

JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

4th QUARTER MEETING
November 19, 2014
1:30 p.m.— House Hearing Room 7

AGENDA

Roll Call

2014 Watch List

State Auditor's Report

Employer Contribution Rates

Quarterly Reporting

Other Business



JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT
FOURTH QUARTER MEETING
November 19, 2014

The Joint Committee on Public Employee Retirement held its 4th Quarter Meeting on Wednesday, November 19, 2014 at 1:30 pm in House Hearing Room 7. Representative Leara called the meeting to order. Joint Committee members in attendance were Representatives Anders, Runions and Wieland. Senator Keaveny attended via telephone. Senators Kehoe, Lamping, Chappelle-Nadal and Walsh and Representatives Bernskoetter and Pierson were not in attendance. With quorum was not established, the committee met for informational purposes only.

Representative Leara turned the meeting over to the Executive Director, Ronda Stegmann. The 2014 Watch List, highlighting plans that are under 70% funded on a market value basis, was presented to the Committee. It was noted the number of plans on this list decreased from 24 on the previous report to 16 plans in the current year. Eight of these 16 plans have not received their full annual contribution as recommended by the plan's actuary. It was emphasized that the funded ratio alone is not necessarily an indication of a plan's health. It was recommended by Chairman Leara that discussion should be held at the next Joint Committee meeting regarding efforts that the Committee could make to be a resource for information or guidance to some of these plans. In addition, it was noted the subject of fees paid by public pension plans may be a discussion item for the next committee meeting for potential special reporting.

The Director discussed the release of the State Auditor's Office retirement survey. It was noted the survey was informational and summarized that, in the aggregate, Missouri's public plans' financial position is higher than national averages. The survey also noted many Missouri plans have taken measures to address funding concerns in the form of increased revenue or benefit modification. The Auditor's Office also compiled a Watch List of plans which have funded ratios below 70%, or plans not receiving at least 95% of the required contribution.

An informational handout was presented to the committee regarding employer contribution rates for fiscal year 2015/2016 for four of the largest statewide public pension plans. It was noted that the contribution rates adopted by the respective Board of Trustees were higher than the recommended contribution rates. The four plans listed, in addition to other public pension plans, are advocating increased funding to safeguard the plans' financial position into the future.

Quarterly reporting information was not complete given the timeframe from the end of the 3rd quarter. The Director indicated the quarterly report would be generated at the end of November and forwarded to committee members for their review.

Chairman Leara recognized the departing committee members and thanked them for their service. With no further business being presented, the committee adjourned.


Ronda Stegmann
Executive Director



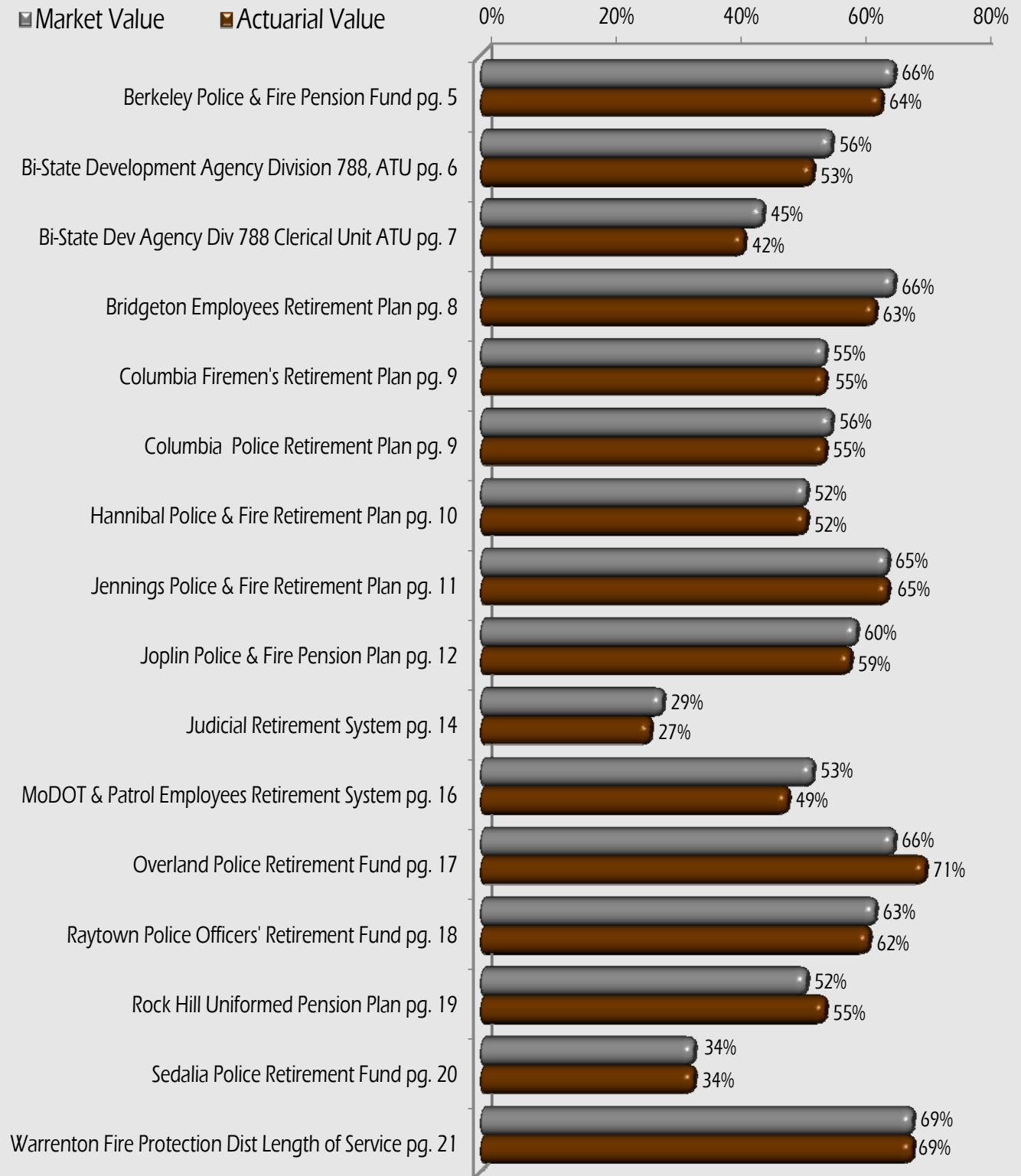


JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

WATCH LIST

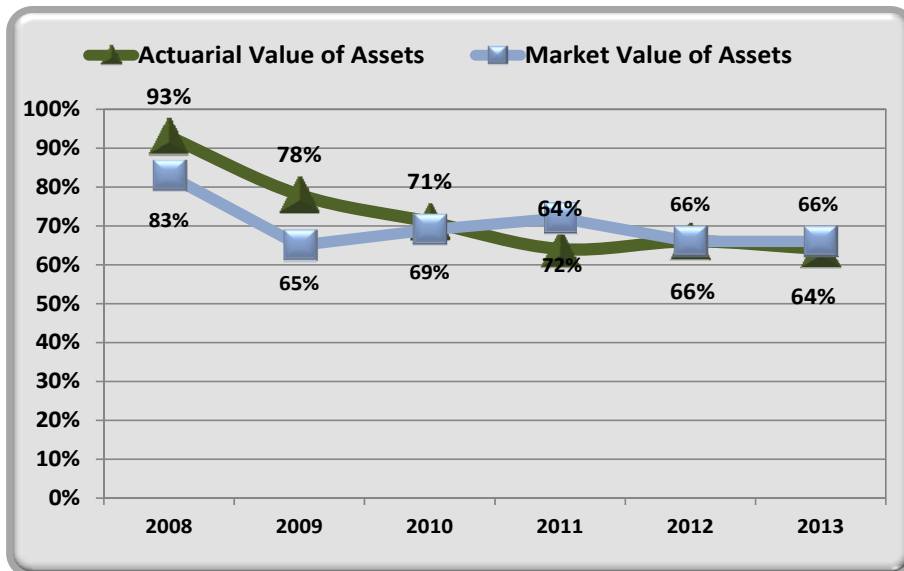
2014

FUNDED RATIO



BERKELEY POLICE & FIRE PENSION FUND

- ✚ Rate of return on investments equaled 9.7% (Market) & 5.5% (Actuarial) vs. 7.5% assumed.
- ✚ Investment gains/losses are smoothed over a 5 year period.
- ✚ The plan experienced an actuarial gain for the year ending 06/30/13 through 13 non-vested terminations during the year.
- ✚ Actuary notes, "If the City's current annual contribution rate continues into the future, we project that the funded ratio on a market value basis will continue to deteriorate, dropping below 60% within 2-3 years and below 50% within 6 years, and the Fund will be on a path toward insolvency that will be difficult to reverse. If plan assets fail to earn at least 7.5% each year, the deterioration will occur even more quickly."
- ✚ The dedicated tax of 11 cents per \$100 assessed value is not generating nearly enough revenue to support the existing benefit structure according to plan actuary.
- ✚ Employees contribute 6% of pay to this plan. *Employee contributions are refunded at retirement.*
- ✚ The employer has not met the ARC since 2003.



