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# **JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT**

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**4th QUARTER MEETING  
December 2, 2024  
11:00 am—12:00 pm  
Joint Committee Room, 117-A, State Capitol**

## **AGENDA**

**Roll Call**

**Watch list**

**Quarterly Investment Report**

**Plan Updates**

**Comments of the Chair**

\*A vote may be taken to close the meeting pursuant to section 610.021(3), RSMo and section 610.021(13), RSMo relating to personnel matters.\*

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# JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

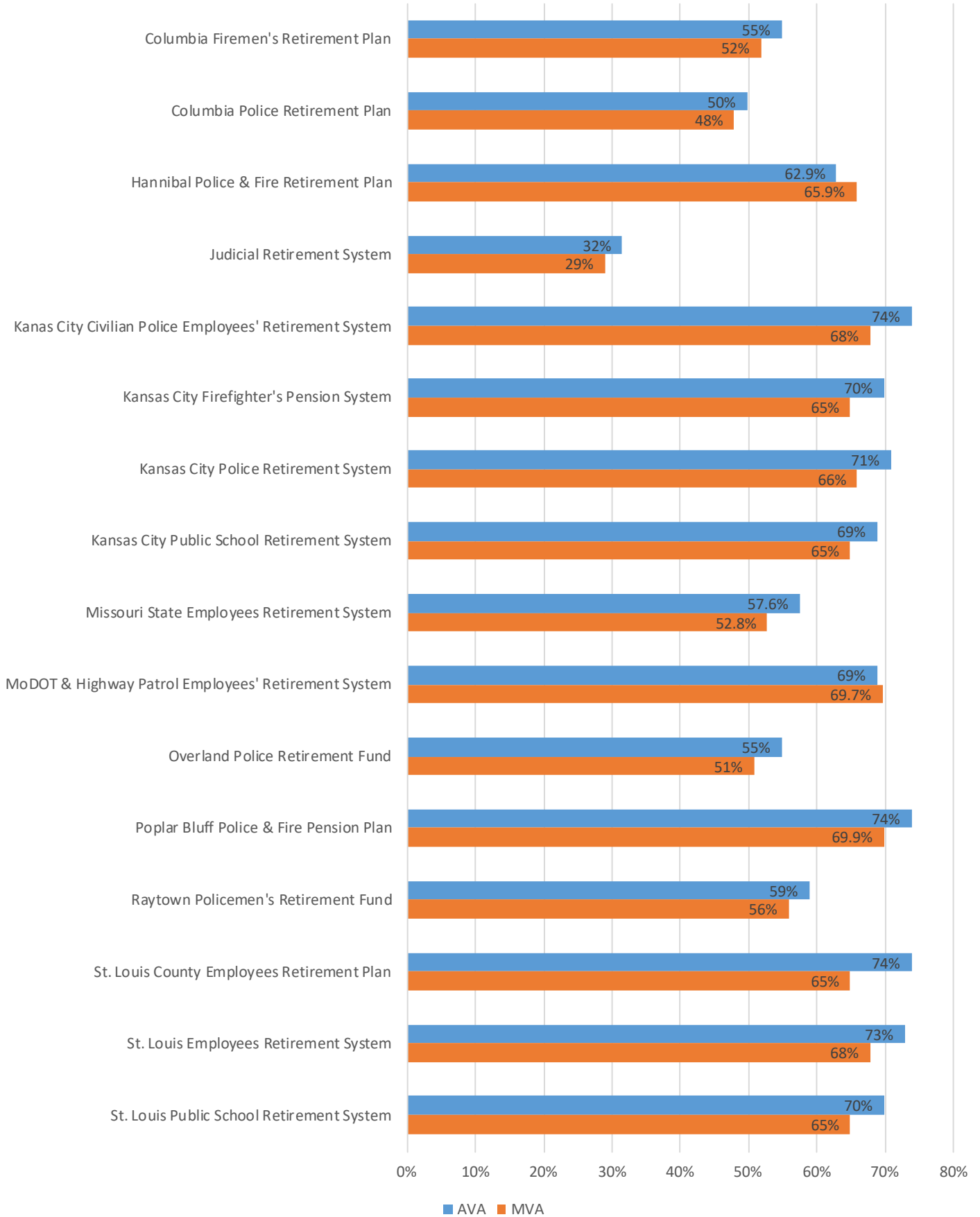
2024 ANNUAL WATCH LIST

Presented on December 2, 2024

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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vested, retired, surviving beneficiary, disabled members, and for some plans, terminated nonvested members who have not withdrawn employee contributions.

## Plans Included on the Watch List 2024

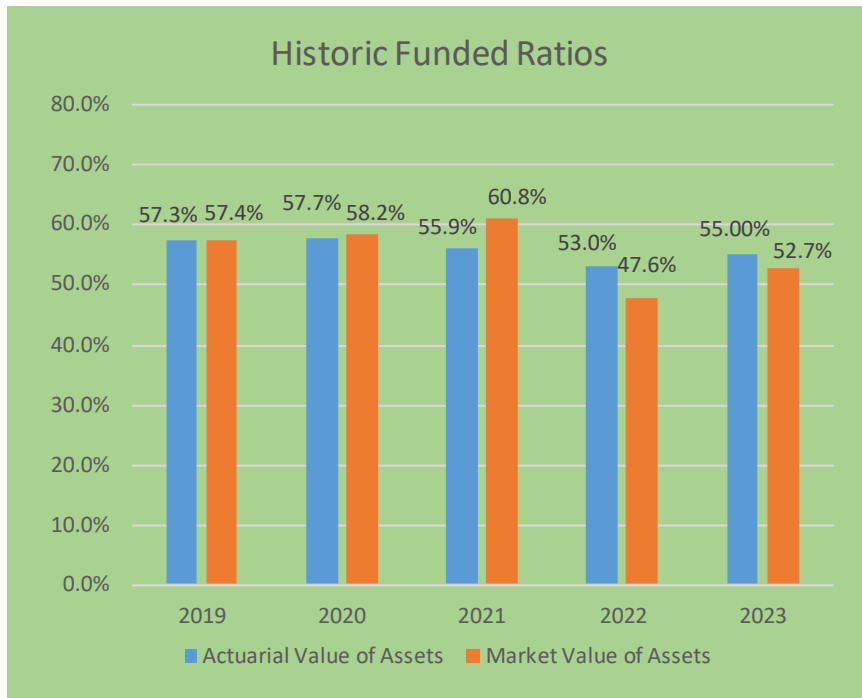


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# COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

- The Fire and Police plans are commingled for investment purposes. For the year ended 9/30/23, the rate of return on investments was 13.5% (Market) & 5.0% (Actuarial) vs 6.25% assumed rate of 7.0%.
- The employer is meeting or exceeded the ADC. The actuary notes that “For the continued well-being of the fund, the fund must receive contributions at least at the levels recommended in the actuarial valuation.”
- In last 13 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 9/30/23 valuation, 28 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...”
- A new tier of provisions was passed for employees hired on or after October 1, 2012. These provisions include, but are not limited to, modified age and service requirements for retirement eligibility, modified benefit multiplier with no retiree COLA, fire member contribution reduced to 4% of pay, and automatic survivor benefit replaced with a survivor option at retirement with member’s reduced benefit. The actuary notes that “the normal cost decreased as more active members came into the post October 1, 2012 benefit plan.”
- Fire employees contribute 16.32% of pay (4% for those hired on/after 10/01/12) and do not participate in Social Security. Police employees contribute between 7.45% & 8.35% of pay (4.5% for those hired on/after 10/01/12) & do participate in Social Security.

