



The Initial Valuation For  
**City of Laddonia**  
as of June 30, 2020



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August 19, 2020

City of Laddonia  
Laddonia, 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 11 as the current cost plus the disability cost. 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 11 as the prior service cost. 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 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 current cost, disability cost, and prior service cost (the total employer cost as shown on pages 4 thru 11). These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on pages 12 and 13 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 29, 2020.

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 June 30, 2020. 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.

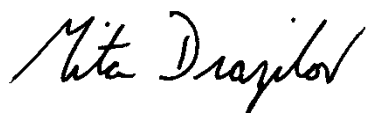
If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

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 either a contributory plan or a non-contributory plan, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

**Contributory Plan.** Under the contributory plan, each covered member contributes 4% 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.

**Non-Contributory Plan.** Under the non-contributory 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.

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 72 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program which they feel best suits their particular situation.

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

# City of Laddonia

## Employer Contribution Rates (Contributory Plan - 5 Year FAS) (4% member contributions are additional)

### Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	0.80%	3.40%	0.20%	4.40%
L-3	General	1.00	4.90	0.30	6.20
LT-4(65)	General	0.90	4.20	0.20	5.30
LT-5(65)	General	1.10	5.40	0.30	6.80
L-7	General	1.30	6.30	0.30	7.90
LT-8(65)	General	1.30	6.70	0.30	8.30
L-12	General	1.50	7.80	0.40	9.70
LT-14(65)	General	1.50	8.00	0.40	9.90
L-6	General	1.70	9.30	0.50	11.50

\* 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 will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

# City of Laddonia

## Employer Contribution Rates (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

### Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			Total Employer Contribution Rate
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	
L-1	General	0.80%	3.60%	0.20%	4.60%
L-3	General	1.10	5.10	0.30	6.50
LT-4(65)	General	1.00	4.40	0.20	5.60
LT-5(65)	General	1.20	5.70	0.30	7.20
L-7	General	1.30	6.60	0.30	8.20
LT-8(65)	General	1.40	7.00	0.30	8.70
L-12	General	1.60	8.20	0.40	10.20
LT-14(65)	General	1.60	8.40	0.40	10.40
L-6	General	1.80	9.70	0.50	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 will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

# City of Laddonia

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (No member contributions)

### Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	1.00%	6.90%	0.20%	8.10%
L-3	General	1.20	8.50	0.30	10.00
LT-4(65)	General	1.10	7.70	0.20	9.00
LT-5(65)	General	1.30	9.00	0.30	10.60
L-7	General	1.50	10.00	0.30	11.80
LT-8(65)	General	1.50	10.30	0.30	12.10
L-12	General	1.70	11.50	0.40	13.60
LT-14(65)	General	1.70	11.70	0.40	13.80
L-6	General	1.90	13.00	0.50	15.40

\* 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 will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.



# City of Laddonia

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS) (No member contributions)

### Regular Retirement Eligibility

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	1.00%	7.20%	0.20%	8.40%
L-3	General	1.30	8.70	0.30	10.30
LT-4(65)	General	1.10	8.00	0.20	9.30
LT-5(65)	General	1.40	9.30	0.30	11.00
L-7	General	1.50	10.30	0.30	12.10
LT-8(65)	General	1.60	10.70	0.30	12.60
L-12	General	1.80	11.80	0.40	14.00
LT-14(65)	General	1.80	12.00	0.40	14.20
L-6	General	2.00	13.40	0.50	15.90

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

# City of Laddonia

## Employer Contribution Rates (Contributory Plan - 5 Year FAS) (4% member contributions are additional)

### Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	0.80%	3.60%	0.20%	4.60%
L-3	General	1.10	5.10	0.30	6.50
LT-4(65)	General	1.00	4.60	0.20	5.80
LT-5(65)	General	1.20	5.90	0.30	7.40
L-7	General	1.30	6.60	0.30	8.20
LT-8(65)	General	1.40	7.10	0.30	8.80
L-12	General	1.50	8.20	0.40	10.10
LT-14(65)	General	1.60	8.40	0.40	10.40
L-6	General	1.80	9.70	0.50	12.00

# 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 will be reduced. An additional actuarial valuation will need to be performed to determine the employer contribution rate.

# City of Laddonia

## Employer Contribution Rates (Contributory Plan - 3 Year FAS) (4% member contributions are additional)

### Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	0.80%	3.80%	0.20%	4.80%
L-3	General	1.10	5.40	0.30	6.80
LT-4(65)	General	1.00	4.80	0.20	6.00
LT-5(65)	General	1.20	6.20	0.30	7.70
L-7	General	1.40	7.00	0.30	8.70
LT-8(65)	General	1.40	7.50	0.30	9.20
L-12	General	1.60	8.50	0.40	10.50
LT-14(65)	General	1.60	8.80	0.40	10.80
L-6	General	1.90	10.10	0.50	12.50

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# City of Laddonia

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS) (No member contributions)

### Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	1.00%	7.10%	0.20%	8.30%
L-3	General	1.20	8.70	0.30	10.20
LT-4(65)	General	1.10	8.10	0.20	9.40
LT-5(65)	General	1.40	9.50	0.30	11.20
L-7	General	1.50	10.30	0.30	12.10
LT-8(65)	General	1.60	10.80	0.30	12.70
L-12	General	1.70	11.80	0.40	13.90
LT-14(65)	General	1.80	12.10	0.40	14.30
L-6	General	2.00	13.40	0.50	15.90

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# City of Laddonia

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS) (No member contributions)

### Rule of 80 Retirement Eligibility#

Benefit Program	Employee Groups	Percents of Active Member Payroll			
		Prior Service Cost Rate *	Normal Cost Rate	Casualty Rate	Total Employer Contribution Rate
L-1	General	1.00%	7.40%	0.20%	8.60%
L-3	General	1.30	9.00	0.30	10.60
LT-4(65)	General	1.20	8.40	0.20	9.80
LT-5(65)	General	1.40	9.80	0.30	11.50
L-7	General	1.50	10.60	0.30	12.40
LT-8(65)	General	1.60	11.10	0.30	13.00
L-12	General	1.80	12.20	0.40	14.40
LT-14(65)	General	1.80	12.50	0.40	14.70
L-6	General	2.10	13.80	0.50	16.40

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

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

# City of Laddonia

## Employer Contribution Dollars Regular Retirement Eligibility

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:

### Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 4,187
L-3	5,900
LT-4(65)	5,043
LT-5(65)	6,471
L-7	7,518
LT-8(65)	7,898
L-12	9,231
LT-14(65)	9,421
L-6	10,943

