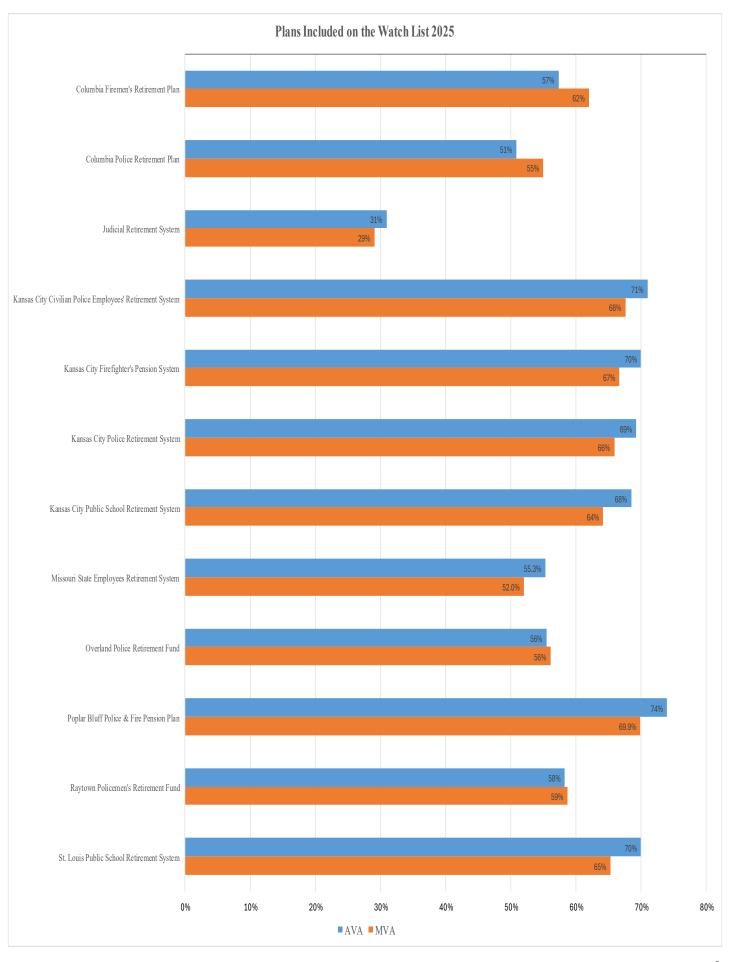


JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

2025 ANNUAL WATCH LIST

Presented on December 2025

Please Note: For purposes of the Watch List, the term "inactive" includes terminated vested, retired, surviving beneficiary, disabled members, and for some plans, terminated nonvested members who have not withdrawn employee contributions.

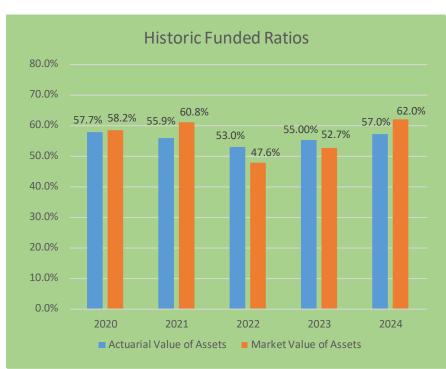


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COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

- The Fire and Police plans are commingled for investment purposes.
- The City Council of Columbia approved an infusion of cash in spring of this year in the amount of 2 million dollars. This will be added in two lump sums of 1 million dollars (500 thousand dollars per plan), once in FY 2025 and again in FY 2026. This amount is not reflected in this year's reporting as this year's report is for FY 2024.
- The Fire and Police plans are commingled for investment purposes. For the year ended 9/30/24, the rate of return on investments was 22.5% (Market) & 9.0% (Actuarial) vs 6.25% assumed rate.
- In last 15 years, the City has reset the amortization period 3 times. In the 2010 valuation, the amortization period was changed from 17 to 29 years. In the 2016 valuation, it was changed from 23 to 30 years. As of the 9/30/24 valuation, 27 years remain. The actuary notes "Periods above 17 to 24 years generally indicate that the UAAL payment is less than the interest in the UAAL. This is called 'negative amortization' and is viewed increasingly as undesirable." The actuary continues "the UAAL is expected to increase until the amortization period becomes approximately 24 years, at which point it would be expected to decline"