## FIREMEN’S RETIREMENT FUND



Year Ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2023	\$8,101,354	\$8,101,354	100%
2022	\$6,962,552	\$6,962,552	100%
2021	\$6,619,098	\$6,619,098	100%
2020	\$5,965,276	\$5,965,276	100%
2019	\$5,306,842	\$5,306,842	100%

**Fire as of 9/30/23**

**Market Value:** \$106,203,705  
**Actuarial Value:** \$110,420,170  
**Liabilities:** \$201,248,536

**Membership:**  
**Active:** 155    **Inactive:** 188

**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%  
**Wage Inflation:** 2.75%

# COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

## POLICE RETIREMENT SYSTEM

### Police as of 9/30/23

<b>Market Value:</b>	\$61,545,181	<b>Membership:</b>	<b>Assumed Rate of Return:</b> 6.25%
<b>Actuarial Value:</b>	\$63,988,628	<b>Active:</b> 134	<b>Salary:</b> 2.75%
<b>Liabilities:</b>	\$128,063,935	<b>Inactive:</b> 254	<b>Social Security Coverage:</b> Yes

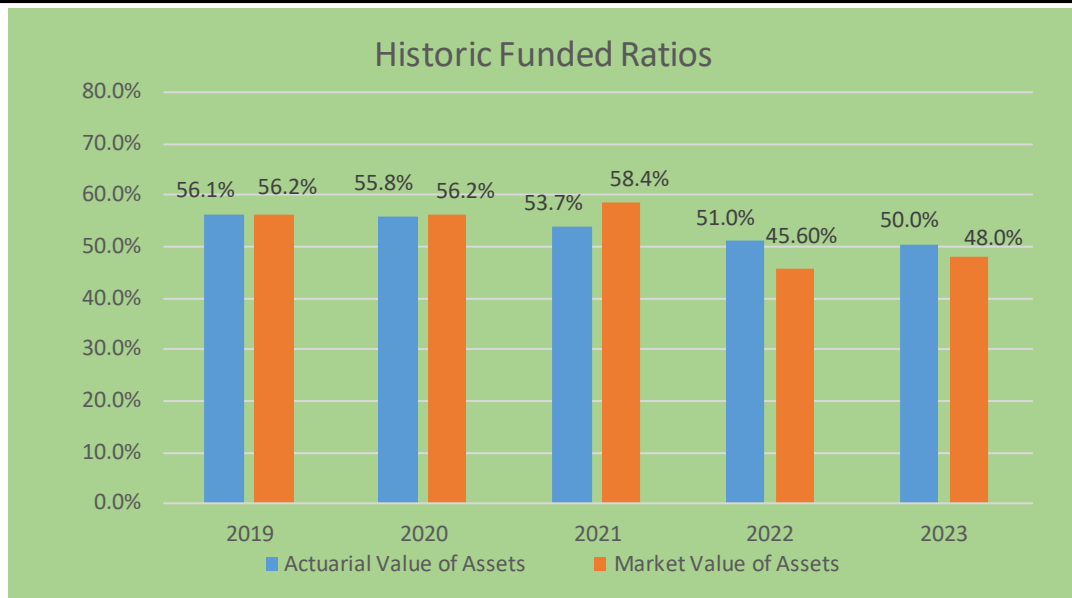
**Normal Retirement Formula:** 3% of Compensation for the first 20 years of service plus 2% of compensation for the next 5 years of service. Max: 70% of compensation with 25 years of service.

**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

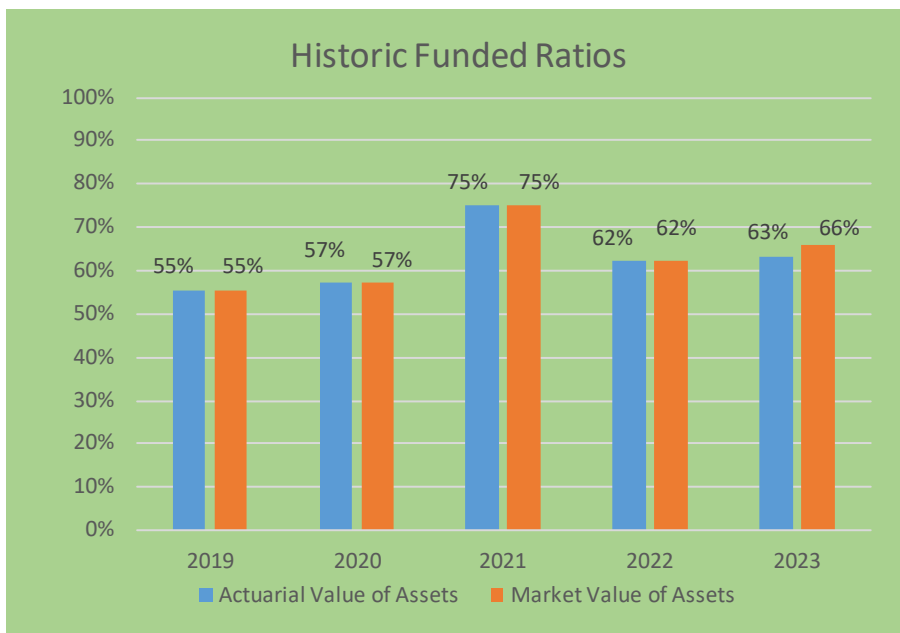
**Wage Inflation:** 2.5%



<b>Year ending 9/30,</b>	<b><u>RECOMMENDED CONTRIBUTION</u></b>	<b><u>ACTUAL CONTRIBUTION</u></b>	<b><u>PERCENT CONTRIBUTED</u></b>
<b>2023</b>	\$4,999,944	\$4,999,944	100%
<b>2022</b>	\$4,345,411	\$4,345,411	100%
<b>2021</b>	\$4,280,243	\$4,280,243	100%
<b>2020</b>	\$4,159,256	\$4,159,256	100%
<b>2019</b>	\$4,019,648	\$4,019,648	100%

# HANNIBAL POLICE & FIRE RETIREMENT PLAN

- The rate of return on investments was 11.4% (Market) vs. 7% assumed.
- Mortality Table: Public Safety 2010 using scale MP-2021
- Per the actuary “The Plan’s annualized investment return over the year preceding the valuation was 11.4%, producing a gain of almost \$950,000 thousand compared to our assumption that the assets will return 7%. A loss in the measurement of liabilities partially offset the asset gains, making the net actuarial gain \$745,721.”
- Also per the actuary “Since the 2011-12 fiscal year, the city has consistently contributed in excess of the recommended contribution, and the funded ratio of the plan has gradually increased. Asset gains from the prior year caused the funded ratio to increase to 66.0%. The plan document requires contributions to remain at a level percentage of covered compensation until the plan reaches a funded ratio of 80%.”



Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
2023	\$1,238,383	\$1,482,564	120%
2022	\$1,242,940	\$1,520,789	122%
2021	\$1,286,444	\$1,492,927	116%
2020	\$1,331,470	\$1,424,566	107%
2019	\$1,378,071	\$1,364,514	99%

**As of 9/30/23**

**Market Value:** \$23,942,187  
**Actuarial Value:** 22,718,608  
**Liabilities:** \$36,291,987

**Membership:**  
 Active: 69 Inactive: 76

**Normal Retirement Formula:**  
 65% of compensation for first 25 years of service + 1% for next 5 years of service. Maximum: 70% of compensation.

**Normal Retirement Eligibility:**  
 25 years of service. If hired on/ after 7/1/07: 25 years of service with a minimum age of 55.