	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
13/14	\$1,337,551	N/A	-
12/13	\$1,279,952	\$186,654	15%
11/12	\$1,245,038	\$225,619	18%
10/11	\$976,809	\$246,418	25%
09/10	\$855,227	\$228,800	27%

As of 6/30/13

Market Value: \$12,181,113
Actuarial Value: \$11,757,542
AAL: \$18,494,931

MEMBERSHIP:

Active: 63 **Inactive:** 49

BENEFITS:

Normal Retirement Formula:

50% of compensation for first 20 years of service plus 1% for next 5 years of service

Maximum: 55% of compensation

Normal Retirement Benefits:

Age 55 with 10 years of service

Social Security Coverage: Yes

COLA:

Percent of CPI: 50%

Annual Amount Maximum: 3%

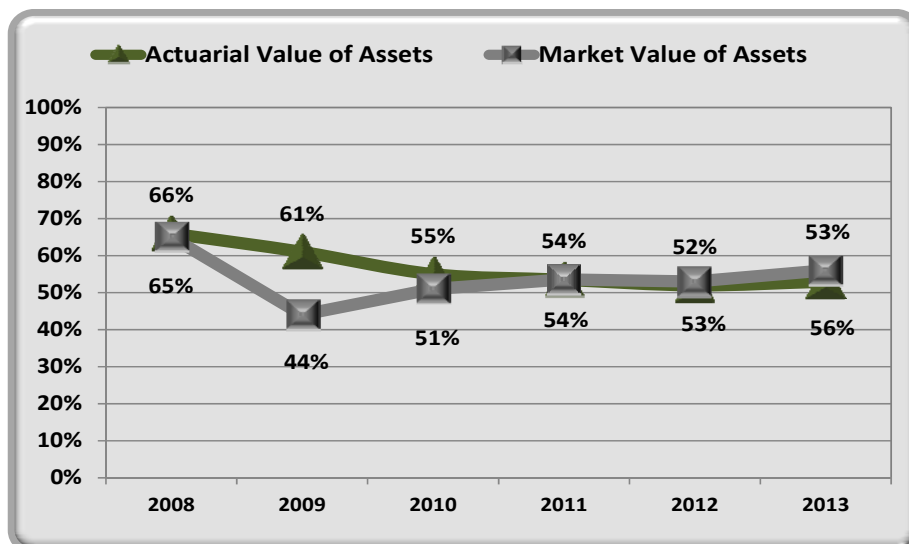
ACTUARIAL ASSUMPTIONS:

Interest: 7.5% **Salary:** 4%

BI-STATE DEVELOPMENT AGENCY DIVISION 788, A.T.U.

- ✦ Rate of return on investments equaled 9.7% (Market) and 5.0% (Actuarial) vs. 7.25% assumed.
- ✦ Investment gains/losses are smoothed over a 5 year period.
- ✦ Unfunded Actuarial Accrued Liability are amortized on a closed 30 year period effective April 1, 2003.
- ✦ The weekly recommended contribution for plan year 13/14 equals \$156.48 per active participant.
- ✦ An additional 5 year weekly contribution of \$8.87 was calculated for the plan to achieve a 60% funded ratio.
- ✦ Employees contribute approx. 30% of weekly contributions.
- ✦ The Employer continues to meet the full ARC & the total recommended contributions were received in Plan Year 2013 after 3 consecutive years of not meeting the total contribution.
- ✦ This plan was included on the State Auditor's "watch list" in 2014.

Plan Year	Div 788, ATU TOTAL Plan Contributions		
	Recmd Total Contribution	Actual Total Contribution	% Contributed
12/13	\$ 10,320,463	\$ 10,954,684	106.15%
11/12	\$ 9,659,870	\$ 9,250,099	95.76%
10/11	\$ 8,825,103	\$ 7,501,929	85.01%
09/10	\$ 7,416,877	\$ 6,841,491	92.24%
08/09	\$ 6,406,578	\$ 6,908,808	107.84%
07/08	\$ 6,437,859	\$ 6,396,002	99.35%
06/07	\$ 5,181,710	\$ 6,421,831	123.93%



	<u>EMPLOYER RECOMMENDED CONTRIBUTION</u>	<u>EMPLOYER ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
12/13	\$7,830,531	\$7,830,531	100%
11/12	\$6,904,988	\$6,904,988	100%
10/11	\$5,393,748	\$5,393,748	100%
09/10	\$4,953,503	\$4,953,503	100%
08/09	\$4,854,000	\$4,854,000	100%

As of 4/1/13

Market Value: \$ 97,975,716
Actuarial Value: \$ 92,629,813
AAL: \$176,399,555

MEMBERSHIP:

Active: 1,286 **Inactive:** 1,088

BENEFITS:

Normal Retirement Formula:

\$40 times years of service for those retiring with less than 25 years of service

\$55 times years of service for those retiring with 25 or more years of service

Normal Retirement Benefits:

25 years of service, age 65, or age 55 with 20 years of service

Social Security Coverage: Yes

COLA: Ad Hoc COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7.25%

BI-STATE DEVELOPMENT AGENCY

DIVISION 788 CLERICAL UNIT ATU

✦ Rate of return on investments equaled 3.5% (Actuarial) and 8.0% (Market) vs. 7.25% assumed.

✦ Investment gains/losses are smoothed over a 5 year period.

✦ Unfunded Actuarial Accrued Liability are amortized on a closed 30 year period effective April 1, 2004.

✦ The weekly recommended contribution for plan year 13/14 equals \$286.32 per active participant (up from \$270.40).

✦ The actuary notes an additional contribution over a 5 year period to reach various funded levels of:

60% funded ratio - \$ 67.32 per week

65% funded ratio - \$107.58 per week

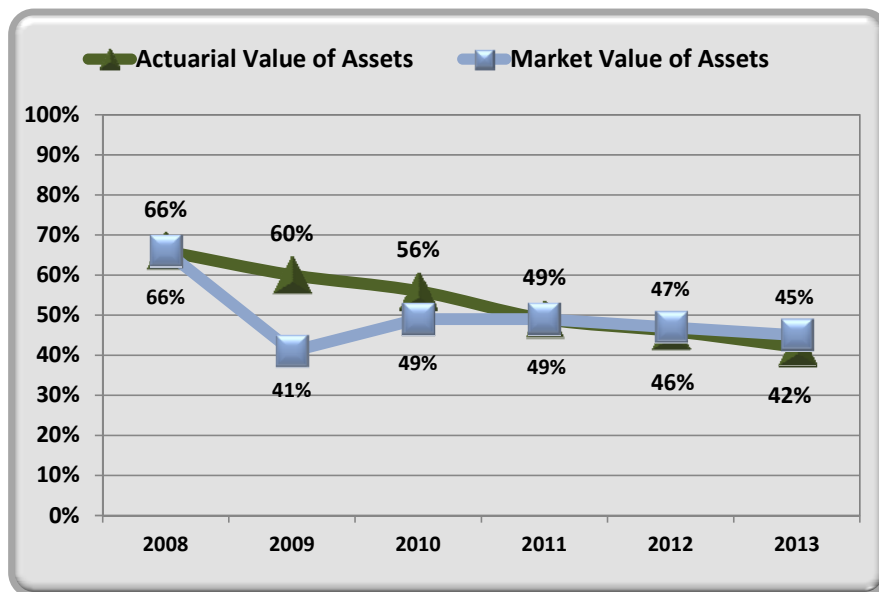
70% funded ratio - \$147.84 per week

✦ Employees contribute approximately 32% of the weekly contributions.

✦ The Employer continues to meet the full ARC however the total contribution has not met in since plan year 06/07.

