



The Initial Valuation For

Brookline Fire Protection District

as of July 31, 2021



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August 27, 2021

Brookline Fire Protection District
Brookline Station, 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 - 106.685 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 July 31, 2021. The valuation was based on data furnished from your records concerning individual employees (see Appendix V).

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

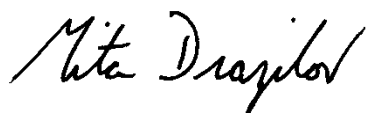
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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

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

The signing actuary is independent of the plan sponsor.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA



Alternate Plan Provisions Affecting Employer Contribution Rates

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

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

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

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

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

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

Brookline 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	8.50%	0.60%	0.30%	9.40%	7.50%	5.60%	3.70%
L-3	Fire	10.30	0.70	0.40	11.40	9.50	7.60	5.70
LT-4(65)	Fire	10.30	0.60	0.40	11.30	9.40	7.50	5.60
LT-5(65)	Fire	11.70	0.70	0.50	12.90	11.00	9.10	7.20
L-7	Fire	12.20	0.80	0.50	13.50	11.60	9.70	7.80
LT-8(65)	Fire	13.10	0.80	0.60	14.50	12.60	10.70	8.80
L-12	Fire	14.10	0.90	0.60	15.60	13.70	11.80	9.90
LT-14(65)	Fire	14.60	0.90	0.60	16.10	14.20	12.30	10.40
L-6	Fire	16.00	1.00	0.70	17.70	15.80	13.90	12.00

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

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

Brookline 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	8.70%	0.60%	0.40%	9.70%	7.80%	5.90%	4.00%
L-3	Fire	10.70	0.70	0.40	11.80	9.90	8.00	6.10
LT-4(65)	Fire	10.60	0.60	0.40	11.60	9.70	7.80	5.90
LT-5(65)	Fire	12.10	0.70	0.50	13.30	11.40	9.50	7.60
L-7	Fire	12.60	0.80	0.50	13.90	12.00	10.10	8.20
LT-8(65)	Fire	13.60	0.80	0.60	15.00	13.10	11.20	9.30
L-12	Fire	14.60	0.90	0.60	16.10	14.20	12.30	10.40
LT-14(65)	Fire	15.00	0.90	0.60	16.50	14.60	12.70	10.80
L-6	Fire	16.50	1.00	0.70	18.20	16.30	14.40	12.50

* 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.

Brookline 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%	0.40%	9.80%	7.90%	6.00%	4.10%
L-3	Fire	10.70	0.70	0.40	11.80	9.90	8.00	6.10
LT-4(65)	Fire	11.10	0.60	0.50	12.20	10.30	8.40	6.50
LT-5(65)	Fire	12.50	0.70	0.50	13.70	11.80	9.90	8.00
L-7	Fire	12.70	0.80	0.50	14.00	12.10	10.20	8.30
LT-8(65)	Fire	13.90	0.80	0.60	15.30	13.40	11.50	9.60
L-12	Fire	14.70	0.90	0.60	16.20	14.30	12.40	10.50
LT-14(65)	Fire	15.30	0.90	0.70	16.90	15.00	13.10	11.20
L-6	Fire	16.60	1.00	0.70	18.30	16.40	14.50	12.60

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

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

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

Brookline 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	9.00%	0.60%	0.40%	10.00%	8.10%	6.20%	4.30%
L-3	Fire	11.10	0.70	0.50	12.30	10.40	8.50	6.60
LT-4(65)	Fire	11.40	0.60	0.50	12.50	10.60	8.70	6.80
LT-5(65)	Fire	12.90	0.70	0.50	14.10	12.20	10.30	8.40
L-7	Fire	13.10	0.80	0.60	14.50	12.60	10.70	8.80
LT-8(65)	Fire	14.30	0.80	0.60	15.70	13.80	11.90	10.00
L-12	Fire	15.10	0.90	0.60	16.60	14.70	12.80	10.90
LT-14(65)	Fire	15.70	0.90	0.70	17.30	15.40	13.50	11.60
L-6	Fire	17.20	1.00	0.70	18.90	17.00	15.10	13.20

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.

Brookline Fire Protection District

Employer Contribution Dollars

Fire

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

Regular Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 15,886	\$ 12,675	\$ 9,464	\$ 6,253
L-3	19,266	16,055	12,844	9,633
LT-4(65)	19,097	15,886	12,675	9,464
LT-5(65)	21,801	18,590	15,379	12,168
L-7	22,815	19,604	16,393	13,182
LT-8(65)	24,505	21,294	18,083	14,872
L-12	26,364	23,153	19,942	16,731
LT-14(65)	27,209	23,998	20,787	17,576
L-6	29,913	26,702	23,491	20,280

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 16,393	\$ 13,182	\$ 9,971	\$ 6,760
L-3	19,942	16,731	13,520	10,309
LT-4(65)	19,604	16,393	13,182	9,971
LT-5(65)	22,477	19,266	16,055	12,844
L-7	23,491	20,280	17,069	13,858
LT-8(65)	25,350	22,139	18,928	15,717
L-12	27,209	23,998	20,787	17,576
LT-14(65)	27,885	24,674	21,463	18,252
L-6	30,758	27,547	24,336	21,125

Rule of 80 Retirement Eligibility

5 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 16,562	\$ 13,351	\$ 10,140	\$ 6,929
L-3	19,942	16,731	13,520	10,309
LT-4(65)	20,618	17,407	14,196	10,985
LT-5(65)	23,153	19,942	16,731	13,520
L-7	23,660	20,449	17,238	14,027
LT-8(65)	25,857	22,646	19,435	16,224
L-12	27,378	24,167	20,956	17,745
LT-14(65)	28,561	25,350	22,139	18,928
L-6	30,927	27,716	24,505	21,294

3 Year FAS				
Benefit Program	Member Contribution Rate			
	0%	2%	4%	6%
L-1	\$ 16,900	\$ 13,689	\$ 10,478	\$ 7,267
L-3	20,787	17,576	14,365	11,154
LT-4(65)	21,125	17,914	14,703	11,492
LT-5(65)	23,829	20,618	17,407	14,196
L-7	24,505	21,294	18,083	14,872
LT-8(65)	26,533	23,322	20,111	16,900
L-12	28,054	24,843	21,632	18,421
LT-14(65)	29,237	26,026	22,815	19,604
L-6	31,941	28,730	25,519	22,308

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.

Brookline Fire Protection District

Employees and Payroll Included in the Valuation

	Fire
Number of Employees	4
Annual Payroll	\$ 169,000

Information regarding the age and service characteristics of the employees is contained in Appendix V.

APPENDIX I

UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability (UAAL)

If the decision is made to join LAGERS the governing body also must decide how much credit to grant employees for their service before the membership date. The options are to cover 25%, 50%, 75% or 100% of prior service. The granting of prior service credit results in the establishment of an actuarial accrued liability. Because your political subdivision will not have established an asset balance with the System as of the membership date, the value established for prior service is an unfunded actuarial accrued liability.

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 7 as the "Prior Service Cost Rate" are designed to pay for the applicable unfunded actuarial accrued liability. This procedure will allow your political subdivision to retire the unfunded actuarial accrued liability in an orderly fashion over a period of years without the need for an immediate large payment upon joining the System.

Should the governing body elect to grant credit for 100% of the employees' prior service, the unfunded actuarial accrued liability as of the date of this valuation would be as follows:

Brookline 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	\$ 9,983	\$ 10,311
L-3	Fire	12,509	12,912
LT-4(65)	Fire	12,425	12,805
LT-5(65)	Fire	14,332	14,792
L-7	Fire	15,034	15,496
LT-8(65)	Fire	16,240	16,738
L-12	Fire	17,517	18,072
LT-14(65)	Fire	18,106	18,701
L-6	Fire	20,021	20,653

Brookline 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	\$ 10,339	\$ 10,667
L-3	Fire	12,917	13,327
LT-4(65)	Fire	13,294	13,700
LT-5(65)	Fire	15,128	15,617
L-7	Fire	15,539	16,059
LT-8(65)	Fire	17,016	17,559
L-12	Fire	18,108	18,696
LT-14(65)	Fire	18,838	19,469
L-6	Fire	20,711	21,388

APPENDIX II

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

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

Schedule 1.