**Social Security Coverage:** No

**COLA:** Eliminated, 13th check may be issued if plan is at least 70% funded.

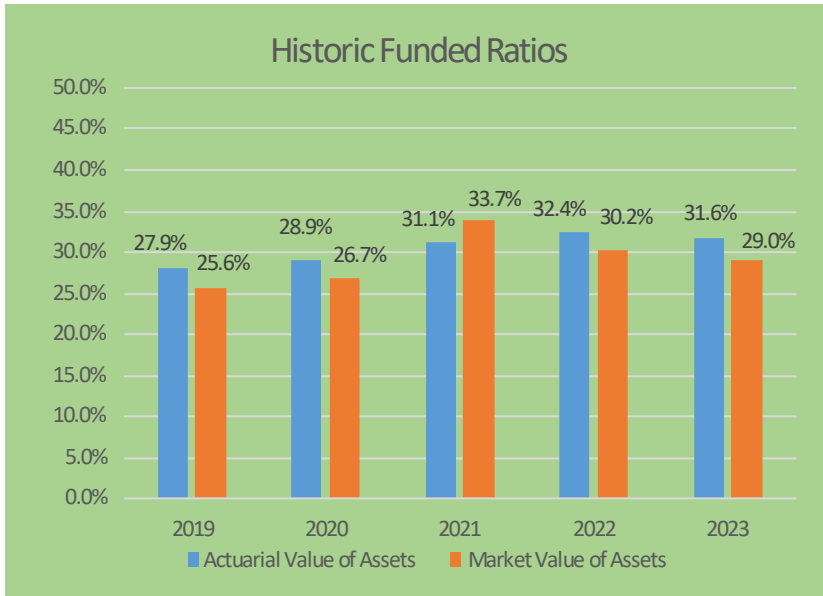
**Assumed rate of return:** 7.0%  
**Wage Inflation:** 3.5%





# JUDICIAL RETIREMENT PLAN

- For the year ending 6/30/23, investment returns were 2.5% (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: changing the individual salary increase assumption from age-based to 3%, updating mortality tables to Pub-2010 General Employees with a 75% generational projection, updating retirement and termination assumptions, eliminating the disability assumption, and modifying the length of future layers used to amortize actuarial gains/losses from 30 years to 25 years.
- New tier provisions were passed in 2010 requiring increased age and service requirements as well as employee contributions of 4% for judges serving for the first time on or after 1/01/11.
- The number of active members covered by the 2011 Plan increased from 263 in the 2022 valuation to 302 in the 2023 valuation, and the percentage of total active members in 2011 Plan increased from 63% to 73%. The normal cost rate decreased by 0.29% and the effective member contribution rate increased by 0.36% which both served to reduce the employer contribution rate.
- 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%.



FY End-ing 6/30,	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$39,064,758	\$39,064,758	100%
<b>2022</b>	\$39,228,848	\$39,228,848	100%
<b>2021</b>	\$39,996,509	\$39,996,509	100%
<b>2020</b>	\$39,174,515	\$39,174,515	100%
<b>2019</b>	\$38,604,668	\$38,604,668	100%

**As of 6/30/23**

**Market Value:** \$190,226,755  
**Actuarial Value:** \$207,085,203  
**Liabilities:** \$654,242,323

**Membership:**  
**Active:** 415    **Inactive:** 651

**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

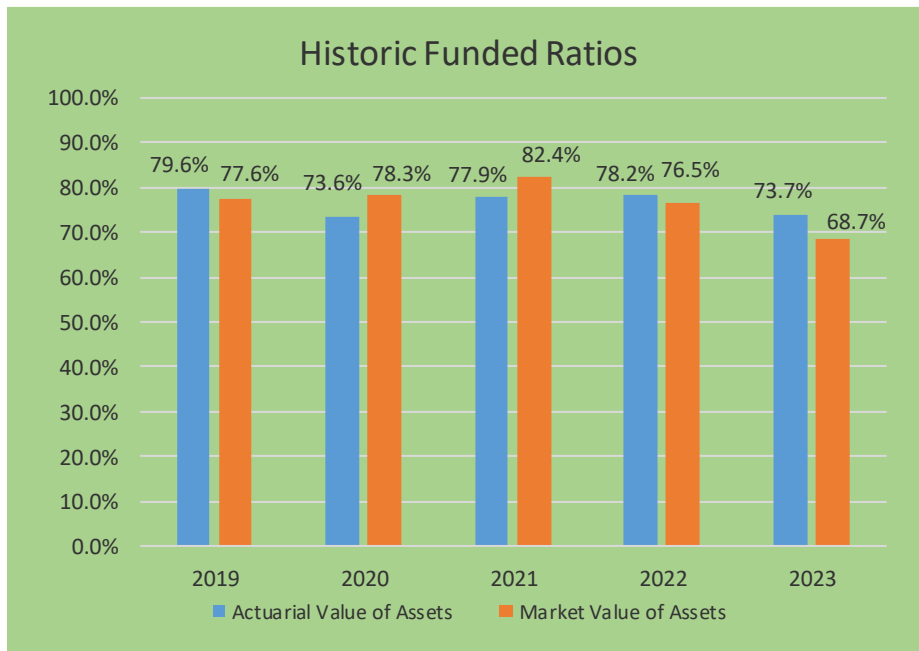
**Serving for the first time on/after 1/1/11:**  
 Age 67 with 12 years of service  
 Age 62 with 20 years of service

**Social Security Coverage:** Yes  
**COLA:** Annual max 5%, 80% CPI  
**Assumed rate of return:** 6.95%  
**Salary:** 3%



# Kansas City Civilian Police Employees' Retirement System

- Rate of return on investments was -.03% (market) and 4.6% (actuarial) vs. 6.95% assumed.
- The plan used Pub-2010, on a generational projection Scale MP-2021, mortality tables. (Previously on RP-2000Healthy projected 2017 with Scale AA)
- The actuary writes that “ There were several changes to the actuarial assumptions used in this valuation as a result of the completion of the an experience study in the first half of 2023. The net impact of the changes to the actuarial assumptions increased the actuarial accrued liability by \$5.2 million and a lead to a decrease in the employer contribution of \$80,000 for the fiscal year ending in April 30, 2025.
- The plan utilizes a closed 30-year period for amortization of unfunded actuarial accrued liabilities that began in 2017.
- This is a contributory plan for the employees (5%).
- The plan has adjusted its assumed return to 6.95% in 2023 from 7.05% in 2022.



**As of 4/30/23**

**Market Value:** \$165,793,843  
**Actuarial Value:** \$177,749,624  
**Liabilities:** \$241,181,842

**Membership:**  
**Active:** 492 **Inactive:** 378

**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

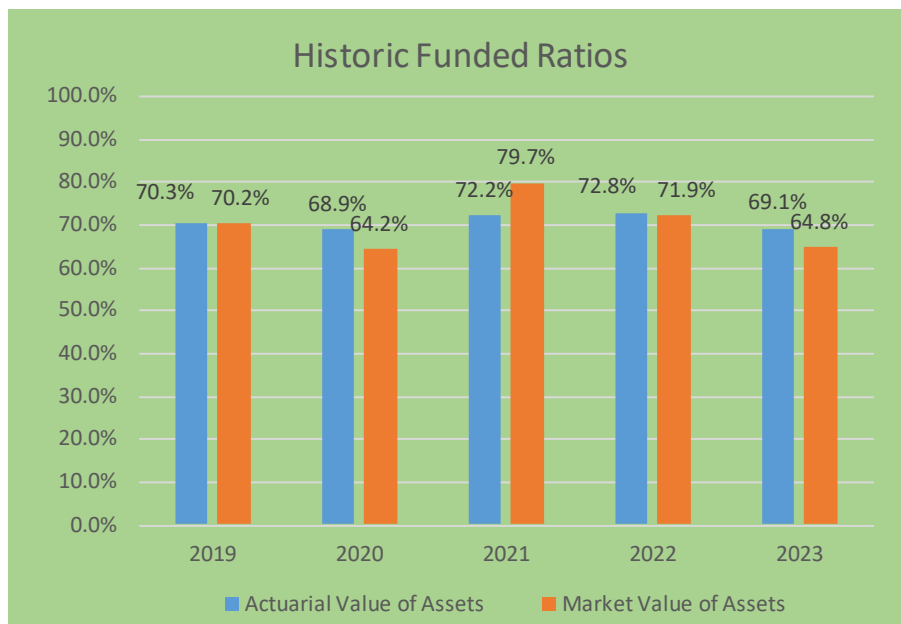
**Social Security Coverage:** Yes  
**COLA:** Ad Hoc. 3% Max  
**Assumed Rate of Return:** 6.95%  
**Salary:** 3%

Year ended 4/30,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$6,441,244	\$6,441,244	100%
<b>2022</b>	\$5,800,468	\$5,800,468	100%
<b>2021</b>	\$5,358,552	\$5,358,552	100%
<b>2020</b>	\$4,849,708	\$4,849,708	100%
<b>2019</b>	\$4,778,854	\$4,778,854	100%



# Kansas City Firefighter's Pension System

- The plan did not reach the recommended contribution in 2022. This loss has not been offsite by any additional contributions the following year.
- The plans investment did not generate the assumed returns at the rate predicted for 2023, with Market ROR of -1.45% and Actuarial ROR of 4.60%. These values are weighted against the assumed ROR of 7%. This lead to an increase in liability of \$15.1 million dollars. The actuary cites this as one of two major factors in the increase of unfunded actuarial liability.
- Salary change increased unfunded liability of the system by \$22.5 million. This was marked as the second major factor in the increase of the unfunded actuarial liability.
- The plan is moving to a new amortization period. It takes effect and increase the recommended contributions in 2023. 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.