Clerical Unit, Union Employees TOTAL Plan Contributions

Plan Year	Recmd Total Contribution	Actual Total Contribution	% Contributed
12/13	\$ 703,031	\$ 479,875	68.26%
11/12	\$ 621,627	\$ 509,846	82.02%
10/11	\$ 518,448	\$ 347,392	67.01%
09/10	\$ 457,771	\$ 322,525	70.46%
08/09	\$ 371,521	\$ 312,519	84.12%
07/08	\$ 343,278	\$ 323,074	94.11%
06/07	\$ 310,145	\$ 316,634	102.09%



	<u>EMPLOYER RECOMMENDED CONTRIBUTION</u>	<u>EMPLOYER ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
12/13	\$326,673	\$326,673	100%
11/12	\$402,107	\$402,107	100%
10/11	\$241,797	\$241,797	100%
09/10	\$223,550	\$223,550	100%
08/09	\$216,471	\$216,471	100%

As of 4/1/13

Market Value: \$ 5,118,949
Actuarial Value: \$ 4,794,257
AAL: \$11,383,041

MEMBERSHIP:

Active: 51 Inactive: 72

BENEFITS:

Normal Retirement Formula:

\$40 times years of service for those retiring with less than 25 years of service;

\$55 times years of service for those retiring with 25 or more years of service

Normal Retirement Benefits:

25 years of service, or age 65 with 10 years of service

Social Security Coverage: Yes

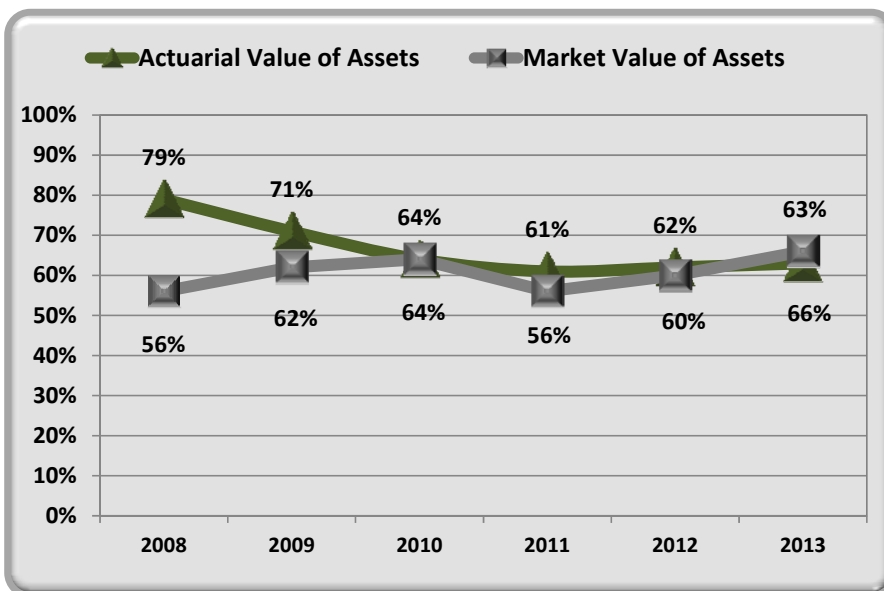
COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7.25%

BRIDGETON EMPLOYEES RETIREMENT PLAN

- ✦ Rate of return on investments equaled 16.3% (Market) and 9.4% (Actuarial) vs. assumed 7.5%
- ✦ Investment gains/losses are smoothed over a 3 year period.
- ✦ Open 30 year period for amortization of unfunded liabilities
- ✦ Actuary notes reasons for increase in annual cost, as a percentage of payroll, result from the decline in payroll and *“that actual City contributions fell short of target contributions.”*
- ✦ General City sales tax of 1/4 of 1% was passed by voters in August 2013.
- ✦ Employees do not make a payroll contribution to this plan.
- ✦ The Employer has not met the ARC since 2008.
- ✦ *This plan was frozen to new employees as of January 1, 2012*
- ✦ *The City has implemented a new matching component to the City’s 457 deferred compensation plan for employees hired after January 1, 2012.*
- ✦ *This plan was included on the State Auditor’s “watch list” in 2014.*



As of 12/31/13

Market Value: \$25,278,995
Actuarial Value: \$24,452,827
AAL: \$38,327,780

MEMBERSHIP:

Active: 117 **Inactive:** 138

BENEFITS:

Normal Retirement Formula:
 2% of compensation times
 years of service

Normal Retirement Benefits:
 Age 60 with 5 years of service

Social Security Coverage:
 Yes

COLA: No COLA

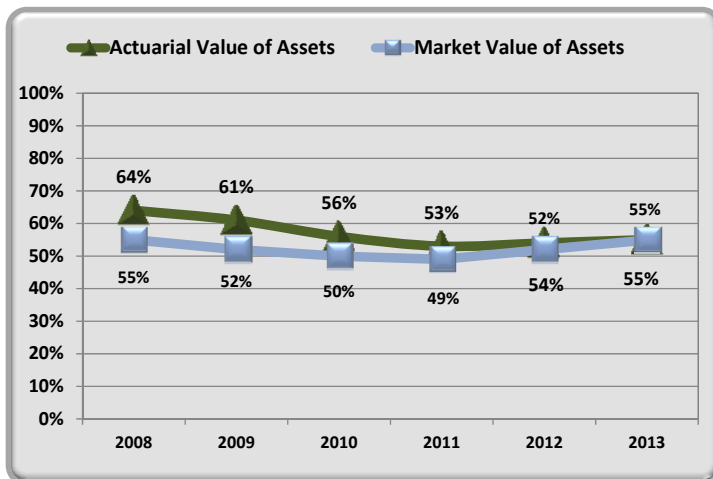
ACTUARIAL ASSUMPTIONS:
Interest: 7.5% **Salary:** 4.5%

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
2014	\$1,740,187	N/A	-
2013	\$1,767,398	\$1,000,000	56%
2012	\$1,745,095	\$1,000,000	57%
2011	\$1,529,511	\$1,000,000	65%
2010	\$1,400,936	\$900,000	64%
2009	\$1,165,675	\$900,000	77%

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

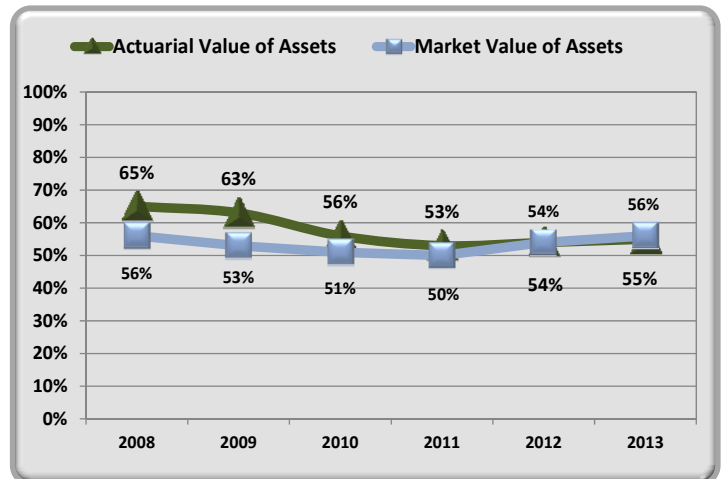
- The Fire & Police plans are comingled for investment purposes. Rate of return on investments equaled 9.7% (Market) & 8.0% (Actuarial) vs. 7.5% assumed. Investment gains/losses are smoothed over a 4 year period.
- Unfunded liabilities amortized over a 26 year closed period.
- A new tier of provisions were 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. New tier provisions estimated to produce in excess of \$40 million savings over 20 years.
- Fire Employees contribute 16.32% of pay (4% - new hires) and do not participate in Social Security.
- Police employees contribute between 7.45% & 8.35% of pay (4.5% - new hires) & do participate in Social Security.
- The employer continues to meet the ARC.
- These plans were included on the State Auditor's watch list in 2014.*

FIREFIGHTER'S RETIREMENT FUND



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
13/14	\$4,376,766 est.	n/a	n/a
12/13	\$4,382,296	\$4,382,296	100%
11/12	\$3,995,869	\$3,995,869	100%
10/11	\$3,598,322	\$3,598,322	100%
09/10	\$3,330,409	\$3,330,409	100%

POLICE RETIREMENT SYSTEM



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
13/14	\$3,340,920 est.	n/a	n/a
12/13	\$3,243,455	\$3,243,455	100%
11/12	\$3,153,367	\$3,153,367	100%
10/11	\$3,033,164	\$3,033,164	100%
09/10	\$2,693,152	\$2,693,152	100%

As of 09/30/13

Market Value: \$ 60,876,677 Membership:

Actuarial Value: \$ 61,190,565 Active: 136

AAL: \$ 110,758,321 Inactive: 147

Normal Retirement Formula:
 3.5% of compensation for first 20 years + 2% for next 5 years
 Max: 80% of compensation; 2% of compensation < 20 years
 2.5% of compensation x yrs service—No max (new hires)

Normal Retirement Benefits: **COLA:**
 Age 65 or 20 years of service Annual Amount Max: 2%
 Age 55 w/ 5 yrs service or Rule of 80 (new hires)

