The Initial Valuation For

# City of Monroe City

as of June 30, 2019

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GRS Retirement Consulting

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August 16, 2019

City of Monroe City
Monroe City, 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 28, 2019.

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

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, 2019. 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 Drazilov

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 Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 7.70% | 3.10% | 0.20% | 11.00% |
| | Police | 1.00 | 4.20 | 0.40 | 5.60 |
| L-3 | General | 9.60 | 4.40 | 0.30 | 14.30 |
| | Police | 1.20 | 5.90 | 0.50 | 7.60 |
| LT-4(65) | General | 8.10 | 3.80 | 0.20 | 12.10 |
| | Police | 1.20 | 5.80 | 0.40 | 7.40 |
| LT-5(65) | General | 10.00 | 4.90 | 0.30 | 15.20 |
| | Police | 1.40 | 7.10 | 0.50 | 9.00 |
| L-7 | General | 11.60 | 5.70 | 0.30 | 17.60 |
| | Police | 1.50 | 7.60 | 0.60 | 9.70 |
| LT-8(65) | General | 11.90 | 6.00 | 0.30 | 18.20 |
| | Police | 1.60 | 8.40 | 0.60 | 10.60 |
| L-12 | General | 13.60 | 7.10 | 0.40 | 21.10 |
| | Police | 1.80 | 9.40 | 0.70 | 11.90 |
| LT-14(65) | General | 13.70 | 7.20 | 0.40 | 21.30 |
| | Police | 1.80 | 9.80 | 0.70 | 12.30 |
| L-6 | General | 15.60 | 8.50 | 0.50 | 24.60 |
| | Police | 2.00 | 11.10 | 0.80 | 13.90 |

* 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 Monroe City

## 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 | | | |
|---|---|---|---|---|---|
| | | Prior Service Cost * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 7.90% | 3.30% | 0.20% | 11.40% |
| | Police | 1.00 | 4.50 | 0.40 | 5.90 |
| L-3 | General | 10.00 | 4.60 | 0.30 | 14.90 |
| | Police | 1.30 | 6.20 | 0.50 | 8.00 |
| LT-4(65) | General | 8.40 | 4.00 | 0.20 | 12.60 |
| | Police | 1.30 | 6.10 | 0.40 | 7.80 |
| LT-5(65) | General | 10.30 | 5.10 | 0.30 | 15.70 |
| | Police | 1.50 | 7.50 | 0.50 | 9.50 |
| L-7 | General | 12.00 | 6.00 | 0.30 | 18.30 |
| | Police | 1.60 | 7.90 | 0.60 | 10.10 |
| LT-8(65) | General | 12.30 | 6.30 | 0.30 | 18.90 |
| | Police | 1.70 | 8.80 | 0.60 | 11.10 |
| L-12 | General | 14.10 | 7.40 | 0.40 | 21.90 |
| | Police | 1.80 | 9.80 | 0.70 | 12.30 |
| LT-14(65) | General | 14.20 | 7.60 | 0.40 | 22.20 |
| | Police | 1.90 | 10.20 | 0.70 | 12.80 |
| L-6 | General | 16.10 | 8.90 | 0.50 | 25.50 |
| | Police | 2.10 | 11.60 | 0.80 | 14.50 |

* 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 Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 7.90% | 6.50% | 0.20% | 14.60% |
| | Police | 1.10 | 7.90 | 0.40 | 9.40 |
| L-3 | General | 9.90 | 7.90 | 0.30 | 18.10 |
| | Police | 1.40 | 9.60 | 0.50 | 11.50 |
| LT-4(65) | General | 8.40 | 7.20 | 0.20 | 15.80 |
| | Police | 1.40 | 9.50 | 0.40 | 11.30 |
| LT-5(65) | General | 10.20 | 8.50 | 0.30 | 19.00 |
| | Police | 1.60 | 10.80 | 0.50 | 12.90 |
| L-7 | General | 11.80 | 9.30 | 0.30 | 21.40 |
| | Police | 1.70 | 11.30 | 0.60 | 13.60 |
| LT-8(65) | General | 12.10 | 9.70 | 0.30 | 22.10 |
| | Police | 1.80 | 12.10 | 0.60 | 14.50 |
| L-12 | General | 13.80 | 10.80 | 0.40 | 25.00 |
| | Police | 2.00 | 13.10 | 0.70 | 15.80 |
| LT-14(65) | General | 13.90 | 10.90 | 0.40 | 25.20 |
| | Police | 2.00 | 13.50 | 0.70 | 16.20 |
| L-6 | General | 15.80 | 12.20 | 0.50 | 28.50 |
| | Police | 2.20 | 14.80 | 0.80 | 17.80 |

* 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 Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 8.10% | 6.70% | 0.20% | 15.00% |
| | Police | 1.20 | 8.10 | 0.40 | 9.70 |
| L-3 | General | 10.20 | 8.20 | 0.30 | 18.70 |
| | Police | 1.40 | 9.90 | 0.50 | 11.80 |
| LT-4(65) | General | 8.60 | 7.50 | 0.20 | 16.30 |
| | Police | 1.40 | 9.80 | 0.40 | 11.60 |
| LT-5(65) | General | 10.60 | 8.70 | 0.30 | 19.60 |
| | Police | 1.70 | 11.20 | 0.50 | 13.40 |
| L-7 | General | 12.20 | 9.60 | 0.30 | 22.10 |
| | Police | 1.70 | 11.70 | 0.60 | 14.00 |
| LT-8(65) | General | 12.50 | 10.00 | 0.30 | 22.80 |
| | Police | 1.90 | 12.50 | 0.60 | 15.00 |
| L-12 | General | 14.30 | 11.10 | 0.40 | 25.80 |
| | Police | 2.00 | 13.50 | 0.70 | 16.20 |
| LT-14(65) | General | 14.40 | 11.30 | 0.40 | 26.10 |
| | Police | 2.10 | 13.90 | 0.70 | 16.70 |
| L-6 | General | 16.30 | 12.60 | 0.50 | 29.40 |
| | Police | 2.30 | 15.30 | 0.80 | 18.40 |

* 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 Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
|---|---|---|---|---|---|
| L-1 | General | 8.30% | 3.50% | 0.20% | 12.00% |
| | Police | 1.00 | 4.40 | 0.40 | 5.80 |
| L-3 | General | 10.40 | 4.90 | 0.30 | 15.60 |
| | Police | 1.20 | 6.00 | 0.50 | 7.70 |
| LT-4(65) | General | 9.40 | 4.70 | 0.20 | 14.30 |
| | Police | 1.20 | 6.20 | 0.40 | 7.80 |
| LT-5(65) | General | 11.20 | 5.80 | 0.30 | 17.30 |
| | Police | 1.50 | 7.40 | 0.50 | 9.40 |
| L-7 | General | 12.50 | 6.30 | 0.30 | 19.10 |
| | Police | 1.50 | 7.80 | 0.60 | 9.90 |
| LT-8(65) | General | 13.10 | 6.90 | 0.30 | 20.30 |
| | Police | 1.70 | 8.60 | 0.60 | 10.90 |
| L-12 | General | 14.60 | 7.80 | 0.40 | 22.80 |
| | Police | 1.80 | 9.60 | 0.70 | 12.10 |
| LT-14(65) | General | 14.90 | 8.10 | 0.40 | 23.40 |
| | Police | 1.90 | 9.90 | 0.70 | 12.50 |
| L-6 | General | 16.70 | 9.30 | 0.50 | 26.50 |
| | Police | 2.10 | 11.30 | 0.80 | 14.20 |

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

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

# City of Monroe City

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

### Rule of 80 Retirement Eligibility#

| | | Percents of Active Member Payroll | | | |
|---|---|---|---|---|---|
| Benefit Program | Employee Groups | Prior Service Cost * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 8.50% | 3.70% | 0.20% | 12.40% |
| | Police | 1.00 | 4.60 | 0.40 | 6.00 |
| L-3 | General | 10.70 | 5.20 | 0.30 | 16.20 |
| | Police | 1.30 | 6.40 | 0.50 | 8.20 |
| LT-4(65) | General | 9.80 | 5.00 | 0.20 | 15.00 |
| | Police | 1.30 | 6.50 | 0.40 | 8.20 |
| LT-5(65) | General | 11.60 | 6.10 | 0.30 | 18.00 |
| | Police | 1.50 | 7.80 | 0.50 | 9.80 |
| L-7 | General | 12.90 | 6.60 | 0.30 | 19.80 |
| | Police | 1.60 | 8.10 | 0.60 | 10.30 |
| LT-8(65) | General | 13.50 | 7.30 | 0.30 | 21.10 |
| | Police | 1.70 | 9.10 | 0.60 | 11.40 |
| L-12 | General | 15.10 | 8.20 | 0.40 | 23.70 |
| | Police | 1.90 | 9.90 | 0.70 | 12.50 |
| LT-14(65) | General | 15.40 | 8.50 | 0.40 | 24.30 |
| | Police | 1.90 | 10.50 | 0.70 | 13.10 |
| L-6 | General | 17.30 | 9.70 | 0.50 | 27.50 |
| | Police | 2.10 | 11.90 | 0.80 | 14.80 |

# 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 Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 8.40% | 6.90% | 0.20% | 15.50% |
| | Police | 1.10 | 8.00 | 0.40 | 9.50 |
| L-3 | General | 10.60 | 8.50 | 0.30 | 19.40 |
| | Police | 1.40 | 9.70 | 0.50 | 11.60 |
| LT-4(65) | General | 9.60 | 8.20 | 0.20 | 18.00 |
| | Police | 1.40 | 9.80 | 0.40 | 11.60 |
| LT-5(65) | General | 11.40 | 9.40 | 0.30 | 21.10 |
| | Police | 1.60 | 11.10 | 0.50 | 13.20 |
| L-7 | General | 12.70 | 10.00 | 0.30 | 23.00 |
| | Police | 1.70 | 11.50 | 0.60 | 13.80 |
| LT-8(65) | General | 13.30 | 10.60 | 0.30 | 24.20 |
| | Police | 1.80 | 12.40 | 0.60 | 14.80 |
| L-12 | General | 14.80 | 11.50 | 0.40 | 26.70 |
| | Police | 2.00 | 13.30 | 0.70 | 16.00 |
| LT-14(65) | General | 15.10 | 11.80 | 0.40 | 27.30 |
| | Police | 2.00 | 13.70 | 0.70 | 16.40 |
| L-6 | General | 16.90 | 13.00 | 0.50 | 30.40 |
| | Police | 2.20 | 15.10 | 0.80 | 18.10 |

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

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

# City of Monroe City

## 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 * | Current Cost | Disability Cost | Total Employer Contribution Rate |
| L-1 | General | 8.70% | 7.20% | 0.20% | 16.10% |
| | Police | 1.20 | 8.20 | 0.40 | 9.80 |
| L-3 | General | 10.90 | 8.70 | 0.30 | 19.90 |
| | Police | 1.50 | 10.10 | 0.50 | 12.10 |
| LT-4(65) | General | 9.90 | 8.40 | 0.20 | 18.50 |
| | Police | 1.50 | 10.10 | 0.40 | 12.00 |
| LT-5(65) | General | 11.80 | 9.70 | 0.30 | 21.80 |
| | Police | 1.70 | 11.50 | 0.50 | 13.70 |
| L-7 | General | 13.10 | 10.30 | 0.30 | 23.70 |
| | Police | 1.70 | 11.90 | 0.60 | 14.20 |
| LT-8(65) | General | 13.70 | 10.90 | 0.30 | 24.90 |
| | Police | 1.90 | 12.80 | 0.60 | 15.30 |
| L-12 | General | 15.30 | 11.90 | 0.40 | 27.60 |
| | Police | 2.00 | 13.70 | 0.70 | 16.40 |
| LT-14(65) | General | 15.60 | 12.20 | 0.40 | 28.20 |
| | Police | 2.10 | 14.20 | 0.70 | 17.00 |
| L-6 | General | 17.50 | 13.40 | 0.50 | 31.40 |
| | Police | 2.30 | 15.60 | 0.80 | 18.70 |

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

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

# City of Monroe City

## 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 | Police |
| L-1 | $ 61,214 | $ 15,802 |
| L-3 | 79,579 | 21,446 |
| LT-4(65) | 67,336 | 20,881 |
| LT-5(65) | 84,587 | 25,396 |
| L-7 | 97,943 | 27,371 |
| LT-8(65) | 101,282 | 29,911 |
| L-12 | 117,420 | 33,579 |
| LT-14(65) | 118,533 | 34,708 |
| L-6 | 136,898 | 39,223 |

| 3 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 63,440 | $ 16,649 |
| L-3 | 82,918 | 22,574 |
| LT-4(65) | 70,118 | 22,010 |
| LT-5(65) | 87,370 | 26,807 |
| L-7 | 101,839 | 28,500 |
| LT-8(65) | 105,178 | 31,322 |
| L-12 | 121,872 | 34,708 |
| LT-14(65) | 123,542 | 36,119 |
| L-6 | 141,906 | 40,916 |

**Non-Contributory Plan**

| 5 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 81,248 | $ 26,525 |
| L-3 | 100,726 | 32,451 |
| LT-4(65) | 87,926 | 31,886 |
| LT-5(65) | 105,734 | 36,401 |
| L-7 | 119,090 | 38,376 |
| LT-8(65) | 122,985 | 40,916 |
| L-12 | 139,124 | 44,584 |
| LT-14(65) | 140,237 | 45,713 |
| L-6 | 158,601 | 50,228 |

| 3 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 83,474 | $ 27,371 |
| L-3 | 104,065 | 33,297 |
| LT-4(65) | 90,709 | 32,733 |
| LT-5(65) | 109,073 | 37,812 |
| L-7 | 122,985 | 39,505 |
| LT-8(65) | 126,881 | 42,327 |
| L-12 | 143,576 | 45,713 |
| LT-14(65) | 145,245 | 47,124 |
| L-6 | 163,610 | 51,921 |

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 Monroe City

## 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 | Police |
| L-1 | $ 66,779 | $ 16,366 |
| L-3 | 86,813 | 21,728 |
| LT-4(65) | 79,579 | 22,010 |
| LT-5(65) | 96,274 | 26,525 |
| L-7 | 106,291 | 27,936 |
| LT-8(65) | 112,968 | 30,758 |
| L-12 | 126,881 | 34,144 |
| LT-14(65) | 130,220 | 35,273 |
| L-6 | 147,471 | 40,070 |

| 3 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 69,005 | $ 16,931 |
| L-3 | 90,152 | 23,139 |
| LT-4(65) | 83,474 | 23,139 |
| LT-5(65) | 100,169 | 27,654 |
| L-7 | 110,186 | 29,065 |
| LT-8(65) | 117,420 | 32,169 |
| L-12 | 131,889 | 35,273 |
| LT-14(65) | 135,228 | 36,966 |
| L-6 | 153,036 | 41,763 |

**Non-Contributory Plan**

| 5 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 86,257 | $ 26,807 |
| L-3 | 107,960 | 32,733 |
| LT-4(65) | 100,169 | 32,733 |
| LT-5(65) | 117,420 | 37,248 |
| L-7 | 127,994 | 38,941 |
| LT-8(65) | 134,672 | 41,763 |
| L-12 | 148,584 | 45,149 |
| LT-14(65) | 151,923 | 46,278 |
| L-6 | 169,174 | 51,075 |

| 3 Year FAS | | |
|---|---|---|
| Benefit Program | General | Police |
| L-1 | $ 89,596 | $ 27,654 |
| L-3 | 110,743 | 34,144 |
| LT-4(65) | 102,952 | 33,862 |
| LT-5(65) | 121,316 | 38,659 |
| L-7 | 131,889 | 40,070 |
| LT-8(65) | 138,567 | 43,174 |
| L-12 | 153,593 | 46,278 |
| LT-14(65) | 156,932 | 47,971 |
| L-6 | 174,739 | 52,768 |