3 Year FAS	
Benefit Program	General
L-1	\$ 4,377
L-3	6,185
LT-4(65)	5,329
LT-5(65)	6,852
L-7	7,803
LT-8(65)	8,279
L-12	9,706
LT-14(65)	9,897
L-6	11,419

### Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 7,708
L-3	9,516
LT-4(65)	8,564
LT-5(65)	10,087
L-7	11,229
LT-8(65)	11,514
L-12	12,942
LT-14(65)	13,132
L-6	14,655

3 Year FAS	
Benefit Program	General
L-1	\$ 7,993
L-3	9,801
LT-4(65)	8,850
LT-5(65)	10,468
L-7	11,514
LT-8(65)	11,990
L-12	13,322
LT-14(65)	13,513
L-6	15,130

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

# City of Laddonia

## Employer Contribution Dollars Rule of 80 Retirement Eligibility

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:

### Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 4,377
L-3	6,185
LT-4(65)	5,519
LT-5(65)	7,042
L-7	7,803
LT-8(65)	8,374
L-12	9,611
LT-14(65)	9,897
L-6	11,419

3 Year FAS	
Benefit Program	General
L-1	\$ 4,568
L-3	6,471
LT-4(65)	5,710
LT-5(65)	7,327
L-7	8,279
LT-8(65)	8,755
L-12	9,992
LT-14(65)	10,277
L-6	11,895

### Non-Contributory Plan

5 Year FAS	
Benefit Program	General
L-1	\$ 7,898
L-3	9,706
LT-4(65)	8,945
LT-5(65)	10,658
L-7	11,514
LT-8(65)	12,085
L-12	13,227
LT-14(65)	13,608
L-6	15,130

3 Year FAS	
Benefit Program	General
L-1	\$ 8,184
L-3	10,087
LT-4(65)	9,326
LT-5(65)	10,943
L-7	11,800
LT-8(65)	12,371
L-12	13,703
LT-14(65)	13,989
L-6	15,606

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

# City of Laddonia

## Employees and Payroll Included in the Valuation

	General
Number of Employees	3
Annual Payroll	\$ 95,160

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



## **APPENDIX I**

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### **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 11 as the "Prior Service Cost" are designed to pay for the applicable unfunded actuarial accrued liability. This procedure will allow your political subdivision to retire the unfunded actuarial accrued liability in an orderly fashion over a period of years without the need for an immediate large payment upon joining the System.

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

### City of Laddonia

#### Regular Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 13,237	\$ 13,820	\$ 16,340	\$ 16,901
L-3	General	17,304	17,998	20,409	21,110
LT-4(65)	General	15,368	16,028	18,451	19,084
LT-5(65)	General	18,883	19,650	21,990	22,745
L-7	General	21,307	22,128	24,496	25,356
LT-8(65)	General	22,361	23,227	25,539	26,443
L-12	General	25,274	26,284	28,575	29,541
LT-14(65)	General	25,827	26,838	29,102	30,100
L-6	General	29,281	30,421	32,638	33,784

# City of Laddonia

## Unfunded Actuarial Accrued Liability (UAAL)

### Rule of 80 Retirement Eligibility

Benefit Group	Employee Group	Contributory		Non-Contributory	
		UAAL (5 Year FAS)	UAAL (3 Year FAS)	UAAL (5 Year FAS)	UAAL (3 Year FAS)
L-1	General	\$ 13,607	\$ 14,210	\$ 16,693	\$ 17,295
L-3	General	17,762	18,474	20,856	21,599
LT-4(65)	General	16,185	16,875	19,261	19,938
LT-5(65)	General	19,691	20,473	22,771	23,584
L-7	General	21,842	22,708	25,020	25,928
LT-8(65)	General	23,124	24,031	26,288	27,253
L-12	General	25,930	26,939	29,213	30,217
LT-14(65)	General	26,583	27,596	29,866	30,887
L-6	General	30,020	31,179	33,377	34,524

## **APPENDIX II**

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### **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 7.25% 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 2.50% and the wage inflation rate used in making the valuations was 3.25%. The 7.25% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.00%. Adopted 2011 and 2016.
2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The pre-retirement mortality tables used were the RP-2014 employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. For both the post-retirement and pre-retirement tables, the base year for males was then established to be 2017. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to the above described tables. Adopted 2016.
3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2016.
4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2016.
5. Post-retirement cost of living allowances are assumed to be 2.50% per year. Adopted 2016.
6. Total active member payroll is assumed to increase **Error! No document variable supplied.** 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 2016.
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.

## 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 Members				Police/Public Safety		Fire	
		Men		Women		Disability	Withdrawal	Disability	Withdrawal
All	0		19.00%		22.00%		18.00%		10.00%
	1		17.00		20.00		17.00		8.00
	2		15.00		17.00		16.00		7.00
	3		13.00		14.00		13.00		6.00
	4		11.00		13.00		12.00		6.00
25	5 & Over	0.09%	7.30	0.02%	10.80	0.10%	9.80	0.06%	5.00
30		0.12	6.50	0.03	8.90	0.11	7.80	0.10	4.00
35		0.15	5.00	0.06	7.40	0.16	6.10	0.23	2.80
40		0.21	3.70	0.10	5.70	0.22	4.40	0.35	2.20
45		0.30	3.00	0.16	4.20	0.34	3.20	0.56	1.80
50		0.44	2.40	0.24	3.30	0.53	1.80	0.85	1.00
55		0.68	1.80	0.34	2.50	0.88	1.00	1.31	0.50
60		1.02	1.00	0.48	1.20		0.00		0.00
65			0.00		0.00		0.00		0.00

Sample Ages	Percent Increase in Individual's Pay During Next Year		
	General	Police/Public Safety	Fire
25	6.55%	6.55%	7.15%
30	5.75	5.75	6.05
35	5.25	5.25	5.15
40	4.75	4.75	4.45
45	4.25	4.25	4.15
50	3.85	3.85	3.85
55	3.65	3.65	3.65
60	3.55	3.55	3.25
65	3.25	3.25	3.25

## 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%	2.50%
56	3.00%	3.00%	51	2.50%	2.50%
57	3.00%	3.00%	52	2.50%	2.50%
58	3.00%	3.00%	53	2.50%	2.50%
59	3.00%	3.00%	54	2.50%	2.50%

#### Normal Retirement

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

## Schedule 2. (Continued)

### 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	15%	15%	25%	25%
51	15	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	30	15	30	45
63	30	15	30	45
64	30	20	30	45
65	30	25	100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		



## **APPENDIX III**

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### **SUMMARY OF LAGERS PROVISIONS**

# Missouri Local Government Employees Retirement System

## Brief Summary of LAGERS

### Benefits and Conditions Evaluated and/or Considered as of February 29, 2020

#### (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 4% of compensation beginning after completion of sufficient employment for 6 months of credited service.