ACTUARIAL ASSUMPTIONS:
 Interest: 7.5% Salary: 3.5%

As of 09/30/13

Market Value: \$ 42,007,703 Membership:

Actuarial Value: \$ 41,564,868 Active: 150

AAL: \$ 74,992,992 Inactive: 155

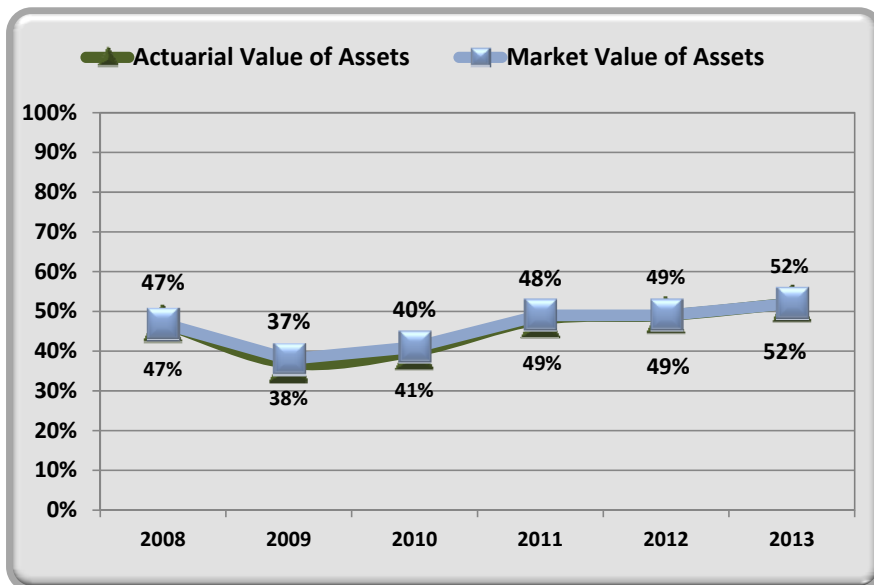
Normal Retirement Formula:
 3% of compensation for first 20 years + 2% for next 5 years
 Maximum: 70% of compensation
 2.0% of compensation up to 25 years + 1.5% each year over 25 years Max—57.5% of compensation (new hires)

Normal Retirement Benefits: **COLA:**
 20 years of service, or age 65 Annual Amount Max: 0.6%
 25 years of service or age 65 (new hires)

ACTUARIAL ASSUMPTIONS: Interest: 7.5% Salary: 3.5%

HANNIBAL POLICE & FIRE RETIREMENT PLAN

- ✦ The plan does not smooth investment gains/losses.
- ✦ Open 20 year period for amortization of unfunded liabilities.
- ✦ Actuary notes *"In recent years the city has been contributing less than the actuarial recommended contribution. The city has contributed more than recommended contribution in the last two years. Asset gains have helped increase the funded status. The new policy, implemented in 2012 increasing employee contributions while not decreasing the city's contribution rate will also help the Plan in its recovery. However, any pattern of less than adequate funding could decrease the funded status of the Plan to a point from which it would be impossible to recover."*
- ✦ Plan modifications effective 7/1/11 include: Increasing mandatory employee contributions from 9.5% of pay to 12%, 11.4% annual minimum City contribution (plus tax revenue) will be modified to provide that the City's contribution will not be reduced unless the plan is determined to be at least 80% funded.
- ✦ Employee contribution of 12% of pay effective with plan year 2011 (from 9.5%). These members do not participate in Social Security.
- ✦ The employer exceeded the ARC for the past 2 years after 6 years of not meeting ARC.



	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
13/14	\$994,809	N/A	-
12/13	\$1,010,251	\$1,212,249	120%
11/12	\$921,124	\$1,152,165	125%
10/11	\$1,179,620	\$1,101,663	93%
09/10	\$1,169,397	\$935,435	80%

As of 6/30/13

Market Value: \$12,636,059
Actuarial Value: \$12,616,812
AAL: \$24,262,236

MEMBERSHIP:

Active: 74 **Inactive:** 64

BENEFITS:

Normal Retirement Formula:

65% of compensation for first 25 years of service, plus 1% for each of the next 5 years of service in excess of 25
 Maximum: 70% of compensation

Normal Retirement Benefits:

Age 55 or 25 years of service

Social Security Coverage: No

COLA: Ad Hoc COLA

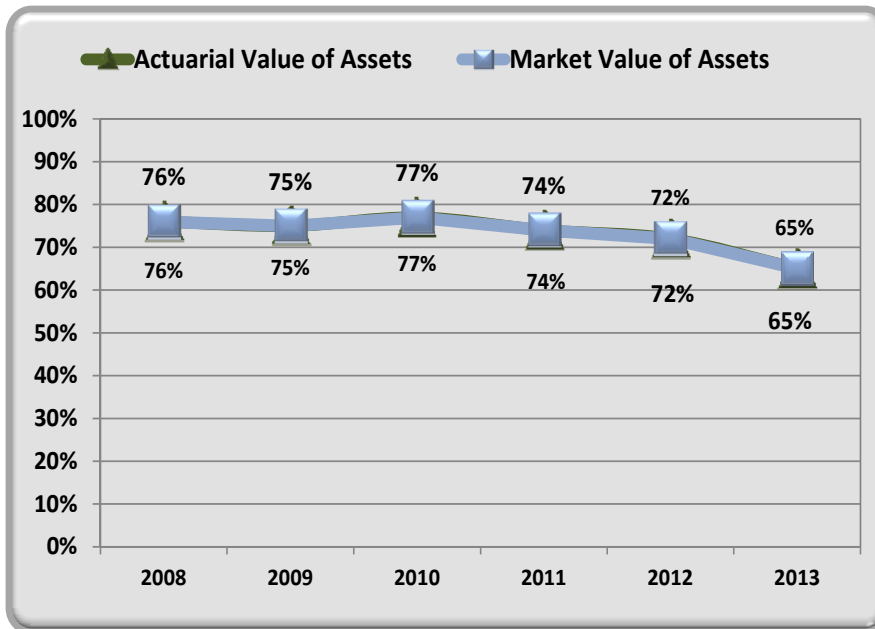
No COLA if Funded Ratio below 50%

ACTUARIAL ASSUMPTIONS:

Interest: 7.5% **Salary:** 4%

JENNINGS POLICE & FIRE RETIREMENT FUND

- ✚ Rate of return on investments equaled 3.3% (Market) vs. 6% assumed.
- ✚ Investment gains/losses are not smoothed.
- ✚ Closed 15 year period for amortization of unfunded liabilities.
- ✚ Plan was closed in 1987 with new hires joining LAGERS.
- ✚ First time being included on JCPER watch list.
- ✚ Officials with this plan expressed interest in LAGERS administration proposal of 2014. This bill was TAFP'd under SB 675 but was vetoed by the Governor.
- ✚ The Police Department was disbanded in 2011 with the St. Louis County Police Department being contracted for public safety purposes.
- ✚ Voters approved the dissolving of the Fire Department in August 2014 with the city merging with Riverview FPD for fire services.
- ✚ Employees contribute 3.39% of pay, which is refunded at retirement.
- ✚ The City has met the ARC two years (2010 & 2011) since 1999. The contribution is tied to a tax levy which the actuary notes is *"no longer adequate to meet this funding timeline"*.



	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
13/14	\$315,629	N/A	-
12/13	\$244,685	\$203,049	83%
11/12	\$209,394	\$203,184	97%
10/11	\$201,076	\$210,405	105%
09/10	\$216,908	\$218,467	101%
08/09	\$200,240	\$185,587	93%

As of 04/01/13

Market Value: \$5,604,265
Actuarial Value: \$5,604,265
AAL: \$8,554,488

MEMBERSHIP:

Active: 4 Inactive: 43

BENEFITS:

Normal Retirement Formula:

2.25% of compensation times years of service

Maximum: 50% of compensation

Normal Retirement Benefits:

Age 55 with 20 years of service

Age 65 with 15 years of service

Social Security Coverage: Yes

COLA: No COLA

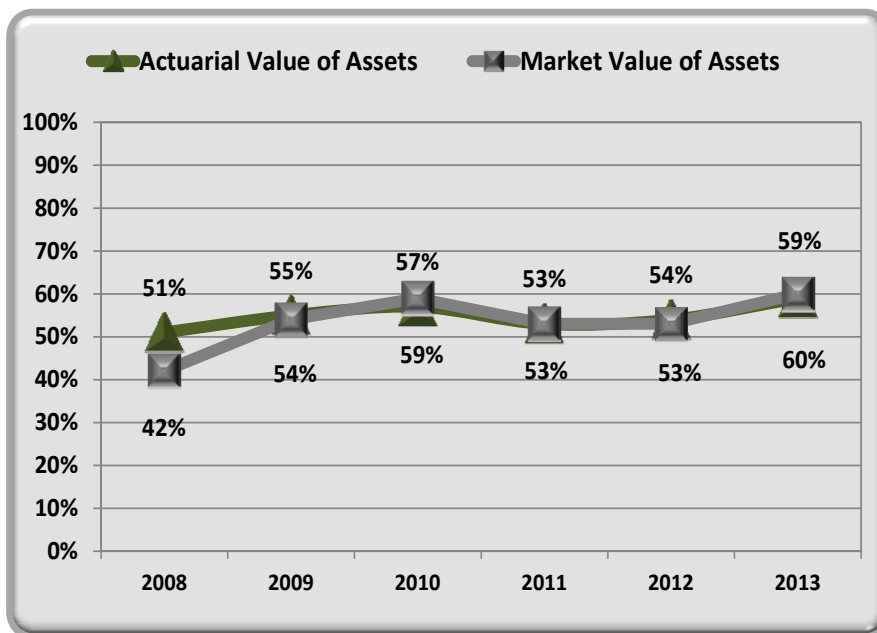
ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: 4%

Plan Closed in 1987 with New Hires joining LAGERS.