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 Monroe City

## Employees and Payroll Included in the Valuation

| | General | Police |
|---|---|---|
| Number of Employees | 14 | 8 |
| Annual Payroll | $ 556,495 | $ 282,180 |

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

# APPENDIX I

## UNFUNDED ACTUARIAL ACCRUED LIABILITY

# Unfunded Actuarial Accrued Liability (UAAL)

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

The policy of the LAGERS Board of Trustees provides that unfunded liabilities are to be paid for by level percent of payroll contributions over a period of 30 years. The contribution rates shown on pages 4 through 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 Monroe City

### Regular Retirement Eligibility

| Benefit Group | Employee Group | Contributory UAAL (5 Year FAS) | Contributory UAAL (3 Year FAS) | Non-Contributory UAAL (5 Year FAS) | Non-Contributory UAAL (3 Year FAS) |
|---|---|---|---|---|---|
| L-1 | General | $ 751,888 | $ 777,696 | $ 773,139 | $ 798,921 |
| | Police | 47,272 | 49,235 | 55,490 | 57,464 |
| L-3 | General | 945,362 | 977,602 | 966,423 | 998,674 |
| | Police | 60,846 | 63,290 | 69,328 | 71,853 |
| LT-4(65) | General | 798,525 | 825,940 | 819,418 | 846,811 |
| | Police | 61,060 | 63,558 | 69,235 | 71,721 |
| LT-5(65) | General | 980,320 | 1,013,763 | 1,001,141 | 1,034,595 |
| | Police | 71,207 | 74,064 | 79,639 | 82,533 |
| L-7 | General | 1,138,856 | 1,177,555 | 1,159,732 | 1,198,376 |
| | Police | 74,430 | 77,373 | 83,238 | 86,233 |
| LT-8(65) | General | 1,162,156 | 1,201,675 | 1,182,842 | 1,222,334 |
| | Police | 81,340 | 84,520 | 90,086 | 93,384 |
| L-12 | General | 1,332,355 | 1,377,559 | 1,353,043 | 1,398,160 |
| | Police | 87,846 | 91,244 | 97,081 | 100,611 |
| LT-14(65) | General | 1,344,019 | 1,389,613 | 1,364,611 | 1,410,141 |
| | Police | 91,321 | 94,822 | 100,504 | 104,192 |
| L-6 | General | 1,525,832 | 1,577,427 | 1,546,289 | 1,597,787 |
| | Police | 101,229 | 105,126 | 110,913 | 114,971 |

# City of Monroe City

## Unfunded Actuarial Accrued Liability (UAAL)

### Rule of 80 Retirement Eligibility

| Benefit Group | Employee Group | Contributory UAAL (5 Year FAS) | Contributory UAAL (3 Year FAS) | Non-Contributory UAAL (5 Year FAS) | Non-Contributory UAAL (3 Year FAS) |
|---|---|---|---|---|---|
| L-1 | General | $ 809,381 | $ 837,435 | $ 828,005 | $ 856,046 |
| | Police | 47,687 | 49,707 | 55,904 | 57,913 |
| L-3 | General | 1,016,524 | 1,051,589 | 1,034,991 | 1,070,054 |
| | Police | 61,382 | 63,861 | 69,856 | 72,393 |
| LT-4(65) | General | 924,482 | 956,685 | 942,640 | 974,815 |
| | Police | 62,131 | 64,675 | 70,286 | 72,833 |
| LT-5(65) | General | 1,102,865 | 1,141,037 | 1,120,975 | 1,159,115 |
| | Police | 72,228 | 75,121 | 80,643 | 83,574 |
| L-7 | General | 1,223,676 | 1,265,866 | 1,241,967 | 1,284,070 |
| | Police | 75,038 | 77,997 | 83,828 | 86,883 |
| LT-8(65) | General | 1,281,247 | 1,325,492 | 1,299,275 | 1,343,465 |
| | Police | 82,249 | 85,484 | 91,021 | 94,342 |
| L-12 | General | 1,430,984 | 1,480,232 | 1,448,959 | 1,498,100 |
| | Police | 88,541 | 91,993 | 97,780 | 101,356 |
| LT-14(65) | General | 1,459,753 | 1,510,036 | 1,477,608 | 1,527,802 |
| | Police | 92,169 | 95,737 | 101,374 | 105,102 |
| L-6 | General | 1,638,264 | 1,694,465 | 1,655,976 | 1,712,092 |
| | Police | 102,030 | 105,980 | 111,713 | 115,852 |

# APPENDIX II

## SUMMARY OF FINANCIAL ASSUMPTIONS

# Summary of Assumptions Used in Actuarial Valuations

## Assumptions Adopted by Board of Trustees After Consulting With Actuary

1. The investment return rate used in making the valuations was 7.25% 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 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 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 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | General Members | | | | | | | |
| Sample | Years of | Men | | Women | | Police | | Fire | |
| Ages | Service | Disability | Withdrawal | Disability | Withdrawal | 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 |

| | Percent Increase in Individual's Pay During Next Year | |
|---|---|---|
| Sample Ages | General & Police | Fire |
| 25 | 6.55% | 7.15% |
| 30 | 5.75 | 6.05 |
| 35 | 5.25 | 5.15 |
| 40 | 4.75 | 4.45 |
| 45 | 4.25 | 4.15 |
| 50 | 3.85 | 3.85 |
| 55 | 3.65 | 3.65 |
| 60 | 3.55 | 3.25 |
| 65 | 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 Men | General Members Women | Retirement Ages | Police | Fire |
|---|---|---|---|---|---|
| 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 Men | General Members Women | Retirement Ages | Police | Fire |
|---|---|---|---|---|---|
| 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 | General Members | | | |
|---|---|---|---|---|
| Ages | Men | Women | Police | Fire |
| 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

## SUMMARY OF LAGERS PROVISIONS

# Missouri LocAl Government Employees Retirement System
# Brief Summary of LAGERS
# Benefits and Conditions Evaluated and/or Considered
# as of February 28, 2019
# (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 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 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

## Benefit Illustrations

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] | Estimated Social Security [2] | Estimated Monthly Total $ | Estimated Monthly Total % of FAS |
|---|---|---|---|---|
| 35 Years of Service: | | | | |
| $1,500 | $ 525 | $ 930 | $1,455 | 97% |
| 2,000 | 700 | 1,076 | 1,776 | 89% |
| 2,500 | 875 | 1,223 | 2,098 | 84% |
| 3,000 | 1,050 | 1,370 | 2,420 | 81% |
| 3,500 | 1,225 | 1,516 | 2,741 | 78% |
| 4,000 | 1,400 | 1,662 | 3,062 | 77% |
| 25 Years of Service: | | | | |
| $1,500 | $ 375 | $ 930 | $1,305 | 87% |
| 2,000 | 500 | 1,076 | 1,576 | 79% |
| 2,500 | 625 | 1,223 | 1,848 | 74% |
| 3,000 | 750 | 1,370 | 2,120 | 71% |
| 3,500 | 875 | 1,516 | 2,391 | 68% |
| 4,000 | 1,000 | 1,662 | 2,662 | 67% |
| 15 Years of Service: | | | | |
| $1,500 | $225 | $ 930 | $1,155 | 77% |
| 2,000 | 300 | 1,076 | 1,376 | 69% |
| 2,500 | 375 | 1,223 | 1,598 | 64% |
| 3,000 | 450 | 1,370 | 1,820 | 61% |
| 3,500 | 525 | 1,516 | 2,041 | 58% |
| 4,000 | 600 | 1,662 | 2,262 | 57% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] | Estimated Social Security [2] | Estimated Monthly Total $ | Estimated Monthly Total % of FAS |
|---|---|---|---|---|
| 35 Years of Service: | | | | |
| $1,500 | $ 656 | $ 930 | $1,586 | 106% |
| 2,000 | 875 | 1,076 | 1,951 | 98% |
| 2,500 | 1,094 | 1,223 | 2,317 | 93% |
| 3,000 | 1,313 | 1,370 | 2,683 | 89% |
| 3,500 | 1,531 | 1,516 | 3,047 | 87% |
| 4,000 | 1,750 | 1,662 | 3,412 | 85% |
| 25 Years of Service: | | | | |
| $1,500 | $ 469 | $ 930 | $1,399 | 93% |
| 2,000 | 625 | 1,076 | 1,701 | 85% |
| 2,500 | 781 | 1,223 | 2,004 | 80% |
| 3,000 | 938 | 1,370 | 2,308 | 77% |
| 3,500 | 1,094 | 1,516 | 2,610 | 75% |
| 4,000 | 1,250 | 1,662 | 2,912 | 73% |
| 15 Years of Service: | | | | |
| $1,500 | $281 | $ 930 | $1,211 | 81% |
| 2,000 | 375 | 1,076 | 1,451 | 73% |
| 2,500 | 469 | 1,223 | 1,692 | 68% |
| 3,000 | 563 | 1,370 | 1,933 | 64% |
| 3,500 | 656 | 1,516 | 2,172 | 62% |
| 4,000 | 750 | 1,662 | 2,412 | 60% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] | Estimated Social Security [2] | Estimated Monthly Total $ | Estimated Monthly Total % of FAS |
|---|---|---|---|---|
| 35 Years of Service: | | | | |
| $1,500 | $ 788 | $ 930 | $1,718 | 115% |
| 2,000 | 1,050 | 1,076 | 2,126 | 106% |
| 2,500 | 1,313 | 1,223 | 2,536 | 101% |
| 3,000 | 1,575 | 1,370 | 2,945 | 98% |
| 3,500 | 1,838 | 1,516 | 3,354 | 96% |
| 4,000 | 2,100 | 1,662 | 3,762 | 94% |
| 25 Years of Service: | | | | |
| $1,500 | $ 563 | $ 930 | $1,493 | 100% |
| 2,000 | 750 | 1,076 | 1,826 | 91% |
| 2,500 | 938 | 1,223 | 2,161 | 86% |
| 3,000 | 1,125 | 1,370 | 2,495 | 83% |
| 3,500 | 1,313 | 1,516 | 2,829 | 81% |
| 4,000 | 1,500 | 1,662 | 3,162 | 79% |
| 15 Years of Service: | | | | |
| $1,500 | $338 | $ 930 | $1,268 | 85% |
| 2,000 | 450 | 1,076 | 1,526 | 76% |
| 2,500 | 563 | 1,223 | 1,786 | 71% |
| 3,000 | 675 | 1,370 | 2,045 | 68% |
| 3,500 | 788 | 1,516 | 2,304 | 66% |
| 4,000 | 900 | 1,662 | 2,562 | 64% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] | Estimated Social Security [2] | Estimated Monthly Total $ | Estimated Monthly Total % of FAS |
|---|---|---|---|---|
| 35 Years of Service: | | | | |
| $1,500 | $ 919 | $ 930 | $1,849 | 123% |
| 2,000 | 1,225 | 1,076 | 2,301 | 115% |
| 2,500 | 1,531 | 1,223 | 2,754 | 110% |
| 3,000 | 1,838 | 1,370 | 3,208 | 107% |
| 3,500 | 2,144 | 1,516 | 3,660 | 105% |
| 4,000 | 2,450 | 1,662 | 4,112 | 103% |
| 25 Years of Service: | | | | |
| $1,500 | $ 656 | $ 930 | $1,586 | 106% |
| 2,000 | 875 | 1,076 | 1,951 | 98% |
| 2,500 | 1,094 | 1,223 | 2,317 | 93% |
| 3,000 | 1,313 | 1,370 | 2,683 | 89% |
| 3,500 | 1,531 | 1,516 | 3,047 | 87% |
| 4,000 | 1,750 | 1,662 | 3,412 | 85% |
| 15 Years of Service: | | | | |
| $1,500 | $ 394 | $ 930 | $1,324 | 88% |
| 2,000 | 525 | 1,076 | 1,601 | 80% |
| 2,500 | 656 | 1,223 | 1,879 | 75% |
| 3,000 | 788 | 1,370 | 2,158 | 72% |
| 3,500 | 919 | 1,516 | 2,435 | 70% |
| 4,000 | 1,050 | 1,662 | 2,712 | 68% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] | Estimated Social Security [2] | Estimated Monthly Total $ | Estimated Monthly Total % of FAS |
|---|---|---|---|---|
| 35 Years of Service: | | | | |
| $1,500 | $1,050 | $ 930 | $1,980 | 132% |
| 2,000 | 1,400 | 1,076 | 2,476 | 124% |
| 2,500 | 1,750 | 1,223 | 2,973 | 119% |
| 3,000 | 2,100 | 1,370 | 3,470 | 116% |
| 3,500 | 2,450 | 1,516 | 3,966 | 113% |
| 4,000 | 2,800 | 1,662 | 4,462 | 112% |
| 25 Years of Service: | | | | |
| $1,500 | $ 750 | $ 930 | $1,680 | 112% |
| 2,000 | 1,000 | 1,076 | 2,076 | 104% |
| 2,500 | 1,250 | 1,223 | 2,473 | 99% |
| 3,000 | 1,500 | 1,370 | 2,870 | 96% |
| 3,500 | 1,750 | 1,516 | 3,266 | 93% |
| 4,000 | 2,000 | 1,662 | 3,662 | 92% |
| 15 Years of Service: | | | | |
| $1,500 | $ 450 | $ 930 | $1,380 | 92% |
| 2,000 | 600 | 1,076 | 1,676 | 84% |
| 2,500 | 750 | 1,223 | 1,973 | 79% |
| 3,000 | 900 | 1,370 | 2,270 | 76% |
| 3,500 | 1,050 | 1,516 | 2,566 | 73% |
| 4,000 | 1,200 | 1,662 | 2,862 | 72% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] To 65 | LAGERS BENEFIT [3] At 65 | Estimated Social Security [2] | Estimated Monthly Total To 65 | Estimated Monthly Total At 65 | Percent of FAS To 65 | Percent of FAS At 65 |
|---|---|---|---|---|---|---|---|
| 35 Years of Service: | | | | | | | |
| $1,500 | $1,050 | $ 525 | $ 930 | $1,050 | $1,455 | 70% | 97% |
| 2,000 | 1,400 | 700 | 1,076 | 1,400 | 1,776 | 70% | 89% |
| 2,500 | 1,750 | 875 | 1,223 | 1,750 | 2,098 | 70% | 84% |
| 3,000 | 2,100 | 1,050 | 1,370 | 2,100 | 2,420 | 70% | 81% |
| 3,500 | 2,450 | 1,225 | 1,516 | 2,450 | 2,741 | 70% | 78% |
| 4,000 | 2,800 | 1,400 | 1,662 | 2,800 | 3,062 | 70% | 77% |
| 25 Years of Service: | | | | | | | |
| $1,500 | $ 750 | $ 375 | $ 930 | $ 750 | $1,305 | 50% | 87% |
| 2,000 | 1,000 | 500 | 1,076 | 1,000 | 1,576 | 50% | 79% |
| 2,500 | 1,250 | 625 | 1,223 | 1,250 | 1,848 | 50% | 74% |
| 3,000 | 1,500 | 750 | 1,370 | 1,500 | 2,120 | 50% | 71% |
| 3,500 | 1,750 | 875 | 1,516 | 1,750 | 2,391 | 50% | 68% |
| 4,000 | 2,000 | 1,000 | 1,662 | 2,000 | 2,662 | 50% | 67% |
| 15 Years of Service: | | | | | | | |
| $1,500 | $ 450 | $225 | $ 930 | $ 450 | $1,155 | 30% | 77% |
| 2,000 | 600 | 300 | 1,076 | 600 | 1,376 | 30% | 69% |
| 2,500 | 750 | 375 | 1,223 | 750 | 1,598 | 30% | 64% |
| 3,000 | 900 | 450 | 1,370 | 900 | 1,820 | 30% | 61% |
| 3,500 | 1,050 | 525 | 1,516 | 1,050 | 2,041 | 30% | 58% |
| 4,000 | 1,200 | 600 | 1,662 | 1,200 | 2,262 | 30% | 57% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] To 65 | LAGERS BENEFIT [3] At 65 | Estimated Social Security [2] | Estimated Monthly Total To 65 | Estimated Monthly Total At 65 | Percent of FAS To 65 | Percent of FAS At 65 |
|---|---|---|---|---|---|---|---|
| 35 Years of Service: | | | | | | | |
| $1,500 | $1,050 | $ 656 | $ 930 | $1,050 | $1,586 | 70% | 106% |
| 2,000 | 1,400 | 875 | 1,076 | 1,400 | 1,951 | 70% | 98% |
| 2,500 | 1,750 | 1,094 | 1,223 | 1,750 | 2,317 | 70% | 93% |
| 3,000 | 2,100 | 1,313 | 1,370 | 2,100 | 2,683 | 70% | 89% |
| 3,500 | 2,450 | 1,531 | 1,516 | 2,450 | 3,047 | 70% | 87% |
| 4,000 | 2,800 | 1,750 | 1,662 | 2,800 | 3,412 | 70% | 85% |
| 25 Years of Service: | | | | | | | |
| $1,500 | $ 750 | $ 469 | $ 930 | $ 750 | $1,399 | 50% | 93% |
| 2,000 | 1,000 | 625 | 1,076 | 1,000 | 1,701 | 50% | 85% |
| 2,500 | 1,250 | 781 | 1,223 | 1,250 | 2,004 | 50% | 80% |
| 3,000 | 1,500 | 938 | 1,370 | 1,500 | 2,308 | 50% | 77% |
| 3,500 | 1,750 | 1,094 | 1,516 | 1,750 | 2,610 | 50% | 75% |
| 4,000 | 2,000 | 1,250 | 1,662 | 2,000 | 2,912 | 50% | 73% |
| 15 Years of Service: | | | | | | | |
| $1,500 | $ 450 | $281 | $ 930 | $ 450 | $1,211 | 30% | 81% |
| 2,000 | 600 | 375 | 1,076 | 600 | 1,451 | 30% | 73% |
| 2,500 | 750 | 469 | 1,223 | 750 | 1,692 | 30% | 68% |
| 3,000 | 900 | 563 | 1,370 | 900 | 1,933 | 30% | 64% |
| 3,500 | 1,050 | 656 | 1,516 | 1,050 | 2,172 | 30% | 62% |
| 4,000 | 1,200 | 750 | 1,662 | 1,200 | 2,412 | 30% | 60% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] To 65 | LAGERS BENEFIT [3] At 65 | Estimated Social Security [2] | Estimated Monthly Total To 65 | Estimated Monthly Total At 65 | Percent of FAS To 65 | Percent of FAS At 65 |
|---|---|---|---|---|---|---|---|
| 35 Years of Service: | | | | | | | |
| $1,500 | $1,050 | $ 788 | $ 930 | $1,050 | $1,718 | 70% | 115% |
| 2,000 | 1,400 | 1,050 | 1,076 | 1,400 | 2,126 | 70% | 106% |
| 2,500 | 1,750 | 1,313 | 1,223 | 1,750 | 2,536 | 70% | 101% |
| 3,000 | 2,100 | 1,575 | 1,370 | 2,100 | 2,945 | 70% | 98% |
| 3,500 | 2,450 | 1,838 | 1,516 | 2,450 | 3,354 | 70% | 96% |
| 4,000 | 2,800 | 2,100 | 1,662 | 2,800 | 3,762 | 70% | 94% |
| 25 Years of Service: | | | | | | | |
| $1,500 | $ 750 | $ 563 | $ 930 | $ 750 | $1,493 | 50% | 100% |
| 2,000 | 1,000 | 750 | 1,076 | 1,000 | 1,826 | 50% | 91% |
| 2,500 | 1,250 | 938 | 1,223 | 1,250 | 2,161 | 50% | 86% |
| 3,000 | 1,500 | 1,125 | 1,370 | 1,500 | 2,495 | 50% | 83% |
| 3,500 | 1,750 | 1,313 | 1,516 | 1,750 | 2,829 | 50% | 81% |
| 4,000 | 2,000 | 1,500 | 1,662 | 2,000 | 3,162 | 50% | 79% |
| 15 Years of Service: | | | | | | | |
| $1,500 | $ 450 | $338 | $ 930 | $ 450 | $1,268 | 30% | 85% |
| 2,000 | 600 | 450 | 1,076 | 600 | 1,526 | 30% | 76% |
| 2,500 | 750 | 563 | 1,223 | 750 | 1,786 | 30% | 71% |
| 3,000 | 900 | 675 | 1,370 | 900 | 2,045 | 30% | 68% |
| 3,500 | 1,050 | 788 | 1,516 | 1,050 | 2,304 | 30% | 66% |
| 4,000 | 1,200 | 900 | 1,662 | 1,200 | 2,562 | 30% | 64% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