**As of 4/30/23**

**Market Value:** \$602,383,893  
**Actuarial Value:** \$652,247,594  
**Liabilities:** \$929,542,451

**Membership:**  
**Active:** 1,004 **Inactive:** 1,060

**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%

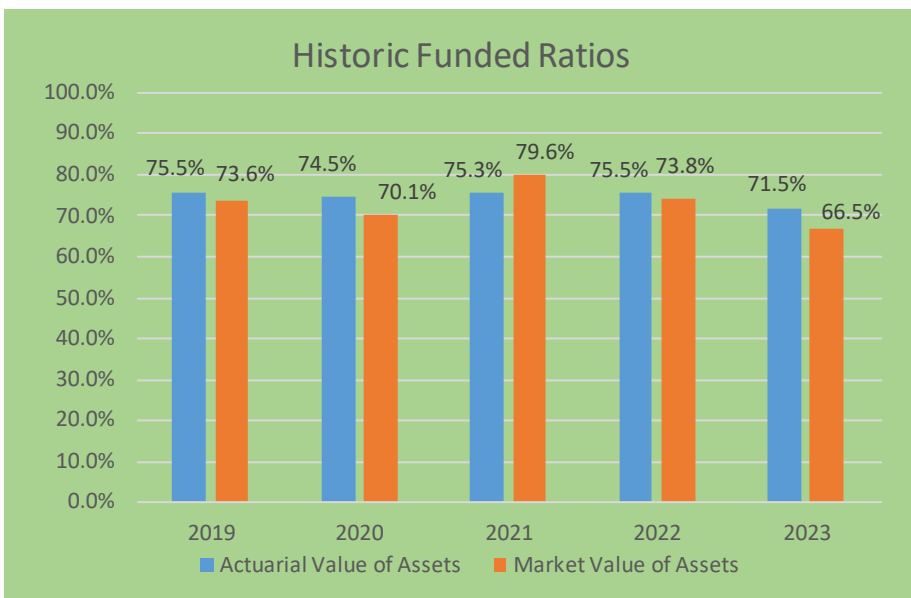
**Assumed Rate of Return:** 7.0%  
**Salary:** 3%

Year ended 9/30	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$27,301,916	\$27,335,443	100%
<b>2022</b>	\$28,803,906	\$26,813,483	93%
<b>2021</b>	\$23,981,922	\$24,258,707	101%
<b>2020</b>	\$21,562,471	\$21,728,336	101%
<b>2019</b>	\$19,747,524	\$20,015,327	101%



# Kansas City Police Retirement System

- Based on market value ROR was -0.3%. The auditor believe this is due to general market trends from April 2022 to April 2023. This lost is reflected in the actuarial value of the assets returning 4.6% on the investments, which is under the expect rate of return of 7.20%. In recent years the actuarial ROR has been below the assumed ROR (with the exception of 2021).
- The plan has 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 this year. These all unfavorably effect the plan. This alone reduced the funding ratio by 3% on an actuarial base. However, these changes will lead to better long term performance, if recommended contributions continue to be met.
- The changes to the actuarial assumptions were: decreasing the assumed ROR from 7.2% to 6.95%, increasing assumed administrative cost expenses by 0.4%, increasing salary merit assumptions, adjusting retirement and termination rates, and shift to a more preferred mortality table in the Pub-2010 safety - scale MP-2021.



**As of 9/30/23**

**Market Value:** \$953,586,876  
**Actuarial Value:** \$1,025,449,242  
**Liabilities:** \$1,434,214,565

**Membership:**  
**Active:** 1091 **Inactive:** 1,566

**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:** 6.95%  
**Salary:** 3.0%

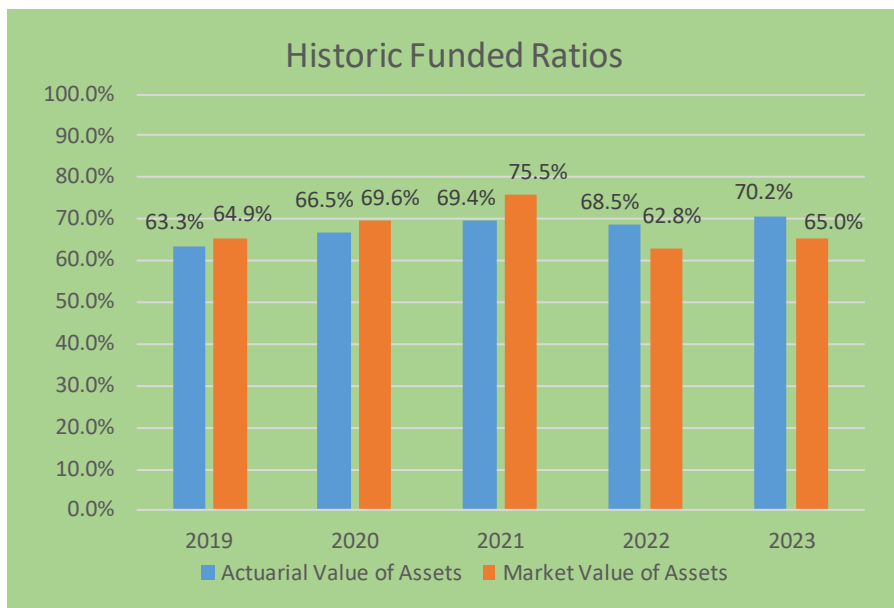
Year ended 9/30	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$35,231,206	\$38,821,206	107%
<b>2022</b>	\$34,741,680	\$38,233,480	110%
<b>2021</b>	\$32,797,288	\$36,166,888	110%
<b>2020</b>	\$30,157,170	\$33,432,570	111%
<b>2019</b>	\$29,083,743	\$32,280,943	111%





# Kansas City Public School Retirement

- Market returns were 10.1%, which is over the expect ROR of 7.25%. This allowed the plan to gain ground over last year. However, the increase in the value of the assets did not offset the losses from the previous year.
- The actuarial value of assets are still below targets, this lead the actuary to increase the recommended contributions (as a percentage of payroll) to 19.12% from 17.85% .
- The actuaries noted a large portion of actuarial gains were do to the termination of non-vested members leaving the plan. These participants are no longer a liability on the plan.
- 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).
- The current contribution rate is 21% (employee 9% and 12% employer). This is over the actuarial recommended 10.22% These additional contributions will be available to fund the Unfunded Actuarial Accrued Liability.