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 non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the non-contributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 2 years. Under the non-contributory provisions 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**

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### **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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 948	\$1,473	98%
2,000	700	1,095	1,795	90%
2,500	875	1,242	2,117	85%
3,000	1,050	1,388	2,438	81%
3,500	1,225	1,535	2,760	79%
4,000	1,400	1,682	3,082	77%
25 Years of Service:				
\$1,500	\$ 375	\$ 948	\$1,323	88%
2,000	500	1,095	1,595	80%
2,500	625	1,242	1,867	75%
3,000	750	1,388	2,138	71%
3,500	875	1,535	2,410	69%
4,000	1,000	1,682	2,682	67%
15 Years of Service:				
\$1,500	\$225	\$ 948	\$1,173	78%
2,000	300	1,095	1,395	70%
2,500	375	1,242	1,617	65%
3,000	450	1,388	1,838	61%
3,500	525	1,535	2,060	59%
4,000	600	1,682	2,282	57%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 948	\$1,604	107%
2,000	875	1,095	1,970	99%
2,500	1,094	1,242	2,336	93%
3,000	1,313	1,388	2,701	90%
3,500	1,531	1,535	3,066	88%
4,000	1,750	1,682	3,432	86%
25 Years of Service:				
\$1,500	\$ 469	\$ 948	\$1,417	94%
2,000	625	1,095	1,720	86%
2,500	781	1,242	2,023	81%
3,000	938	1,388	2,326	78%
3,500	1,094	1,535	2,629	75%
4,000	1,250	1,682	2,932	73%
15 Years of Service:				
\$1,500	\$281	\$ 948	\$1,229	82%
2,000	375	1,095	1,470	74%
2,500	469	1,242	1,711	68%
3,000	563	1,388	1,951	65%
3,500	656	1,535	2,191	63%
4,000	750	1,682	2,432	61%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 948	\$1,736	116%
2,000	1,050	1,095	2,145	107%
2,500	1,313	1,242	2,555	102%
3,000	1,575	1,388	2,963	99%
3,500	1,838	1,535	3,373	96%
4,000	2,100	1,682	3,782	95%
25 Years of Service:				
\$1,500	\$ 563	\$ 948	\$1,511	101%
2,000	750	1,095	1,845	92%
2,500	938	1,242	2,180	87%
3,000	1,125	1,388	2,513	84%
3,500	1,313	1,535	2,848	81%
4,000	1,500	1,682	3,182	80%
15 Years of Service:				
\$1,500	\$338	\$ 948	\$1,286	86%
2,000	450	1,095	1,545	77%
2,500	563	1,242	1,805	72%
3,000	675	1,388	2,063	69%
3,500	788	1,535	2,323	66%
4,000	900	1,682	2,582	65%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 948	\$1,867	124%
2,000	1,225	1,095	2,320	116%
2,500	1,531	1,242	2,773	111%
3,000	1,838	1,388	3,226	108%
3,500	2,144	1,535	3,679	105%
4,000	2,450	1,682	4,132	103%
25 Years of Service:				
\$1,500	\$ 656	\$ 948	\$1,604	107%
2,000	875	1,095	1,970	99%
2,500	1,094	1,242	2,336	93%
3,000	1,313	1,388	2,701	90%
3,500	1,531	1,535	3,066	88%
4,000	1,750	1,682	3,432	86%
15 Years of Service:				
\$1,500	\$ 394	\$ 948	\$1,342	89%
2,000	525	1,095	1,620	81%
2,500	656	1,242	1,898	76%
3,000	788	1,388	2,176	73%
3,500	919	1,535	2,454	70%
4,000	1,050	1,682	2,732	68%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> )

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>	Estimated Social Security <sup>2</sup>	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 948	\$1,998	133%
2,000	1,400	1,095	2,495	125%
2,500	1,750	1,242	2,992	120%
3,000	2,100	1,388	3,488	116%
3,500	2,450	1,535	3,985	114%
4,000	2,800	1,682	4,482	112%
25 Years of Service:				
\$1,500	\$ 750	\$ 948	\$1,698	113%
2,000	1,000	1,095	2,095	105%
2,500	1,250	1,242	2,492	100%
3,000	1,500	1,388	2,888	96%
3,500	1,750	1,535	3,285	94%
4,000	2,000	1,682	3,682	92%
15 Years of Service:				
\$1,500	\$ 450	\$ 948	\$1,398	93%
2,000	600	1,095	1,695	85%
2,500	750	1,242	1,992	80%
3,000	900	1,388	2,288	76%
3,500	1,050	1,535	2,585	74%
4,000	1,200	1,682	2,882	72%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> to age 65) 1.00% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 948	\$1,050	\$1,473	70%	98%
2,000	1,400	700	1,095	1,400	1,795	70%	90%
2,500	1,750	875	1,242	1,750	2,117	70%	85%
3,000	2,100	1,050	1,388	2,100	2,438	70%	81%
3,500	2,450	1,225	1,535	2,450	2,760	70%	79%
4,000	2,800	1,400	1,682	2,800	3,082	70%	77%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 948	\$ 750	\$1,323	50%	88%
2,000	1,000	500	1,095	1,000	1,595	50%	80%
2,500	1,250	625	1,242	1,250	1,867	50%	75%
3,000	1,500	750	1,388	1,500	2,138	50%	71%
3,500	1,750	875	1,535	1,750	2,410	50%	69%
4,000	2,000	1,000	1,682	2,000	2,682	50%	67%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 948	\$ 450	\$1,173	30%	78%
2,000	600	300	1,095	600	1,395	30%	70%
2,500	750	375	1,242	750	1,617	30%	65%
3,000	900	450	1,388	900	1,838	30%	61%
3,500	1,050	525	1,535	1,050	2,060	30%	59%
4,000	1,200	600	1,682	1,200	2,282	30%	57%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> to age 65)  
1.25% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 948	\$1,050	\$1,604	70%	107%
2,000	1,400	875	1,095	1,400	1,970	70%	99%
2,500	1,750	1,094	1,242	1,750	2,336	70%	93%
3,000	2,100	1,313	1,388	2,100	2,701	70%	90%
3,500	2,450	1,531	1,535	2,450	3,066	70%	88%
4,000	2,800	1,750	1,682	2,800	3,432	70%	86%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 948	\$ 750	\$1,417	50%	94%
2,000	1,000	625	1,095	1,000	1,720	50%	86%
2,500	1,250	781	1,242	1,250	2,023	50%	81%
3,000	1,500	938	1,388	1,500	2,326	50%	78%
3,500	1,750	1,094	1,535	1,750	2,629	50%	75%
4,000	2,000	1,250	1,682	2,000	2,932	50%	73%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 948	\$ 450	\$1,229	30%	82%
2,000	600	375	1,095	600	1,470	30%	74%
2,500	750	469	1,242	750	1,711	30%	68%
3,000	900	563	1,388	900	1,951	30%	65%
3,500	1,050	656	1,535	1,050	2,191	30%	63%
4,000	1,200	750	1,682	1,200	2,432	30%	61%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> to age 65)  
1.50% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 948	\$1,050	\$1,736	70%	116%
2,000	1,400	1,050	1,095	1,400	2,145	70%	107%
2,500	1,750	1,313	1,242	1,750	2,555	70%	102%
3,000	2,100	1,575	1,388	2,100	2,963	70%	99%
3,500	2,450	1,838	1,535	2,450	3,373	70%	96%
4,000	2,800	2,100	1,682	2,800	3,782	70%	95%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 948	\$ 750	\$1,511	50%	101%
2,000	1,000	750	1,095	1,000	1,845	50%	92%
2,500	1,250	938	1,242	1,250	2,180	50%	87%
3,000	1,500	1,125	1,388	1,500	2,513	50%	84%
3,500	1,750	1,313	1,535	1,750	2,848	50%	81%
4,000	2,000	1,500	1,682	2,000	3,182	50%	80%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 948	\$ 450	\$1,286	30%	86%
2,000	600	450	1,095	600	1,545	30%	77%
2,500	750	563	1,242	750	1,805	30%	72%
3,000	900	675	1,388	900	2,063	30%	69%
3,500	1,050	788	1,535	1,050	2,323	30%	66%
4,000	1,200	900	1,682	1,200	2,582	30%	65%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