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

| Final Average Salary (FAS) [1] | LAGERS BENEFIT [3] To 65 | LAGERS BENEFIT [3] At 65 | Estimated Social Security [2] | Estimated Monthly Total To 65 | Estimated Monthly Total At 65 | Percent of FAS To 65 | Percent of FAS At 65 |
|---|---|---|---|---|---|---|---|
| 35 Years of Service: | | | | | | | |
| $1,500 | $1,050 | $ 919 | $ 930 | $1,050 | $1,849 | 70% | 123% |
| 2,000 | 1,400 | 1,225 | 1,076 | 1,400 | 2,301 | 70% | 115% |
| 2,500 | 1,750 | 1,531 | 1,223 | 1,750 | 2,754 | 70% | 110% |
| 3,000 | 2,100 | 1,838 | 1,370 | 2,100 | 3,208 | 70% | 107% |
| 3,500 | 2,450 | 2,144 | 1,516 | 2,450 | 3,660 | 70% | 105% |
| 4,000 | 2,800 | 2,450 | 1,662 | 2,800 | 4,112 | 70% | 103% |
| 25 Years of Service: | | | | | | | |
| $1,500 | $ 750 | $ 656 | $ 930 | $ 750 | $1,586 | 50% | 106% |
| 2,000 | 1,000 | 875 | 1,076 | 1,000 | 1,951 | 50% | 98% |
| 2,500 | 1,250 | 1,094 | 1,223 | 1,250 | 2,317 | 50% | 93% |
| 3,000 | 1,500 | 1,313 | 1,370 | 1,500 | 2,683 | 50% | 89% |
| 3,500 | 1,750 | 1,531 | 1,516 | 1,750 | 3,047 | 50% | 87% |
| 4,000 | 2,000 | 1,750 | 1,662 | 2,000 | 3,412 | 50% | 85% |
| 15 Years of Service: | | | | | | | |
| $1,500 | $ 450 | $ 394 | $ 930 | $ 450 | $1,324 | 30% | 88% |
| 2,000 | 600 | 525 | 1,076 | 600 | 1,601 | 30% | 80% |
| 2,500 | 750 | 656 | 1,223 | 750 | 1,879 | 30% | 75% |
| 3,000 | 900 | 788 | 1,370 | 900 | 2,158 | 30% | 72% |
| 3,500 | 1,050 | 919 | 1,516 | 1,050 | 2,435 | 30% | 70% |
| 4,000 | 1,200 | 1,050 | 1,662 | 1,200 | 2,712 | 30% | 68% |

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

[2] "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit and is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2019 - it does not include any amounts which might be payable to an eligible spouse or children.

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

# APPENDIX V

## AGE AND SERVICE CHARACTERISTICS OF EMPLOYEES

# City of Monroe City - General

## June 30, 2019

## 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** | 2 | | | | | | | 2 | $ 76,650 |
| **25-29** | 2 | | | | | | | 2 | $ 58,200 |
| **30-34** | | | | | | | | | |
| **35-39** | | | | | | | | | |
| **40-44** | | | | | | | | | |
| **45-49** | 1 | | | | 1 | | | 2 | $ 103,850 |
| **50-54** | 1 | | | | 1 | | | 2 | $ 77,550 |
| **55-59** | | | | | | | | | |
| **60-64** | | | 2 | 3 | | | | 5 | $ 199,820 |
| **65-69** | | | | | | | 1 | 1 | $ 40,425 |
| **70 & Over** | | | | | | | | | |
| **Totals** | **6** | | **2** | **3** | **2** | | **1** | **14** | **$ 556,495** |

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

Age: 48.9 years.

Benefit Service: 12.7 years.

Annual Pay: $ 39,750.

# City of Monroe City - Police

**June 30, 2019**

**By Attained Age and Years of Service**

| Attained Age | Years of Service to Valuation Date | | | | | | | Totals | |
|---|---|---|---|---|---|---|---|---|---|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | No. | Valuation Payroll |
| Under 20 | | | | | | | | | |
| 20-24 | 1 | | | | | | | 1 | $ 31,200 |
| 25-29 | 2 | | | | | | | 2 | $ 66,420 |
| 30-34 | 1 | | | | | | | 1 | $ 35,780 |
| 35-39 | | | | | | | | | |
| 40-44 | | 1 | | | | | | 1 | $ 48,000 |
| 45-49 | 3 | | | | | | | 3 | $ 100,780 |
| 50-54 | | | | | | | | | |
| 55-59 | | | | | | | | | |
| 60-64 | | | | | | | | | |
| 65-69 | | | | | | | | | |
| 70 & Over | | | | | | | | | |
| **Totals** | **7** | **1** | | | | | | **8** | **$ 282,180** |

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

Age: 35.8 years.

Benefit Service: 1.9 years.

Annual Pay: $ 35,273.

# APPENDIX VI

## RISK COMMENTARY

# Risk Commentary

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

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

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

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

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

The computed contribution rates shown on pages 4 thru 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.

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

August 16, 2019 E-mail

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

Dear Bob:

Enclosed is the report of the June 30, 2019 Initial Actuarial Valuation of LAGERS benefits for the employees of

City of Monroe City

Sincerely,

Mita D. Drazilov, ASA, FCA, MAAA

MDD:wp

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

GRS Retirement Consulting
800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

August 16, 2019

City of Monroe City
Monroe City, 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, 2019 Initial Valuation for the City of Monroe City dated August 16, 2019.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2019.

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,

Mita Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

# City of Monroe City - 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 | |
| 2019 | $ 556,495 | 11.0% | $61,214 | $ 751,888 | 14.3% | $79,579 | $ 945,362 | 12.1% | $67,336 | $ 798,525 |
| 2020 | 574,581 | 11.0 | 63,204 | 762,189 | 14.3 | 82,165 | 958,313 | 12.1 | 69,524 | 809,465 |
| 2021 | 593,255 | 11.0 | 65,258 | 771,800 | 14.3 | 84,835 | 970,397 | 12.1 | 71,784 | 819,672 |
| 2022 | 612,536 | 11.0 | 67,379 | 780,624 | 14.3 | 87,593 | 981,491 | 12.1 | 74,117 | 829,043 |
| 2023 | 632,443 | 11.0 | 69,569 | 788,556 | 14.3 | 90,439 | 991,464 | 12.1 | 76,526 | 837,467 |
| 2024 | 652,997 | 11.0 | 71,830 | 795,481 | 14.3 | 93,379 | 1,000,171 | 12.1 | 79,013 | 844,822 |
| 2025 | 674,219 | 11.0 | 74,164 | 801,276 | 14.3 | 96,413 | 1,007,457 | 12.1 | 81,580 | 850,976 |
| 2026 | 696,131 | 11.0 | 76,574 | 805,805 | 14.3 | 99,547 | 1,013,151 | 12.1 | 84,232 | 855,785 |
| 2027 | 718,755 | 11.0 | 79,063 | 808,921 | 14.3 | 102,782 | 1,017,069 | 12.1 | 86,969 | 859,094 |
| 2028 | 742,115 | 11.0 | 81,633 | 810,466 | 14.3 | 106,122 | 1,019,011 | 12.1 | 89,796 | 860,734 |

| 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 | |
| 2019 | $ 556,495 | 15.2% | $84,587 | $ 980,320 | 17.6% | $97,943 | $ 1,138,856 | 18.2% | $101,282 | $ 1,162,156 |
| 2020 | 574,581 | 15.2 | 87,336 | 993,750 | 17.6 | 101,126 | 1,154,458 | 18.2 | 104,574 | 1,178,077 |
| 2021 | 593,255 | 15.2 | 90,175 | 1,006,281 | 17.6 | 104,413 | 1,169,015 | 18.2 | 107,972 | 1,192,932 |
| 2022 | 612,536 | 15.2 | 93,105 | 1,017,786 | 17.6 | 107,806 | 1,182,380 | 18.2 | 111,482 | 1,206,571 |
| 2023 | 632,443 | 15.2 | 96,131 | 1,028,128 | 17.6 | 111,310 | 1,194,394 | 18.2 | 115,105 | 1,218,831 |
| 2024 | 652,997 | 15.2 | 99,256 | 1,037,157 | 17.6 | 114,927 | 1,204,884 | 18.2 | 118,845 | 1,229,535 |
| 2025 | 674,219 | 15.2 | 102,481 | 1,044,712 | 17.6 | 118,663 | 1,213,661 | 18.2 | 122,708 | 1,238,491 |
| 2026 | 696,131 | 15.2 | 105,812 | 1,050,616 | 17.6 | 122,519 | 1,220,520 | 18.2 | 126,696 | 1,245,491 |
| 2027 | 718,755 | 15.2 | 109,251 | 1,054,679 | 17.6 | 126,501 | 1,225,240 | 18.2 | 130,813 | 1,250,307 |
| 2028 | 742,115 | 15.2 | 112,801 | 1,056,693 | 17.6 | 130,612 | 1,227,580 | 18.2 | 135,065 | 1,252,694 |

| 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 | |
| 2019 | $ 556,495 | 21.1% | $117,420 | $ 1,332,355 | 21.3% | $118,533 | $ 1,344,019 | 24.6% | $136,898 | $ 1,525,832 |
| 2020 | 574,581 | 21.1 | 121,237 | 1,350,608 | 21.3 | 122,386 | 1,362,432 | 24.6 | 141,347 | 1,546,736 |
| 2021 | 593,255 | 21.1 | 125,177 | 1,367,638 | 21.3 | 126,363 | 1,379,611 | 24.6 | 145,941 | 1,566,239 |
| 2022 | 612,536 | 21.1 | 129,245 | 1,383,274 | 21.3 | 130,470 | 1,395,384 | 24.6 | 150,684 | 1,584,146 |
| 2023 | 632,443 | 21.1 | 133,445 | 1,397,329 | 21.3 | 134,710 | 1,409,562 | 24.6 | 155,581 | 1,600,242 |
| 2024 | 652,997 | 21.1 | 137,782 | 1,409,601 | 21.3 | 139,088 | 1,421,941 | 24.6 | 160,637 | 1,614,296 |
| 2025 | 674,219 | 21.1 | 142,260 | 1,419,869 | 21.3 | 143,609 | 1,432,299 | 24.6 | 165,858 | 1,626,055 |
| 2026 | 696,131 | 21.1 | 146,884 | 1,427,894 | 21.3 | 148,276 | 1,440,394 | 24.6 | 171,248 | 1,635,245 |
| 2027 | 718,755 | 21.1 | 151,657 | 1,433,416 | 21.3 | 153,095 | 1,445,964 | 24.6 | 176,814 | 1,641,569 |
| 2028 | 742,115 | 21.1 | 156,586 | 1,436,153 | 21.3 | 158,070 | 1,448,725 | 24.6 | 182,560 | 1,644,704 |