Year ended 9/30	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
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%
2019	\$21,998,207	\$21,488,838	98%

**As of 9/30/23**

**Market Value:** \$652,945,771  
**Actuarial Value:** \$702,224,863  
**Liabilities:** \$1,016,027,955

**Membership:**  
**Active:** 4,407 **Inactive:** 7,781

**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

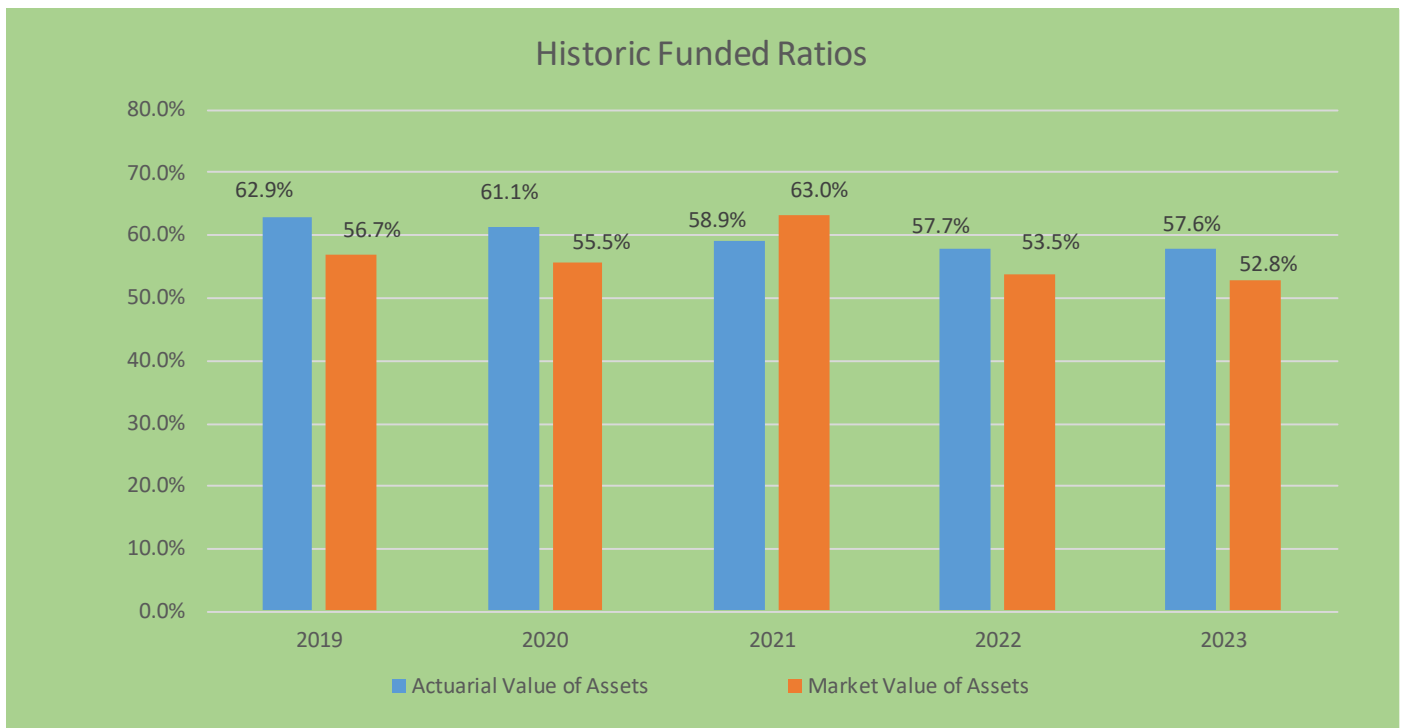
**Assumed Rate of Return:**  
 7.25%

**Salary:** 2.85%



# MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

- For the year ending June 30, 2022, the rate of return on investments was 2.5% (market) and 3.4% (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.
- One factor that affected the actuarially determined contribution rate was an increase in active membership of 3.6% from 41,595 as of 6/30/22 to 43,088 as of 6/30/23. This increase resulted in covered payroll increasing compared to the prior year. Active membership has declined about 23% over 19 years from 55,914 actives in 2004 to 43,088 in 2023.
- In 2018, the Board adopted a new investment portfolio asset allocation with a planned 36 month transition period. The board completed the transition ten months ahead of schedule in February 2021.
- Effective 6/30/18, the Board modified the asset smoothing method from an open five-year period to a closed five-year period. Existing unrecognized investment experience as of 6/30/18 will be recognized over a closed seven-year transition period beginning 6/30/18.
- 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 23,304 (6/30/22) to 26,511 (6/30/23) and the percentage of members covered by MSEP 2011 increased from 56% to 62%. The actuary writes that “Because the benefit structure is different for MSEP 2011 members...the ongoing cost of the System declines as a larger percentage of active members are covered by MSEP 2011.”



Year Ending 6/30	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
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%
2019	\$394,150,042	\$394,150,042	100%

**As of 6/30/23**

**Market Value:** \$8,557,793,248  
**Actuarial Value:** \$9,331,207,050  
**Liabilities:** \$16,190,813,686

**Active Members:** 43,088  
**Inactive Members:** 72,908

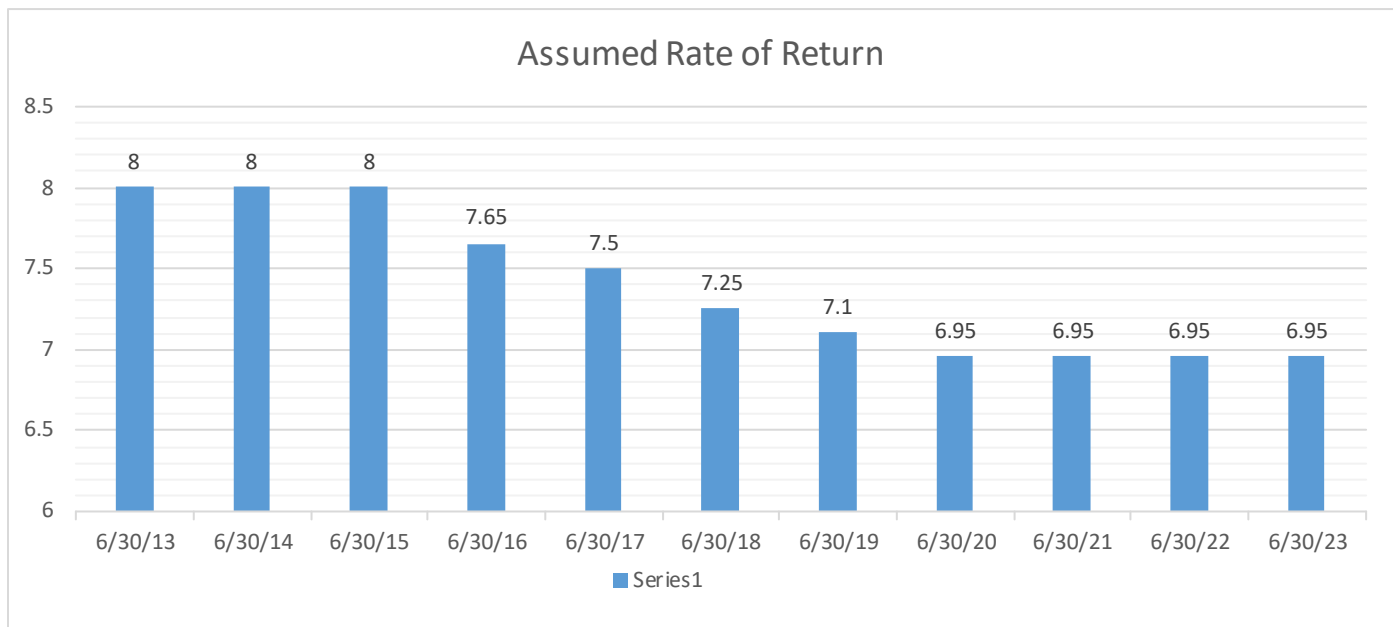
**Normal Retirement Formula:**  
MSEP 2000: 1.7% of compensation times years of service plus 0.8% to age 62 (temp benefit under Rule of 80 or Rule of 90 for the 2011 Tier).