<sup>3</sup> 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 <sup>1</sup> to age 65)  
1.75% of FAS <sup>1</sup> at age 65)

Final Average Salary (FAS) <sup>1</sup>	LAGERS BENEFIT <sup>3</sup>		Estimated Social Security <sup>2</sup>	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	\$ 948	\$1,050	\$1,867	70%	124%
2,000	1,400	1,225	1,095	1,400	2,320	70%	116%
2,500	1,750	1,531	1,242	1,750	2,773	70%	111%
3,000	2,100	1,838	1,388	2,100	3,226	70%	108%
3,500	2,450	2,144	1,535	2,450	3,679	70%	105%
4,000	2,800	2,450	1,682	2,800	4,132	70%	103%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 948	\$ 750	\$1,604	50%	107%
2,000	1,000	875	1,095	1,000	1,970	50%	99%
2,500	1,250	1,094	1,242	1,250	2,336	50%	93%
3,000	1,500	1,313	1,388	1,500	2,701	50%	90%
3,500	1,750	1,531	1,535	1,750	3,066	50%	88%
4,000	2,000	1,750	1,682	2,000	3,432	50%	86%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 948	\$ 450	\$1,342	30%	89%
2,000	600	525	1,095	600	1,620	30%	81%
2,500	750	656	1,242	750	1,898	30%	76%
3,000	900	788	1,388	900	2,176	30%	73%
3,500	1,050	919	1,535	1,050	2,454	30%	70%
4,000	1,200	1,050	1,682	1,200	2,732	30%	68%

<sup>1</sup> "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.

<sup>2</sup> "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 2020 - it does not include any amounts which might be payable to an eligible spouse or children.

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

## **APPENDIX V**

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### **AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES**

# City of Laddonia

June 30, 2020

## By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29									
30-34									
35-39	2							2	\$ 57,720
40-44	1							1	\$ 37,440
45-49									
50-54									
55-59									
60-64									
65-69									
70 & Over									
<b>Totals</b>	<b>3</b>							<b>3</b>	<b>\$ 95,160</b>

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

Age: 39.2 years.

Benefit Service: 2.0 years.

Annual Pay: \$31,720.



## **APPENDIX VI**

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### **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 11 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 19, 2020 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 June 30, 2020 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Laddonia

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 19, 2020

City of Laddonia  
Laddonia, 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 June 30, 2020 Initial Valuation for the City of Laddonia dated August 19, 2020.

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 29, 2020.

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

Respectfully submitted,

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

Mita D. Drazilov, ASA, FCA, MAAA

# City of Laddonia - General

## Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% 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	
2020	\$ 95,160	4.4%	\$4,187	\$ 13,237	6.2%	\$5,900	\$ 17,304	5.3%	\$5,043	\$ 15,368
2021	98,253	4.4	4,323	13,418	6.2	6,092	17,541	5.3	5,207	15,579
2022	101,446	4.4	4,464	13,587	6.2	6,290	17,762	5.3	5,377	15,775
2023	104,743	4.4	4,609	13,742	6.2	6,494	17,965	5.3	5,551	15,955
2024	108,147	4.4	4,758	13,882	6.2	6,705	18,148	5.3	5,732	16,117
2025	111,662	4.4	4,913	14,004	6.2	6,923	18,307	5.3	5,918	16,259
2026	115,291	4.4	5,073	14,106	6.2	7,148	18,440	5.3	6,110	16,377
2027	119,038	4.4	5,238	14,186	6.2	7,380	18,544	5.3	6,309	16,470
2028	122,907	4.4	5,408	14,241	6.2	7,620	18,616	5.3	6,514	16,534
2029	126,901	4.4	5,584	14,268	6.2	7,868	18,652	5.3	6,726	16,566