FIREMEN'S RETIREMENT FUND



Year Ending	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$9,566,824	\$9,566,824	100%
2023	\$8,101,354	\$8,101,354	100%
2022	\$6,962,552	\$6,962552	100%
2021	\$6,619,098	\$6,619,098	100%
2020	\$5,965,276	\$5,965,276	100%

Fire as of 9/30/24

 Market Value:
 \$130,564,357

 Actuarial Value:
 \$120,719,034

 Liabilities:
 \$210,497,029

Membership:

Active: 168 Inactive: 181

Normal Retirement Formula:

3.5% of compensation for the first 20 years + 2% for the next 5 years. Max of 80% of compensation.

Hired on/after 10/1/12: 2.5% of compensation times years of service. No max benefit.

Normal Retirement Eligibility:

Age 65 or 20 years of service

Hired on/after 10/1/12: Age 55 with 1 year of service. Rule of 80.

COLA Annual Minimum: 2%

Social Security Coverage: No

Assumed Rate of Return: 6.25%

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

POLICE RETIREMENT SYSTEM

Police as of 9/30/24

Market Value: \$73,955,996 Membership: Assumed Rate of Return: 6.25%

Actuarial Value: \$68,379,278 **Active**: 136 **Salary**: 2.75%

Liabilities: \$134,468,753 Inactive: 261 Social Security Coverage: Yes

Normal Retirement Formula: 3.0% of Compensation for the first 20 years of service plus 2% of compensation for the next 5 years of service. Max: 70% of compensation with 25 years of service.

Hired on/after 10/1/12: 2% of compensation for the first 25 years of service plus 1.5% of compensation for each year over 25. Max of 57.5% of compensation.

Normal Retirement Eligibility: 20 years of service or age 65. **Hired on/after 10/1/12**: 25 years of service or age 65.

COLA: Annual min. increase of 0.6%. **Social Security:** Yes

Wage Inflation: 2.5%



Year ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$5,421,662	\$5,421,662	100%
2023	\$4,999,944	\$4,999,944	100%
2022	\$4,345,411	\$4,345,411	100%
2021	\$4,280,243	\$4,280,243	100%
2020	\$4,159,256	\$4,159,256	100%

JUDICIAL RETIREMENT PLAN

- The rate of return on investments was 6.6% (Market) and 4.1% (Actuarial) vs. 6.95% assumed. Missing the assumed rate of return caused the plan to suffer an actuarial loss on assets of \$5.9 million and an increase the recommended contribution rate by 58 basis points (0.58%). This increased the unfunded actuarial accrued liability as well as the actuarial required contribution rate (by 0.58%).
- Amortization period for the plan is set to a 30 year period as of 2018, leaving 24 years at the beginning of FY 2025.
- Prior to 1998, the plan was funded on a pay-as-you-go basis so no pre-funding occurred. When funding on an actuarial basis began, the funded ratio was at 0%. The amortization period was set to a closed 35 year cycle.



FY End- ing	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$40,748,235	\$40,748,235	100%
2023	\$39,064,758	\$39,064,758	100%
2022	\$39,228,848	\$39,228,848	100%
2021	\$39,996,509	\$39,996,509	100%
2020	\$39,174,515	\$39,174,515	100%

As of 6/30/24

 Market Value:
 \$196,573,541

 Actuarial Value:
 \$209,090,000

 Liabilities:
 \$675,035,481

Membership:

Active: 424 Inactive: 656
Normal Retirement Formula:

50% of compensation. Less than service requirement = pro rated benefit based on service

Normal Retirement Eligibility:

Age 62 with 12 years of service Age 60 with 15 years of service

Age 55 with 20 years of service

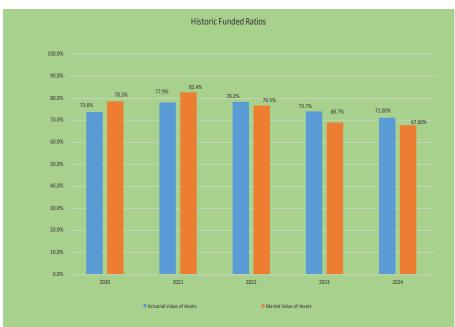
Serving for the first time on/after 1/1/11:

Age 67 with 12 years of service Age 62 with 20 years of service

Social Security Coverage: Yes COLA: Annual max 5%, 80% CPI

Kansas City Civilian Police Employees' Retirement System

- Rate of return on investments was 7.4% (market) and 4.7% (actuarial) vs. 6.85% assumed.
- The assumed rate of return was reduced from 6.95% to 6.85% and, according to the actuary, the Board's intention is to continue until the assumed rate of return is 6.50% by the April 30, 2027 valuation. Reducing assumed rate of return increased actuarial accrued liability. However, this change will increase the likelihood the plan remains on the correct trajectory regarding the amortization schedule.
- The plan utilizes a closed 30-year period for amortization of unfunded actuarial accrued liabilities that began in 2017, 23 years remain as the end of the plan's FY. Future amortization periods will be over a closed 20-year period.
- This is a contributory plan for the employees (5%).
- A new tier of benefits was created in 2013. As of plan year 2024 half of all active members of the plan are in new tier of benefits.



Year ended 4/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$6,598,774	\$6,598,774	100%
2023	\$6,441,244	\$6,441,244	100%
2022	\$5,800,468	\$5,800,468	100%
2021	\$5,358,552	\$5,358,552	100%
2020	\$4,849,708	\$4,849,708	100%

As of 4/30/24

 Market Value:
 \$174,490,324

 Actuarial Value:
 \$183,136,367

 Liabilities:
 \$257,919,771

Membership:

Active: 498 Inactive: 381

Normal Retirement Formula:

2% of compensation x years of creditable service Supplemental Benefit: \$160 per month with 15 years of service

Normal Retirement Eligibility:

Tier 1: Age 65 with 10 years of service Rule of 80

Tier 2: Age 67 with 20 years of service Tier 2: Rule of 85

Social Security Coverage: Yes

COLA: Ad Hoc. 3% Max

Assumed Rate of Return:

6.95%

Salary: 3%

Kansas City Firefighter's Pension System

- The plan did not reach the recommended contribution in 2022. This loss has not been offsite by additional contributions the following years.
- The plans investment did generate the assumed returns at the rate predicted for 2024, with Market ROR of 8.56%. However these returns on an actuarial level are only 5.27% as poor returns from pervious years are still accounted for. These values are weighted against the assumed ROR of 7%. This results in a lose of \$11.1 million to the plan.
- The plan has moved to a new amortization period in 2023. This increased the recommended contributions in 2023 and will increase recommend contribution level going forward. The current period is a 30 year period, which started in May 2014 that has been combined with a new closed period of 20 years, which will end in April 2043.
- Salary change increased unfunded liability of the system by \$5.0 million.
- Over contributing decreased the liabilities by \$4.7 million.



Year ended 9/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$29,045,338	\$29,461,351	101%
2023	\$27,301,916	\$27,335,443	100%
2022	\$28,803,906	\$26,813,483	93%
2021	\$23,981,922	\$24,258,707	101%
2020	\$21,562,471	\$21,728,336	101%

As of 4/30/23

Market Value: \$638,335,832

Actuarial Value: \$671,304,371

Liabilities: \$956,511,832

Membership:

Active: 1,045 Inactive: 986

Normal Retirement Formula:

2.5% of compensation x the number of years of credited service. Cap of 80% of compensation.

Normal Retirement Eligibility:

25 years of service.

New Tier:

27 years of service.