**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

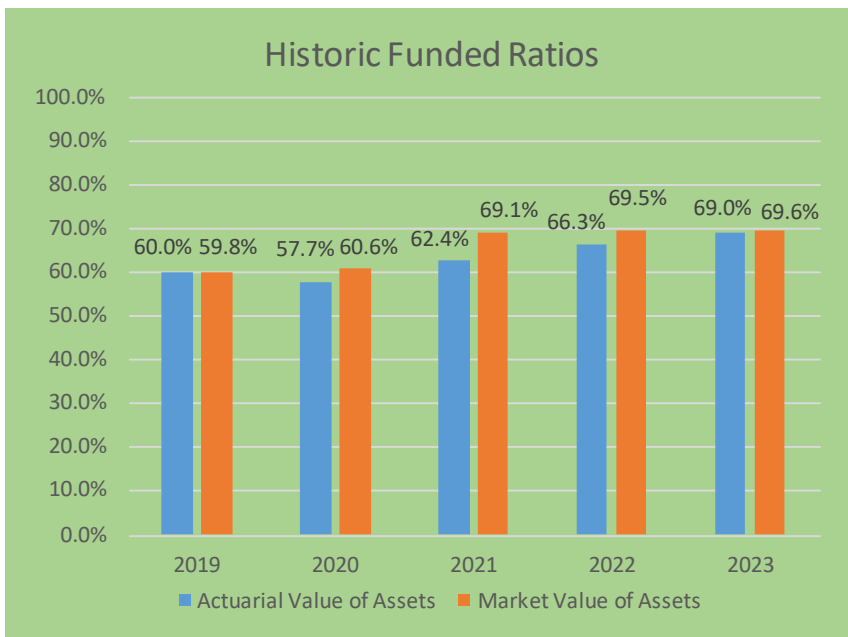
**Assumed Rate of Return:** 6.95%  
**Salary:** 2.75-10.00%

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.



# MoDOT & HIGHWAY PATROL EMPLOYEES' RETIREMENT SYSTEM (MPERS)

- Rate of return on investments was 8.9% (Market) and 12.85% (Actuarial) vs. 6.5% assumed.
- The Board of Trustees' actuary performed a review of economic assumptions (between experience studies) and lowered the assumed rate of return for investments from 7% to 6.5%.
- The actuary continues to recommend that economic assumptions be reviewed annually in light of changes in actuarial standards and changes in forecasts of future economic conditions.
- New tier provisions were passed in 2010 requiring increased age and service requirements and an employee contribution rate of 4% of pay for employees hired for the first time on or after 01/01/11. As of 6/30/22, 3,331 active members were covered under the 2011 tier (an increase from 3,280 as of 6/30/21).
- In 2009, the actuary presented a temporary accelerated amortization schedule in accordance with section 105.684. As of 6/30/22 valuation, the plan uses a closed 2-year amortization period for unfunded retiree liabilities and a closed 13-year amortization period for the remaining unfunded liabilities (for the plan year beginning 7/1/23).
- In September 2014, the Board established a "rate stabilization reserve fund" from experience gains to attempt to maintain the employer contribution rate at or close to its current level (58% of covered payroll).
- As of June 30th of 2024, the plan is funded at 74.1% on a market base, this will appear in the 2026 annual report.



Year Ending June 30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2023	\$232,813,995	\$232,813,995	100%
2022	\$212,711,117	\$212,711,117	100%
2021	\$208,212,848	\$208,212,848	100%
2020	\$210,871,852	\$210,871,852	100%
2019	\$210,166,927	\$210,166,927	100%

**As of 6/30/23**

**Market Value:** \$3,281,627,844

**Actuarial Value:** \$3,247,983,333

**Liabilities:** \$4,709,391,407

**Membership:**  
Active: 6,621      Inactive: 11,843

**Normal Retirement Formula:**  
Year 2000 Plan: 1.7% of compensation times years of service plus 0.8% to age 62 (temporary 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. Uniformed Patrol: Mandatory retirement at age 60. Rule of 80 with minimum age of 48.

**Hired for the first time on/after 1/1/11:**  
Age 67 with 5 years of service or Rule of 90 (age 55). Uniformed Patrol: Age 55 with 5 years of service. Mandatory retirement at age 60.

**Social Security Coverage:** Yes

**COLA:** Annual Max 5%; 80% of CPI

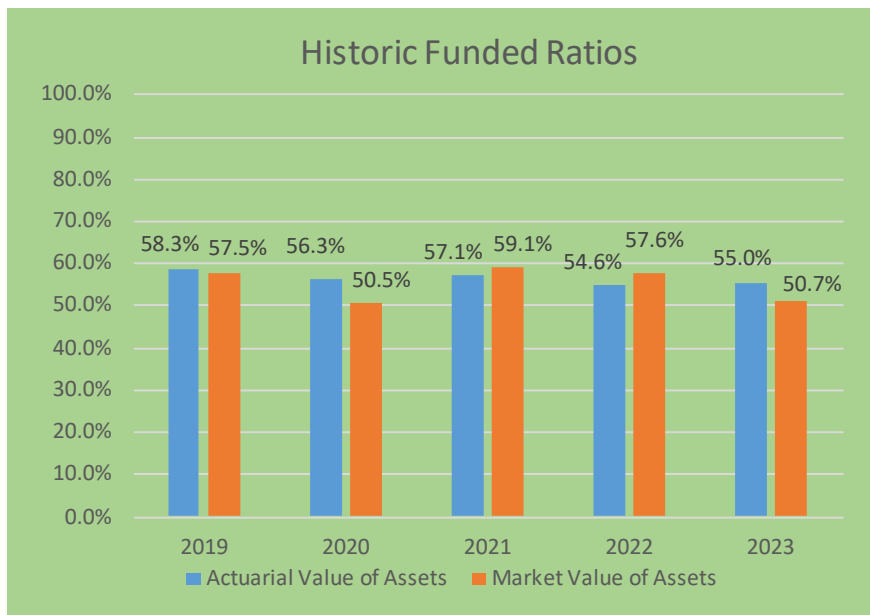
**Assumed rate of return:** 6.5%

**Wage Inflation:** 3%



# OVERLAND POLICE RETIREMENT FUND

- Rate of return on investments was -8.3% (Market) and 4.9% (Actuarial) vs. 6.75% assumed.
- The mortality tables have been updated to Pub-2010 Safety.
- 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 actuarially determined tax rate increased from \$0.512 as of 4/20/22 to \$0.513 as of 4/1/23.
- 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 3/31,	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
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%
2018	\$1,091,236	\$553,559	51%

**As of 4/1/23**

**Market Value:** \$13,357,004

**Actuarial Value:** \$14,479,416

**Liabilities:** \$26,330,607

**Membership:**  
Active: 39    Inactive: 44

**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%

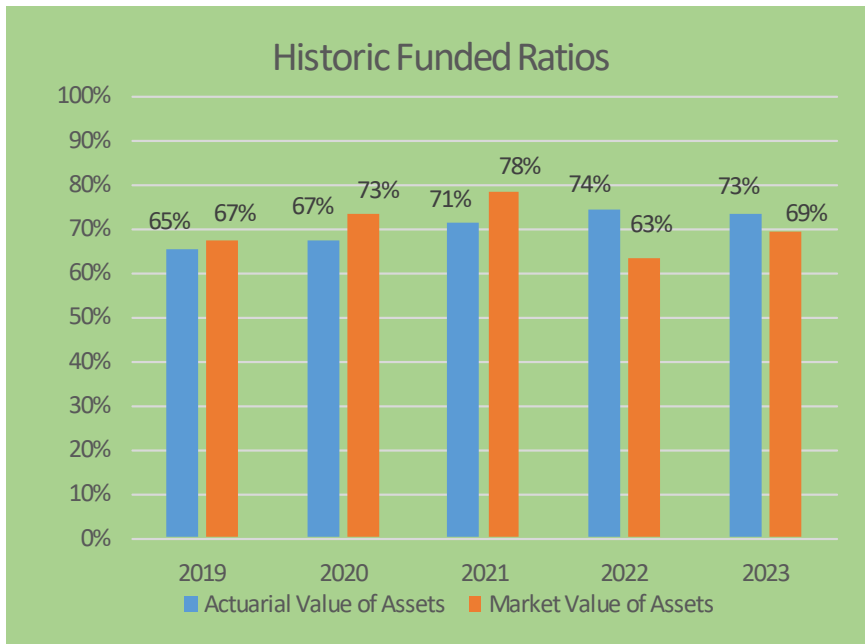
**Salary:** 3.5%





# Poplar Bluff Police & Fire Pension Plan

- Rate of return on investments was 11.30% (market) vs. 5.5% assumed rate of return.
- Per the actuary “During the last year, the plan experienced an actuarial loss of \$561,959. This loss was due to plan contributions for the prior year being less than the 2023 actuarial determined contribution.
- The City has not contributed 100% of the ADC beginning with plan year 2012. The actuary comments that “Over the years, the plan sponsor has been contributing 30-50% of the ADC. This contribution policy will likely not be enough to cover future benefit obligations and ADC is likely to increase with each year the contribution is under 100%.”
- Prior to the 1/1/19 valuation, the plan’s actuary conducted a comprehensive review of assumptions. Effective with the 1/1/19 valuation, the following assumptions were changed: increased the assumed rate of return from 5 to 5.25, increased inflation assumption from 2 to 2.25, and updated mortality tables.
- 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.



Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$859,094	\$295,840	34%
<b>2022</b>	\$918,351	\$242,767	26%
<b>2021</b>	\$972,802	\$287,067	30%
<b>2020</b>	\$938,667	\$289,861	31%
<b>2019</b>	\$912,881	\$201,001	22%

**As of 12/31/23**

**Market Value:** \$14,018,631  
**Actuarial Value:** \$14,742,066  
**Liabilities:** \$20,057,769

**Membership:**  
 Active: 78    Inactive: 85

**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.

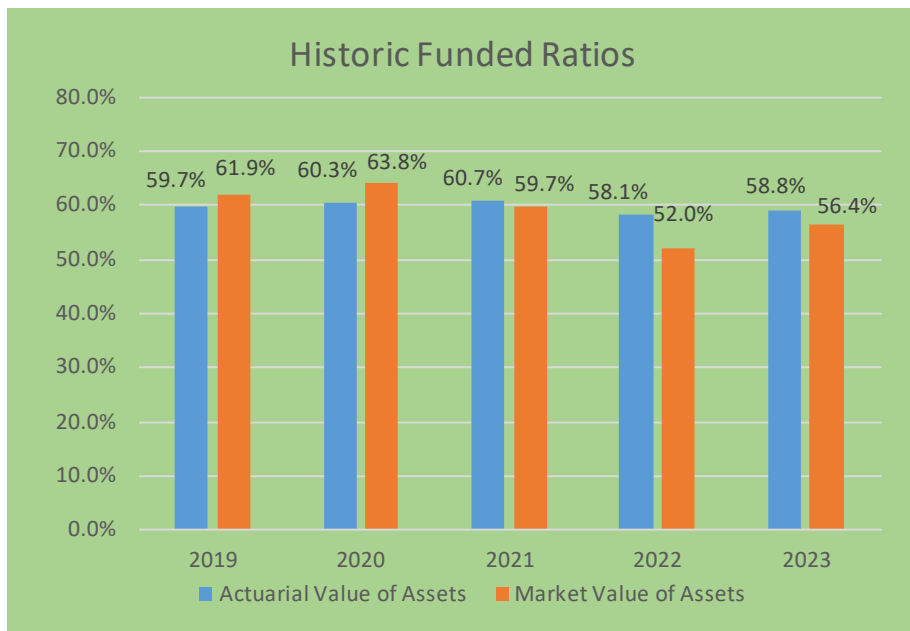
**Normal Retirement Eligibility:**  
 Age 55 with 5 years of service

**Social Security Coverage:** Yes  
**COLA:** No COLA  
**Assumed Rate of Return:** 5.50%  
**Salary:** 3.0%



# RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- Rate of return on investments was 16.33% (market) and 7.90% (actuarial) vs. 7.0% assumed.
- Updated mortality tables with the most recent projection scale, MP-2024.
- The actuary writes that “The plan’s asset return in 2023 was 16.34% on a market value basis, compared to the valuation’s long-term expected return of 7.00%, resulting in asset gains of over \$1.45 million. For purposes of calculating the contribution, asset gains and losses are smoothed over five years. This measure of assets produced a return of 7.9% on an actuarial basis, producing asset gains of about \$38 thousand.”
- Effective with the 1/1/16 valuation, the plan implemented five year smoothing of investment gains and losses. This is designed to reduce volatility of market returns and produce more stability in contribution rates.
- The plan utilizes a closed 30-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/14.
- An employee contribution of 3% of pay was ceased in 2000 when the Plan was 101% funded.
- The plan was frozen as of December 31, 2013 with members moving to LAGERS.



Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
2023	\$697,221	\$697,222	100%
2022	\$660,896	\$660,896	100%
2021	\$648,688	\$648,688	100%
2020	\$635,147	\$635,147	100%
2019	\$590,127	\$590,127	100%

**As of 1/1/24**

**Market Value:** \$9,966,137  
**Actuarial Value:** \$10,390,059  
**Liabilities:** \$17,668,283

**Membership:**  
**Active:** 12    **Inactive:** 69

**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.

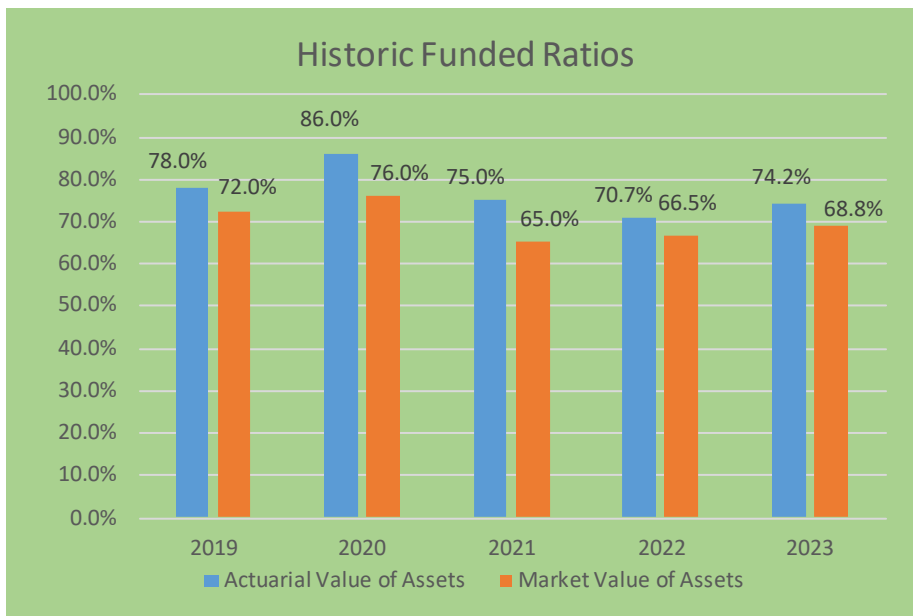
**Normal Retirement Eligibility:**  
 Age 55 with 20 years of service

**Social Security Coverage:** Yes  
**COLA:** No COLA  
**Assumed Rate of Return:** 7.0%  
**Salary:** 4%



# ST. LOUIS COUNTY EMPLOYEES RETIREMENT PLAN

- Rate of return on investments was 12.58% (market) and 5.16% (actuarial) vs. 7.25% assumed.
- The actuary indicates rate of return on investment is below the assumed return of 7.25 (on an actuarial level). This is cited as the primary cause for increased recommend contributions.
- Plan A uses Blended 85% PubG-2021, Plan B uses PubS-2010 Scale MP-2021.
- The salary increases that unfavorably effected the plan last year have not occurred again this year, with salary increases more closely matching the assumptions.
- The plan utilizes a closed 25-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/2023.
- An employee contribution of 4% is in place for participants hired prior to February 1, 2018.



**As of 12/31/23**

**Market Value:** \$840,746,779

**Actuarial Value:** \$906,249,236

**Liabilities:** \$1,221,200,084

**Membership:**

**Active:** 3,765    **Inactive:** 5,899

**Normal Retirement Formula:**

Civilian: 1.3-1.5% of comp x years of service + \$15 per month x years of service.

Police: 1.4-1.6 x years of service x + \$30 per month x years of service to age 65 then \$5 per month x years of service.