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

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

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

Schedule 2.

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

Early Retirement

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

Normal Retirement

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

Schedule 2. (Concluded)

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

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

APPENDIX III

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System

Brief Summary of LAGERS

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

(Section references are to RSMo)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX IV

BENEFIT ILLUSTRATIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Missouri LAGERS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Missouri LAGERS

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

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

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

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

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

APPENDIX V

AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

Brookline Fire Protection District - Fire

July 31, 2021

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24	1							1	\$ 24,960
25-29	1							1	\$ 50,000
30-34	1							1	\$ 27,040
35-39									
40-44									
45-49									
50-54	1							1	\$ 67,000
55-59									
60-64									
65-69									
70 & Over									
Totals	4							4	\$ 169,000

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

Age: 32.7 years.

Benefit Service: 0.4 years.

Annual Pay: \$42,250.

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.



August 27, 2021 E-mail

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

Dear Bob:

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

Brookline 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



August 27, 2021

Brookline Fire Protection District
Brookline Station, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the July 31, 2021 Initial Valuation for the Brookline Fire Protection District dated August 27, 2021.

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

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

Respectfully submitted,

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

Mita D. Drazilov, ASA, FCA, MAAA

Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	9.4%	\$15,886	\$ 9,983	11.4%	\$19,266	\$ 12,509	11.3%	\$19,097	\$ 12,425
2022	173,648	9.4	16,323	10,079	11.4	19,796	12,629	11.3	19,622	12,544
2023	178,423	9.4	16,772	10,165	11.4	20,340	12,737	11.3	20,162	12,651
2024	183,330	9.4	17,233	10,240	11.4	20,900	12,831	11.3	20,716	12,744
2025	188,372	9.4	17,707	10,303	11.4	21,474	12,909	11.3	21,286	12,822
2026	193,552	9.4	18,194	10,352	11.4	22,065	12,970	11.3	21,871	12,883
2027	198,875	9.4	18,694	10,386	11.4	22,672	13,013	11.3	22,473	12,925
2028	204,344	9.4	19,208	10,403	11.4	23,295	13,035	11.3	23,091	12,947
2029	209,963	9.4	19,737	10,402	11.4	23,936	13,034	11.3	23,726	12,946
2030	215,737	9.4	20,279	10,381	11.4	24,594	13,008	11.3	24,378	12,920

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	12.9%	\$21,801	\$ 14,332	13.5%	\$22,815	\$ 15,034	14.5%	\$24,505	\$ 16,240
2022	173,648	12.9	22,401	14,469	13.5	23,442	15,178	14.5	25,179	16,396
2023	178,423	12.9	23,017	14,592	13.5	24,087	15,307	14.5	25,871	16,536
2024	183,330	12.9	23,650	14,699	13.5	24,750	15,420	14.5	26,583	16,658
2025	188,372	12.9	24,300	14,789	13.5	25,430	15,514	14.5	27,314	16,760
2026	193,552	12.9	24,968	14,859	13.5	26,130	15,588	14.5	28,065	16,840
2027	198,875	12.9	25,655	14,908	13.5	26,848	15,639	14.5	28,837	16,895
2028	204,344	12.9	26,360	14,933	13.5	27,586	15,665	14.5	29,630	16,923
2029	209,963	12.9	27,085	14,932	13.5	28,345	15,663	14.5	30,445	16,921
2030	215,737	12.9	27,830	14,902	13.5	29,124	15,631	14.5	31,282	16,887

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	15.6%	\$26,364	\$ 17,517	16.1%	\$27,209	\$ 18,106	17.7%	\$29,913	\$ 20,021
2022	173,648	15.6	27,089	17,685	16.1	27,957	18,280	17.7	30,736	20,213
2023	178,423	15.6	27,834	17,836	16.1	28,726	18,436	17.7	31,581	20,385
2024	183,330	15.6	28,599	17,967	16.1	29,516	18,572	17.7	32,449	20,535
2025	188,372	15.6	29,386	18,077	16.1	30,328	18,686	17.7	33,342	20,661
2026	193,552	15.6	30,194	18,163	16.1	31,162	18,775	17.7	34,259	20,759
2027	198,875	15.6	31,025	18,223	16.1	32,019	18,837	17.7	35,201	20,827
2028	204,344	15.6	31,878	18,253	16.1	32,899	18,868	17.7	36,169	20,862
2029	209,963	15.6	32,754	18,251	16.1	33,804	18,866	17.7	37,163	20,860
2030	215,737	15.6	33,655	18,214	16.1	34,734	18,828	17.7	38,185	20,818

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	7.5%	\$12,675	\$ 9,983	9.5%	\$16,055	\$ 12,509	9.4%	\$15,886	\$ 12,425
2022	173,648	7.5	13,024	10,079	9.5	16,497	12,629	9.4	16,323	12,544
2023	178,423	7.5	13,382	10,165	9.5	16,950	12,737	9.4	16,772	12,651
2024	183,330	7.5	13,750	10,240	9.5	17,416	12,831	9.4	17,233	12,744
2025	188,372	7.5	14,128	10,303	9.5	17,895	12,909	9.4	17,707	12,822
2026	193,552	7.5	14,516	10,352	9.5	18,387	12,970	9.4	18,194	12,883
2027	198,875	7.5	14,916	10,386	9.5	18,893	13,013	9.4	18,694	12,925
2028	204,344	7.5	15,326	10,403	9.5	19,413	13,035	9.4	19,208	12,947
2029	209,963	7.5	15,747	10,402	9.5	19,946	13,034	9.4	19,737	12,946
2030	215,737	7.5	16,180	10,381	9.5	20,495	13,008	9.4	20,279	12,920

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	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	11.0%	\$18,590	\$ 14,332	11.6%	\$19,604	\$ 15,034	12.6%	\$21,294	\$ 16,240
2022	173,648	11.0	19,101	14,469	11.6	20,143	15,178	12.6	21,880	16,396
2023	178,423	11.0	19,627	14,592	11.6	20,697	15,307	12.6	22,481	16,536
2024	183,330	11.0	20,166	14,699	11.6	21,266	15,420	12.6	23,100	16,658
2025	188,372	11.0	20,721	14,789	11.6	21,851	15,514	12.6	23,735	16,760
2026	193,552	11.0	21,291	14,859	11.6	22,452	15,588	12.6	24,388	16,840
2027	198,875	11.0	21,876	14,908	11.6	23,070	15,639	12.6	25,058	16,895
2028	204,344	11.0	22,478	14,933	11.6	23,704	15,665	12.6	25,747	16,923
2029	209,963	11.0	23,096	14,932	11.6	24,356	15,663	12.6	26,455	16,921
2030	215,737	11.0	23,731	14,902	11.6	25,025	15,631	12.6	27,183	16,887

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	13.7%	\$23,153	\$ 17,517	14.2%	\$23,998	\$ 18,106	15.8%	\$26,702	\$ 20,021
2022	173,648	13.7	23,790	17,685	14.2	24,658	18,280	15.8	27,436	20,213
2023	178,423	13.7	24,444	17,836	14.2	25,336	18,436	15.8	28,191	20,385
2024	183,330	13.7	25,116	17,967	14.2	26,033	18,572	15.8	28,966	20,535
2025	188,372	13.7	25,807	18,077	14.2	26,749	18,686	15.8	29,763	20,661
2026	193,552	13.7	26,517	18,163	14.2	27,484	18,775	15.8	30,581	20,759
2027	198,875	13.7	27,246	18,223	14.2	28,240	18,837	15.8	31,422	20,827
2028	204,344	13.7	27,995	18,253	14.2	29,017	18,868	15.8	32,286	20,862
2029	209,963	13.7	28,765	18,251	14.2	29,815	18,866	15.8	33,174	20,860
2030	215,737	13.7	29,556	18,214	14.2	30,635	18,828	15.8	34,086	20,818