JOPLIN POLICE & FIRE PENSION PLAN

- Rate of return on investments equaled 10.5% (Market) & 7.3% (Actuarial) vs. 7% assumed.
- Investment gains/losses are smoothed over a 5 year period.
- Closed 30 year period as of 11/01/06 for amortization of unfunded liabilities.
- Modified plan assumptions in 2011 included, but not limited to, mortality, inflation rate and retirement rates resulted in approximately \$5 million increase in plan liabilities. These modifications were based on the most recent experience study.
- A new tier was implemented for those hired after 1/31/09 with provisions including normal retirement service of 25 years (from 20) and maximum benefit of 60% of compensation (from 65%).
- Employees contribute 18.08% of pay, which is refunded at retirement. Those hired under new benefit tier contribute 10% of pay without refund.
- The City prefunded \$1 million in addition to the ARC in fiscal year 2013.
- This plan was included on the State Auditor's "watch list" in 2014.*



As of 10/31/13

Market Value: \$33,287,630
Actuarial Value: \$32,674,943
AAL: \$55,327,408

MEMBERSHIP:

Active: 198 **Inactive:** 156

BENEFITS:

Normal Retirement Formula:

Hired after 1/31/09: 2.2% of compensation for first 25 years of service, plus 1% for each of the next 5 years of service

Maximum: 60% of compensation

Normal Retirement Benefits:

Age 60 or 25 years of service

Social Security Coverage: No

COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7% **Salary:** 2.5%

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
13/14	\$2,737,752	N/A	-
12/13	\$2,580,017	\$3,718,194	144%
11/12	\$2,214,118	\$2,473,301	112%
10/11	\$2,214,118	\$2,653,556	120%
09/10	\$2,206,690	\$1,797,683	81%
08/09	\$2,169,744	\$2,443,752	113%



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State of Missouri
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, Mo 65101

Ladies and Gentlemen:

The Joplin Policemen's and Firemen's Pension Plan is currently funded less than 70%. On January 31, 2009, the pension plan and the City of Joplin passed a major change to the plan that provided a long-term solution for the funding status of the plan. The original actuarial analysis indicated the changes to the plan would increase the funding status of the plan to above 80% over a period of approximately eight to ten years. As stated, the new plan is different for all new hires after 1/31/09.

Some changes to the plan include the following for new hires after 1/31/09:

- *The employee contribution drops to 10% of pay; however, upon retirement this amount is no longer refunded to the employee but retained in the plan to help fund the plan over time.

- *Full retirement benefits after twenty-five (25) years of service rather than twenty (20) years.

- *By Ordinance, the City agreed to fund the plan at a progressive rate each year until finally reaching the full actuarial required rate beginning on 11/1/11.

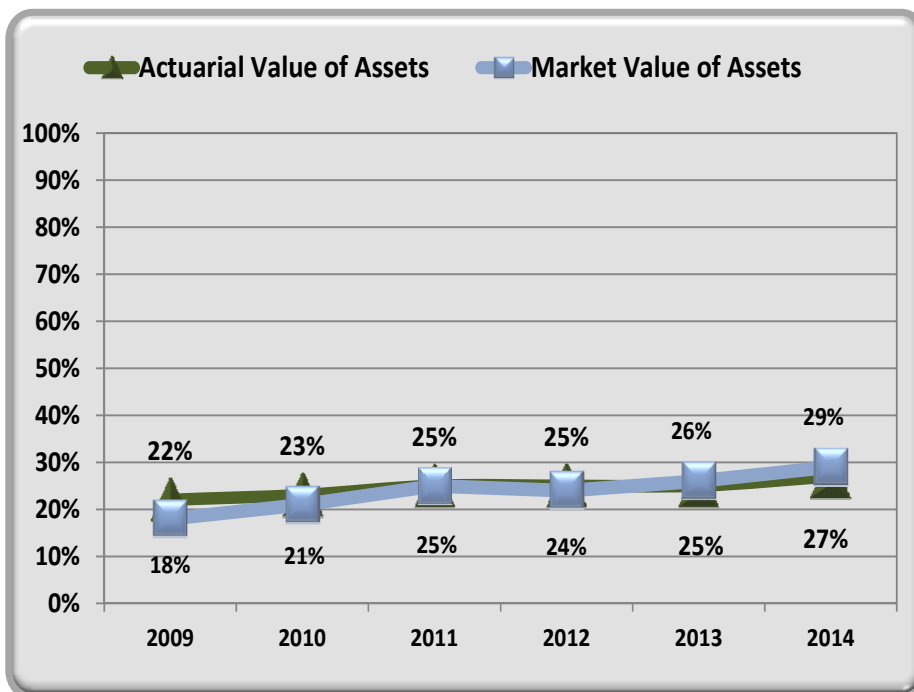
While these changes will help the funding status of the plan over the long-term, there was also a short-term commitment by the City to improve the funding status of the plan. Specifically, the city has made several additional contributions to the plan. The City made a one-time contribution of \$1,000,000 in 2009 and another \$1,000,000 contribution in 2013. In fact, each year since the change to the plan, the City has contributed more than the actuarial recommended contribution rate. As a result, the plan was 54% funded on 10/31/12 and 59.1% funded on 10/31/13. Since the change to the plan in 2009, without additional contributions by the City, the funded status of the plan has consistently increased approximately 2% per year. Given this information, it is expected the plan will be 70% funded in no more than ten years. It is possible that this will occur faster, but it depends in large part on the retention of the employees on the original plan.

However, the guarantee of the City contribution at the actuarial recommended amount, along with the board approved policy change of using a 30-year closed amortization period, it is certain the funded status of the pension plan will continue to increase over the next several years. The pension board and the City of Joplin place a high priority on the funding of the pension plan and continue to look for innovative ways to increase the funding of the plan.

Thank you for the opportunity to respond.
Joplin Policemen's and Firemen's Pension Board

JUDICIAL RETIREMENT PLAN

- ✦ Rate of return on investments equaled 11.77% (Actuarial) and 19.24% (Market) vs. 8.0% assumed.
- ✦ Adopted a Closed 30 year amortization of unfunded liabilities (Previously open 30 years).
- ✦ Asset Method modified to recognize the expected investment return and averages unanticipated market return over a five-year period.
- ✦ New tier provisions were passed in 2010 requiring increased age and service requirements, as well as employee contributions for judges serving for the first time on or after 01/01/11.
- ✦ Board of Trustees voted to certify an annual contribution rate minimum of 58.45% of payroll until the plan's funded ratio is at least 80%.
- ✦ Prior to 1998, the plan was funded on a pay-as-you-go basis.
- ✦ Judges serving for the first time on or after 1/1/11 make a 4% of pay contribution.
- ✦ The Employer continues to meet the ARC.