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	
2020	\$ 95,160	6.8%	\$6,471	\$ 18,883	7.9%	\$7,518	\$ 21,307	8.3%	\$7,898	\$ 22,361
2021	98,253	6.8	6,681	19,142	7.9	7,762	21,599	8.3	8,155	22,667
2022	101,446	6.8	6,898	19,383	7.9	8,014	21,871	8.3	8,420	22,953
2023	104,743	6.8	7,123	19,605	7.9	8,275	22,121	8.3	8,694	23,215
2024	108,147	6.8	7,354	19,804	7.9	8,544	22,346	8.3	8,976	23,451
2025	111,662	6.8	7,593	19,978	7.9	8,821	22,542	8.3	9,268	23,657
2026	115,291	6.8	7,840	20,124	7.9	9,108	22,706	8.3	9,569	23,829
2027	119,038	6.8	8,095	20,238	7.9	9,404	22,834	8.3	9,880	23,964
2028	122,907	6.8	8,358	20,316	7.9	9,710	22,922	8.3	10,201	24,057
2029	126,901	6.8	8,629	20,355	7.9	10,025	22,966	8.3	10,533	24,103

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	
2020	\$ 95,160	9.7%	\$9,231	\$ 25,274	9.9%	\$9,421	\$ 25,827	11.5%	\$10,943	\$ 29,281
2021	98,253	9.7	9,531	25,620	9.9	9,727	26,181	11.5	11,299	29,682
2022	101,446	9.7	9,840	25,943	9.9	10,043	26,511	11.5	11,666	30,056
2023	104,743	9.7	10,160	26,240	9.9	10,370	26,814	11.5	12,045	30,400
2024	108,147	9.7	10,490	26,507	9.9	10,707	27,086	11.5	12,437	30,709
2025	111,662	9.7	10,831	26,740	9.9	11,055	27,324	11.5	12,841	30,979
2026	115,291	9.7	11,183	26,935	9.9	11,414	27,523	11.5	13,258	31,205
2027	119,038	9.7	11,547	27,087	9.9	11,785	27,679	11.5	13,689	31,381
2028	122,907	9.7	11,922	27,192	9.9	12,168	27,786	11.5	14,134	31,502
2029	126,901	9.7	12,309	27,244	9.9	12,563	27,839	11.5	14,594	31,562

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% 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	
2020	\$ 95,160	4.6%	\$4,377	\$ 13,820	6.5%	\$6,185	\$ 17,998	5.6%	\$5,329	\$ 16,028
2021	98,253	4.6	4,520	14,009	6.5	6,386	18,245	5.6	5,502	16,248
2022	101,446	4.6	4,667	14,186	6.5	6,594	18,475	5.6	5,681	16,453
2023	104,743	4.6	4,818	14,348	6.5	6,808	18,686	5.6	5,866	16,641
2024	108,147	4.6	4,975	14,494	6.5	7,030	18,876	5.6	6,056	16,810
2025	111,662	4.6	5,136	14,621	6.5	7,258	19,042	5.6	6,253	16,958
2026	115,291	4.6	5,303	14,728	6.5	7,494	19,181	5.6	6,456	17,082
2027	119,038	4.6	5,476	14,811	6.5	7,737	19,289	5.6	6,666	17,179
2028	122,907	4.6	5,654	14,868	6.5	7,989	19,364	5.6	6,883	17,245
2029	126,901	4.6	5,837	14,896	6.5	8,249	19,401	5.6	7,106	17,278

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	
2020	\$ 95,160	7.2%	\$6,852	\$ 19,650	8.2%	\$7,803	\$ 22,128	8.7%	\$8,279	\$ 23,227
2021	98,253	7.2	7,074	19,919	8.2	8,057	22,431	8.7	8,548	23,545
2022	101,446	7.2	7,304	20,170	8.2	8,319	22,714	8.7	8,826	23,842
2023	104,743	7.2	7,541	20,401	8.2	8,589	22,974	8.7	9,113	24,115
2024	108,147	7.2	7,787	20,608	8.2	8,868	23,207	8.7	9,409	24,360
2025	111,662	7.2	8,040	20,789	8.2	9,156	23,411	8.7	9,715	24,574
2026	115,291	7.2	8,301	20,940	8.2	9,454	23,582	8.7	10,030	24,753
2027	119,038	7.2	8,571	21,058	8.2	9,761	23,715	8.7	10,356	24,893
2028	122,907	7.2	8,849	21,139	8.2	10,078	23,807	8.7	10,693	24,989
2029	126,901	7.2	9,137	21,179	8.2	10,406	23,852	8.7	11,040	25,037

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	
2020	\$ 95,160	10.2%	\$9,706	\$ 26,284	10.4%	\$9,897	\$ 26,838	12.0%	\$11,419	\$ 30,421
2021	98,253	10.2	10,022	26,644	10.4	10,218	27,206	12.0	11,790	30,838
2022	101,446	10.2	10,347	26,980	10.4	10,550	27,549	12.0	12,174	31,227
2023	104,743	10.2	10,684	27,288	10.4	10,893	27,864	12.0	12,569	31,584
2024	108,147	10.2	11,031	27,565	10.4	11,247	28,147	12.0	12,978	31,905
2025	111,662	10.2	11,390	27,807	10.4	11,613	28,394	12.0	13,399	32,185
2026	115,291	10.2	11,760	28,010	10.4	11,990	28,601	12.0	13,835	32,419
2027	119,038	10.2	12,142	28,168	10.4	12,380	28,763	12.0	14,285	32,602
2028	122,907	10.2	12,537	28,277	10.4	12,782	28,874	12.0	14,749	32,728
2029	126,901	10.2	12,944	28,331	10.4	13,198	28,929	12.0	15,228	32,790

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)

(0% 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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	8.1%	\$7,708	\$ 16,340	10.0%	\$9,516	\$ 20,409	9.0%	\$8,564	\$ 18,451
2021	98,253	8.1	7,958	16,564	10.0	9,825	20,689	9.0	8,843	18,704
2022	101,446	8.1	8,217	16,773	10.0	10,145	20,950	9.0	9,130	18,940
2023	104,743	8.1	8,484	16,965	10.0	10,474	21,190	9.0	9,427	19,157
2024	108,147	8.1	8,760	17,137	10.0	10,815	21,405	9.0	9,733	19,352
2025	111,662	8.1	9,045	17,288	10.0	11,166	21,593	9.0	10,050	19,522
2026	115,291	8.1	9,339	17,414	10.0	11,529	21,750	9.0	10,376	19,664
2027	119,038	8.1	9,642	17,512	10.0	11,904	21,873	9.0	10,713	19,775
2028	122,907	8.1	9,955	17,580	10.0	12,291	21,958	9.0	11,062	19,851
2029	126,901	8.1	10,279	17,614	10.0	12,690	22,000	9.0	11,421	19,889