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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
2021	\$ 169,000	5.6%	\$9,464	\$ 9,983	7.6%	\$12,844	\$ 12,509	7.5%	\$12,675	\$ 12,425
2022	173,648	5.6	9,724	10,079	7.6	13,197	12,629	7.5	13,024	12,544
2023	178,423	5.6	9,992	10,165	7.6	13,560	12,737	7.5	13,382	12,651
2024	183,330	5.6	10,266	10,240	7.6	13,933	12,831	7.5	13,750	12,744
2025	188,372	5.6	10,549	10,303	7.6	14,316	12,909	7.5	14,128	12,822
2026	193,552	5.6	10,839	10,352	7.6	14,710	12,970	7.5	14,516	12,883
2027	198,875	5.6	11,137	10,386	7.6	15,115	13,013	7.5	14,916	12,925
2028	204,344	5.6	11,443	10,403	7.6	15,530	13,035	7.5	15,326	12,947
2029	209,963	5.6	11,758	10,402	7.6	15,957	13,034	7.5	15,747	12,946
2030	215,737	5.6	12,081	10,381	7.6	16,396	13,008	7.5	16,180	12,920

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 169,000	9.1%	\$15,379	\$ 14,332	9.7%	\$16,393	\$ 15,034	10.7%	\$18,083	\$ 16,240
2022	173,648	9.1	15,802	14,469	9.7	16,844	15,178	10.7	18,580	16,396
2023	178,423	9.1	16,236	14,592	9.7	17,307	15,307	10.7	19,091	16,536
2024	183,330	9.1	16,683	14,699	9.7	17,783	15,420	10.7	19,616	16,658
2025	188,372	9.1	17,142	14,789	9.7	18,272	15,514	10.7	20,156	16,760
2026	193,552	9.1	17,613	14,859	9.7	18,775	15,588	10.7	20,710	16,840
2027	198,875	9.1	18,098	14,908	9.7	19,291	15,639	10.7	21,280	16,895
2028	204,344	9.1	18,595	14,933	9.7	19,821	15,665	10.7	21,865	16,923
2029	209,963	9.1	19,107	14,932	9.7	20,366	15,663	10.7	22,466	16,921
2030	215,737	9.1	19,632	14,902	9.7	20,926	15,631	10.7	23,084	16,887

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 169,000	11.8%	\$19,942	\$ 17,517	12.3%	\$20,787	\$ 18,106	13.9%	\$23,491	\$ 20,021
2022	173,648	11.8	20,490	17,685	12.3	21,359	18,280	13.9	24,137	20,213
2023	178,423	11.8	21,054	17,836	12.3	21,946	18,436	13.9	24,801	20,385
2024	183,330	11.8	21,633	17,967	12.3	22,550	18,572	13.9	25,483	20,535
2025	188,372	11.8	22,228	18,077	12.3	23,170	18,686	13.9	26,184	20,661
2026	193,552	11.8	22,839	18,163	12.3	23,807	18,775	13.9	26,904	20,759
2027	198,875	11.8	23,467	18,223	12.3	24,462	18,837	13.9	27,644	20,827
2028	204,344	11.8	24,113	18,253	12.3	25,134	18,868	13.9	28,404	20,862
2029	209,963	11.8	24,776	18,251	12.3	25,825	18,866	13.9	29,185	20,860
2030	215,737	11.8	25,457	18,214	12.3	26,536	18,828	13.9	29,987	20,818

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	3.7%	\$6,253	\$ 9,983	5.7%	\$9,633	\$ 12,509	5.6%	\$9,464	\$ 12,425
2022	173,648	3.7	6,425	10,079	5.7	9,898	12,629	5.6	9,724	12,544
2023	178,423	3.7	6,602	10,165	5.7	10,170	12,737	5.6	9,992	12,651
2024	183,330	3.7	6,783	10,240	5.7	10,450	12,831	5.6	10,266	12,744
2025	188,372	3.7	6,970	10,303	5.7	10,737	12,909	5.6	10,549	12,822
2026	193,552	3.7	7,161	10,352	5.7	11,032	12,970	5.6	10,839	12,883
2027	198,875	3.7	7,358	10,386	5.7	11,336	13,013	5.6	11,137	12,925
2028	204,344	3.7	7,561	10,403	5.7	11,648	13,035	5.6	11,443	12,947
2029	209,963	3.7	7,769	10,402	5.7	11,968	13,034	5.6	11,758	12,946
2030	215,737	3.7	7,982	10,381	5.7	12,297	13,008	5.6	12,081	12,920

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	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	7.2%	\$12,168	\$ 14,332	7.8%	\$13,182	\$ 15,034	8.8%	\$14,872	\$ 16,240
2022	173,648	7.2	12,503	14,469	7.8	13,545	15,178	8.8	15,281	16,396
2023	178,423	7.2	12,846	14,592	7.8	13,917	15,307	8.8	15,701	16,536
2024	183,330	7.2	13,200	14,699	7.8	14,300	15,420	8.8	16,133	16,658
2025	188,372	7.2	13,563	14,789	7.8	14,693	15,514	8.8	16,577	16,760
2026	193,552	7.2	13,936	14,859	7.8	15,097	15,588	8.8	17,033	16,840
2027	198,875	7.2	14,319	14,908	7.8	15,512	15,639	8.8	17,501	16,895
2028	204,344	7.2	14,713	14,933	7.8	15,939	15,665	8.8	17,982	16,923
2029	209,963	7.2	15,117	14,932	7.8	16,377	15,663	8.8	18,477	16,921
2030	215,737	7.2	15,533	14,902	7.8	16,827	15,631	8.8	18,985	16,887

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	9.9%	\$16,731	\$ 17,517	10.4%	\$17,576	\$ 18,106	12.0%	\$20,280	\$ 20,021
2022	173,648	9.9	17,191	17,685	10.4	18,059	18,280	12.0	20,838	20,213
2023	178,423	9.9	17,664	17,836	10.4	18,556	18,436	12.0	21,411	20,385
2024	183,330	9.9	18,150	17,967	10.4	19,066	18,572	12.0	22,000	20,535
2025	188,372	9.9	18,649	18,077	10.4	19,591	18,686	12.0	22,605	20,661
2026	193,552	9.9	19,162	18,163	10.4	20,129	18,775	12.0	23,226	20,759
2027	198,875	9.9	19,689	18,223	10.4	20,683	18,837	12.0	23,865	20,827
2028	204,344	9.9	20,230	18,253	10.4	21,252	18,868	12.0	24,521	20,862
2029	209,963	9.9	20,786	18,251	10.4	21,836	18,866	12.0	25,196	20,860
2030	215,737	9.9	21,358	18,214	10.4	22,437	18,828	12.0	25,888	20,818

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	9.7%	\$16,393	\$ 10,311	11.8%	\$19,942	\$ 12,912	11.6%	\$19,604	\$ 12,805
2022	173,648	9.7	16,844	10,410	11.8	20,490	13,036	11.6	20,143	12,928
2023	178,423	9.7	17,307	10,499	11.8	21,054	13,147	11.6	20,697	13,038
2024	183,330	9.7	17,783	10,576	11.8	21,633	13,244	11.6	21,266	13,134
2025	188,372	9.7	18,272	10,641	11.8	22,228	13,325	11.6	21,851	13,214
2026	193,552	9.7	18,775	10,692	11.8	22,839	13,388	11.6	22,452	13,277
2027	198,875	9.7	19,291	10,727	11.8	23,467	13,432	11.6	23,070	13,321
2028	204,344	9.7	19,821	10,745	11.8	24,113	13,454	11.6	23,704	13,343
2029	209,963	9.7	20,366	10,744	11.8	24,776	13,453	11.6	24,356	13,342
2030	215,737	9.7	20,926	10,722	11.8	25,457	13,426	11.6	25,025	13,315