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 $28^{th}$ 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 Monroe City - General

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

### Regular Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 11.4% | $63,440 | $ 777,696 | 14.9% | $82,918 | $ 977,602 | 12.6% | $70,118 | $ 825,940 |
| 2020 | 574,581 | 11.4 | 65,502 | 788,350 | 14.9 | 85,613 | 990,995 | 12.6 | 72,397 | 837,255 |
| 2021 | 593,255 | 11.4 | 67,631 | 798,291 | 14.9 | 88,395 | 1,003,491 | 12.6 | 74,750 | 847,812 |
| 2022 | 612,536 | 11.4 | 69,829 | 807,418 | 14.9 | 91,268 | 1,014,964 | 12.6 | 77,180 | 857,505 |
| 2023 | 632,443 | 11.4 | 72,099 | 815,622 | 14.9 | 94,234 | 1,025,277 | 12.6 | 79,688 | 866,218 |
| 2024 | 652,997 | 11.4 | 74,442 | 822,785 | 14.9 | 97,297 | 1,034,281 | 12.6 | 82,278 | 873,825 |
| 2025 | 674,219 | 11.4 | 76,861 | 828,778 | 14.9 | 100,459 | 1,041,815 | 12.6 | 84,952 | 880,190 |
| 2026 | 696,131 | 11.4 | 79,359 | 833,462 | 14.9 | 103,724 | 1,047,703 | 12.6 | 87,713 | 885,165 |
| 2027 | 718,755 | 11.4 | 81,938 | 836,685 | 14.9 | 107,094 | 1,051,755 | 12.6 | 90,563 | 888,588 |
| 2028 | 742,115 | 11.4 | 84,601 | 838,283 | 14.9 | 110,575 | 1,053,763 | 12.6 | 93,506 | 890,285 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 15.7% | $87,370 | $ 1,013,763 | 18.3% | $101,839 | $ 1,177,555 | 18.9% | $105,178 | $ 1,201,675 |
| 2020 | 574,581 | 15.7 | 90,209 | 1,027,651 | 18.3 | 105,148 | 1,193,687 | 18.9 | 108,596 | 1,218,138 |
| 2021 | 593,255 | 15.7 | 93,141 | 1,040,609 | 18.3 | 108,566 | 1,208,739 | 18.9 | 112,125 | 1,233,498 |
| 2022 | 612,536 | 15.7 | 96,168 | 1,052,506 | 18.3 | 112,094 | 1,222,558 | 18.9 | 115,769 | 1,247,601 |
| 2023 | 632,443 | 15.7 | 99,294 | 1,063,200 | 18.3 | 115,737 | 1,234,980 | 18.9 | 119,532 | 1,260,278 |
| 2024 | 652,997 | 15.7 | 102,521 | 1,072,537 | 18.3 | 119,498 | 1,245,826 | 18.9 | 123,416 | 1,271,346 |
| 2025 | 674,219 | 15.7 | 105,852 | 1,080,350 | 18.3 | 123,382 | 1,254,901 | 18.9 | 127,427 | 1,280,607 |
| 2026 | 696,131 | 15.7 | 109,293 | 1,086,456 | 18.3 | 127,392 | 1,261,993 | 18.9 | 131,569 | 1,287,845 |
| 2027 | 718,755 | 15.7 | 112,845 | 1,090,657 | 18.3 | 131,532 | 1,266,873 | 18.9 | 135,845 | 1,292,825 |
| 2028 | 742,115 | 15.7 | 116,512 | 1,092,740 | 18.3 | 135,807 | 1,269,292 | 18.9 | 140,260 | 1,295,294 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 21.9% | $121,872 | $ 1,377,559 | 22.2% | $123,542 | $ 1,389,613 | 25.5% | $141,906 | $ 1,577,427 |
| 2020 | 574,581 | 21.9 | 125,833 | 1,396,431 | 22.2 | 127,557 | 1,408,650 | 25.5 | 146,518 | 1,599,038 |
| 2021 | 593,255 | 21.9 | 129,923 | 1,414,039 | 22.2 | 131,703 | 1,426,412 | 25.5 | 151,280 | 1,619,201 |
| 2022 | 612,536 | 21.9 | 134,145 | 1,430,206 | 22.2 | 135,983 | 1,442,720 | 25.5 | 156,197 | 1,637,713 |
| 2023 | 632,443 | 21.9 | 138,505 | 1,444,738 | 22.2 | 140,402 | 1,457,379 | 25.5 | 161,273 | 1,654,354 |
| 2024 | 652,997 | 21.9 | 143,006 | 1,457,426 | 22.2 | 144,965 | 1,470,178 | 25.5 | 166,514 | 1,668,883 |
| 2025 | 674,219 | 21.9 | 147,654 | 1,468,042 | 22.2 | 149,677 | 1,480,887 | 25.5 | 171,926 | 1,681,040 |
| 2026 | 696,131 | 21.9 | 152,453 | 1,476,339 | 22.2 | 154,541 | 1,489,256 | 25.5 | 177,513 | 1,690,541 |
| 2027 | 718,755 | 21.9 | 157,407 | 1,482,048 | 22.2 | 159,564 | 1,495,015 | 25.5 | 183,283 | 1,697,078 |
| 2028 | 742,115 | 21.9 | 162,523 | 1,484,878 | 22.2 | 164,750 | 1,497,870 | 25.5 | 189,239 | 1,700,319 |

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

# City of Monroe City - General

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

(0% member contributions are additional)

### Regular Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 556,495 | 14.6% | $81,248 | $ 773,139 | 18.1% | $100,726 | $ 966,423 | 15.8% | $87,926 | $ 819,418 |
| 2020 | 574,581 | 14.6 | 83,889 | 783,731 | 18.1 | 103,999 | 979,663 | 15.8 | 90,784 | 830,644 |
| 2021 | 593,255 | 14.6 | 86,615 | 793,613 | 18.1 | 107,379 | 992,016 | 15.8 | 93,734 | 841,118 |
| 2022 | 612,536 | 14.6 | 89,430 | 802,686 | 18.1 | 110,869 | 1,003,358 | 15.8 | 96,781 | 850,734 |
| 2023 | 632,443 | 14.6 | 92,337 | 810,842 | 18.1 | 114,472 | 1,013,553 | 15.8 | 99,926 | 859,378 |
| 2024 | 652,997 | 14.6 | 95,338 | 817,963 | 18.1 | 118,192 | 1,022,454 | 15.8 | 103,174 | 866,925 |
| 2025 | 674,219 | 14.6 | 98,436 | 823,921 | 18.1 | 122,034 | 1,029,902 | 15.8 | 106,527 | 873,240 |
| 2026 | 696,131 | 14.6 | 101,635 | 828,578 | 18.1 | 126,000 | 1,035,723 | 15.8 | 109,989 | 878,175 |
| 2027 | 718,755 | 14.6 | 104,938 | 831,782 | 18.1 | 130,095 | 1,039,728 | 15.8 | 113,563 | 881,571 |
| 2028 | 742,115 | 14.6 | 108,349 | 833,370 | 18.1 | 134,323 | 1,041,713 | 15.8 | 117,254 | 883,254 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 556,495 | 19.0% | $105,734 | $ 1,001,141 | 21.4% | $119,090 | $ 1,159,732 | 22.1% | $122,985 | $ 1,182,842 |
| 2020 | 574,581 | 19.0 | 109,170 | 1,014,856 | 21.4 | 122,960 | 1,175,620 | 22.1 | 126,982 | 1,199,047 |
| 2021 | 593,255 | 19.0 | 112,718 | 1,027,653 | 21.4 | 126,957 | 1,190,444 | 22.1 | 131,109 | 1,214,166 |
| 2022 | 612,536 | 19.0 | 116,382 | 1,039,402 | 21.4 | 131,083 | 1,204,054 | 22.1 | 135,370 | 1,228,047 |
| 2023 | 632,443 | 19.0 | 120,164 | 1,049,963 | 21.4 | 135,343 | 1,216,288 | 22.1 | 139,770 | 1,240,525 |
| 2024 | 652,997 | 19.0 | 124,069 | 1,059,184 | 21.4 | 139,741 | 1,226,970 | 22.1 | 144,312 | 1,251,420 |
| 2025 | 674,219 | 19.0 | 128,102 | 1,066,899 | 21.4 | 144,283 | 1,235,908 | 22.1 | 149,002 | 1,260,536 |
| 2026 | 696,131 | 19.0 | 132,265 | 1,072,929 | 21.4 | 148,972 | 1,242,893 | 22.1 | 153,845 | 1,267,660 |
| 2027 | 718,755 | 19.0 | 136,563 | 1,077,078 | 21.4 | 153,814 | 1,247,699 | 22.1 | 158,845 | 1,272,562 |
| 2028 | 742,115 | 19.0 | 141,002 | 1,079,135 | 21.4 | 158,813 | 1,250,081 | 22.1 | 164,007 | 1,274,992 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 556,495 | 25.0% | $139,124 | $ 1,353,043 | 25.2% | $140,237 | $ 1,364,611 | 28.5% | $158,601 | $ 1,546,289 |
| 2020 | 574,581 | 25.0 | 143,645 | 1,371,579 | 25.2 | 144,794 | 1,383,306 | 28.5 | 163,756 | 1,567,473 |
| 2021 | 593,255 | 25.0 | 148,314 | 1,388,874 | 25.2 | 149,500 | 1,400,749 | 28.5 | 169,078 | 1,587,238 |
| 2022 | 612,536 | 25.0 | 153,134 | 1,404,753 | 25.2 | 154,359 | 1,416,764 | 28.5 | 174,573 | 1,605,385 |
| 2023 | 632,443 | 25.0 | 158,111 | 1,419,027 | 25.2 | 159,376 | 1,431,160 | 28.5 | 180,246 | 1,621,697 |
| 2024 | 652,997 | 25.0 | 163,249 | 1,431,489 | 25.2 | 164,555 | 1,443,729 | 28.5 | 186,104 | 1,635,939 |
| 2025 | 674,219 | 25.0 | 168,555 | 1,441,916 | 25.2 | 169,903 | 1,454,246 | 28.5 | 192,152 | 1,647,856 |
| 2026 | 696,131 | 25.0 | 174,033 | 1,450,065 | 25.2 | 175,425 | 1,462,465 | 28.5 | 198,397 | 1,657,169 |
| 2027 | 718,755 | 25.0 | 179,689 | 1,455,672 | 25.2 | 181,126 | 1,468,120 | 28.5 | 204,845 | 1,663,577 |
| 2028 | 742,115 | 25.0 | 185,529 | 1,458,452 | 25.2 | 187,013 | 1,470,923 | 28.5 | 211,503 | 1,666,754 |

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

# City of Monroe City - 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 15.0% | $83,474 | $ 798,921 | 18.7% | $104,065 | $ 998,674 | 16.3% | $90,709 | $ 846,811 |
| 2020 | 574,581 | 15.0 | 86,187 | 809,866 | 18.7 | 107,447 | 1,012,356 | 16.3 | 93,657 | 858,412 |
| 2021 | 593,255 | 15.0 | 88,988 | 820,078 | 18.7 | 110,939 | 1,025,121 | 16.3 | 96,701 | 869,236 |
| 2022 | 612,536 | 15.0 | 91,880 | 829,454 | 18.7 | 114,544 | 1,036,841 | 16.3 | 99,843 | 879,174 |
| 2023 | 632,443 | 15.0 | 94,866 | 837,882 | 18.7 | 118,267 | 1,047,376 | 16.3 | 103,088 | 888,107 |
| 2024 | 652,997 | 15.0 | 97,950 | 845,241 | 18.7 | 122,110 | 1,056,574 | 16.3 | 106,439 | 895,907 |
| 2025 | 674,219 | 15.0 | 101,133 | 851,398 | 18.7 | 126,079 | 1,064,270 | 16.3 | 109,898 | 902,433 |
| 2026 | 696,131 | 15.0 | 104,420 | 856,210 | 18.7 | 130,176 | 1,070,285 | 16.3 | 113,469 | 907,533 |
| 2027 | 718,755 | 15.0 | 107,813 | 859,521 | 18.7 | 134,407 | 1,074,424 | 16.3 | 117,157 | 911,042 |
| 2028 | 742,115 | 15.0 | 111,317 | 861,162 | 18.7 | 138,776 | 1,076,476 | 16.3 | 120,965 | 912,782 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 19.6% | $109,073 | $ 1,034,595 | 22.1% | $122,985 | $ 1,198,376 | 22.8% | $126,881 | $ 1,222,334 |
| 2020 | 574,581 | 19.6 | 112,618 | 1,048,769 | 22.1 | 126,982 | 1,214,794 | 22.8 | 131,004 | 1,239,080 |
| 2021 | 593,255 | 19.6 | 116,278 | 1,061,993 | 22.1 | 131,109 | 1,230,112 | 22.8 | 135,262 | 1,254,704 |
| 2022 | 612,536 | 19.6 | 120,057 | 1,074,135 | 22.1 | 135,370 | 1,244,176 | 22.8 | 139,658 | 1,269,049 |
| 2023 | 632,443 | 19.6 | 123,959 | 1,085,049 | 22.1 | 139,770 | 1,256,818 | 22.8 | 144,197 | 1,281,944 |
| 2024 | 652,997 | 19.6 | 127,987 | 1,094,578 | 22.1 | 144,312 | 1,267,856 | 22.8 | 148,883 | 1,293,202 |
| 2025 | 674,219 | 19.6 | 132,147 | 1,102,551 | 22.1 | 149,002 | 1,277,091 | 22.8 | 153,722 | 1,302,622 |
| 2026 | 696,131 | 19.6 | 136,442 | 1,108,782 | 22.1 | 153,845 | 1,284,309 | 22.8 | 158,718 | 1,309,984 |
| 2027 | 718,755 | 19.6 | 140,876 | 1,113,070 | 22.1 | 158,845 | 1,289,275 | 22.8 | 163,876 | 1,315,050 |
| 2028 | 742,115 | 19.6 | 145,455 | 1,115,195 | 22.1 | 164,007 | 1,291,737 | 22.8 | 169,202 | 1,317,561 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 25.8% | $143,576 | $ 1,398,160 | 26.1% | $145,245 | $ 1,410,141 | 29.4% | $163,610 | $ 1,597,787 |
| 2020 | 574,581 | 25.8 | 148,242 | 1,417,315 | 26.1 | 149,966 | 1,429,460 | 29.4 | 168,927 | 1,619,676 |
| 2021 | 593,255 | 25.8 | 153,060 | 1,435,186 | 26.1 | 154,840 | 1,447,485 | 29.4 | 174,417 | 1,640,099 |
| 2022 | 612,536 | 25.8 | 158,034 | 1,451,594 | 26.1 | 159,872 | 1,464,034 | 29.4 | 180,086 | 1,658,850 |
| 2023 | 632,443 | 25.8 | 163,170 | 1,466,344 | 26.1 | 165,068 | 1,478,910 | 29.4 | 185,938 | 1,675,705 |
| 2024 | 652,997 | 25.8 | 168,473 | 1,479,222 | 26.1 | 170,432 | 1,491,898 | 29.4 | 191,981 | 1,690,422 |
| 2025 | 674,219 | 25.8 | 173,949 | 1,489,997 | 26.1 | 175,971 | 1,502,765 | 29.4 | 198,220 | 1,702,736 |
| 2026 | 696,131 | 25.8 | 179,602 | 1,498,418 | 26.1 | 181,690 | 1,511,258 | 29.4 | 204,663 | 1,712,359 |
| 2027 | 718,755 | 25.8 | 185,439 | 1,504,212 | 26.1 | 187,595 | 1,517,102 | 29.4 | 211,314 | 1,718,981 |
| 2028 | 742,115 | 25.8 | 191,466 | 1,507,084 | 26.1 | 193,692 | 1,519,999 | 29.4 | 218,182 | 1,722,263 |