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	10.6%	\$10,087	\$ 21,990	11.8%	\$11,229	\$ 24,496	12.1%	\$11,514	\$ 25,539
2021	98,253	10.6	10,415	22,291	11.8	11,594	24,832	12.1	11,889	25,889
2022	101,446	10.6	10,753	22,572	11.8	11,971	25,145	12.1	12,275	26,215
2023	104,743	10.6	11,103	22,830	11.8	12,360	25,432	12.1	12,674	26,515
2024	108,147	10.6	11,464	23,062	11.8	12,761	25,690	12.1	13,086	26,784
2025	111,662	10.6	11,836	23,265	11.8	13,176	25,916	12.1	13,511	27,019
2026	115,291	10.6	12,221	23,434	11.8	13,604	26,105	12.1	13,950	27,216
2027	119,038	10.6	12,618	23,566	11.8	14,046	26,253	12.1	14,404	27,370
2028	122,907	10.6	13,028	23,657	11.8	14,503	26,355	12.1	14,872	27,476
2029	126,901	10.6	13,452	23,702	11.8	14,974	26,405	12.1	15,355	27,528

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	13.6%	\$12,942	\$ 28,575	13.8%	\$13,132	\$ 29,102	15.4%	\$14,655	\$ 32,638
2021	98,253	13.6	13,362	28,966	13.8	13,559	29,501	15.4	15,131	33,085
2022	101,446	13.6	13,797	29,331	13.8	14,000	29,873	15.4	15,623	33,502
2023	104,743	13.6	14,245	29,666	13.8	14,455	30,215	15.4	16,130	33,885
2024	108,147	13.6	14,708	29,967	13.8	14,924	30,522	15.4	16,655	34,229
2025	111,662	13.6	15,186	30,230	13.8	15,409	30,790	15.4	17,196	34,530
2026	115,291	13.6	15,680	30,450	13.8	15,910	31,014	15.4	17,755	34,782
2027	119,038	13.6	16,189	30,622	13.8	16,427	31,189	15.4	18,332	34,979
2028	122,907	13.6	16,715	30,740	13.8	16,961	31,310	15.4	18,928	35,114
2029	126,901	13.6	17,259	30,799	13.8	17,512	31,370	15.4	19,543	35,181

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.



# City of Laddonia - General

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% 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
2020	\$ 95,160	8.4%	\$7,993	\$ 16,901	10.3%	\$9,801	\$ 21,110	9.3%	\$8,850	\$ 19,084
2021	98,253	8.4	8,253	17,133	10.3	10,120	21,399	9.3	9,138	19,345
2022	101,446	8.4	8,521	17,349	10.3	10,449	21,669	9.3	9,434	19,589
2023	104,743	8.4	8,798	17,547	10.3	10,789	21,917	9.3	9,741	19,813
2024	108,147	8.4	9,084	17,725	10.3	11,139	22,140	9.3	10,058	20,014
2025	111,662	8.4	9,380	17,881	10.3	11,501	22,334	9.3	10,385	20,190
2026	115,291	8.4	9,684	18,011	10.3	11,875	22,497	9.3	10,722	20,337
2027	119,038	8.4	9,999	18,113	10.3	12,261	22,624	9.3	11,071	20,452
2028	122,907	8.4	10,324	18,183	10.3	12,659	22,711	9.3	11,430	20,531
2029	126,901	8.4	10,660	18,218	10.3	13,071	22,754	9.3	11,802	20,570

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
2020	\$ 95,160	11.0%	\$10,468	\$ 22,745	12.1%	\$11,514	\$ 25,356	12.6%	\$11,990	\$ 26,443
2021	98,253	11.0	10,808	23,057	12.1	11,889	25,703	12.6	12,380	26,805
2022	101,446	11.0	11,159	23,348	12.1	12,275	26,027	12.6	12,782	27,143
2023	104,743	11.0	11,522	23,615	12.1	12,674	26,325	12.6	13,198	27,453
2024	108,147	11.0	11,896	23,855	12.1	13,086	26,592	12.6	13,627	27,732
2025	111,662	11.0	12,283	24,065	12.1	13,511	26,826	12.6	14,069	27,976
2026	115,291	11.0	12,682	24,240	12.1	13,950	27,021	12.6	14,527	28,180
2027	119,038	11.0	13,094	24,377	12.1	14,404	27,174	12.6	14,999	28,339
2028	122,907	11.0	13,520	24,471	12.1	14,872	27,279	12.6	15,486	28,449
2029	126,901	11.0	13,959	24,518	12.1	15,355	27,331	12.6	15,990	28,503

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
2020	\$ 95,160	14.0%	\$13,322	\$ 29,541	14.2%	\$13,513	\$ 30,100	15.9%	\$15,130	\$ 33,784
2021	98,253	14.0	13,755	29,946	14.2	13,952	30,512	15.9	15,622	34,247
2022	101,446	14.0	14,202	30,324	14.2	14,405	30,897	15.9	16,130	34,679
2023	104,743	14.0	14,664	30,671	14.2	14,874	31,250	15.9	16,654	35,075
2024	108,147	14.0	15,141	30,983	14.2	15,357	31,568	15.9	17,195	35,431
2025	111,662	14.0	15,633	31,255	14.2	15,856	31,845	15.9	17,754	35,742
2026	115,291	14.0	16,141	31,483	14.2	16,371	32,077	15.9	18,331	36,002
2027	119,038	14.0	16,665	31,661	14.2	16,903	32,258	15.9	18,927	36,205
2028	122,907	14.0	17,207	31,783	14.2	17,453	32,383	15.9	19,542	36,345
2029	126,901	14.0	17,766	31,844	14.2	18,020	32,445	15.9	20,177	36,414

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	4.6%	\$4,377	\$ 13,607	6.5%	\$6,185	\$ 17,762	5.8%	\$5,519	\$ 16,185
2021	98,253	4.6	4,520	13,793	6.5	6,386	18,005	5.8	5,699	16,407
2022	101,446	4.6	4,667	13,967	6.5	6,594	18,232	5.8	5,884	16,614
2023	104,743	4.6	4,818	14,127	6.5	6,808	18,440	5.8	6,075	16,804
2024	108,147	4.6	4,975	14,271	6.5	7,030	18,627	5.8	6,273	16,975
2025	111,662	4.6	5,136	14,396	6.5	7,258	18,791	5.8	6,476	17,124
2026	115,291	4.6	5,303	14,501	6.5	7,494	18,928	5.8	6,687	17,249
2027	119,038	4.6	5,476	14,583	6.5	7,737	19,035	5.8	6,904	17,346
2028	122,907	4.6	5,654	14,639	6.5	7,989	19,109	5.8	7,129	17,413
2029	126,901	4.6	5,837	14,667	6.5	8,249	19,145	5.8	7,360	17,446