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	13.3%	\$22,477	\$ 14,792	13.9%	\$23,491	\$ 15,496	15.0%	\$25,350	\$ 16,738
2022	173,648	13.3	23,095	14,934	13.9	24,137	15,645	15.0	26,047	16,899
2023	178,423	13.3	23,730	15,061	13.9	24,801	15,778	15.0	26,763	17,043
2024	183,330	13.3	24,383	15,172	13.9	25,483	15,894	15.0	27,500	17,169
2025	188,372	13.3	25,053	15,265	13.9	26,184	15,991	15.0	28,256	17,274
2026	193,552	13.3	25,742	15,338	13.9	26,904	16,067	15.0	29,033	17,356
2027	198,875	13.3	26,450	15,388	13.9	27,644	16,120	15.0	29,831	17,413
2028	204,344	13.3	27,178	15,414	13.9	28,404	16,147	15.0	30,652	17,442
2029	209,963	13.3	27,925	15,413	13.9	29,185	16,145	15.0	31,494	17,440
2030	215,737	13.3	28,693	15,382	13.9	29,987	16,112	15.0	32,361	17,405

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	16.1%	\$27,209	\$ 18,072	16.5%	\$27,885	\$ 18,701	18.2%	\$30,758	\$ 20,653
2022	173,648	16.1	27,957	18,245	16.5	28,652	18,880	18.2	31,604	20,851
2023	178,423	16.1	28,726	18,400	16.5	29,440	19,041	18.2	32,473	21,029
2024	183,330	16.1	29,516	18,536	16.5	30,249	19,181	18.2	33,366	21,184
2025	188,372	16.1	30,328	18,649	16.5	31,081	19,298	18.2	34,284	21,313
2026	193,552	16.1	31,162	18,738	16.5	31,936	19,390	18.2	35,226	21,414
2027	198,875	16.1	32,019	18,799	16.5	32,814	19,454	18.2	36,195	21,484
2028	204,344	16.1	32,899	18,830	16.5	33,717	19,486	18.2	37,191	21,520
2029	209,963	16.1	33,804	18,828	16.5	34,644	19,484	18.2	38,213	21,518
2030	215,737	16.1	34,734	18,790	16.5	35,597	19,444	18.2	39,264	21,474

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	7.8%	\$13,182	\$ 10,311	9.9%	\$16,731	\$ 12,912	9.7%	\$16,393	\$ 12,805
2022	173,648	7.8	13,545	10,410	9.9	17,191	13,036	9.7	16,844	12,928
2023	178,423	7.8	13,917	10,499	9.9	17,664	13,147	9.7	17,307	13,038
2024	183,330	7.8	14,300	10,576	9.9	18,150	13,244	9.7	17,783	13,134
2025	188,372	7.8	14,693	10,641	9.9	18,649	13,325	9.7	18,272	13,214
2026	193,552	7.8	15,097	10,692	9.9	19,162	13,388	9.7	18,775	13,277
2027	198,875	7.8	15,512	10,727	9.9	19,689	13,432	9.7	19,291	13,321
2028	204,344	7.8	15,939	10,745	9.9	20,230	13,454	9.7	19,821	13,343
2029	209,963	7.8	16,377	10,744	9.9	20,786	13,453	9.7	20,366	13,342
2030	215,737	7.8	16,827	10,722	9.9	21,358	13,426	9.7	20,926	13,315

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	11.4%	\$19,266	\$ 14,792	12.0%	\$20,280	\$ 15,496	13.1%	\$22,139	\$ 16,738
2022	173,648	11.4	19,796	14,934	12.0	20,838	15,645	13.1	22,748	16,899
2023	178,423	11.4	20,340	15,061	12.0	21,411	15,778	13.1	23,373	17,043
2024	183,330	11.4	20,900	15,172	12.0	22,000	15,894	13.1	24,016	17,169
2025	188,372	11.4	21,474	15,265	12.0	22,605	15,991	13.1	24,677	17,274
2026	193,552	11.4	22,065	15,338	12.0	23,226	16,067	13.1	25,355	17,356
2027	198,875	11.4	22,672	15,388	12.0	23,865	16,120	13.1	26,053	17,413
2028	204,344	11.4	23,295	15,414	12.0	24,521	16,147	13.1	26,769	17,442
2029	209,963	11.4	23,936	15,413	12.0	25,196	16,145	13.1	27,505	17,440
2030	215,737	11.4	24,594	15,382	12.0	25,888	16,112	13.1	28,262	17,405

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	14.2%	\$23,998	\$ 18,072	14.6%	\$24,674	\$ 18,701	16.3%	\$27,547	\$ 20,653
2022	173,648	14.2	24,658	18,245	14.6	25,353	18,880	16.3	28,305	20,851
2023	178,423	14.2	25,336	18,400	14.6	26,050	19,041	16.3	29,083	21,029
2024	183,330	14.2	26,033	18,536	14.6	26,766	19,181	16.3	29,883	21,184
2025	188,372	14.2	26,749	18,649	14.6	27,502	19,298	16.3	30,705	21,313
2026	193,552	14.2	27,484	18,738	14.6	28,259	19,390	16.3	31,549	21,414
2027	198,875	14.2	28,240	18,799	14.6	29,036	19,454	16.3	32,417	21,484
2028	204,344	14.2	29,017	18,830	14.6	29,834	19,486	16.3	33,308	21,520
2029	209,963	14.2	29,815	18,828	14.6	30,655	19,484	16.3	34,224	21,518
2030	215,737	14.2	30,635	18,790	14.6	31,498	19,444	16.3	35,165	21,474

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	5.9%	\$9,971	\$ 10,311	8.0%	\$13,520	\$ 12,912	7.8%	\$13,182	\$ 12,805
2022	173,648	5.9	10,245	10,410	8.0	13,892	13,036	7.8	13,545	12,928
2023	178,423	5.9	10,527	10,499	8.0	14,274	13,147	7.8	13,917	13,038
2024	183,330	5.9	10,816	10,576	8.0	14,666	13,244	7.8	14,300	13,134
2025	188,372	5.9	11,114	10,641	8.0	15,070	13,325	7.8	14,693	13,214
2026	193,552	5.9	11,420	10,692	8.0	15,484	13,388	7.8	15,097	13,277
2027	198,875	5.9	11,734	10,727	8.0	15,910	13,432	7.8	15,512	13,321
2028	204,344	5.9	12,056	10,745	8.0	16,348	13,454	7.8	15,939	13,343
2029	209,963	5.9	12,388	10,744	8.0	16,797	13,453	7.8	16,377	13,342
2030	215,737	5.9	12,728	10,722	8.0	17,259	13,426	7.8	16,827	13,315

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	9.5%	\$16,055	\$ 14,792	10.1%	\$17,069	\$ 15,496	11.2%	\$18,928	\$ 16,738
2022	173,648	9.5	16,497	14,934	10.1	17,538	15,645	11.2	19,449	16,899
2023	178,423	9.5	16,950	15,061	10.1	18,021	15,778	11.2	19,983	17,043
2024	183,330	9.5	17,416	15,172	10.1	18,516	15,894	11.2	20,533	17,169
2025	188,372	9.5	17,895	15,265	10.1	19,026	15,991	11.2	21,098	17,274
2026	193,552	9.5	18,387	15,338	10.1	19,549	16,067	11.2	21,678	17,356
2027	198,875	9.5	18,893	15,388	10.1	20,086	16,120	11.2	22,274	17,413
2028	204,344	9.5	19,413	15,414	10.1	20,639	16,147	11.2	22,887	17,442
2029	209,963	9.5	19,946	15,413	10.1	21,206	16,145	11.2	23,516	17,440
2030	215,737	9.5	20,495	15,382	10.1	21,789	16,112	11.2	24,163	17,405