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

# City of Monroe City - 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 12.0% | $66,779 | $ 809,381 | 15.6% | $86,813 | $ 1,016,524 | 14.3% | $79,579 | $ 924,482 |
| 2020 | 574,581 | 12.0 | 68,950 | 820,469 | 15.6 | 89,635 | 1,030,450 | 14.3 | 82,165 | 937,147 |
| 2021 | 593,255 | 12.0 | 71,191 | 830,815 | 15.6 | 92,548 | 1,043,443 | 14.3 | 84,835 | 948,964 |
| 2022 | 612,536 | 12.0 | 73,504 | 840,314 | 15.6 | 95,556 | 1,055,373 | 14.3 | 87,593 | 959,813 |
| 2023 | 632,443 | 12.0 | 75,893 | 848,852 | 15.6 | 98,661 | 1,066,097 | 14.3 | 90,439 | 969,566 |
| 2024 | 652,997 | 12.0 | 78,360 | 856,307 | 15.6 | 101,868 | 1,075,460 | 14.3 | 93,379 | 978,081 |
| 2025 | 674,219 | 12.0 | 80,906 | 862,545 | 15.6 | 105,178 | 1,083,294 | 14.3 | 96,413 | 985,206 |
| 2026 | 696,131 | 12.0 | 83,536 | 867,420 | 15.6 | 108,596 | 1,089,416 | 14.3 | 99,547 | 990,774 |
| 2027 | 718,755 | 12.0 | 86,251 | 870,774 | 15.6 | 112,126 | 1,093,629 | 14.3 | 102,782 | 994,605 |
| 2028 | 742,115 | 12.0 | 89,054 | 872,437 | 15.6 | 115,770 | 1,095,717 | 14.3 | 106,122 | 996,504 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 17.3% | $96,274 | $ 1,102,865 | 19.1% | $106,291 | $ 1,223,676 | 20.3% | $112,968 | $ 1,281,247 |
| 2020 | 574,581 | 17.3 | 99,403 | 1,117,974 | 19.1 | 109,745 | 1,240,440 | 20.3 | 116,640 | 1,298,800 |
| 2021 | 593,255 | 17.3 | 102,633 | 1,132,071 | 19.1 | 113,312 | 1,256,081 | 20.3 | 120,431 | 1,315,177 |
| 2022 | 612,536 | 17.3 | 105,969 | 1,145,014 | 19.1 | 116,994 | 1,270,442 | 20.3 | 124,345 | 1,330,213 |
| 2023 | 632,443 | 17.3 | 109,413 | 1,156,648 | 19.1 | 120,797 | 1,283,351 | 20.3 | 128,386 | 1,343,729 |
| 2024 | 652,997 | 17.3 | 112,968 | 1,166,806 | 19.1 | 124,722 | 1,294,622 | 20.3 | 132,558 | 1,355,530 |
| 2025 | 674,219 | 17.3 | 116,640 | 1,175,305 | 19.1 | 128,776 | 1,304,052 | 20.3 | 136,866 | 1,365,404 |
| 2026 | 696,131 | 17.3 | 120,431 | 1,181,947 | 19.1 | 132,961 | 1,311,422 | 20.3 | 141,315 | 1,373,121 |
| 2027 | 718,755 | 17.3 | 124,345 | 1,186,518 | 19.1 | 137,282 | 1,316,493 | 20.3 | 145,907 | 1,378,431 |
| 2028 | 742,115 | 17.3 | 128,386 | 1,188,784 | 19.1 | 141,744 | 1,319,007 | 20.3 | 150,649 | 1,381,063 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 556,495 | 22.8% | $126,881 | $ 1,430,984 | 23.4% | $130,220 | $ 1,459,753 | 26.5% | $147,471 | $ 1,638,264 |
| 2020 | 574,581 | 22.8 | 131,004 | 1,450,588 | 23.4 | 134,452 | 1,479,751 | 26.5 | 152,264 | 1,660,708 |
| 2021 | 593,255 | 22.8 | 135,262 | 1,468,879 | 23.4 | 138,822 | 1,498,410 | 26.5 | 157,213 | 1,681,648 |
| 2022 | 612,536 | 22.8 | 139,658 | 1,485,673 | 23.4 | 143,333 | 1,515,541 | 26.5 | 162,322 | 1,700,874 |
| 2023 | 632,443 | 22.8 | 144,197 | 1,500,769 | 23.4 | 147,992 | 1,530,940 | 26.5 | 167,597 | 1,718,156 |
| 2024 | 652,997 | 22.8 | 148,883 | 1,513,949 | 23.4 | 152,801 | 1,544,385 | 26.5 | 173,044 | 1,733,245 |
| 2025 | 674,219 | 22.8 | 153,722 | 1,524,977 | 23.4 | 157,767 | 1,555,635 | 26.5 | 178,668 | 1,745,871 |
| 2026 | 696,131 | 22.8 | 158,718 | 1,533,596 | 23.4 | 162,895 | 1,564,427 | 26.5 | 184,475 | 1,755,738 |
| 2027 | 718,755 | 22.8 | 163,876 | 1,539,526 | 23.4 | 168,189 | 1,570,477 | 26.5 | 190,470 | 1,762,528 |
| 2028 | 742,115 | 22.8 | 169,202 | 1,542,466 | 23.4 | 173,655 | 1,573,476 | 26.5 | 196,660 | 1,765,894 |

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$^{th}$ 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 Monroe City - General

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

### Rule of 80 Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 12.4% | $69,005 | $ 837,435 | 16.2% | $90,152 | $ 1,051,589 | 15.0% | $83,474 | $ 956,685 |
| 2020 | 574,581 | 12.4 | 71,248 | 848,908 | 16.2 | 93,082 | 1,065,996 | 15.0 | 86,187 | 969,791 |
| 2021 | 593,255 | 12.4 | 73,564 | 859,612 | 16.2 | 96,107 | 1,079,438 | 15.0 | 88,988 | 982,019 |
| 2022 | 612,536 | 12.4 | 75,954 | 869,440 | 16.2 | 99,231 | 1,091,779 | 15.0 | 91,880 | 993,246 |
| 2023 | 632,443 | 12.4 | 78,423 | 878,274 | 16.2 | 102,456 | 1,102,872 | 15.0 | 94,866 | 1,003,338 |
| 2024 | 652,997 | 12.4 | 80,972 | 885,987 | 16.2 | 105,786 | 1,112,558 | 15.0 | 97,950 | 1,012,150 |
| 2025 | 674,219 | 12.4 | 83,603 | 892,441 | 16.2 | 109,223 | 1,120,662 | 15.0 | 101,133 | 1,019,523 |
| 2026 | 696,131 | 12.4 | 86,320 | 897,485 | 16.2 | 112,773 | 1,126,996 | 15.0 | 104,420 | 1,025,285 |
| 2027 | 718,755 | 12.4 | 89,126 | 900,956 | 16.2 | 116,438 | 1,131,354 | 15.0 | 107,813 | 1,029,250 |
| 2028 | 742,115 | 12.4 | 92,022 | 902,676 | 16.2 | 120,223 | 1,133,514 | 15.0 | 111,317 | 1,031,215 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 18.0% | $100,169 | $ 1,141,037 | 19.8% | $110,186 | $ 1,265,866 | 21.1% | $117,420 | $ 1,325,492 |
| 2020 | 574,581 | 18.0 | 103,425 | 1,156,669 | 19.8 | 113,767 | 1,283,208 | 21.1 | 121,237 | 1,343,651 |
| 2021 | 593,255 | 18.0 | 106,786 | 1,171,254 | 19.8 | 117,464 | 1,299,388 | 21.1 | 125,177 | 1,360,594 |
| 2022 | 612,536 | 18.0 | 110,256 | 1,184,645 | 19.8 | 121,282 | 1,314,244 | 21.1 | 129,245 | 1,376,150 |
| 2023 | 632,443 | 18.0 | 113,840 | 1,196,682 | 19.8 | 125,224 | 1,327,598 | 21.1 | 133,445 | 1,390,133 |
| 2024 | 652,997 | 18.0 | 117,539 | 1,207,192 | 19.8 | 129,293 | 1,339,257 | 21.1 | 137,782 | 1,402,342 |
| 2025 | 674,219 | 18.0 | 121,359 | 1,215,986 | 19.8 | 133,495 | 1,349,013 | 21.1 | 142,260 | 1,412,557 |
| 2026 | 696,131 | 18.0 | 125,304 | 1,222,858 | 19.8 | 137,834 | 1,356,637 | 21.1 | 146,884 | 1,420,540 |
| 2027 | 718,755 | 18.0 | 129,376 | 1,227,587 | 19.8 | 142,313 | 1,361,883 | 21.1 | 151,657 | 1,426,033 |
| 2028 | 742,115 | 18.0 | 133,581 | 1,229,931 | 19.8 | 146,939 | 1,364,483 | 21.1 | 156,586 | 1,428,756 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 23.7% | $131,889 | $ 1,480,232 | 24.3% | $135,228 | $ 1,510,036 | 27.5% | $153,036 | $ 1,694,465 |
| 2020 | 574,581 | 23.7 | 136,176 | 1,500,511 | 24.3 | 139,623 | 1,530,723 | 27.5 | 158,010 | 1,717,679 |
| 2021 | 593,255 | 23.7 | 140,601 | 1,519,431 | 24.3 | 144,161 | 1,550,024 | 27.5 | 163,145 | 1,739,338 |
| 2022 | 612,536 | 23.7 | 145,171 | 1,536,803 | 24.3 | 148,846 | 1,567,745 | 27.5 | 168,447 | 1,759,224 |
| 2023 | 632,443 | 23.7 | 149,889 | 1,552,418 | 24.3 | 153,684 | 1,583,675 | 27.5 | 173,922 | 1,777,099 |
| 2024 | 652,997 | 23.7 | 154,760 | 1,566,052 | 24.3 | 158,678 | 1,597,583 | 27.5 | 179,574 | 1,792,706 |
| 2025 | 674,219 | 23.7 | 159,790 | 1,577,460 | 24.3 | 163,835 | 1,609,220 | 27.5 | 185,410 | 1,805,765 |
| 2026 | 696,131 | 23.7 | 164,983 | 1,586,375 | 24.3 | 169,160 | 1,618,315 | 27.5 | 191,436 | 1,815,971 |
| 2027 | 718,755 | 23.7 | 170,345 | 1,592,510 | 24.3 | 174,657 | 1,624,573 | 27.5 | 197,658 | 1,822,993 |
| 2028 | 742,115 | 23.7 | 175,881 | 1,595,551 | 24.3 | 180,334 | 1,627,675 | 27.5 | 204,082 | 1,826,474 |

Notes regarding the above projections:

1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 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$^{th}$ 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 Monroe City - General

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)
(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

| | | L-1 Benefit Program | | | L-3 Benefit Program | | | LT-4(65) Benefit Program | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability |
| 2019 | $ 556,495 | 15.5% | $86,257 | $ 828,005 | 19.4% | $107,960 | $ 1,034,991 | 18.0% | $100,169 | $ 942,640 |
| 2020 | 574,581 | 15.5 | 89,060 | 839,349 | 19.4 | 111,469 | 1,049,170 | 18.0 | 103,425 | 955,554 |
| 2021 | 593,255 | 15.5 | 91,955 | 849,933 | 19.4 | 115,091 | 1,062,399 | 18.0 | 106,786 | 967,603 |
| 2022 | 612,536 | 15.5 | 94,943 | 859,650 | 19.4 | 118,832 | 1,074,545 | 18.0 | 110,256 | 978,666 |
| 2023 | 632,443 | 15.5 | 98,029 | 868,385 | 19.4 | 122,694 | 1,085,463 | 18.0 | 113,840 | 988,610 |
| 2024 | 652,997 | 15.5 | 101,215 | 876,011 | 19.4 | 126,681 | 1,094,996 | 18.0 | 117,539 | 997,292 |
| 2025 | 674,219 | 15.5 | 104,504 | 882,392 | 19.4 | 130,798 | 1,102,972 | 18.0 | 121,359 | 1,004,557 |
| 2026 | 696,131 | 15.5 | 107,900 | 887,379 | 19.4 | 135,049 | 1,109,206 | 18.0 | 125,304 | 1,010,234 |
| 2027 | 718,755 | 15.5 | 111,407 | 890,811 | 19.4 | 139,438 | 1,113,495 | 18.0 | 129,376 | 1,014,141 |
| 2028 | 742,115 | 15.5 | 115,028 | 892,512 | 19.4 | 143,970 | 1,115,621 | 18.0 | 133,581 | 1,016,077 |

| | | LT-5(65) Benefit Program | | | L-7 Benefit Program | | | LT-8(65) Benefit Program | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability |
| 2019 | $ 556,495 | 21.1% | $117,420 | $ 1,120,975 | 23.0% | $127,994 | $ 1,241,967 | 24.2% | $134,672 | $ 1,299,275 |
| 2020 | 574,581 | 21.1 | 121,237 | 1,136,332 | 23.0 | 132,154 | 1,258,982 | 24.2 | 139,049 | 1,317,075 |
| 2021 | 593,255 | 21.1 | 125,177 | 1,150,660 | 23.0 | 136,449 | 1,274,857 | 24.2 | 143,568 | 1,333,682 |
| 2022 | 612,536 | 21.1 | 129,245 | 1,163,815 | 23.0 | 140,883 | 1,289,432 | 24.2 | 148,234 | 1,348,930 |
| 2023 | 632,443 | 21.1 | 133,445 | 1,175,640 | 23.0 | 145,462 | 1,302,534 | 24.2 | 153,051 | 1,362,636 |
| 2024 | 652,997 | 21.1 | 137,782 | 1,185,965 | 23.0 | 150,189 | 1,313,973 | 24.2 | 158,025 | 1,374,603 |
| 2025 | 674,219 | 21.1 | 142,260 | 1,194,604 | 23.0 | 155,070 | 1,323,544 | 24.2 | 163,161 | 1,384,616 |
| 2026 | 696,131 | 21.1 | 146,884 | 1,201,356 | 23.0 | 160,110 | 1,331,024 | 24.2 | 168,464 | 1,392,441 |
| 2027 | 718,755 | 21.1 | 151,657 | 1,206,002 | 23.0 | 165,314 | 1,336,171 | 24.2 | 173,939 | 1,397,826 |
| 2028 | 742,115 | 21.1 | 156,586 | 1,208,305 | 23.0 | 170,686 | 1,338,722 | 24.2 | 179,592 | 1,400,495 |

| | | L-12 Benefit Program | | | LT-14(65) Benefit Program | | | L-6 Benefit Program | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded | Estimated Employer Contribution | | Unfunded |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability | As a % of Payroll | Annual Dollars | Actuarial Accrued Liability |
| 2019 | $ 556,495 | 26.7% | $148,584 | $ 1,448,959 | 27.3% | $151,923 | $ 1,477,608 | 30.4% | $169,174 | $ 1,655,976 |
| 2020 | 574,581 | 26.7 | 153,413 | 1,468,810 | 27.3 | 156,861 | 1,497,851 | 30.4 | 174,673 | 1,678,663 |
| 2021 | 593,255 | 26.7 | 158,399 | 1,487,331 | 27.3 | 161,959 | 1,516,738 | 30.4 | 180,350 | 1,699,830 |
| 2022 | 612,536 | 26.7 | 163,547 | 1,504,336 | 27.3 | 167,222 | 1,534,079 | 30.4 | 186,211 | 1,719,264 |
| 2023 | 632,443 | 26.7 | 168,862 | 1,519,621 | 27.3 | 172,657 | 1,549,667 | 30.4 | 192,263 | 1,736,733 |
| 2024 | 652,997 | 26.7 | 174,350 | 1,532,967 | 27.3 | 178,268 | 1,563,277 | 30.4 | 198,511 | 1,751,986 |
| 2025 | 674,219 | 26.7 | 180,016 | 1,544,134 | 27.3 | 184,062 | 1,574,664 | 30.4 | 204,963 | 1,764,748 |
| 2026 | 696,131 | 26.7 | 185,867 | 1,552,861 | 27.3 | 190,044 | 1,583,563 | 30.4 | 211,624 | 1,774,722 |
| 2027 | 718,755 | 26.7 | 191,908 | 1,558,866 | 27.3 | 196,220 | 1,589,687 | 30.4 | 218,502 | 1,781,585 |
| 2028 | 742,115 | 26.7 | 198,145 | 1,561,843 | 27.3 | 202,597 | 1,592,722 | 30.4 | 225,603 | 1,784,987 |