Social Security Coverage: Yes

COLA: 2.5% Max and only if funding ratio is above 80%

Assumed Rate of Return: 7.0%

Salary: 3%

Kansas City Police Retirement System

- Based on market value ROR was 7.4%. The actuarial value of the assets returning 4.7% on the investments, which is under the expect rate of return of 6.85%. In recent years the actuarial ROR has been below the assumed ROR (with the exception of 2021).
- The assumed rate of return was reduced from 7.20% to 6.85%, this change will increase the likelihood the plan will meet future Actuarial RORs, as the losses from previous years are incorporated. This change begin in 2022 and it is the board's intent to reduce this further over the coming years until the plan reaches an assumed rate of return of 6.50%. The target of 6.50% is based on the most recent experience study.
- The plan had been stable above a 70% funding ratio, on a market base, for the last few years, but the funding ratio has not been increasing. This is despite contributions being over the recommended level.
- The plan is changing a number of the actuarial assumptions in 2023 year based on the new information from the experience study. These all unfavorably effected the plan in 2023. However, these changes will lead to better long term performance, if recommended contributions continue to be met.



Year ended 9/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$35,791,483	\$39,434,883	110%
2023	\$35,231,206	\$38,821,206	107%
2022	\$34,741,680	\$38,233,480	110%
2021	\$32,797,288	\$36,166,888	110%
2020	\$30,157,170	\$33,432,570	111%

As of 9/30/24

Market Value: \$987,787,161

Actuarial Value:\$1,038,113,517

Liabilities: \$1,498,414,396

Membership:

Active: 1,074 Inactive: 1,553
Normal Retirement Formula:

2.5% of compensation per year to a max of 80%. With a supplemental benefit of \$420 a month for Tier 1 and \$200 a month of Tier 2

Normal Retirement Eligibility:

Age 60 with 10 years of service.

New Tier:

Age 60 with 15 years of service.

Social Security Coverage: Yes

COLA: 2.5% Max 3% of CPI

Assumed Rate of Return: 6.85%

Salary: 3.0%

Kansas City Public School Retirement

- Market returns were 5.2%, which is under the target ROR of 7.25%. While last years returns were over 10%, when adjusted to an actuarial return, the ROR was only 5.1%. This will put additional downward pressure on the plan.
- Actuarial returns are still impacted by a return of -11.3% in 2022.
- The plan has been locked into a minimum contribution of 12% of payroll or the actuarially recommendation contribution which is greater since July 1 of 2021. This will remain the case until the system is fully funded (funded ratio of 100% at validation date). This year the Actuarial Recommended rate (less the employee contribution) was 8.74%, so the employer contribution rate will be 12%
- The current contribution rate is 21% (employee 9% and 12% employer). This is over the actuarial recommended 8.74% These additional contributions will be available to fund the Unfunded Actuarial Accrued Liability.
- Plan membership increased in plan year 2024 from 4,407 to 4,512. Growth of active membership in a plan is viewed a positive factor, as it leads to increased contributions.



Year ended 9/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$48,715,000	\$56,267,000	116%
2023	\$47,514,000	\$52,655,000	111%
2022	\$45,864,000	\$49,414,000	108%
2021	\$23,926,078	\$26,717,489	112%
2020	\$25,636,126	\$25,771,854	100%

As of 9/30/24

Market Value: \$662,534,519 **Actuarial Value**: \$706,408,237

Liabilities: \$1,031,257,385

Membership:

Active: 4,512 **Inactive**: 7,953

Normal Retirement Formula:

2% of compensation per year.

Normal Retirement Eligibility:

Age 60 with 5 years of service.

New Tier:

Age 62 with 5 years of service.

Social Security Coverage: Yes

COLA: The lessor of 3% or

100% of CPI

Assumed Rate of Return:

7.25%

Salary: 2.85% + Service Based

3.85% to 9.5%

MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

- For the year ending June 30, 2024, the rate of return on investments was 6.6% (market) and 3.7% (actuarial) vs. 6.95% assumed.
- The actuary completed a five-year experience study for the period 7/1/15—6/30/20. The board adopted changes to actuarial assumptions and methods including, but not limited to: increasing the individual salary growth assumption to partially reflect higher merit salary increases, updating mortality tables to Pub-2010 General Employees with a 75% generational projection, updating the retirement and termination assumptions, and modifying the length of future layers used to amortize actuarial gains/losses from 30 years to 25 years.
- The employer contribution rate as a percent of payroll increased from 28.75% for FY25 to 30.25% for FY26 and 32.00% of pay thereafter. This will continue until the plan has an 80% funding ratio. This is over the 27.19% recommended account.
- According to the actuary, there was an increase of 3.7% in the number of active members in the 2024 valuation (44,680 compared to 43,088 in the prior valuation). This increase paired with increase in salary in excess of expectations, lend to an increase in total covered payroll of 11.1% from the prior plan year. This amount was significantly greater than the assumed increase of 2.25%. This resulted in the UAAL contribution rate decreased by 1.94% which then decreased the actuarial required contribution rate. While effecting the recommended actuarial contributions, this does not change the actual contribution level.
- In the general, MOSER has providing at least the full actuarial employer contribution each year. Additional in 2023, the plan received 500 million in additional contributions.
- New tier provisions were passed in 2010 requiring increased age and service requirements, as well as employee contributions of 4% for employees hired for the first time on or after 01/01/11. The number of active members covered by the 2011 tier increased from 26,511 (6/30/23) to 29,331 (6/30/24) or 10.6%. Members ship in the other tier decreased from 16,577 (6/30/23) to 15,349 (6/30/24) or -7.4%.



Year End- ing 6/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$669,903,073	\$669,903,073	100%
2023	\$580,661,379	\$1,080,661,379	186%
2022	\$471,302,256	\$471,302,256	100%
2021	\$463,293,368	\$463,293,368	100%
2020	\$436,895,653	\$436,895,653	100%

The actuary writes that the "actuarial assumptions have been changed eight times in the last ten years, resulting in an ultimate reduction in the investment return assumption from 8.5% in the 2011 valuation to 6.95% in the 2020 valuation." In addition, the unfunded portion of the actuarial accrued liability has increased during this time. These changes in assumptions have had the general effect of decreasing the plan's funded ratio.

As of 6/30/24

Market Value:\$8,798,645,184Actuarial Value:\$9,355,757,779Liabilities:\$16,915,028,387

Active Members: 44,680
Inactive Members: 73.411

Normal Retirement Formula:

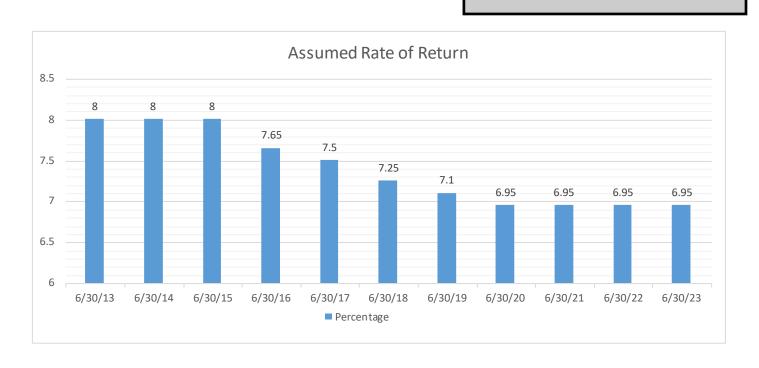
MSEP 2000: 1.7% of compensation times years of service plus 0.8% to age 62 (temp benefit under Rule of 80 or Rule of 90 for the 2011 Tier).

Normal Retirement Eligibility: Age 62 with 5 years of service or Rule of 80. 2011 Tier: Age 67 with 5 years of service or Rule of 90 with minimum age of 55.