As of 6/30/14

Market Value: \$132,645,657
Actuarial Value: \$124,269,105
AAL: \$462,336,255

MEMBERSHIP:

Active: 400 **Inactive:** 530

BENEFITS:

Normal Retirement Formula:

Less than 12 years of service:
 4.17% of compensation times
 years of service;
 > 12 years: 50% of compensation

Normal Retirement Benefits:

Age 62 with 12 years of service;
 Age 60 with 15 years of service;
 Age 55 with 20 years of service

Serving for first time on or after
 01/01/11:
 Age 67 with 12 years of service, or
 Age 62 with 20 years of service

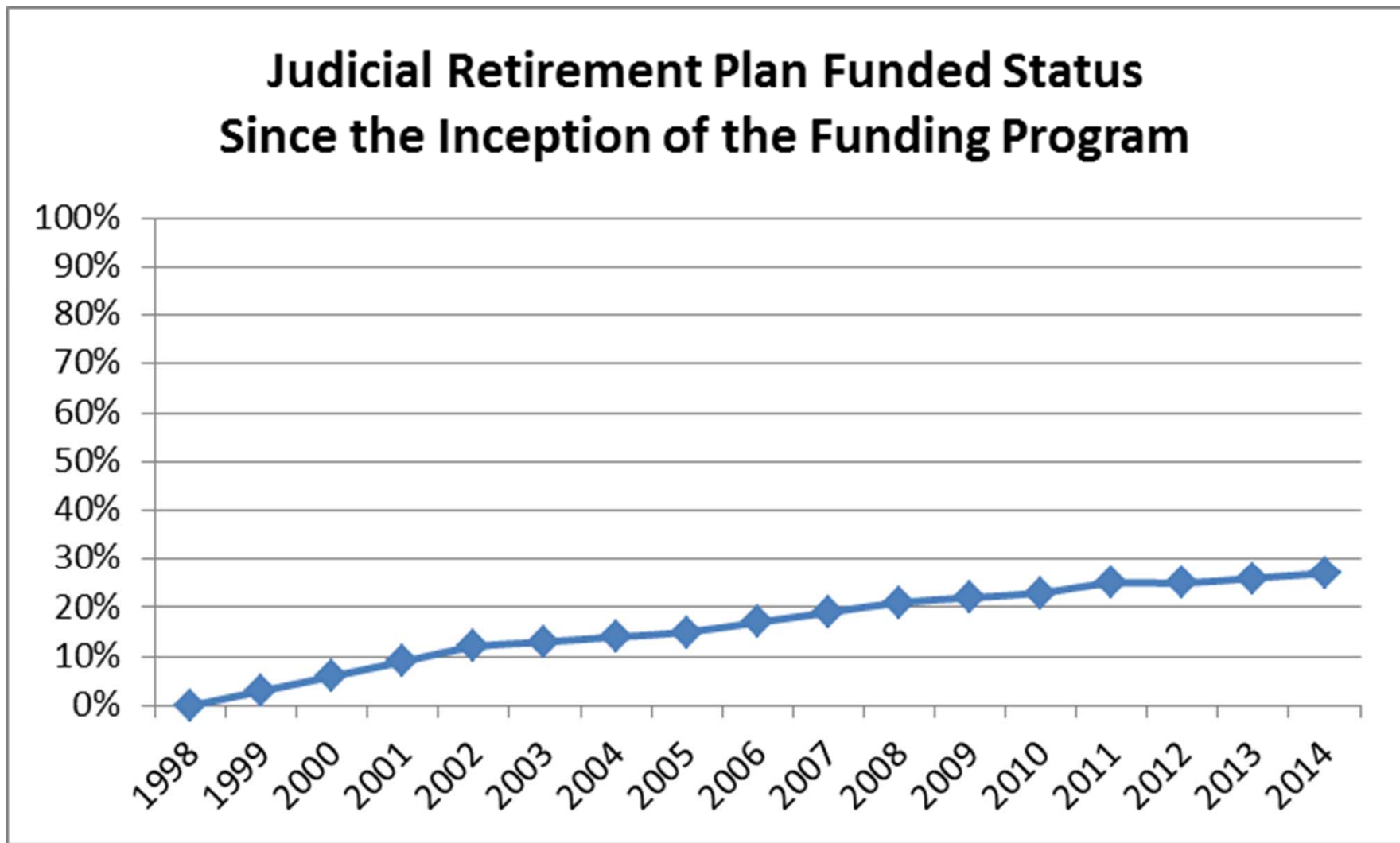
Social Security Coverage: Yes

COLA: Annual Amount Max: 5%
 Percent of CPI: 80%

ACTUARIAL ASSUMPTIONS:

Interest: 8.0% **Salary:** 4%

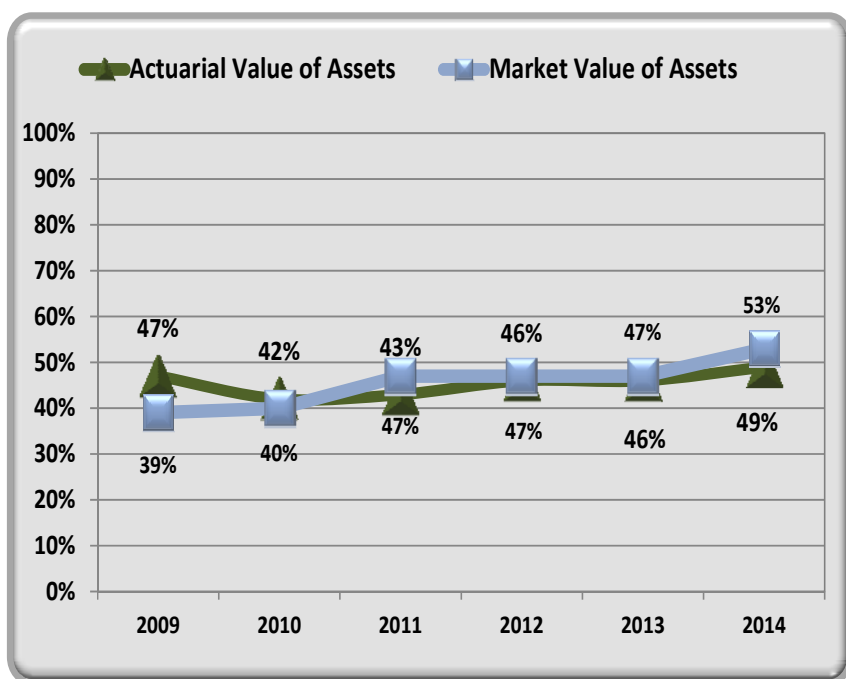
	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
14/15	\$30,200,000 (estimated)	N/A	-
13/14	\$29,264,877	\$29,264,877	100%
12/13	\$28,330,648	\$28,330,648	100%
11/12	\$26,324,526	\$26,324,526	100%
10/11	\$27,702,682	\$27,702,682	100%



As was noted in the JCPER report, the plan was funded on a pay-as-you-go basis until 1998 with no accumulation of assets. Steady funding progress has been made since the actuarial funding program was initiated.

MoDOT & PATROL EMPLOYEES RETIREMENT SYSTEM

- ✦ Rate of return on investments equaled 18.28% (Market) and 11.36% (Actuarial) vs. 7.75% assumed.
- ✦ Investment gains/losses are smoothed over a 3 year period.
- ✦ Assumed Investment return reduced from 8.25% to 7.75%.
- ✦ New tier provisions were passed in 2010 requiring increased age and service requirement, increased vesting period and employee contributions for employees hired for the first time on or after 01/01/11. As of 06/30/14, 1,060 members were covered under the 2011 tier.
- ✦ Closed 10 year period amortization of unfunded retiree liabilities and closed 25 year period amortization for the remaining unfunded liabilities.
- ✦ Board voted to certify the FY15/16 contribution at the same level as FY 14/15 which exceeds the actuary's ARC to allow for a "rate stabilization reserve fund".
- ✦ Employees hired for the first time on or after 1/1/11, contribute 4% of pay.
- ✦ The Employer continues to meet the ARC.
- ✦ *This plan was included on the State Auditor's "watch list" in 2014.*



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
14/15	\$200,485,540 (estimated)	N/A	-
13/14	\$183,358,841	\$183,358,841	100%
12/13	\$170,836,117	\$170,836,117	100%
11/12	\$164,884,467	\$164,884,467	100%
10/11	\$149,952,750	\$149,952,750	100%

As of 6/30/14

Market Value: \$1,937,268,639
Actuarial Value: \$1,795,264,291
AAL: \$3,650,241,741

MEMBERSHIP:

Active: 7,390 **Inactive:** 10,613

BENEFITS:

Normal Retirement Formula:

MSEP 2000: 1.7% of compensation times years of service, plus .8% to Age 62 (under Rule of 80 or Rule of 90)

Normal Retirement Benefits:

Age 62 with 5 years service, or Rule of 80 (Age 48)

Uniformed Patrol: Mandatory retirement at Age 60

Hired for first time on or after 01/01/11:

Age 67 w 10 years service, or Rule of 90 (Age 55)

