,675	10.1	73,421	212,076
2031	746,929	7.6	56,767	174,552	10.1	75,440	218,231	10.1	75,440	211,645

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	12.1%	\$70,799	\$ 236,607	12.7%	\$74,310	\$ 251,802	14.0%	\$81,916	\$ 269,619
2023	601,208	12.1	72,746	238,877	12.7	76,353	254,217	14.0	84,169	272,205
2024	617,741	12.1	74,747	240,913	12.7	78,453	256,383	14.0	86,484	274,525
2025	634,729	12.1	76,802	242,687	12.7	80,611	258,271	14.0	88,862	276,547
2026	652,184	12.1	78,914	244,170	12.7	82,827	259,850	14.0	91,306	278,237
2027	670,119	12.1	81,084	245,331	12.7	85,105	261,085	14.0	93,817	279,560
2028	688,547	12.1	83,314	246,135	12.7	87,445	261,941	14.0	96,397	280,476
2029	707,482	12.1	85,605	246,545	12.7	89,850	262,377	14.0	99,047	280,943
2030	726,938	12.1	87,959	246,521	12.7	92,321	262,352	14.0	101,771	280,916
2031	746,929	12.1	90,378	246,020	12.7	94,860	261,819	14.0	104,570	280,346

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	15.2%	\$88,938	\$ 293,812	15.9%	\$93,034	\$ 302,749	17.8%	\$104,151	\$ 335,767
2023	601,208	15.2	91,384	296,630	15.9	95,592	305,653	17.8	107,015	338,988
2024	617,741	15.2	93,897	299,158	15.9	98,221	308,258	17.8	109,958	341,877
2025	634,729	15.2	96,479	301,361	15.9	100,922	310,528	17.8	112,982	344,395
2026	652,184	15.2	99,132	303,203	15.9	103,697	312,426	17.8	116,089	346,500
2027	670,119	15.2	101,858	304,644	15.9	106,549	313,911	17.8	119,281	348,147
2028	688,547	15.2	104,659	305,642	15.9	109,479	314,940	17.8	122,561	349,288
2029	707,482	15.2	107,537	306,151	15.9	112,490	315,465	17.8	125,932	349,870
2030	726,938	15.2	110,495	306,122	15.9	115,583	315,435	17.8	129,395	349,836
2031	746,929	15.2	113,533	305,500	15.9	118,762	314,794	17.8	132,953	349,126

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.

Central Cass County Fire Protection District - Fire

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

Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	5.7%	\$33,352	\$ 167,874	8.2%	\$47,980	\$ 209,880	8.2%	\$47,980	\$ 203,546
2023	601,208	5.7	34,269	169,484	8.2	49,299	211,893	8.2	49,299	205,499
2024	617,741	5.7	35,211	170,928	8.2	50,655	213,699	8.2	50,655	207,250
2025	634,729	5.7	36,180	172,187	8.2	52,048	215,273	8.2	52,048	208,776
2026	652,184	5.7	37,174	173,239	8.2	53,479	216,589	8.2	53,479	210,052
2027	670,119	5.7	38,197	174,063	8.2	54,950	217,619	8.2	54,950	211,051
2028	688,547	5.7	39,247	174,633	8.2	56,461	218,332	8.2	56,461	211,743
2029	707,482	5.7	40,326	174,924	8.2	58,014	218,696	8.2	58,014	212,096
2030	726,938	5.7	41,435	174,907	8.2	59,609	218,675	8.2	59,609	212,076
2031	746,929	5.7	42,575	174,552	8.2	61,248	218,231	8.2	61,248	211,645

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	10.2%	\$59,682	\$ 236,607	10.8%	\$63,193	\$ 251,802	12.1%	\$70,799	\$ 269,619
2023	601,208	10.2	61,323	238,877	10.8	64,930	254,217	12.1	72,746	272,205
2024	617,741	10.2	63,010	240,913	10.8	66,716	256,383	12.1	74,747	274,525
2025	634,729	10.2	64,742	242,687	10.8	68,551	258,271	12.1	76,802	276,547
2026	652,184	10.2	66,523	244,170	10.8	70,436	259,850	12.1	78,914	278,237
2027	670,119	10.2	68,352	245,331	10.8	72,373	261,085	12.1	81,084	279,560
2028	688,547	10.2	70,232	246,135	10.8	74,363	261,941	12.1	83,314	280,476
2029	707,482	10.2	72,163	246,545	10.8	76,408	262,377	12.1	85,605	280,943
2030	726,938	10.2	74,148	246,521	10.8	78,509	262,352	12.1	87,959	280,916
2031	746,929	10.2	76,187	246,020	10.8	80,668	261,819	12.1	90,378	280,346

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2022	\$ 585,117	13.3%	\$77,821	\$ 293,812	14.0%	\$81,916	\$ 302,749	15.9%	\$93,034	\$ 335,767
2023	601,208	13.3	79,961	296,630	14.0	84,169	305,653	15.9	95,592	338,988
2024	617,741	13.3	82,160	299,158	14.0	86,484	308,258	15.9	98,221	341,877
2025	634,729	13.3	84,419	301,361	14.0	88,862	310,528	15.9	100,922	344,395
2026	652,184	13.3	86,740	303,203	14.0	91,306	312,426	15.9	103,697	346,500
2027	670,119	13.3	89,126	304,644	14.0	93,817	313,911	15.9	106,549	348,147
2028	688,547	13.3	91,577	305,642	14.0	96,397	314,940	15.9	109,479	349,288
2029	707,482	13.3	94,095	306,151	14.0	99,047	315,465	15.9	112,490	349,870
2030	726,938	13.3	96,683	306,122	14.0	101,771	315,435	15.9	115,583	349,836
2031	746,929	13.3	99,342	305,500	14.0	104,570	314,794	15.9	118,762	349,126

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.