Social Security Coverage: Yes
COLA: Annual Max 5%, 80% of CPI

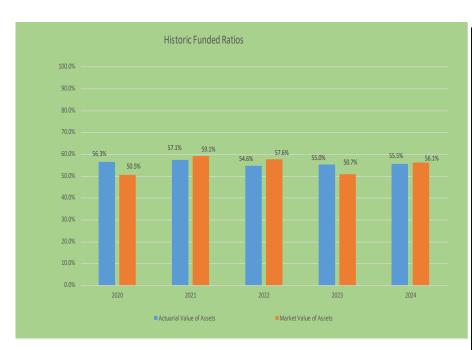
Assumed Rate of Return: 6.95%

Salary: 2.75-10.00%



OVERLAND POLICE RETIREMENT FUND

- Rate of return on investments was 14.5% (Market) and 6.8% (Actuarial) vs. 6.75% assumed.
- In November 2020, the City Council increased employee contributions for lieutenants and captains to 8.5%.
- As part of the collective bargaining agreement approved in November 2018, the employee contribution rate for sergeants, corporals and police officers is now 9.4%.
- The City Council adopted three changes to the plan in 2017: increased employee contributions from 5% to 7.5%, phased out a retroactive COLA for certain members, and changed the refund of employee contributions upon retirement provision so employee contributions made after April 1, 2017 will not be refunded upon retirement.
- The employer contribution was supported by a tax levy of \$0.12 that had been insufficient to meet the ADC since 2008. In August 2017, the voters approved a tax levy increase. The current City tax rates are \$0.24 residential, \$0.3 commercial, \$0.36 personal. The actuary writes "These were recently increased...but are still below the actuarially determined rate."
- The City made multiple changes to actuarial assumptions in 2014 based on the results of a five-year experience study, including lowering the assumed rate of return from 7.5 to 7.0 and again lower to 6.75 in 2021 as well as updating mortality tables. This plan is currently working on moving over to LAGERS.



Year Ending	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$1,385,058	\$746,426	53%
2023	\$1,354,542	\$798,213	59%
2022	\$1,353,069	\$774,329	57%
2021	\$1,232,850	\$683,592	55%
2020	\$1,203,306	\$712,577	59%
2019	\$1,117,425	\$680,159	61%

As of 4/1/24

Market Value: \$15,015,957 **Actuarial Value**: \$14,877,954

Liabilities: \$26,789,307

Membership:

Active: 40 Inactive: 43

Normal Retirement Formula:

2.5% of compensation for the first 20 years of service plus 1.5% of compensation for each of the next 10 years of service.

Normal Retirement Eligibility:

20 years of service or Age 62 with 18 years of service or SSA full retirement age with 5 years of service.

Social Security Coverage: Yes

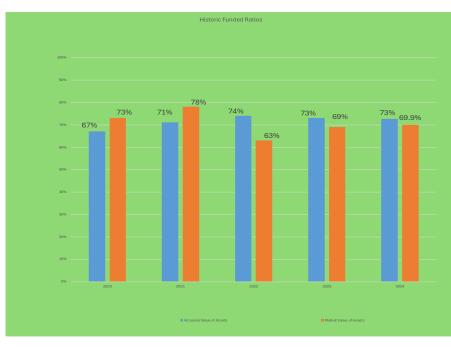
COLA: Annual Max 3%; 60% of CPI. If funded ratio is below 60% only 20% of CPI.

Assumed Rate of Return: 6.75%

Salary: 3.5%

Poplar Bluff Police & Fire Pension Plan

- The plan's funding ratio on a market level is 69.9% this is just under the 70% threshold to be removed from the Watchlist.
- Rate of return on investments was 18.29% (market) vs. 5.5% assumed rate of return
- The City has not contributed 100% of the ADC beginning with plan year 2012, as the only funding source for the plan is a tax which has not been increased to match the increased liabilities.
- In the Summer of 2025, the chairman and executive director of the Joint Committee on Public Employee Retirement met with the board of directors for the Poplar Bluff Police and Fire Pension. The lack of contribution was noted and the board was going to discuss ways to increase the funding, included a possible increase on the tax funding the plan.
- Effective with the January 1, 2015 actuarial valuation, the cost method was changed from the Aggregate method to the Entry Age Normal cost method with a 20-year amortization period for unfunded liabilities. Initial UAAL as of 1/1/15 will be amortized over a closed 20 year period. Subsequent gains and losses are amortized over 15 year periods.
- The increase in the ROR is helping to offset the missed ADC. However, this is not a substitute for meeting the contribution levels.



Year ended 12/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$912,299	\$320,420	35%
2023	\$859,094	\$295,840	34%
2022	\$918,351	\$242,767	26%
2021	\$972,802	\$287,067	30%
2020	\$938,667	\$289,861	31%

As of 12/31/24

Market Value: \$14,018,631
Actuarial Value: \$14,562,484
Liabilities: \$20,557,769

Membership:

Active: 75 Inactive: 88

Normal Retirement Formula:

2% of compensation for the first 20 years of service + 1.5% for each additional year of service.