Uniformed Patrol: Age 55 with 10 years service

Social Security Coverage: Yes

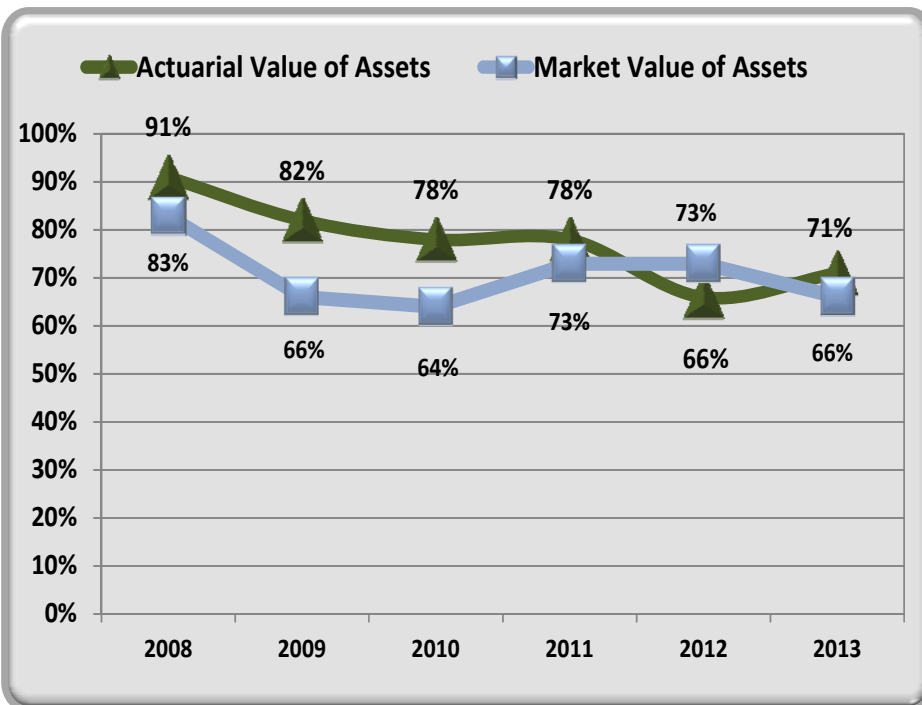
COLA: Annual Amount Maximum: 5%
Percent of CPI: 80%

ACTUARIAL ASSUMPTIONS:

Interest: 7.75% **Salary:** 3.50%

OVERLAND POLICE RETIREMENT FUND

- ↳ Rate of return on investments equaled 6.0% (Market) and 4.5% (Actuarial) vs. 7.5% assumed.
- ↳ Gains/losses are smoothed over a 4 year period.
- ↳ The Aggregate Cost Method is utilized by the plan which does not yield an actuarial accrued liability.
- ↳ The actuary notes *"The rate [property tax] is currently 12 cents which is less than one-third of the recommended rate. Although the Plan has no immediate solvency issues, this contribution shortfall issue should be addressed as soon as possible. Potential approaches might include: i) securing a higher rate from the County, ii) developing an additional source of funding and/or iii) adjusting the benefit provisions to a level consistent with what the current tax rate will support."*
- ↳ Employees contribute 5% of pay to the Plan.
- ↳ The City has not met the ARC since 2008.



As of 04/01/13

Market Value: \$12,867,194
Actuarial Value: \$13,942,330
AAL: \$19,506,350

MEMBERSHIP:

Active: 47 **Inactive:** 37

BENEFITS:

Normal Retirement Formula:
 2.5% of compensation for first 20 years of service, plus 1.5% for each of the next 10 years of service

Normal Retirement Benefits:
 20 years of service, or
 Age 62 w/ 18 years of service, or
 SSA full retirement age w/ 5 years of service

Social Security Coverage: Yes

COLA: Annual Max: 3%
 Percent of CPI: 60%

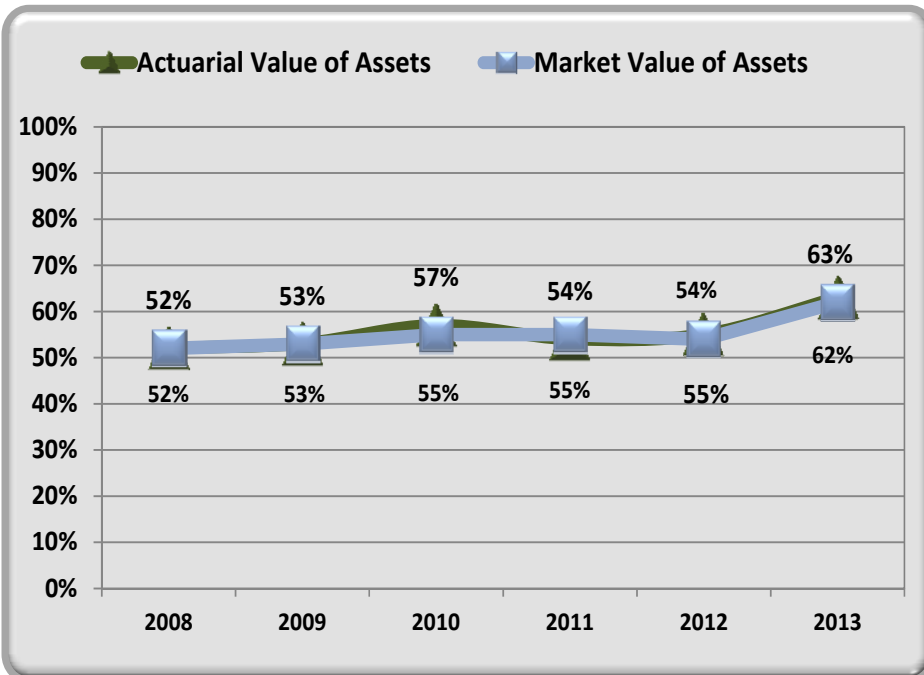
ACTUARIAL ASSUMPTIONS:

Interest: 7.5% **Salary:** 4%

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
2013	\$802,905	\$268,988	34%
2012	\$696,430	\$271,164	39%
2011	\$676,873	\$275,969	41%
2010	\$574,731	\$259,656	45%
2009	\$406,552	\$314,083	77%

RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- ↳ Plan experience was more favorable than expected plan year due to investment and liability gains.
- ↳ Plan does not smooth investment gains/losses.
- ↳ Plan utilizes a Closed 30 year period amortization of Unfunded Actuarial Accrued Liabilities.
- ↳ An Employee contribution of 3% of pay was ceased in 2000 when the Plan was 101% funded.
- ↳ The actuary notes *"The Plan has been making progress toward a safe funding level. The City policy to contribute the recommended contribution will allow the funded status to slowly improve."*
- ↳ The City met or exceeded the ARC for plan years 2011, 2012, and 2013.
- ↳ **The Plan was frozen as of December 31, 2013 with members moving to LAGERS.**



As of 12/31/13 and 10/31/13

Market Value: \$10,181,542
Actuarial Value: \$10,434,102
AAL: \$16,493,351

MEMBERSHIP:

Active: 47 **Inactive:** 35

BENEFITS:

Normal Retirement Formula:
 2.5% of compensation for first 20 years of service, plus 1% for each of the next 10 years of service—Benefits are frozen as of 12/31/13.

Normal Retirement Benefits:
 Age 55 with 20 years of service

Social Security Coverage: Yes

COLA: No COLA

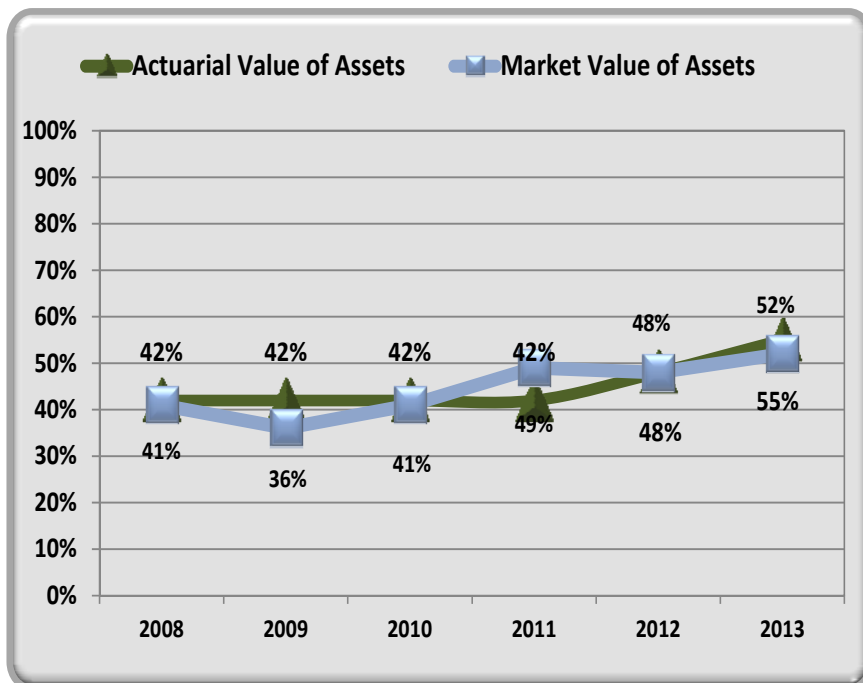
ACTUARIAL ASSUMPTIONS:

Interest: 7.5% **Salary:** 4%

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
2014	\$508,285	N/A	-
2013	\$660,842	\$660,842	100%
2012	\$678,787	\$686,270	101%
2011	\$616,618	\$645,818	105%
2010	\$865,591	\$721,033	83%

ROCK HILL UNIFORMED PENSION PLAN

- ✚ This plan was closed to new employees effective May 2003.
- ✚ All active participants as well as new hires are members of LAGERS as of 09/2007.
- ✚ After multiple years of the employer not making a contribution to this plan, contributions have resumed to this plan. However, contributions continue to not meet the ARC.
- ✚ Employees do not make a payroll contribution to this plan.
- ✚ Plan does not smooth investment gains/losses.
- ✚ The employer has not met the ARC since 2007.