**Normal Retirement Eligibility:**

Civilian: Before 2/1/18 Age 65 w/ 3 years of service. Rule of 80. After 2/1/2018 Age 67 w/ 3 years of service . Rule of 85

Police: Before 2/1/18 Age 60 w/ 10 years of service. Age 65 w/ 3 years of service. Rule 80. After 2/1/18 Rule 85.

**Social Security Coverage:** Yes

**COLA:** Ad HOC

**Rate of Return:** 7.25%

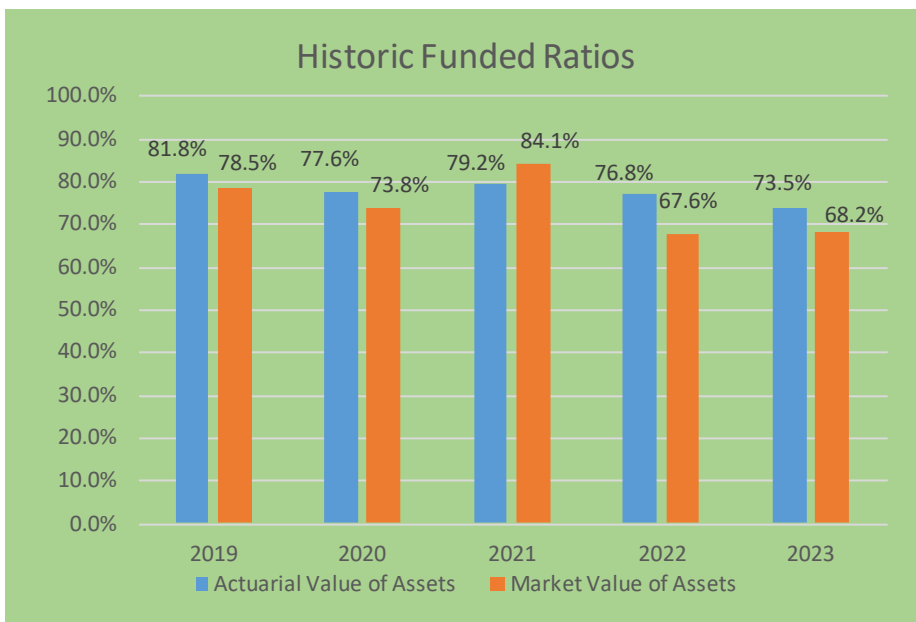
**Salary:** Police 3.25%  
Civilian 3.75%

Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$46,336,419	\$46,336,419	100%
<b>2022</b>	\$44,627,335	\$44,627,335	100%
<b>2021</b>	\$46,803,767	\$46,803,767	100%
<b>2020</b>	\$48,635,850	\$48,635,850	100%
<b>2019</b>	\$43,165,955	\$43,173,263	100%



# St. Louis Employees Retirement System

- Rate of return on investments equaled 9.36% (market) and 3.20% (actuarial) vs. 7.25% assumed.
- The plan used is Pub-2010, generational projection on a Scale MP-2019, mortality table.
- The actuary writes that “The System’s funded ratio, the ratio of actuarial asset value over liabilities, decreased from 76.9% as of October 1, 2022 to 73.5% as of October 1, 2023. The system experienced a total loss of \$20.3 million. Notable losses were \$19.6 million due to salary increases being greater than expected, \$3.9 million from the COLA increase for retiree benefits being greater than expected, and \$2.2 million due to active members retiring earlier than expected. In short liabilities increased and investment losses were taken. The unfunded actuarial liability as of October 1, 2015, is amortized over a fixed 20-year period as a level percentage of payroll. Future gains and losses and changes in actuarial assumptions will be amortized in layers over separate 20 year periods
- Employees can participate in a Deferred Retirement Option Program (DROP). This is a non-contributory factor.



**As of 9/30/23**

**Market Value:** \$786,143,848  
**Actuarial Value:** \$847,397,718  
**Liabilities:** \$1,153,001,981

**Membership:**  
**Active:** 4,602 **Inactive:** 7,782

**Normal Retirement Formula:**  
 1.3% of compensation below \$83,244 per year + 2.05% of compensation above \$83,244 x years of credited service Minimum benefit of \$200 per month for retirees with 12 or more years of creditable service

**Normal Retirement Eligibility:**  
 Age 65 with 5 years of service  
 Rule of 85

**Social Security Coverage:** Yes  
**COLA:** 5% Max, 100% of CPI  
**Assumed Rate of Return:** 7.25%  
**Salary:** 2.50-4.55%

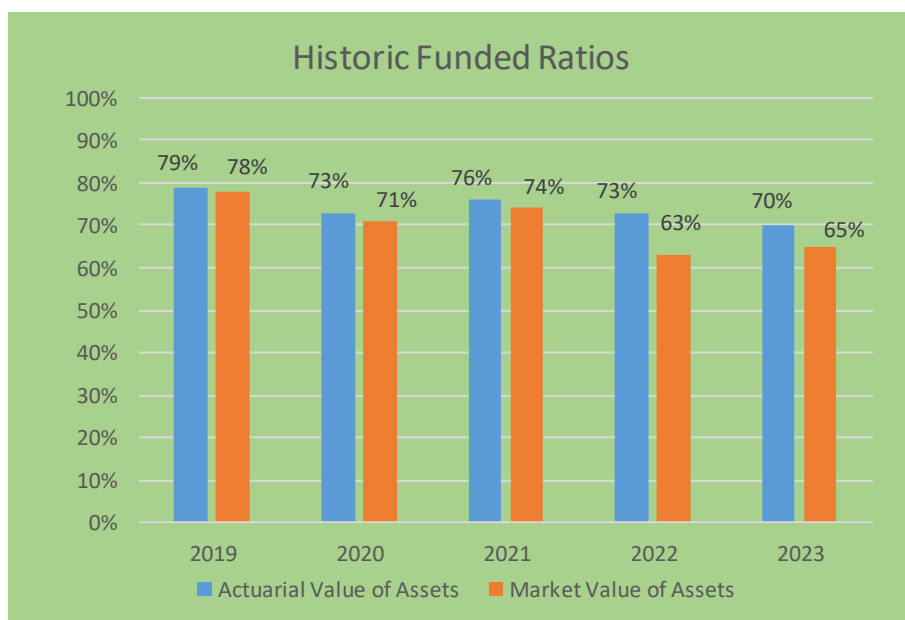
Year ended 9/30	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$37,806,868	\$39,337,287	104%
<b>2022</b>	\$34,501,974	\$37,951,463	110%
<b>2021</b>	\$35,133,462	\$32,804,416	93%
<b>2020</b>	\$30,122,002	\$30,581,795	101%
<b>2019</b>	\$27,958,439	\$29,629,568	106%





# St. Louis Public School Retirement System

- Rate of return on investments came in 10.29% (market) and 2.91% (actuarial) vs. 7.0% assumed.
- The plan uses PubG-2010 mortality tables.
- The actuary writes that “Approximately \$39.8 million loss is attributable to the System’s actuarial value of assets (AVA) rate of return on assets, which was 2.91% for plan year 2023, or 4.09% lower than the assumed rate of return of 7.0%. The loss resulted from returns being lower than expected. Even though the Plan saw a market value return of 10.29% during 2023, the large 2022 loss is still being recognized, resulting in the AVA return being below the expected 7.0%.”
- 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.
- The number of active members increased from 4,940 to 5,000 for the period. The average service of active members decreased from 7.7 to 7.9, the average age decreased slightly, and the average covered payroll increased by \$3,737 (6.5%).



Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
<b>2023</b>	\$42,954,102	\$37,930,116	88%
<b>2022</b>	\$38,336,585	\$41,034,190	107%
<b>2021</b>	\$37,037,171	\$41,226,981	111%
<b>2020</b>	\$49,622,726	\$41,822,334	84%
<b>2019</b>	\$49,429,863	\$43,902,706	89%

**As of 1/1/24**

**Market Value:** \$848,169,915  
**Actuarial Value:** \$916,023,414  
**Liabilities:** \$1,298,589,905

**Membership:**  
**Active:** 5,000 **Inactive:** 9,061

**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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