Maximum Benefit: \$1,650 per

month.

Normal Retirement Eligibility:

Age 55 with 5 years of service

Social Security Coverage: Yes

COLA: No COLA

Assumed Rate of Return: 5.50%

Salary: 3.0%

RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- The plan was frozen as of December 31, 2013 with members moving to LAGERS. At that time the plan was moved to a 30-Year Closed Amortization period.
- A decision made by the Trustees on March 5, 2024, beginning with this valuation added new layers to the
 amortization due to gains and losses, assumption changes, or plan amendments will be recognized over
 amortization periods that ends on December 31, 2043.
- The rate of return was 12.2% (Market) 6.8% (Actuarial) compared to an assumed rate of 7.0%.
- Since moving to asset smoothing in 2016, the plan has only reached the assumed return on 3 times. This is accounting for the change in the assumed ROR in 2022 from 7.5% to 7.0%.
- Per the actuary, City's policy to contribute the recommended contribution, the plan's funded status will improve over the long term.



Year ended 12/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$693,670	\$693,670	100%
2023	\$697,221	\$697,222	100%
2022	\$660,896	\$660,896	100%
2021	\$648,688	\$648,688	100%
2020	\$635,147	\$635,147	100%

As of 1/1/25

Market Value: \$10,299,307

Actuarial Value: \$10,235,512

Liabilities: \$17,542,198

Liabilities: \$17,542,198

Membership:

Active: 11 Inactive: 70

Normal Retirement Formula:

2.5% of compensation for the first 20 years of service plus 1% for each of the next 10 years of service. Benefits frozen as of 12/31/13.

Normal Retirement Eligibility:

Age 55 with 20 years of service

Social Security Coverage: Yes

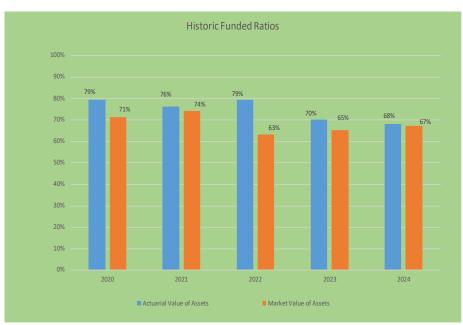
COLA: No COLA

Assumed Rate of Return: 7.0%

Salary: 4%

St. Louis Public School Retirement System

- Rate of return on investments came in 8.89% (market) and 3.24% (actuarial) vs. 7.0% assumed.
- The plan uses PubG-2010 mortality tables, projected fully generationally using projection scale MP-2021.
- The actuary writes that "Approximately \$33.7 million loss is attributable to the System's actuarial value of assets (AVA) rate of return on assets, which was 3.24% for plan year 2024," The actuary continues "Even though the Plan saw a market value return of 8.89% during 2024, the large 2022 loss is still being recognized, resulting in the AVA return being below the expected 7.0%." The actuary noted the loss in 2022 as a downward pressure in the previous valuation as well.
- The plan utilizes a closed 15-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/21.
- An employee contribution of 8.0% is in place with a 9% contribution for employees hired after 1/1/2018.
- Change to RSMo. 169.490(4) have changed the schedule of employer contributions. In plan year 2025, the contribution rate must be 12.5% of payroll. In 2026, the contribution rate will increase to 14%.



Year ended 12/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2024	\$47,567,520	\$40,257,177	85%
2023	\$42,954,102	\$37,930,116	88%
2022	\$38,336,585	\$41,034,190	107%
2021	\$37,037,171	\$41,226,981	111%
2020	\$49,622,726	\$41,822,334	84%

As of 1/1/25

Market Value: \$877,055,352

Actuarial Value: \$900,463,567

Liabilities: \$1,315,485,060

Membership:

Active: 5,121 **Inactive**: 9,188

Normal Retirement Formula:

2% of compensation x years of service. Hired after 1/1/18 1.75% of compensation x years of credit service. Max Benefit is 60% of final average salary.

Normal Retirement Eligibility:

Age 65 with 5 years of service

Social Security Coverage: Yes

COLA: Ad Hoc

Assumed Rate of Return: 7.0%

Salary: 5%

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