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	12.3%	\$20,787	\$ 18,072	12.7%	\$21,463	\$ 18,701	14.4%	\$24,336	\$ 20,653
2022	173,648	12.3	21,359	18,245	12.7	22,053	18,880	14.4	25,005	20,851
2023	178,423	12.3	21,946	18,400	12.7	22,660	19,041	14.4	25,693	21,029
2024	183,330	12.3	22,550	18,536	12.7	23,283	19,181	14.4	26,400	21,184
2025	188,372	12.3	23,170	18,649	12.7	23,923	19,298	14.4	27,126	21,313
2026	193,552	12.3	23,807	18,738	12.7	24,581	19,390	14.4	27,871	21,414
2027	198,875	12.3	24,462	18,799	12.7	25,257	19,454	14.4	28,638	21,484
2028	204,344	12.3	25,134	18,830	12.7	25,952	19,486	14.4	29,426	21,520
2029	209,963	12.3	25,825	18,828	12.7	26,665	19,484	14.4	30,235	21,518
2030	215,737	12.3	26,536	18,790	12.7	27,399	19,444	14.4	31,066	21,474

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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	
2021	\$ 169,000	4.0%	\$6,760	\$ 10,311	6.1%	\$10,309	\$ 12,912	5.9%	\$9,971	\$ 12,805
2022	173,648	4.0	6,946	10,410	6.1	10,593	13,036	5.9	10,245	12,928
2023	178,423	4.0	7,137	10,499	6.1	10,884	13,147	5.9	10,527	13,038
2024	183,330	4.0	7,333	10,576	6.1	11,183	13,244	5.9	10,816	13,134
2025	188,372	4.0	7,535	10,641	6.1	11,491	13,325	5.9	11,114	13,214
2026	193,552	4.0	7,742	10,692	6.1	11,807	13,388	5.9	11,420	13,277
2027	198,875	4.0	7,955	10,727	6.1	12,131	13,432	5.9	11,734	13,321
2028	204,344	4.0	8,174	10,745	6.1	12,465	13,454	5.9	12,056	13,343
2029	209,963	4.0	8,399	10,744	6.1	12,808	13,453	5.9	12,388	13,342
2030	215,737	4.0	8,629	10,722	6.1	13,160	13,426	5.9	12,728	13,315

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	7.6%	\$12,844	\$ 14,792	8.2%	\$13,858	\$ 15,496	9.3%	\$15,717	\$ 16,738
2022	173,648	7.6	13,197	14,934	8.2	14,239	15,645	9.3	16,149	16,899
2023	178,423	7.6	13,560	15,061	8.2	14,631	15,778	9.3	16,593	17,043
2024	183,330	7.6	13,933	15,172	8.2	15,033	15,894	9.3	17,050	17,169
2025	188,372	7.6	14,316	15,265	8.2	15,447	15,991	9.3	17,519	17,274
2026	193,552	7.6	14,710	15,338	8.2	15,871	16,067	9.3	18,000	17,356
2027	198,875	7.6	15,115	15,388	8.2	16,308	16,120	9.3	18,495	17,413
2028	204,344	7.6	15,530	15,414	8.2	16,756	16,147	9.3	19,004	17,442
2029	209,963	7.6	15,957	15,413	8.2	17,217	16,145	9.3	19,527	17,440
2030	215,737	7.6	16,396	15,382	8.2	17,690	16,112	9.3	20,064	17,405

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	10.4%	\$17,576	\$ 18,072	10.8%	\$18,252	\$ 18,701	12.5%	\$21,125	\$ 20,653
2022	173,648	10.4	18,059	18,245	10.8	18,754	18,880	12.5	21,706	20,851
2023	178,423	10.4	18,556	18,400	10.8	19,270	19,041	12.5	22,303	21,029
2024	183,330	10.4	19,066	18,536	10.8	19,800	19,181	12.5	22,916	21,184
2025	188,372	10.4	19,591	18,649	10.8	20,344	19,298	12.5	23,547	21,313
2026	193,552	10.4	20,129	18,738	10.8	20,904	19,390	12.5	24,194	21,414
2027	198,875	10.4	20,683	18,799	10.8	21,479	19,454	12.5	24,859	21,484
2028	204,344	10.4	21,252	18,830	10.8	22,069	19,486	12.5	25,543	21,520
2029	209,963	10.4	21,836	18,828	10.8	22,676	19,484	12.5	26,245	21,518
2030	215,737	10.4	22,437	18,790	10.8	23,300	19,444	12.5	26,967	21,474

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	9.8%	\$16,562	\$ 10,339	11.8%	\$19,942	\$ 12,917	12.2%	\$20,618	\$ 13,294
2022	173,648	9.8	17,018	10,438	11.8	20,490	13,041	12.2	21,185	13,422
2023	178,423	9.8	17,485	10,527	11.8	21,054	13,152	12.2	21,768	13,536
2024	183,330	9.8	17,966	10,605	11.8	21,633	13,249	12.2	22,366	13,636
2025	188,372	9.8	18,460	10,670	11.8	22,228	13,330	12.2	22,981	13,719
2026	193,552	9.8	18,968	10,721	11.8	22,839	13,393	12.2	23,613	13,784
2027	198,875	9.8	19,490	10,756	11.8	23,467	13,437	12.2	24,263	13,829
2028	204,344	9.8	20,026	10,774	11.8	24,113	13,459	12.2	24,930	13,852
2029	209,963	9.8	20,576	10,773	11.8	24,776	13,458	12.2	25,615	13,851
2030	215,737	9.8	21,142	10,751	11.8	25,457	13,431	12.2	26,320	13,823

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	13.7%	\$23,153	\$ 15,128	14.0%	\$23,660	\$ 15,539	15.3%	\$25,857	\$ 17,016
2022	173,648	13.7	23,790	15,273	14.0	24,311	15,688	15.3	26,568	17,179
2023	178,423	13.7	24,444	15,403	14.0	24,979	15,822	15.3	27,299	17,325
2024	183,330	13.7	25,116	15,516	14.0	25,666	15,939	15.3	28,049	17,453
2025	188,372	13.7	25,807	15,611	14.0	26,372	16,036	15.3	28,821	17,560
2026	193,552	13.7	26,517	15,685	14.0	27,097	16,112	15.3	29,613	17,643
2027	198,875	13.7	27,246	15,736	14.0	27,843	16,165	15.3	30,428	17,701
2028	204,344	13.7	27,995	15,762	14.0	28,608	16,192	15.3	31,265	17,730
2029	209,963	13.7	28,765	15,760	14.0	29,395	16,190	15.3	32,124	17,728
2030	215,737	13.7	29,556	15,728	14.0	30,203	16,157	15.3	33,008	17,692

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	16.2%	\$27,378	\$ 18,108	16.9%	\$28,561	\$ 18,838	18.3%	\$30,927	\$ 20,711
2022	173,648	16.2	28,131	18,282	16.9	29,347	19,019	18.3	31,778	20,910
2023	178,423	16.2	28,905	18,438	16.9	30,153	19,181	18.3	32,651	21,088
2024	183,330	16.2	29,699	18,574	16.9	30,983	19,322	18.3	33,549	21,243
2025	188,372	16.2	30,516	18,688	16.9	31,835	19,440	18.3	34,472	21,373
2026	193,552	16.2	31,355	18,777	16.9	32,710	19,532	18.3	35,420	21,475
2027	198,875	16.2	32,218	18,839	16.9	33,610	19,596	18.3	36,394	21,545
2028	204,344	16.2	33,104	18,870	16.9	34,534	19,629	18.3	37,395	21,581
2029	209,963	16.2	34,014	18,868	16.9	35,484	19,627	18.3	38,423	21,579
2030	215,737	16.2	34,949	18,830	16.9	36,460	19,587	18.3	39,480	21,535