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

# City of Monroe City - General

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)
(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 16.1% | $89,596 | $ 856,046 | 19.9% | $110,743 | $ 1,070,054 | 18.5% | $102,952 | $ 974,815 |
| 2020 | 574,581 | 16.1 | 92,508 | 867,774 | 19.9 | 114,342 | 1,084,714 | 18.5 | 106,297 | 988,170 |
| 2021 | 593,255 | 16.1 | 95,514 | 878,716 | 19.9 | 118,058 | 1,098,392 | 18.5 | 109,752 | 1,000,630 |
| 2022 | 612,536 | 16.1 | 98,618 | 888,762 | 19.9 | 121,895 | 1,110,950 | 18.5 | 113,319 | 1,012,070 |
| 2023 | 632,443 | 16.1 | 101,823 | 897,793 | 19.9 | 125,856 | 1,122,238 | 18.5 | 117,002 | 1,022,354 |
| 2024 | 652,997 | 16.1 | 105,133 | 905,678 | 19.9 | 129,946 | 1,132,094 | 18.5 | 120,804 | 1,031,333 |
| 2025 | 674,219 | 16.1 | 108,549 | 912,275 | 19.9 | 134,170 | 1,140,341 | 18.5 | 124,731 | 1,038,846 |
| 2026 | 696,131 | 16.1 | 112,077 | 917,431 | 19.9 | 138,530 | 1,146,786 | 18.5 | 128,784 | 1,044,717 |
| 2027 | 718,755 | 16.1 | 115,720 | 920,979 | 19.9 | 143,032 | 1,151,221 | 18.5 | 132,970 | 1,048,757 |
| 2028 | 742,115 | 16.1 | 119,481 | 922,738 | 19.9 | 147,681 | 1,153,419 | 18.5 | 137,291 | 1,050,760 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 21.8% | $121,316 | $ 1,159,115 | 23.7% | $131,889 | $ 1,284,070 | 24.9% | $138,567 | $ 1,343,465 |
| 2020 | 574,581 | 21.8 | 125,259 | 1,174,995 | 23.7 | 136,176 | 1,301,662 | 24.9 | 143,071 | 1,361,870 |
| 2021 | 593,255 | 21.8 | 129,330 | 1,189,811 | 23.7 | 140,601 | 1,318,075 | 24.9 | 147,720 | 1,379,042 |
| 2022 | 612,536 | 21.8 | 133,533 | 1,203,414 | 23.7 | 145,171 | 1,333,144 | 24.9 | 152,521 | 1,394,808 |
| 2023 | 632,443 | 21.8 | 137,873 | 1,215,642 | 23.7 | 149,889 | 1,346,690 | 24.9 | 157,478 | 1,408,981 |
| 2024 | 652,997 | 21.8 | 142,353 | 1,226,318 | 23.7 | 154,760 | 1,358,517 | 24.9 | 162,596 | 1,421,355 |
| 2025 | 674,219 | 21.8 | 146,980 | 1,235,251 | 23.7 | 159,790 | 1,368,413 | 24.9 | 167,881 | 1,431,709 |
| 2026 | 696,131 | 21.8 | 151,757 | 1,242,232 | 23.7 | 164,983 | 1,376,147 | 24.9 | 173,337 | 1,439,801 |
| 2027 | 718,755 | 21.8 | 156,689 | 1,247,036 | 23.7 | 170,345 | 1,381,469 | 24.9 | 178,970 | 1,445,369 |
| 2028 | 742,115 | 21.8 | 161,781 | 1,249,417 | 23.7 | 175,881 | 1,384,107 | 24.9 | 184,787 | 1,448,129 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 556,495 | 27.6% | $153,593 | $ 1,498,100 | 28.2% | $156,932 | $ 1,527,802 | 31.4% | $174,739 | $ 1,712,092 |
| 2020 | 574,581 | 27.6 | 158,584 | 1,518,624 | 28.2 | 162,032 | 1,548,733 | 31.4 | 180,418 | 1,735,547 |
| 2021 | 593,255 | 27.6 | 163,738 | 1,537,773 | 28.2 | 167,298 | 1,568,262 | 31.4 | 186,282 | 1,757,431 |
| 2022 | 612,536 | 27.6 | 169,060 | 1,555,354 | 28.2 | 172,735 | 1,586,192 | 31.4 | 192,336 | 1,777,524 |
| 2023 | 632,443 | 27.6 | 174,554 | 1,571,158 | 28.2 | 178,349 | 1,602,309 | 31.4 | 198,587 | 1,795,585 |
| 2024 | 652,997 | 27.6 | 180,227 | 1,584,956 | 28.2 | 184,145 | 1,616,381 | 31.4 | 205,041 | 1,811,354 |
| 2025 | 674,219 | 27.6 | 186,084 | 1,596,501 | 28.2 | 190,130 | 1,628,155 | 31.4 | 211,705 | 1,824,549 |
| 2026 | 696,131 | 27.6 | 192,132 | 1,605,524 | 28.2 | 196,309 | 1,637,357 | 31.4 | 218,585 | 1,834,861 |
| 2027 | 718,755 | 27.6 | 198,376 | 1,611,733 | 28.2 | 202,689 | 1,643,689 | 31.4 | 225,689 | 1,841,956 |
| 2028 | 742,115 | 27.6 | 204,824 | 1,614,811 | 28.2 | 209,276 | 1,646,828 | 31.4 | 233,024 | 1,845,473 |

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

# City of Monroe City - Police

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

### Regular Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 282,180 | 5.6% | $15,802 | $ 47,272 | 7.6% | $21,446 | $ 60,846 | 7.4% | $20,881 | $ 61,060 |
| 2020 | 291,351 | 5.6 | 16,316 | 47,920 | 7.6 | 22,143 | 61,680 | 7.4 | 21,560 | 61,897 |
| 2021 | 300,820 | 5.6 | 16,846 | 48,524 | 7.6 | 22,862 | 62,458 | 7.4 | 22,261 | 62,677 |
| 2022 | 310,597 | 5.6 | 17,393 | 49,079 | 7.6 | 23,605 | 63,172 | 7.4 | 22,984 | 63,394 |
| 2023 | 320,691 | 5.6 | 17,959 | 49,578 | 7.6 | 24,373 | 63,814 | 7.4 | 23,731 | 64,038 |
| 2024 | 331,113 | 5.6 | 18,542 | 50,013 | 7.6 | 25,165 | 64,374 | 7.4 | 24,502 | 64,600 |
| 2025 | 341,874 | 5.6 | 19,145 | 50,377 | 7.6 | 25,982 | 64,843 | 7.4 | 25,299 | 65,071 |
| 2026 | 352,985 | 5.6 | 19,767 | 50,662 | 7.6 | 26,827 | 65,209 | 7.4 | 26,121 | 65,439 |
| 2027 | 364,457 | 5.6 | 20,410 | 50,858 | 7.6 | 27,699 | 65,461 | 7.4 | 26,970 | 65,692 |
| 2028 | 376,302 | 5.6 | 21,073 | 50,955 | 7.6 | 28,599 | 65,586 | 7.4 | 27,846 | 65,817 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 282,180 | 9.0% | $25,396 | $ 71,207 | 9.7% | $27,371 | $ 74,430 | 10.6% | $29,911 | $ 81,340 |
| 2020 | 291,351 | 9.0 | 26,222 | 72,183 | 9.7 | 28,261 | 75,450 | 10.6 | 30,883 | 82,454 |
| 2021 | 300,820 | 9.0 | 27,074 | 73,093 | 9.7 | 29,180 | 76,401 | 10.6 | 31,887 | 83,494 |
| 2022 | 310,597 | 9.0 | 27,954 | 73,929 | 9.7 | 30,128 | 77,274 | 10.6 | 32,923 | 84,449 |
| 2023 | 320,691 | 9.0 | 28,862 | 74,680 | 9.7 | 31,107 | 78,059 | 10.6 | 33,993 | 85,307 |
| 2024 | 331,113 | 9.0 | 29,800 | 75,336 | 9.7 | 32,118 | 78,745 | 10.6 | 35,098 | 86,056 |
| 2025 | 341,874 | 9.0 | 30,769 | 75,885 | 9.7 | 33,162 | 79,319 | 10.6 | 36,239 | 86,683 |
| 2026 | 352,985 | 9.0 | 31,769 | 76,314 | 9.7 | 34,240 | 79,767 | 10.6 | 37,416 | 87,173 |
| 2027 | 364,457 | 9.0 | 32,801 | 76,609 | 9.7 | 35,352 | 80,075 | 10.6 | 38,632 | 87,510 |
| 2028 | 376,302 | 9.0 | 33,867 | 76,755 | 9.7 | 36,501 | 80,228 | 10.6 | 39,888 | 87,677 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability | As a % of Payroll | Annual Dollars | Accrued Liability |
| 2019 | $ 282,180 | 11.9% | $33,579 | $ 87,846 | 12.3% | $34,708 | $ 91,321 | 13.9% | $39,223 | $ 101,229 |
| 2020 | 291,351 | 11.9 | 34,671 | 89,049 | 12.3 | 35,836 | 92,572 | 13.9 | 40,498 | 102,616 |
| 2021 | 300,820 | 11.9 | 35,798 | 90,172 | 12.3 | 37,001 | 93,739 | 13.9 | 41,814 | 103,910 |
| 2022 | 310,597 | 11.9 | 36,961 | 91,203 | 12.3 | 38,203 | 94,811 | 13.9 | 43,173 | 105,098 |
| 2023 | 320,691 | 11.9 | 38,162 | 92,130 | 12.3 | 39,445 | 95,774 | 13.9 | 44,576 | 106,166 |
| 2024 | 331,113 | 11.9 | 39,402 | 92,939 | 12.3 | 40,727 | 96,615 | 13.9 | 46,025 | 107,098 |
| 2025 | 341,874 | 11.9 | 40,683 | 93,616 | 12.3 | 42,051 | 97,319 | 13.9 | 47,520 | 107,878 |
| 2026 | 352,985 | 11.9 | 42,005 | 94,145 | 12.3 | 43,417 | 97,869 | 13.9 | 49,065 | 108,488 |
| 2027 | 364,457 | 11.9 | 43,370 | 94,509 | 12.3 | 44,828 | 98,247 | 13.9 | 50,660 | 108,908 |
| 2028 | 376,302 | 11.9 | 44,780 | 94,689 | 12.3 | 46,285 | 98,435 | 13.9 | 52,306 | 109,116 |

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

# City of Monroe City - Police

## 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 5.9% | $16,649 | $ 49,235 | 8.0% | $22,574 | $ 63,290 | 7.8% | $22,010 | $ 63,558 |
| 2020 | 291,351 | 5.9 | 17,190 | 49,910 | 8.0 | 23,308 | 64,157 | 7.8 | 22,725 | 64,429 |
| 2021 | 300,820 | 5.9 | 17,748 | 50,539 | 8.0 | 24,066 | 64,966 | 7.8 | 23,464 | 65,241 |
| 2022 | 310,597 | 5.9 | 18,325 | 51,117 | 8.0 | 24,848 | 65,709 | 7.8 | 24,227 | 65,987 |
| 2023 | 320,691 | 5.9 | 18,921 | 51,636 | 8.0 | 25,655 | 66,377 | 7.8 | 25,014 | 66,657 |
| 2024 | 331,113 | 5.9 | 19,536 | 52,089 | 8.0 | 26,489 | 66,960 | 7.8 | 25,827 | 67,242 |
| 2025 | 341,874 | 5.9 | 20,171 | 52,468 | 8.0 | 27,350 | 67,448 | 7.8 | 26,666 | 67,732 |
| 2026 | 352,985 | 5.9 | 20,826 | 52,765 | 8.0 | 28,239 | 67,829 | 7.8 | 27,533 | 68,115 |
| 2027 | 364,457 | 5.9 | 21,503 | 52,969 | 8.0 | 29,157 | 68,091 | 7.8 | 28,428 | 68,378 |
| 2028 | 376,302 | 5.9 | 22,202 | 53,070 | 8.0 | 30,104 | 68,221 | 7.8 | 29,352 | 68,509 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 9.5% | $26,807 | $ 74,064 | 10.1% | $28,500 | $ 77,373 | 11.1% | $31,322 | $ 84,520 |
| 2020 | 291,351 | 9.5 | 27,678 | 75,079 | 10.1 | 29,426 | 78,433 | 11.1 | 32,340 | 85,678 |
| 2021 | 300,820 | 9.5 | 28,578 | 76,026 | 10.1 | 30,383 | 79,422 | 11.1 | 33,391 | 86,758 |
| 2022 | 310,597 | 9.5 | 29,507 | 76,895 | 10.1 | 31,370 | 80,330 | 11.1 | 34,476 | 87,750 |
| 2023 | 320,691 | 9.5 | 30,466 | 77,676 | 10.1 | 32,390 | 81,146 | 11.1 | 35,597 | 88,642 |
| 2024 | 331,113 | 9.5 | 31,456 | 78,358 | 10.1 | 33,442 | 81,859 | 11.1 | 36,754 | 89,420 |
| 2025 | 341,874 | 9.5 | 32,478 | 78,929 | 10.1 | 34,529 | 82,455 | 11.1 | 37,948 | 90,071 |
| 2026 | 352,985 | 9.5 | 33,534 | 79,375 | 10.1 | 35,651 | 82,921 | 11.1 | 39,181 | 90,580 |
| 2027 | 364,457 | 9.5 | 34,623 | 79,682 | 10.1 | 36,810 | 83,242 | 11.1 | 40,455 | 90,930 |
| 2028 | 376,302 | 9.5 | 35,749 | 79,834 | 10.1 | 38,007 | 83,401 | 11.1 | 41,770 | 91,104 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 12.3% | $34,708 | $ 91,244 | 12.8% | $36,119 | $ 94,822 | 14.5% | $40,916 | $ 105,126 |
| 2020 | 291,351 | 12.3 | 35,836 | 92,494 | 12.8 | 37,293 | 96,121 | 14.5 | 42,246 | 106,566 |
| 2021 | 300,820 | 12.3 | 37,001 | 93,660 | 12.8 | 38,505 | 97,333 | 14.5 | 43,619 | 107,910 |
| 2022 | 310,597 | 12.3 | 38,203 | 94,731 | 12.8 | 39,756 | 98,446 | 14.5 | 45,037 | 109,144 |
| 2023 | 320,691 | 12.3 | 39,445 | 95,694 | 12.8 | 41,048 | 99,446 | 14.5 | 46,500 | 110,253 |
| 2024 | 331,113 | 12.3 | 40,727 | 96,534 | 12.8 | 42,382 | 100,319 | 14.5 | 48,011 | 111,221 |
| 2025 | 341,874 | 12.3 | 42,051 | 97,237 | 12.8 | 43,760 | 101,050 | 14.5 | 49,572 | 112,031 |
| 2026 | 352,985 | 12.3 | 43,417 | 97,787 | 12.8 | 45,182 | 101,621 | 14.5 | 51,183 | 112,664 |
| 2027 | 364,457 | 12.3 | 44,828 | 98,165 | 12.8 | 46,650 | 102,014 | 14.5 | 52,846 | 113,100 |
| 2028 | 376,302 | 12.3 | 46,285 | 98,352 | 12.8 | 48,167 | 102,209 | 14.5 | 54,564 | 113,316 |