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	7.4%	\$7,042	\$ 19,691	8.2%	\$7,803	\$ 21,842	8.8%	\$8,374	\$ 23,124
2021	98,253	7.4	7,271	19,961	8.2	8,057	22,141	8.8	8,646	23,441
2022	101,446	7.4	7,507	20,213	8.2	8,319	22,420	8.8	8,927	23,737
2023	104,743	7.4	7,751	20,444	8.2	8,589	22,676	8.8	9,217	24,008
2024	108,147	7.4	8,003	20,652	8.2	8,868	22,906	8.8	9,517	24,252
2025	111,662	7.4	8,263	20,833	8.2	9,156	23,107	8.8	9,826	24,465
2026	115,291	7.4	8,532	20,985	8.2	9,454	23,275	8.8	10,146	24,643
2027	119,038	7.4	8,809	21,104	8.2	9,761	23,407	8.8	10,475	24,782
2028	122,907	7.4	9,095	21,186	8.2	10,078	23,498	8.8	10,816	24,878
2029	126,901	7.4	9,391	21,226	8.2	10,406	23,543	8.8	11,167	24,926

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	10.1%	\$9,611	\$ 25,930	10.4%	\$9,897	\$ 26,583	12.0%	\$11,419	\$ 30,020
2021	98,253	10.1	9,924	26,285	10.4	10,218	26,947	12.0	11,790	30,431
2022	101,446	10.1	10,246	26,616	10.4	10,550	27,287	12.0	12,174	30,815
2023	104,743	10.1	10,579	26,920	10.4	10,893	27,599	12.0	12,569	31,167
2024	108,147	10.1	10,923	27,194	10.4	11,247	27,879	12.0	12,978	31,484
2025	111,662	10.1	11,278	27,433	10.4	11,613	28,124	12.0	13,399	31,761
2026	115,291	10.1	11,644	27,633	10.4	11,990	28,329	12.0	13,835	31,992
2027	119,038	10.1	12,023	27,789	10.4	12,380	28,489	12.0	14,285	32,173
2028	122,907	10.1	12,414	27,896	10.4	12,782	28,599	12.0	14,749	32,297
2029	126,901	10.1	12,817	27,949	10.4	13,198	28,654	12.0	15,228	32,359

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% 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
2020	\$ 95,160	4.8%	\$4,568	\$ 14,210	6.8%	\$6,471	\$ 18,474	6.0%	\$5,710	\$ 16,875
2021	98,253	4.8	4,716	14,405	6.8	6,681	18,727	6.0	5,895	17,106
2022	101,446	4.8	4,869	14,587	6.8	6,898	18,963	6.0	6,087	17,322
2023	104,743	4.8	5,028	14,754	6.8	7,123	19,180	6.0	6,285	17,520
2024	108,147	4.8	5,191	14,904	6.8	7,354	19,375	6.0	6,489	17,698
2025	111,662	4.8	5,360	15,035	6.8	7,593	19,545	6.0	6,700	17,853
2026	115,291	4.8	5,534	15,145	6.8	7,840	19,687	6.0	6,917	17,983
2027	119,038	4.8	5,714	15,231	6.8	8,095	19,798	6.0	7,142	18,085
2028	122,907	4.8	5,900	15,290	6.8	8,358	19,875	6.0	7,374	18,155
2029	126,901	4.8	6,091	15,319	6.8	8,629	19,913	6.0	7,614	18,190

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
2020	\$ 95,160	7.7%	\$7,327	\$ 20,473	8.7%	\$8,279	\$ 22,708	9.2%	\$8,755	\$ 24,031
2021	98,253	7.7	7,565	20,753	8.7	8,548	23,019	9.2	9,039	24,360
2022	101,446	7.7	7,811	21,015	8.7	8,826	23,309	9.2	9,333	24,667
2023	104,743	7.7	8,065	21,255	8.7	9,113	23,575	9.2	9,636	24,949
2024	108,147	7.7	8,327	21,471	8.7	9,409	23,815	9.2	9,950	25,203
2025	111,662	7.7	8,598	21,660	8.7	9,715	24,024	9.2	10,273	25,424
2026	115,291	7.7	8,877	21,818	8.7	10,030	24,199	9.2	10,607	25,609
2027	119,038	7.7	9,166	21,941	8.7	10,356	24,336	9.2	10,951	25,754
2028	122,907	7.7	9,464	22,026	8.7	10,693	24,430	9.2	11,307	25,854
2029	126,901	7.7	9,771	22,068	8.7	11,040	24,477	9.2	11,675	25,903

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
2020	\$ 95,160	10.5%	\$9,992	\$ 26,939	10.8%	\$10,277	\$ 27,596	12.5%	\$11,895	\$ 31,179
2021	98,253	10.5	10,317	27,308	10.8	10,611	27,974	12.5	12,282	31,606
2022	101,446	10.5	10,652	27,652	10.8	10,956	28,327	12.5	12,681	32,005
2023	104,743	10.5	10,998	27,968	10.8	11,312	28,651	12.5	13,093	32,371
2024	108,147	10.5	11,355	28,252	10.8	11,680	28,942	12.5	13,518	32,700
2025	111,662	10.5	11,725	28,500	10.8	12,059	29,196	12.5	13,958	32,987
2026	115,291	10.5	12,106	28,708	10.8	12,451	29,409	12.5	14,411	33,227
2027	119,038	10.5	12,499	28,870	10.8	12,856	29,575	12.5	14,880	33,415
2028	122,907	10.5	12,905	28,982	10.8	13,274	29,689	12.5	15,363	33,544
2029	126,901	10.5	13,325	29,037	10.8	13,705	29,746	12.5	15,863	33,608

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)

(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	8.3%	\$7,898	\$ 16,693	10.2%	\$9,706	\$ 20,856	9.4%	\$8,945	\$ 19,261
2021	98,253	8.3	8,155	16,922	10.2	10,022	21,142	9.4	9,236	19,525
2022	101,446	8.3	8,420	17,135	10.2	10,347	21,409	9.4	9,536	19,771
2023	104,743	8.3	8,694	17,331	10.2	10,684	21,654	9.4	9,846	19,997
2024	108,147	8.3	8,976	17,507	10.2	11,031	21,874	9.4	10,166	20,200
2025	111,662	8.3	9,268	17,661	10.2	11,390	22,066	9.4	10,496	20,377
2026	115,291	8.3	9,569	17,790	10.2	11,760	22,227	9.4	10,837	20,525
2027	119,038	8.3	9,880	17,891	10.2	12,142	22,353	9.4	11,190	20,641
2028	122,907	8.3	10,201	17,960	10.2	12,537	22,439	9.4	11,553	20,721
2029	126,901	8.3	10,533	17,994	10.2	12,944	22,482	9.4	11,929	20,761