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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
2021	\$ 169,000	7.9%	\$13,351	\$ 10,339	9.9%	\$16,731	\$ 12,917	10.3%	\$17,407	\$ 13,294
2022	173,648	7.9	13,718	10,438	9.9	17,191	13,041	10.3	17,886	13,422
2023	178,423	7.9	14,095	10,527	9.9	17,664	13,152	10.3	18,378	13,536
2024	183,330	7.9	14,483	10,605	9.9	18,150	13,249	10.3	18,883	13,636
2025	188,372	7.9	14,881	10,670	9.9	18,649	13,330	10.3	19,402	13,719
2026	193,552	7.9	15,291	10,721	9.9	19,162	13,393	10.3	19,936	13,784
2027	198,875	7.9	15,711	10,756	9.9	19,689	13,437	10.3	20,484	13,829
2028	204,344	7.9	16,143	10,774	9.9	20,230	13,459	10.3	21,047	13,852
2029	209,963	7.9	16,587	10,773	9.9	20,786	13,458	10.3	21,626	13,851
2030	215,737	7.9	17,043	10,751	9.9	21,358	13,431	10.3	22,221	13,823

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 169,000	11.8%	\$19,942	\$ 15,128	12.1%	\$20,449	\$ 15,539	13.4%	\$22,646	\$ 17,016
2022	173,648	11.8	20,490	15,273	12.1	21,011	15,688	13.4	23,269	17,179
2023	178,423	11.8	21,054	15,403	12.1	21,589	15,822	13.4	23,909	17,325
2024	183,330	11.8	21,633	15,516	12.1	22,183	15,939	13.4	24,566	17,453
2025	188,372	11.8	22,228	15,611	12.1	22,793	16,036	13.4	25,242	17,560
2026	193,552	11.8	22,839	15,685	12.1	23,420	16,112	13.4	25,936	17,643
2027	198,875	11.8	23,467	15,736	12.1	24,064	16,165	13.4	26,649	17,701
2028	204,344	11.8	24,113	15,762	12.1	24,726	16,192	13.4	27,382	17,730
2029	209,963	11.8	24,776	15,760	12.1	25,406	16,190	13.4	28,135	17,728
2030	215,737	11.8	25,457	15,728	12.1	26,104	16,157	13.4	28,909	17,692

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability	As a % of Payroll	Annual Dollars	Accrued Liability
2021	\$ 169,000	14.3%	\$24,167	\$ 18,108	15.0%	\$25,350	\$ 18,838	16.4%	\$27,716	\$ 20,711
2022	173,648	14.3	24,832	18,282	15.0	26,047	19,019	16.4	28,478	20,910
2023	178,423	14.3	25,514	18,438	15.0	26,763	19,181	16.4	29,261	21,088
2024	183,330	14.3	26,216	18,574	15.0	27,500	19,322	16.4	30,066	21,243
2025	188,372	14.3	26,937	18,688	15.0	28,256	19,440	16.4	30,893	21,373
2026	193,552	14.3	27,678	18,777	15.0	29,033	19,532	16.4	31,743	21,475
2027	198,875	14.3	28,439	18,839	15.0	29,831	19,596	16.4	32,616	21,545
2028	204,344	14.3	29,221	18,870	15.0	30,652	19,629	16.4	33,512	21,581
2029	209,963	14.3	30,025	18,868	15.0	31,494	19,627	16.4	34,434	21,579
2030	215,737	14.3	30,850	18,830	15.0	32,361	19,587	16.4	35,381	21,535

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	6.0%	\$10,140	\$ 10,339	8.0%	\$13,520	\$ 12,917	8.4%	\$14,196	\$ 13,294
2022	173,648	6.0	10,419	10,438	8.0	13,892	13,041	8.4	14,586	13,422
2023	178,423	6.0	10,705	10,527	8.0	14,274	13,152	8.4	14,988	13,536
2024	183,330	6.0	11,000	10,605	8.0	14,666	13,249	8.4	15,400	13,636
2025	188,372	6.0	11,302	10,670	8.0	15,070	13,330	8.4	15,823	13,719
2026	193,552	6.0	11,613	10,721	8.0	15,484	13,393	8.4	16,258	13,784
2027	198,875	6.0	11,933	10,756	8.0	15,910	13,437	8.4	16,706	13,829
2028	204,344	6.0	12,261	10,774	8.0	16,348	13,459	8.4	17,165	13,852
2029	209,963	6.0	12,598	10,773	8.0	16,797	13,458	8.4	17,637	13,851
2030	215,737	6.0	12,944	10,751	8.0	17,259	13,431	8.4	18,122	13,823

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	9.9%	\$16,731	\$ 15,128	10.2%	\$17,238	\$ 15,539	11.5%	\$19,435	\$ 17,016
2022	173,648	9.9	17,191	15,273	10.2	17,712	15,688	11.5	19,970	17,179
2023	178,423	9.9	17,664	15,403	10.2	18,199	15,822	11.5	20,519	17,325
2024	183,330	9.9	18,150	15,516	10.2	18,700	15,939	11.5	21,083	17,453
2025	188,372	9.9	18,649	15,611	10.2	19,214	16,036	11.5	21,663	17,560
2026	193,552	9.9	19,162	15,685	10.2	19,742	16,112	11.5	22,258	17,643
2027	198,875	9.9	19,689	15,736	10.2	20,285	16,165	11.5	22,871	17,701
2028	204,344	9.9	20,230	15,762	10.2	20,843	16,192	11.5	23,500	17,730
2029	209,963	9.9	20,786	15,760	10.2	21,416	16,190	11.5	24,146	17,728
2030	215,737	9.9	21,358	15,728	10.2	22,005	16,157	11.5	24,810	17,692

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	12.4%	\$20,956	\$ 18,108	13.1%	\$22,139	\$ 18,838	14.5%	\$24,505	\$ 20,711
2022	173,648	12.4	21,532	18,282	13.1	22,748	19,019	14.5	25,179	20,910
2023	178,423	12.4	22,124	18,438	13.1	23,373	19,181	14.5	25,871	21,088
2024	183,330	12.4	22,733	18,574	13.1	24,016	19,322	14.5	26,583	21,243
2025	188,372	12.4	23,358	18,688	13.1	24,677	19,440	14.5	27,314	21,373
2026	193,552	12.4	24,000	18,777	13.1	25,355	19,532	14.5	28,065	21,475
2027	198,875	12.4	24,661	18,839	13.1	26,053	19,596	14.5	28,837	21,545
2028	204,344	12.4	25,339	18,870	13.1	26,769	19,629	14.5	29,630	21,581
2029	209,963	12.4	26,035	18,868	13.1	27,505	19,627	14.5	30,445	21,579
2030	215,737	12.4	26,751	18,830	13.1	28,262	19,587	14.5	31,282	21,535

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	4.1%	\$6,929	\$ 10,339	6.1%	\$10,309	\$ 12,917	6.5%	\$10,985	\$ 13,294
2022	173,648	4.1	7,120	10,438	6.1	10,593	13,041	6.5	11,287	13,422
2023	178,423	4.1	7,315	10,527	6.1	10,884	13,152	6.5	11,597	13,536
2024	183,330	4.1	7,517	10,605	6.1	11,183	13,249	6.5	11,916	13,636
2025	188,372	4.1	7,723	10,670	6.1	11,491	13,330	6.5	12,244	13,719
2026	193,552	4.1	7,936	10,721	6.1	11,807	13,393	6.5	12,581	13,784
2027	198,875	4.1	8,154	10,756	6.1	12,131	13,437	6.5	12,927	13,829
2028	204,344	4.1	8,378	10,774	6.1	12,465	13,459	6.5	13,282	13,852
2029	209,963	4.1	8,608	10,773	6.1	12,808	13,458	6.5	13,648	13,851
2030	215,737	4.1	8,845	10,751	6.1	13,160	13,431	6.5	14,023	13,823