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

# City of Monroe City - Police

## Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)
(0% member contributions are additional)

### Regular Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 9.4% | $26,525 | $ 55,490 | 11.5% | $32,451 | $ 69,328 | 11.3% | $31,886 | $ 69,235 |
| 2020 | 291,351 | 9.4 | 27,387 | 56,250 | 11.5 | 33,505 | 70,278 | 11.3 | 32,923 | 70,184 |
| 2021 | 300,820 | 9.4 | 28,277 | 56,959 | 11.5 | 34,594 | 71,164 | 11.3 | 33,993 | 71,069 |
| 2022 | 310,597 | 9.4 | 29,196 | 57,610 | 11.5 | 35,719 | 71,978 | 11.3 | 35,097 | 71,882 |
| 2023 | 320,691 | 9.4 | 30,145 | 58,195 | 11.5 | 36,879 | 72,709 | 11.3 | 36,238 | 72,612 |
| 2024 | 331,113 | 9.4 | 31,125 | 58,706 | 11.5 | 38,078 | 73,348 | 11.3 | 37,416 | 73,250 |
| 2025 | 341,874 | 9.4 | 32,136 | 59,134 | 11.5 | 39,316 | 73,882 | 11.3 | 38,632 | 73,784 |
| 2026 | 352,985 | 9.4 | 33,181 | 59,468 | 11.5 | 40,593 | 74,300 | 11.3 | 39,887 | 74,201 |
| 2027 | 364,457 | 9.4 | 34,259 | 59,698 | 11.5 | 41,913 | 74,587 | 11.3 | 41,184 | 74,488 |
| 2028 | 376,302 | 9.4 | 35,372 | 59,812 | 11.5 | 43,275 | 74,729 | 11.3 | 42,522 | 74,630 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 12.9% | $36,401 | $ 79,639 | 13.6% | $38,376 | $ 83,238 | 14.5% | $40,916 | $ 90,086 |
| 2020 | 291,351 | 12.9 | 37,584 | 80,730 | 13.6 | 39,624 | 84,378 | 14.5 | 42,246 | 91,320 |
| 2021 | 300,820 | 12.9 | 38,806 | 81,748 | 13.6 | 40,912 | 85,442 | 14.5 | 43,619 | 92,471 |
| 2022 | 310,597 | 12.9 | 40,067 | 82,683 | 13.6 | 42,241 | 86,419 | 14.5 | 45,037 | 93,528 |
| 2023 | 320,691 | 12.9 | 41,369 | 83,523 | 13.6 | 43,614 | 87,297 | 14.5 | 46,500 | 94,478 |
| 2024 | 331,113 | 12.9 | 42,714 | 84,257 | 13.6 | 45,031 | 88,064 | 14.5 | 48,011 | 95,308 |
| 2025 | 341,874 | 12.9 | 44,102 | 84,871 | 13.6 | 46,495 | 88,705 | 14.5 | 49,572 | 96,002 |
| 2026 | 352,985 | 12.9 | 45,535 | 85,351 | 13.6 | 48,006 | 89,206 | 14.5 | 51,183 | 96,545 |
| 2027 | 364,457 | 12.9 | 47,015 | 85,681 | 13.6 | 49,566 | 89,551 | 14.5 | 52,846 | 96,918 |
| 2028 | 376,302 | 12.9 | 48,543 | 85,845 | 13.6 | 51,177 | 89,722 | 14.5 | 54,564 | 97,103 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 15.8% | $44,584 | $ 97,081 | 16.2% | $45,713 | $ 100,504 | 17.8% | $50,228 | $ 110,913 |
| 2020 | 291,351 | 15.8 | 46,033 | 98,411 | 16.2 | 47,199 | 101,881 | 17.8 | 51,860 | 112,432 |
| 2021 | 300,820 | 15.8 | 47,530 | 99,652 | 16.2 | 48,733 | 103,166 | 17.8 | 53,546 | 113,850 |
| 2022 | 310,597 | 15.8 | 49,074 | 100,791 | 16.2 | 50,317 | 104,345 | 17.8 | 55,286 | 115,152 |
| 2023 | 320,691 | 15.8 | 50,669 | 101,815 | 16.2 | 51,952 | 105,405 | 17.8 | 57,083 | 116,322 |
| 2024 | 331,113 | 15.8 | 52,316 | 102,709 | 16.2 | 53,640 | 106,331 | 17.8 | 58,938 | 117,344 |
| 2025 | 341,874 | 15.8 | 54,016 | 103,457 | 16.2 | 55,384 | 107,106 | 17.8 | 60,854 | 118,199 |
| 2026 | 352,985 | 15.8 | 55,772 | 104,042 | 16.2 | 57,184 | 107,711 | 17.8 | 62,831 | 118,867 |
| 2027 | 364,457 | 15.8 | 57,584 | 104,444 | 16.2 | 59,042 | 108,128 | 17.8 | 64,873 | 119,327 |
| 2028 | 376,302 | 15.8 | 59,456 | 104,643 | 16.2 | 60,961 | 108,334 | 17.8 | 66,982 | 119,555 |

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

# City of Monroe City - Police

## 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 9.7% | $27,371 | $ 57,464 | 11.8% | $33,297 | $ 71,853 | 11.6% | $32,733 | $ 71,721 |
| 2020 | 291,351 | 9.7 | 28,261 | 58,251 | 11.8 | 34,379 | 72,837 | 11.6 | 33,797 | 72,704 |
| 2021 | 300,820 | 9.7 | 29,180 | 58,986 | 11.8 | 35,497 | 73,755 | 11.6 | 34,895 | 73,621 |
| 2022 | 310,597 | 9.7 | 30,128 | 59,660 | 11.8 | 36,650 | 74,598 | 11.6 | 36,029 | 74,463 |
| 2023 | 320,691 | 9.7 | 31,107 | 60,266 | 11.8 | 37,842 | 75,356 | 11.6 | 37,200 | 75,220 |
| 2024 | 331,113 | 9.7 | 32,118 | 60,795 | 11.8 | 39,071 | 76,018 | 11.6 | 38,409 | 75,881 |
| 2025 | 341,874 | 9.7 | 33,162 | 61,238 | 11.8 | 40,341 | 76,572 | 11.6 | 39,657 | 76,434 |
| 2026 | 352,985 | 9.7 | 34,240 | 61,584 | 11.8 | 41,652 | 77,005 | 11.6 | 40,946 | 76,866 |
| 2027 | 364,457 | 9.7 | 35,352 | 61,822 | 11.8 | 43,006 | 77,303 | 11.6 | 42,277 | 77,163 |
| 2028 | 376,302 | 9.7 | 36,501 | 61,940 | 11.8 | 44,404 | 77,451 | 11.6 | 43,651 | 77,310 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 13.4% | $37,812 | $ 82,533 | 14.0% | $39,505 | $ 86,233 | 15.0% | $42,327 | $ 93,384 |
| 2020 | 291,351 | 13.4 | 39,041 | 83,664 | 14.0 | 40,789 | 87,414 | 15.0 | 43,703 | 94,663 |
| 2021 | 300,820 | 13.4 | 40,310 | 84,719 | 14.0 | 42,115 | 88,516 | 15.0 | 45,123 | 95,857 |
| 2022 | 310,597 | 13.4 | 41,620 | 85,688 | 14.0 | 43,484 | 89,528 | 15.0 | 46,590 | 96,953 |
| 2023 | 320,691 | 13.4 | 42,973 | 86,559 | 14.0 | 44,897 | 90,438 | 15.0 | 48,104 | 97,938 |
| 2024 | 331,113 | 13.4 | 44,369 | 87,319 | 14.0 | 46,356 | 91,232 | 15.0 | 49,667 | 98,798 |
| 2025 | 341,874 | 13.4 | 45,811 | 87,955 | 14.0 | 47,862 | 91,897 | 15.0 | 51,281 | 99,518 |
| 2026 | 352,985 | 13.4 | 47,300 | 88,452 | 14.0 | 49,418 | 92,416 | 15.0 | 52,948 | 100,080 |
| 2027 | 364,457 | 13.4 | 48,837 | 88,794 | 14.0 | 51,024 | 92,773 | 15.0 | 54,669 | 100,467 |
| 2028 | 376,302 | 13.4 | 50,424 | 88,964 | 14.0 | 52,682 | 92,950 | 15.0 | 56,445 | 100,659 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 16.2% | $45,713 | $ 100,611 | 16.7% | $47,124 | $ 104,192 | 18.4% | $51,921 | $ 114,971 |
| 2020 | 291,351 | 16.2 | 47,199 | 101,989 | 16.7 | 48,656 | 105,619 | 18.4 | 53,609 | 116,546 |
| 2021 | 300,820 | 16.2 | 48,733 | 103,275 | 16.7 | 50,237 | 106,951 | 18.4 | 55,351 | 118,016 |
| 2022 | 310,597 | 16.2 | 50,317 | 104,456 | 16.7 | 51,870 | 108,174 | 18.4 | 57,150 | 119,365 |
| 2023 | 320,691 | 16.2 | 51,952 | 105,517 | 16.7 | 53,555 | 109,273 | 18.4 | 59,007 | 120,578 |
| 2024 | 331,113 | 16.2 | 53,640 | 106,444 | 16.7 | 55,296 | 110,233 | 18.4 | 60,925 | 121,637 |
| 2025 | 341,874 | 16.2 | 55,384 | 107,219 | 16.7 | 57,093 | 111,036 | 18.4 | 62,905 | 122,523 |
| 2026 | 352,985 | 16.2 | 57,184 | 107,825 | 16.7 | 58,948 | 111,664 | 18.4 | 64,949 | 123,215 |
| 2027 | 364,457 | 16.2 | 59,042 | 108,242 | 16.7 | 60,864 | 112,096 | 18.4 | 67,060 | 123,691 |
| 2028 | 376,302 | 16.2 | 60,961 | 108,449 | 16.7 | 62,842 | 112,310 | 18.4 | 69,240 | 123,927 |

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

# City of Monroe City - Police

## 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 5.8% | $16,366 | $ 47,687 | 7.7% | $21,728 | $ 61,382 | 7.8% | $22,010 | $ 62,131 |
| 2020 | 291,351 | 5.8 | 16,898 | 48,340 | 7.7 | 22,434 | 62,223 | 7.8 | 22,725 | 62,982 |
| 2021 | 300,820 | 5.8 | 17,448 | 48,950 | 7.7 | 23,163 | 63,008 | 7.8 | 23,464 | 63,776 |
| 2022 | 310,597 | 5.8 | 18,015 | 49,510 | 7.7 | 23,916 | 63,728 | 7.8 | 24,227 | 64,505 |
| 2023 | 320,691 | 5.8 | 18,600 | 50,013 | 7.7 | 24,693 | 64,376 | 7.8 | 25,014 | 65,160 |
| 2024 | 331,113 | 5.8 | 19,205 | 50,452 | 7.7 | 25,496 | 64,941 | 7.8 | 25,827 | 65,732 |
| 2025 | 341,874 | 5.8 | 19,829 | 50,820 | 7.7 | 26,324 | 65,414 | 7.8 | 26,666 | 66,211 |
| 2026 | 352,985 | 5.8 | 20,473 | 51,107 | 7.7 | 27,180 | 65,784 | 7.8 | 27,533 | 66,585 |
| 2027 | 364,457 | 5.8 | 21,139 | 51,305 | 7.7 | 28,063 | 66,038 | 7.8 | 28,428 | 66,842 |
| 2028 | 376,302 | 5.8 | 21,826 | 51,403 | 7.7 | 28,975 | 66,164 | 7.8 | 29,352 | 66,970 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 9.4% | $26,525 | $ 72,228 | 9.9% | $27,936 | $ 75,038 | 10.9% | $30,758 | $ 82,249 |
| 2020 | 291,351 | 9.4 | 27,387 | 73,218 | 9.9 | 28,844 | 76,066 | 10.9 | 31,757 | 83,376 |
| 2021 | 300,820 | 9.4 | 28,277 | 74,141 | 9.9 | 29,781 | 77,025 | 10.9 | 32,789 | 84,427 |
| 2022 | 310,597 | 9.4 | 29,196 | 74,989 | 9.9 | 30,749 | 77,906 | 10.9 | 33,855 | 85,392 |
| 2023 | 320,691 | 9.4 | 30,145 | 75,751 | 9.9 | 31,748 | 78,698 | 10.9 | 34,955 | 86,260 |
| 2024 | 331,113 | 9.4 | 31,125 | 76,416 | 9.9 | 32,780 | 79,389 | 10.9 | 36,091 | 87,018 |
| 2025 | 341,874 | 9.4 | 32,136 | 76,973 | 9.9 | 33,846 | 79,967 | 10.9 | 37,264 | 87,652 |
| 2026 | 352,985 | 9.4 | 33,181 | 77,408 | 9.9 | 34,946 | 80,419 | 10.9 | 38,475 | 88,147 |
| 2027 | 364,457 | 9.4 | 34,259 | 77,707 | 9.9 | 36,081 | 80,730 | 10.9 | 39,726 | 88,488 |
| 2028 | 376,302 | 9.4 | 35,372 | 77,855 | 9.9 | 37,254 | 80,884 | 10.9 | 41,017 | 88,657 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 12.1% | $34,144 | $ 88,541 | 12.5% | $35,273 | $ 92,169 | 14.2% | $40,070 | $ 102,030 |
| 2020 | 291,351 | 12.1 | 35,253 | 89,754 | 12.5 | 36,419 | 93,432 | 14.2 | 41,372 | 103,428 |
| 2021 | 300,820 | 12.1 | 36,399 | 90,886 | 12.5 | 37,603 | 94,610 | 14.2 | 42,716 | 104,732 |
| 2022 | 310,597 | 12.1 | 37,582 | 91,925 | 12.5 | 38,825 | 95,692 | 14.2 | 44,105 | 105,929 |
| 2023 | 320,691 | 12.1 | 38,804 | 92,859 | 12.5 | 40,086 | 96,664 | 14.2 | 45,538 | 107,005 |
| 2024 | 331,113 | 12.1 | 40,065 | 93,675 | 12.5 | 41,389 | 97,513 | 14.2 | 47,018 | 107,945 |
| 2025 | 341,874 | 12.1 | 41,367 | 94,357 | 12.5 | 42,734 | 98,223 | 14.2 | 48,546 | 108,731 |
| 2026 | 352,985 | 12.1 | 42,711 | 94,890 | 12.5 | 44,123 | 98,778 | 14.2 | 50,124 | 109,346 |
| 2027 | 364,457 | 12.1 | 44,099 | 95,257 | 12.5 | 45,557 | 99,160 | 14.2 | 51,753 | 109,769 |
| 2028 | 376,302 | 12.1 | 45,533 | 95,439 | 12.5 | 47,038 | 99,349 | 14.2 | 53,435 | 109,979 |

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$^{th}$ 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 Monroe City - Police