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	11.2%	\$10,658	\$ 22,771	12.1%	\$11,514	\$ 25,020	12.7%	\$12,085	\$ 26,288
2021	98,253	11.2	11,004	23,083	12.1	11,889	25,363	12.7	12,478	26,648
2022	101,446	11.2	11,362	23,374	12.1	12,275	25,683	12.7	12,884	26,984
2023	104,743	11.2	11,731	23,641	12.1	12,674	25,977	12.7	13,302	27,293
2024	108,147	11.2	12,112	23,881	12.1	13,086	26,241	12.7	13,735	27,570
2025	111,662	11.2	12,506	24,091	12.1	13,511	26,471	12.7	14,181	27,812
2026	115,291	11.2	12,913	24,266	12.1	13,950	26,664	12.7	14,642	28,015
2027	119,038	11.2	13,332	24,403	12.1	14,404	26,815	12.7	15,118	28,173
2028	122,907	11.2	13,766	24,497	12.1	14,872	26,919	12.7	15,609	28,282
2029	126,901	11.2	14,213	24,544	12.1	15,355	26,970	12.7	16,116	28,336

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 %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	13.9%	\$13,227	\$ 29,213	14.3%	\$13,608	\$ 29,866	15.9%	\$15,130	\$ 33,377
2021	98,253	13.9	13,657	29,613	14.3	14,050	30,275	15.9	15,622	33,834
2022	101,446	13.9	14,101	29,986	14.3	14,507	30,657	15.9	16,130	34,261
2023	104,743	13.9	14,559	30,329	14.3	14,978	31,007	15.9	16,654	34,653
2024	108,147	13.9	15,032	30,637	14.3	15,465	31,322	15.9	17,195	35,005
2025	111,662	13.9	15,521	30,906	14.3	15,968	31,597	15.9	17,754	35,312
2026	115,291	13.9	16,025	31,131	14.3	16,487	31,827	15.9	18,331	35,569
2027	119,038	13.9	16,546	31,307	14.3	17,022	32,007	15.9	18,927	35,770
2028	122,907	13.9	17,084	31,428	14.3	17,576	32,131	15.9	19,542	35,908
2029	126,901	13.9	17,639	31,488	14.3	18,147	32,192	15.9	20,177	35,977

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 3.25%.
- 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 28<sup>th</sup> have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

# City of Laddonia - General

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

Valuation Year	Estimated Projected Payroll	L-1 Benefit Program			L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
		of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2020	\$ 95,160	8.6%	\$8,184	\$ 17,295	10.6%	\$10,087	\$ 21,599	9.8%	\$9,326	\$ 19,938
2021	98,253	8.6	8,450	17,532	10.6	10,415	21,895	9.8	9,629	20,211
2022	101,446	8.6	8,724	17,753	10.6	10,753	22,171	9.8	9,942	20,466
2023	104,743	8.6	9,008	17,956	10.6	11,103	22,424	9.8	10,265	20,700
2024	108,147	8.6	9,301	18,138	10.6	11,464	22,652	9.8	10,598	20,910
2025	111,662	8.6	9,603	18,297	10.6	11,836	22,851	9.8	10,943	21,094
2026	115,291	8.6	9,915	18,430	10.6	12,221	23,017	9.8	11,299	21,248
2027	119,038	8.6	10,237	18,534	10.6	12,618	23,147	9.8	11,666	21,368
2028	122,907	8.6	10,570	18,606	10.6	13,028	23,237	9.8	12,045	21,451
2029	126,901	8.6	10,913	18,642	10.6	13,452	23,281	9.8	12,436	21,492

Valuation Year	Estimated Projected Payroll	LT-5(65) Benefit Program			L-7 Benefit Program			LT-8(65) Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	11.5%	\$10,943	\$ 23,584	12.4%	\$11,800	\$ 25,928	13.0%	\$12,371	\$ 27,253
2021	98,253	11.5	11,299	23,907	12.4	12,183	26,283	13.0	12,773	27,626
2022	101,446	11.5	11,666	24,208	12.4	12,579	26,614	13.0	13,188	27,974
2023	104,743	11.5	12,045	24,485	12.4	12,988	26,918	13.0	13,617	28,294
2024	108,147	11.5	12,437	24,734	12.4	13,410	27,192	13.0	14,059	28,581
2025	111,662	11.5	12,841	24,951	12.4	13,846	27,431	13.0	14,516	28,832
2026	115,291	11.5	13,258	25,133	12.4	14,296	27,631	13.0	14,988	29,042
2027	119,038	11.5	13,689	25,275	12.4	14,761	27,787	13.0	15,475	29,206
2028	122,907	11.5	14,134	25,373	12.4	15,240	27,894	13.0	15,978	29,319
2029	126,901	11.5	14,594	25,421	12.4	15,736	27,947	13.0	16,497	29,375

Valuation Year	Estimated Projected Payroll	L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program		
		Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial
		As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
		Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2020	\$ 95,160	14.4%	\$13,703	\$ 30,217	14.7%	\$13,989	\$ 30,887	16.4%	\$15,606	\$ 34,524
2021	98,253	14.4	14,148	30,631	14.7	14,443	31,310	16.4	16,113	34,997
2022	101,446	14.4	14,608	31,017	14.7	14,913	31,705	16.4	16,637	35,438
2023	104,743	14.4	15,083	31,372	14.7	15,397	32,067	16.4	17,178	35,843
2024	108,147	14.4	15,573	31,691	14.7	15,898	32,393	16.4	17,736	36,207
2025	111,662	14.4	16,079	31,969	14.7	16,414	32,677	16.4	18,313	36,525
2026	115,291	14.4	16,602	32,202	14.7	16,948	32,915	16.4	18,908	36,791
2027	119,038	14.4	17,141	32,384	14.7	17,499	33,101	16.4	19,522	36,999
2028	122,907	14.4	17,699	32,509	14.7	18,067	33,229	16.4	20,157	37,142
2029	126,901	14.4	18,274	32,571	14.7	18,654	33,292	16.4	20,812	37,213

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 3.25%.
- 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 28<sup>th</sup> 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.