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	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	8.0%	\$13,520	\$ 15,128	8.3%	\$14,027	\$ 15,539	9.6%	\$16,224	\$ 17,016
2022	173,648	8.0	13,892	15,273	8.3	14,413	15,688	9.6	16,670	17,179
2023	178,423	8.0	14,274	15,403	8.3	14,809	15,822	9.6	17,129	17,325
2024	183,330	8.0	14,666	15,516	8.3	15,216	15,939	9.6	17,600	17,453
2025	188,372	8.0	15,070	15,611	8.3	15,635	16,036	9.6	18,084	17,560
2026	193,552	8.0	15,484	15,685	8.3	16,065	16,112	9.6	18,581	17,643
2027	198,875	8.0	15,910	15,736	8.3	16,507	16,165	9.6	19,092	17,701
2028	204,344	8.0	16,348	15,762	8.3	16,961	16,192	9.6	19,617	17,730
2029	209,963	8.0	16,797	15,760	8.3	17,427	16,190	9.6	20,156	17,728
2030	215,737	8.0	17,259	15,728	8.3	17,906	16,157	9.6	20,711	17,692

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	10.5%	\$17,745	\$ 18,108	11.2%	\$18,928	\$ 18,838	12.6%	\$21,294	\$ 20,711
2022	173,648	10.5	18,233	18,282	11.2	19,449	19,019	12.6	21,880	20,910
2023	178,423	10.5	18,734	18,438	11.2	19,983	19,181	12.6	22,481	21,088
2024	183,330	10.5	19,250	18,574	11.2	20,533	19,322	12.6	23,100	21,243
2025	188,372	10.5	19,779	18,688	11.2	21,098	19,440	12.6	23,735	21,373
2026	193,552	10.5	20,323	18,777	11.2	21,678	19,532	12.6	24,388	21,475
2027	198,875	10.5	20,882	18,839	11.2	22,274	19,596	12.6	25,058	21,545
2028	204,344	10.5	21,456	18,870	11.2	22,887	19,629	12.6	25,747	21,581
2029	209,963	10.5	22,046	18,868	11.2	23,516	19,627	12.6	26,455	21,579
2030	215,737	10.5	22,652	18,830	11.2	24,163	19,587	12.6	27,183	21,535

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	10.0%	\$16,900	\$ 10,667	12.3%	\$20,787	\$ 13,327	12.5%	\$21,125	\$ 13,700
2022	173,648	10.0	17,365	10,769	12.3	21,359	13,455	12.5	21,706	13,831
2023	178,423	10.0	17,842	10,861	12.3	21,946	13,570	12.5	22,303	13,949
2024	183,330	10.0	18,333	10,941	12.3	22,550	13,670	12.5	22,916	14,052
2025	188,372	10.0	18,837	11,008	12.3	23,170	13,754	12.5	23,547	14,138
2026	193,552	10.0	19,355	11,060	12.3	23,807	13,819	12.5	24,194	14,205
2027	198,875	10.0	19,888	11,096	12.3	24,462	13,864	12.5	24,859	14,252
2028	204,344	10.0	20,434	11,114	12.3	25,134	13,887	12.5	25,543	14,276
2029	209,963	10.0	20,996	11,113	12.3	25,825	13,886	12.5	26,245	14,275
2030	215,737	10.0	21,574	11,090	12.3	26,536	13,858	12.5	26,967	14,246

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	14.1%	\$23,829	\$ 15,617	14.5%	\$24,505	\$ 16,059	15.7%	\$26,533	\$ 17,559
2022	173,648	14.1	24,484	15,767	14.5	25,179	16,213	15.7	27,263	17,727
2023	178,423	14.1	25,158	15,901	14.5	25,871	16,351	15.7	28,012	17,878
2024	183,330	14.1	25,850	16,018	14.5	26,583	16,471	15.7	28,783	18,010
2025	188,372	14.1	26,560	16,116	14.5	27,314	16,572	15.7	29,574	18,120
2026	193,552	14.1	27,291	16,193	14.5	28,065	16,651	15.7	30,388	18,206
2027	198,875	14.1	28,041	16,246	14.5	28,837	16,706	15.7	31,223	18,266
2028	204,344	14.1	28,813	16,273	14.5	29,630	16,734	15.7	32,082	18,296
2029	209,963	14.1	29,605	16,271	14.5	30,445	16,732	15.7	32,964	18,294
2030	215,737	14.1	30,419	16,238	14.5	31,282	16,698	15.7	33,871	18,257

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	16.6%	\$28,054	\$ 18,696	17.3%	\$29,237	\$ 19,469	18.9%	\$31,941	\$ 21,388
2022	173,648	16.6	28,826	18,875	17.3	30,041	19,656	18.9	32,819	21,593
2023	178,423	16.6	29,618	19,036	17.3	30,867	19,823	18.9	33,722	21,777
2024	183,330	16.6	30,433	19,176	17.3	31,716	19,969	18.9	34,649	21,937
2025	188,372	16.6	31,270	19,293	17.3	32,588	20,091	18.9	35,602	22,071
2026	193,552	16.6	32,130	19,385	17.3	33,484	20,187	18.9	36,581	22,176
2027	198,875	16.6	33,013	19,449	17.3	34,405	20,253	18.9	37,587	22,249
2028	204,344	16.6	33,921	19,481	17.3	35,352	20,287	18.9	38,621	22,286
2029	209,963	16.6	34,854	19,479	17.3	36,324	20,285	18.9	39,683	22,284
2030	215,737	16.6	35,812	19,439	17.3	37,323	20,244	18.9	40,774	22,239

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	8.1%	\$13,689	\$ 10,667	10.4%	\$17,576	\$ 13,327	10.6%	\$17,914	\$ 13,700
2022	173,648	8.1	14,065	10,769	10.4	18,059	13,455	10.6	18,407	13,831
2023	178,423	8.1	14,452	10,861	10.4	18,556	13,570	10.6	18,913	13,949
2024	183,330	8.1	14,850	10,941	10.4	19,066	13,670	10.6	19,433	14,052
2025	188,372	8.1	15,258	11,008	10.4	19,591	13,754	10.6	19,967	14,138
2026	193,552	8.1	15,678	11,060	10.4	20,129	13,819	10.6	20,517	14,205
2027	198,875	8.1	16,109	11,096	10.4	20,683	13,864	10.6	21,081	14,252
2028	204,344	8.1	16,552	11,114	10.4	21,252	13,887	10.6	21,660	14,276
2029	209,963	8.1	17,007	11,113	10.4	21,836	13,886	10.6	22,256	14,275
2030	215,737	8.1	17,475	11,090	10.4	22,437	13,858	10.6	22,868	14,246

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	12.2%	\$20,618	\$ 15,617	12.6%	\$21,294	\$ 16,059	13.8%	\$23,322	\$ 17,559
2022	173,648	12.2	21,185	15,767	12.6	21,880	16,213	13.8	23,963	17,727
2023	178,423	12.2	21,768	15,901	12.6	22,481	16,351	13.8	24,622	17,878
2024	183,330	12.2	22,366	16,018	12.6	23,100	16,471	13.8	25,300	18,010
2025	188,372	12.2	22,981	16,116	12.6	23,735	16,572	13.8	25,995	18,120
2026	193,552	12.2	23,613	16,193	12.6	24,388	16,651	13.8	26,710	18,206
2027	198,875	12.2	24,263	16,246	12.6	25,058	16,706	13.8	27,445	18,266
2028	204,344	12.2	24,930	16,273	12.6	25,747	16,734	13.8	28,199	18,296
2029	209,963	12.2	25,615	16,271	12.6	26,455	16,732	13.8	28,975	18,294
2030	215,737	12.2	26,320	16,238	12.6	27,183	16,698	13.8	29,772	18,257