## 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: Estimated Employer Contribution As a % of Payroll | L-1: Annual Dollars | L-1: Unfunded Actuarial Accrued Liability | L-3 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-3: Annual Dollars | L-3: Unfunded Actuarial Accrued Liability | LT-4(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-4(65): Annual Dollars | LT-4(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 6.0% | $16,931 | $ 49,707 | 8.2% | $23,139 | $ 63,861 | 8.2% | $23,139 | $ 64,675 |
| 2020 | 291,351 | 6.0 | 17,481 | 50,388 | 8.2 | 23,891 | 64,736 | 8.2 | 23,891 | 65,561 |
| 2021 | 300,820 | 6.0 | 18,049 | 51,023 | 8.2 | 24,667 | 65,552 | 8.2 | 24,667 | 66,388 |
| 2022 | 310,597 | 6.0 | 18,636 | 51,606 | 8.2 | 25,469 | 66,301 | 8.2 | 25,469 | 67,147 |
| 2023 | 320,691 | 6.0 | 19,241 | 52,130 | 8.2 | 26,297 | 66,975 | 8.2 | 26,297 | 67,829 |
| 2024 | 331,113 | 6.0 | 19,867 | 52,588 | 8.2 | 27,151 | 67,563 | 8.2 | 27,151 | 68,425 |
| 2025 | 341,874 | 6.0 | 20,512 | 52,971 | 8.2 | 28,034 | 68,055 | 8.2 | 28,034 | 68,923 |
| 2026 | 352,985 | 6.0 | 21,179 | 53,270 | 8.2 | 28,945 | 68,440 | 8.2 | 28,945 | 69,313 |
| 2027 | 364,457 | 6.0 | 21,867 | 53,476 | 8.2 | 29,885 | 68,705 | 8.2 | 29,885 | 69,581 |
| 2028 | 376,302 | 6.0 | 22,578 | 53,578 | 8.2 | 30,857 | 68,836 | 8.2 | 30,857 | 69,714 |

| Valuation Year | Estimated Projected Payroll | LT-5(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-5(65): Annual Dollars | LT-5(65): Unfunded Actuarial Accrued Liability | L-7 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-7: Annual Dollars | L-7: Unfunded Actuarial Accrued Liability | LT-8(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-8(65): Annual Dollars | LT-8(65): Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 9.8% | $27,654 | $ 75,121 | 10.3% | $29,065 | $ 77,997 | 11.4% | $32,169 | $ 85,484 |
| 2020 | 291,351 | 9.8 | 28,552 | 76,150 | 10.3 | 30,009 | 79,066 | 11.4 | 33,214 | 86,655 |
| 2021 | 300,820 | 9.8 | 29,480 | 77,110 | 10.3 | 30,984 | 80,063 | 11.4 | 34,293 | 87,748 |
| 2022 | 310,597 | 9.8 | 30,439 | 77,992 | 10.3 | 31,991 | 80,978 | 11.4 | 35,408 | 88,751 |
| 2023 | 320,691 | 9.8 | 31,428 | 78,784 | 10.3 | 33,031 | 81,801 | 11.4 | 36,559 | 89,653 |
| 2024 | 331,113 | 9.8 | 32,449 | 79,476 | 10.3 | 34,105 | 82,519 | 11.4 | 37,747 | 90,440 |
| 2025 | 341,874 | 9.8 | 33,504 | 80,055 | 10.3 | 35,213 | 83,120 | 11.4 | 38,974 | 91,099 |
| 2026 | 352,985 | 9.8 | 34,593 | 80,507 | 10.3 | 36,357 | 83,590 | 11.4 | 40,240 | 91,614 |
| 2027 | 364,457 | 9.8 | 35,717 | 80,818 | 10.3 | 37,539 | 83,913 | 11.4 | 41,548 | 91,968 |
| 2028 | 376,302 | 9.8 | 36,878 | 80,972 | 10.3 | 38,759 | 84,073 | 11.4 | 42,898 | 92,144 |

| Valuation Year | Estimated Projected Payroll | L-12 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-12: Annual Dollars | L-12: Unfunded Actuarial Accrued Liability | LT-14(65) Benefit Program: Estimated Employer Contribution As a % of Payroll | LT-14(65): Annual Dollars | LT-14(65): Unfunded Actuarial Accrued Liability | L-6 Benefit Program: Estimated Employer Contribution As a % of Payroll | L-6: Annual Dollars | L-6: Unfunded Actuarial Accrued Liability |
|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | $ 282,180 | 12.5% | $35,273 | $ 91,993 | 13.1% | $36,966 | $ 95,737 | 14.8% | $41,763 | $ 105,980 |
| 2020 | 291,351 | 12.5 | 36,419 | 93,253 | 13.1 | 38,167 | 97,049 | 14.8 | 43,120 | 107,432 |
| 2021 | 300,820 | 12.5 | 37,603 | 94,429 | 13.1 | 39,407 | 98,273 | 14.8 | 44,521 | 108,787 |
| 2022 | 310,597 | 12.5 | 38,825 | 95,509 | 13.1 | 40,688 | 99,397 | 14.8 | 45,968 | 110,031 |
| 2023 | 320,691 | 12.5 | 40,086 | 96,479 | 13.1 | 42,011 | 100,407 | 14.8 | 47,462 | 111,149 |
| 2024 | 331,113 | 12.5 | 41,389 | 97,326 | 13.1 | 43,376 | 101,289 | 14.8 | 49,005 | 112,125 |
| 2025 | 341,874 | 12.5 | 42,734 | 98,035 | 13.1 | 44,785 | 102,027 | 14.8 | 50,597 | 112,942 |
| 2026 | 352,985 | 12.5 | 44,123 | 98,589 | 13.1 | 46,241 | 102,604 | 14.8 | 52,242 | 113,580 |
| 2027 | 364,457 | 12.5 | 45,557 | 98,970 | 13.1 | 47,744 | 103,001 | 14.8 | 53,940 | 114,019 |
| 2028 | 376,302 | 12.5 | 47,038 | 99,159 | 13.1 | 49,296 | 103,198 | 14.8 | 55,693 | 114,237 |

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

# City of Monroe City - Police

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

(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 9.5% | $26,807 | $ 55,904 | 11.6% | $32,733 | $ 69,856 | 11.6% | $32,733 | $ 70,286 |
| 2020 | 291,351 | 9.5 | 27,678 | 56,670 | 11.6 | 33,797 | 70,813 | 11.6 | 33,797 | 71,249 |
| 2021 | 300,820 | 9.5 | 28,578 | 57,385 | 11.6 | 34,895 | 71,706 | 11.6 | 34,895 | 72,147 |
| 2022 | 310,597 | 9.5 | 29,507 | 58,041 | 11.6 | 36,029 | 72,526 | 11.6 | 36,029 | 72,972 |
| 2023 | 320,691 | 9.5 | 30,466 | 58,631 | 11.6 | 37,200 | 73,263 | 11.6 | 37,200 | 73,713 |
| 2024 | 331,113 | 9.5 | 31,456 | 59,146 | 11.6 | 38,409 | 73,906 | 11.6 | 38,409 | 74,360 |
| 2025 | 341,874 | 9.5 | 32,478 | 59,577 | 11.6 | 39,657 | 74,444 | 11.6 | 39,657 | 74,902 |
| 2026 | 352,985 | 9.5 | 33,534 | 59,914 | 11.6 | 40,946 | 74,865 | 11.6 | 40,946 | 75,325 |
| 2027 | 364,457 | 9.5 | 34,623 | 60,146 | 11.6 | 42,277 | 75,155 | 11.6 | 42,277 | 75,616 |
| 2028 | 376,302 | 9.5 | 35,749 | 60,261 | 11.6 | 43,651 | 75,299 | 11.6 | 43,651 | 75,760 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 13.2% | $37,248 | $ 80,643 | 13.8% | $38,941 | $ 83,201 | 14.8% | $41,763 | $ 91,021 |
| 2020 | 291,351 | 13.2 | 38,458 | 81,748 | 13.8 | 40,206 | 84,341 | 14.8 | 43,120 | 92,268 |
| 2021 | 300,820 | 13.2 | 39,708 | 82,779 | 13.8 | 41,513 | 85,404 | 14.8 | 44,521 | 93,431 |
| 2022 | 310,597 | 13.2 | 40,999 | 83,725 | 13.8 | 42,862 | 86,380 | 14.8 | 45,968 | 94,499 |
| 2023 | 320,691 | 13.2 | 42,331 | 84,576 | 13.8 | 44,255 | 87,258 | 14.8 | 47,462 | 95,459 |
| 2024 | 331,113 | 13.2 | 43,707 | 85,319 | 13.8 | 45,694 | 88,024 | 14.8 | 49,005 | 96,297 |
| 2025 | 341,874 | 13.2 | 45,127 | 85,940 | 13.8 | 47,179 | 88,665 | 14.8 | 50,597 | 96,998 |
| 2026 | 352,985 | 13.2 | 46,594 | 86,426 | 13.8 | 48,712 | 89,166 | 14.8 | 52,242 | 97,546 |
| 2027 | 364,457 | 13.2 | 48,108 | 86,760 | 13.8 | 50,295 | 89,511 | 14.8 | 53,940 | 97,923 |
| 2028 | 376,302 | 13.2 | 49,672 | 86,926 | 13.8 | 51,930 | 89,682 | 14.8 | 55,693 | 98,110 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 16.0% | $45,149 | $ 97,780 | 16.4% | $46,278 | $ 101,374 | 18.1% | $51,075 | $ 111,713 |
| 2020 | 291,351 | 16.0 | 46,616 | 99,120 | 16.4 | 47,782 | 102,763 | 18.1 | 52,735 | 113,243 |
| 2021 | 300,820 | 16.0 | 48,131 | 100,370 | 16.4 | 49,334 | 104,059 | 18.1 | 54,448 | 114,671 |
| 2022 | 310,597 | 16.0 | 49,696 | 101,518 | 16.4 | 50,938 | 105,249 | 18.1 | 56,218 | 115,982 |
| 2023 | 320,691 | 16.0 | 51,311 | 102,550 | 16.4 | 52,593 | 106,318 | 18.1 | 58,045 | 117,160 |
| 2024 | 331,113 | 16.0 | 52,978 | 103,451 | 16.4 | 54,303 | 107,252 | 18.1 | 59,931 | 118,189 |
| 2025 | 341,874 | 16.0 | 54,700 | 104,205 | 16.4 | 56,067 | 108,033 | 18.1 | 61,879 | 119,050 |
| 2026 | 352,985 | 16.0 | 56,478 | 104,794 | 16.4 | 57,890 | 108,644 | 18.1 | 63,890 | 119,723 |
| 2027 | 364,457 | 16.0 | 58,313 | 105,199 | 16.4 | 59,771 | 109,064 | 18.1 | 65,967 | 120,186 |
| 2028 | 376,302 | 16.0 | 60,208 | 105,400 | 16.4 | 61,714 | 109,272 | 18.1 | 68,111 | 120,415 |

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

# City of Monroe City - Police

## Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)
(0% member contributions are additional)

### Rule of 80 Retirement Eligibility

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 9.8% | $27,654 | $ 57,913 | 12.1% | $34,144 | $ 72,393 | 12.0% | $33,862 | $ 72,833 |
| 2020 | 291,351 | 9.8 | 28,552 | 58,706 | 12.1 | 35,253 | 73,385 | 12.0 | 34,962 | 73,831 |
| 2021 | 300,820 | 9.8 | 29,480 | 59,446 | 12.1 | 36,399 | 74,310 | 12.0 | 36,098 | 74,762 |
| 2022 | 310,597 | 9.8 | 30,439 | 60,126 | 12.1 | 37,582 | 75,160 | 12.0 | 37,272 | 75,617 |
| 2023 | 320,691 | 9.8 | 31,428 | 60,737 | 12.1 | 38,804 | 75,924 | 12.0 | 38,483 | 76,385 |
| 2024 | 331,113 | 9.8 | 32,449 | 61,270 | 12.1 | 40,065 | 76,591 | 12.0 | 39,734 | 77,056 |
| 2025 | 341,874 | 9.8 | 33,504 | 61,716 | 12.1 | 41,367 | 77,149 | 12.0 | 41,025 | 77,617 |
| 2026 | 352,985 | 9.8 | 34,593 | 62,065 | 12.1 | 42,711 | 77,585 | 12.0 | 42,358 | 78,056 |
| 2027 | 364,457 | 9.8 | 35,717 | 62,305 | 12.1 | 44,099 | 77,885 | 12.0 | 43,735 | 78,358 |
| 2028 | 376,302 | 9.8 | 36,878 | 62,424 | 12.1 | 45,533 | 78,034 | 12.0 | 45,156 | 78,508 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 13.7% | $38,659 | $ 83,574 | 14.2% | $40,070 | $ 86,883 | 15.3% | $43,174 | $ 94,342 |
| 2020 | 291,351 | 13.7 | 39,915 | 84,719 | 14.2 | 41,372 | 88,073 | 15.3 | 44,577 | 95,634 |
| 2021 | 300,820 | 13.7 | 41,212 | 85,787 | 14.2 | 42,716 | 89,184 | 15.3 | 46,025 | 96,840 |
| 2022 | 310,597 | 13.7 | 42,552 | 86,768 | 14.2 | 44,105 | 90,204 | 15.3 | 47,521 | 97,947 |
| 2023 | 320,691 | 13.7 | 43,935 | 87,650 | 14.2 | 45,538 | 91,121 | 15.3 | 49,066 | 98,942 |
| 2024 | 331,113 | 13.7 | 45,362 | 88,420 | 14.2 | 47,018 | 91,921 | 15.3 | 50,660 | 99,811 |
| 2025 | 341,874 | 13.7 | 46,837 | 89,064 | 14.2 | 48,546 | 92,591 | 15.3 | 52,307 | 100,538 |
| 2026 | 352,985 | 13.7 | 48,359 | 89,567 | 14.2 | 50,124 | 93,114 | 15.3 | 54,007 | 101,106 |
| 2027 | 364,457 | 13.7 | 49,931 | 89,913 | 14.2 | 51,753 | 93,474 | 15.3 | 55,762 | 101,497 |
| 2028 | 376,302 | 13.7 | 51,553 | 90,085 | 14.2 | 53,435 | 93,652 | 15.3 | 57,574 | 101,691 |

| | | 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 |
| Valuation Year | Estimated Projected Payroll | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | | As a % of Payroll | Annual Dollars | |
| 2019 | $ 282,180 | 16.4% | $46,278 | $ 101,356 | 17.0% | $47,971 | $ 105,102 | 18.7% | $52,768 | $ 115,852 |
| 2020 | 291,351 | 16.4 | 47,782 | 102,745 | 17.0 | 49,530 | 106,542 | 18.7 | 54,483 | 117,439 |
| 2021 | 300,820 | 16.4 | 49,334 | 104,041 | 17.0 | 51,139 | 107,885 | 18.7 | 56,253 | 118,920 |
| 2022 | 310,597 | 16.4 | 50,938 | 105,230 | 17.0 | 52,801 | 109,118 | 18.7 | 58,082 | 120,280 |
| 2023 | 320,691 | 16.4 | 52,593 | 106,299 | 17.0 | 54,517 | 110,227 | 18.7 | 59,969 | 121,502 |
| 2024 | 331,113 | 16.4 | 54,303 | 107,233 | 17.0 | 56,289 | 111,195 | 18.7 | 61,918 | 122,569 |
| 2025 | 341,874 | 16.4 | 56,067 | 108,014 | 17.0 | 58,119 | 112,005 | 18.7 | 63,930 | 123,462 |
| 2026 | 352,985 | 16.4 | 57,890 | 108,624 | 17.0 | 60,007 | 112,638 | 18.7 | 66,008 | 124,160 |
| 2027 | 364,457 | 16.4 | 59,771 | 109,044 | 17.0 | 61,958 | 113,074 | 18.7 | 68,153 | 124,640 |
| 2028 | 376,302 | 16.4 | 61,714 | 109,252 | 17.0 | 63,971 | 113,290 | 18.7 | 70,368 | 124,878 |

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