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	14.7%	\$24,843	\$ 18,696	15.4%	\$26,026	\$ 19,469	17.0%	\$28,730	\$ 21,388
2022	173,648	14.7	25,526	18,875	15.4	26,742	19,656	17.0	29,520	21,593
2023	178,423	14.7	26,228	19,036	15.4	27,477	19,823	17.0	30,332	21,777
2024	183,330	14.7	26,950	19,176	15.4	28,233	19,969	17.0	31,166	21,937
2025	188,372	14.7	27,691	19,293	15.4	29,009	20,091	17.0	32,023	22,071
2026	193,552	14.7	28,452	19,385	15.4	29,807	20,187	17.0	32,904	22,176
2027	198,875	14.7	29,235	19,449	15.4	30,627	20,253	17.0	33,809	22,249
2028	204,344	14.7	30,039	19,481	15.4	31,469	20,287	17.0	34,738	22,286
2029	209,963	14.7	30,865	19,479	15.4	32,334	20,285	17.0	35,694	22,284
2030	215,737	14.7	31,713	19,439	15.4	33,223	20,244	17.0	36,675	22,239

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	6.2%	\$10,478	\$ 10,667	8.5%	\$14,365	\$ 13,327	8.7%	\$14,703	\$ 13,700
2022	173,648	6.2	10,766	10,769	8.5	14,760	13,455	8.7	15,107	13,831
2023	178,423	6.2	11,062	10,861	8.5	15,166	13,570	8.7	15,523	13,949
2024	183,330	6.2	11,366	10,941	8.5	15,583	13,670	8.7	15,950	14,052
2025	188,372	6.2	11,679	11,008	8.5	16,012	13,754	8.7	16,388	14,138
2026	193,552	6.2	12,000	11,060	8.5	16,452	13,819	8.7	16,839	14,205
2027	198,875	6.2	12,330	11,096	8.5	16,904	13,864	8.7	17,302	14,252
2028	204,344	6.2	12,669	11,114	8.5	17,369	13,887	8.7	17,778	14,276
2029	209,963	6.2	13,018	11,113	8.5	17,847	13,886	8.7	18,267	14,275
2030	215,737	6.2	13,376	11,090	8.5	18,338	13,858	8.7	18,769	14,246

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	10.3%	\$17,407	\$ 15,617	10.7%	\$18,083	\$ 16,059	11.9%	\$20,111	\$ 17,559
2022	173,648	10.3	17,886	15,767	10.7	18,580	16,213	11.9	20,664	17,727
2023	178,423	10.3	18,378	15,901	10.7	19,091	16,351	11.9	21,232	17,878
2024	183,330	10.3	18,883	16,018	10.7	19,616	16,471	11.9	21,816	18,010
2025	188,372	10.3	19,402	16,116	10.7	20,156	16,572	11.9	22,416	18,120
2026	193,552	10.3	19,936	16,193	10.7	20,710	16,651	11.9	23,033	18,206
2027	198,875	10.3	20,484	16,246	10.7	21,280	16,706	11.9	23,666	18,266
2028	204,344	10.3	21,047	16,273	10.7	21,865	16,734	11.9	24,317	18,296
2029	209,963	10.3	21,626	16,271	10.7	22,466	16,732	11.9	24,986	18,294
2030	215,737	10.3	22,221	16,238	10.7	23,084	16,698	11.9	25,673	18,257

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2021	\$ 169,000	12.8%	\$21,632	\$ 18,696	13.5%	\$22,815	\$ 19,469	15.1%	\$25,519	\$ 21,388
2022	173,648	12.8	22,227	18,875	13.5	23,442	19,656	15.1	26,221	21,593
2023	178,423	12.8	22,838	19,036	13.5	24,087	19,823	15.1	26,942	21,777
2024	183,330	12.8	23,466	19,176	13.5	24,750	19,969	15.1	27,683	21,937
2025	188,372	12.8	24,112	19,293	13.5	25,430	20,091	15.1	28,444	22,071
2026	193,552	12.8	24,775	19,385	13.5	26,130	20,187	15.1	29,226	22,176
2027	198,875	12.8	25,456	19,449	13.5	26,848	20,253	15.1	30,030	22,249
2028	204,344	12.8	26,156	19,481	13.5	27,586	20,287	15.1	30,856	22,286
2029	209,963	12.8	26,875	19,479	13.5	28,345	20,285	15.1	31,704	22,284
2030	215,737	12.8	27,614	19,439	13.5	29,124	20,244	15.1	32,576	22,239

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 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.



Brookline 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 Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	4.3%	\$7,267	\$ 10,667	6.6%	\$11,154	\$ 13,327	6.8%	\$11,492	\$ 13,700
2022	173,648	4.3	7,467	10,769	6.6	11,461	13,455	6.8	11,808	13,831
2023	178,423	4.3	7,672	10,861	6.6	11,776	13,570	6.8	12,133	13,949
2024	183,330	4.3	7,883	10,941	6.6	12,100	13,670	6.8	12,466	14,052
2025	188,372	4.3	8,100	11,008	6.6	12,433	13,754	6.8	12,809	14,138
2026	193,552	4.3	8,323	11,060	6.6	12,774	13,819	6.8	13,162	14,205
2027	198,875	4.3	8,552	11,096	6.6	13,126	13,864	6.8	13,524	14,252
2028	204,344	4.3	8,787	11,114	6.6	13,487	13,887	6.8	13,895	14,276
2029	209,963	4.3	9,028	11,113	6.6	13,858	13,886	6.8	14,277	14,275
2030	215,737	4.3	9,277	11,090	6.6	14,239	13,858	6.8	14,670	14,246

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	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	8.4%	\$14,196	\$ 15,617	8.8%	\$14,872	\$ 16,059	10.0%	\$16,900	\$ 17,559
2022	173,648	8.4	14,586	15,767	8.8	15,281	16,213	10.0	17,365	17,727
2023	178,423	8.4	14,988	15,901	8.8	15,701	16,351	10.0	17,842	17,878
2024	183,330	8.4	15,400	16,018	8.8	16,133	16,471	10.0	18,333	18,010
2025	188,372	8.4	15,823	16,116	8.8	16,577	16,572	10.0	18,837	18,120
2026	193,552	8.4	16,258	16,193	8.8	17,033	16,651	10.0	19,355	18,206
2027	198,875	8.4	16,706	16,246	8.8	17,501	16,706	10.0	19,888	18,266
2028	204,344	8.4	17,165	16,273	8.8	17,982	16,734	10.0	20,434	18,296
2029	209,963	8.4	17,637	16,271	8.8	18,477	16,732	10.0	20,996	18,294
2030	215,737	8.4	18,122	16,238	8.8	18,985	16,698	10.0	21,574	18,257

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued	Estimated Employer Contribution		Unfunded Actuarial Accrued
		As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability	As a % of Payroll	Annual Dollars	Liability
2021	\$ 169,000	10.9%	\$18,421	\$ 18,696	11.6%	\$19,604	\$ 19,469	13.2%	\$22,308	\$ 21,388
2022	173,648	10.9	18,928	18,875	11.6	20,143	19,656	13.2	22,922	21,593
2023	178,423	10.9	19,448	19,036	11.6	20,697	19,823	13.2	23,552	21,777
2024	183,330	10.9	19,983	19,176	11.6	21,266	19,969	13.2	24,200	21,937
2025	188,372	10.9	20,533	19,293	11.6	21,851	20,091	13.2	24,865	22,071
2026	193,552	10.9	21,097	19,385	11.6	22,452	20,187	13.2	25,549	22,176
2027	198,875	10.9	21,677	19,449	11.6	23,070	20,253	13.2	26,252	22,249
2028	204,344	10.9	22,273	19,481	11.6	23,704	20,287	13.2	26,973	22,286
2029	209,963	10.9	22,886	19,479	11.6	24,356	20,285	13.2	27,715	22,284
2030	215,737	10.9	23,515	19,439	11.6	25,025	20,244	13.2	28,477	22,239

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 2.75%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
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