As of 3/31/13 & 5/1/14

Market Value: \$1,891,531
Actuarial Value : \$2,004,533
AAL: \$3,642,395

MEMBERSHIP:

Active: 8 **Inactive:** 20

BENEFITS:

Normal Retirement Formula:

40% or 50% of compensation, reduced by 1/20 for each year less than 20, plus temporary benefit. Percentage based on age and years of service as of 4/30/03.

Normal Retirement Benefits:

Age 60 with 5 years of service

Social Security Coverage: Yes

COLA: No COLA

ACTUARIAL ASSUMPTIONS:

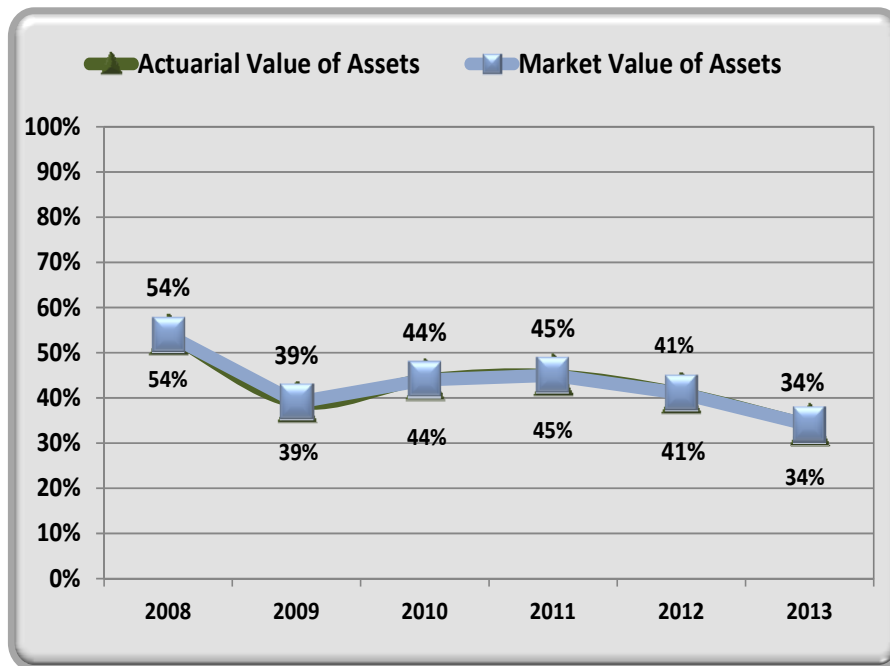
Interest: 6.0% **Salary:** 0%

Closed Plan effective October 2003

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
13/14	\$199,227	n/a	-
12/13	\$251,551	\$210,325	84%
11/12	\$251,551	\$210,325	84%
10/11	\$293,522	\$213,226	73%

SEDALIA POLICE RETIREMENT FUND

- ✚ Rate of return on investments equaled 1.49% (Market) vs. 7.5% assumed (investment assumption was reduced to 6.0% effective the 8/01/13 actuarial valuation).
- ✚ The reduced investment assumption increased the accrued liability by \$1.3 million.
- ✚ Plan does not smooth investment gains/losses.
- ✚ Unfunded Actuarial Accrued Liabilities amortized over a 25 year period as of 2013.
- ✚ The actuary notes 3 investment assumption scenarios and an time estimate of when the plan will have liabilities that it will not be able to fund using available assets. This time estimate ranges from 2020 to 2023.
- ✚ Plan was frozen as of April 1, 2010, with no additional benefit accruals.
- ✚ Existing and new employees moved to LAGERS.
- ✚ Effective 4/1/10, Employee payroll contributions are not required.
- ✚ Employer contributions tied to tax levy proceeds are not meeting the ARC.



	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
2014	\$459,978	N/A	-
2013	\$394,889	\$235,179	57%
2012	\$359,75	\$231,860	64%
2011	\$429,331*	\$222,527	52%
2010	\$597,847	\$221,579	37%

* estimate

As of 7/31/13

Market Value: \$3,153,449
Actuarial Value: \$3,153,449
AAL: \$9,382,244

MEMBERSHIP:

Active: 35 **Inactive:** 41

BENEFITS:

Normal Retirement Formula:

2% of compensation times years of service
Maximum: 30 years

Normal Retirement Benefits:

Age 52 with 15 years of service

Social Security Coverage: Yes

COLA:

Annual Amount Maximum: 2%

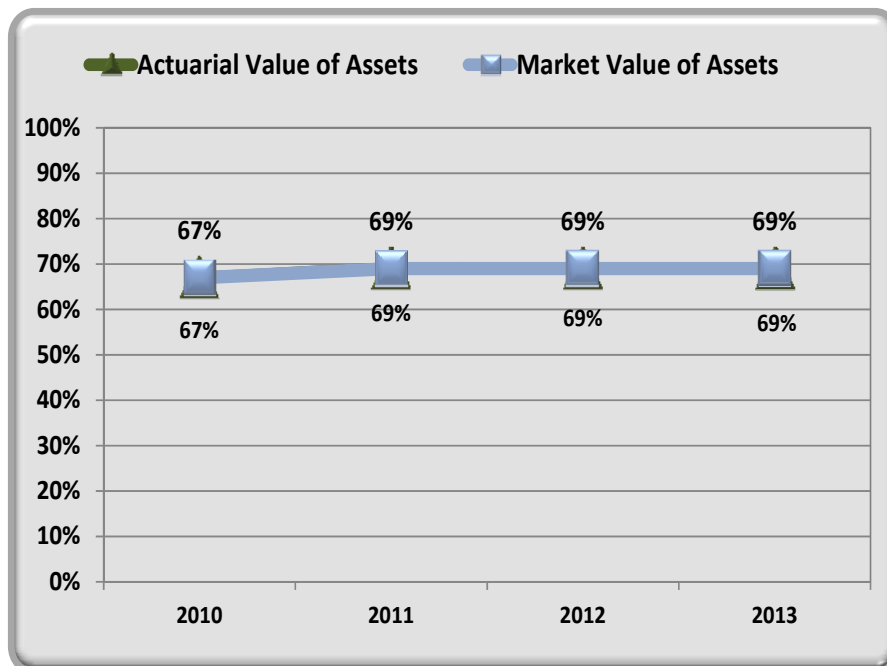
ACTUARIAL ASSUMPTIONS:

Interest: 6.0%

Plan Frozen April 2010
Current & New Employees moved to LAGERS

WARRENTON FIRE PROTECTION DISTRICT LENGTH OF SERVICE AWARDS PROGRAM

- ✦ This plan provides a pension benefit for volunteer members of the fire protection district.
- ✦ Plan was established in 1988.
- ✦ Plan began reporting to JCPER in 2011.
- ✦ Active members do not make a monetary contribution to the plan.
- ✦ District has made the full contribution in 2011, 2012 and 2013.



As of 12/31/13

Market Value: \$178,851
Actuarial Value: \$178,851
AAL: \$260,218

MEMBERSHIP:

Active: 32 **Inactive:** 17

BENEFITS:

Normal Retirement Formula:
 \$10 per month times yrs service;
 Maximum: \$200 per month
 Life annuity guaranteed for 10 years

Normal Retirement Benefits:
 Age 65 with 1 year of service

Social Security Coverage: Yes

COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 4.75%

	<u>RECOMMENDED CONTRIBUTION</u>	<u>ACTUAL CONTRIBUTION</u>	<u>PERCENT CONTRIBUTED</u>
2013	\$21,299	\$32,565	153%
2012	\$18,297	\$19,320	106%
2011	\$30,668	\$32,064	105%

STATE AUDITOR'S REPORT



CITIZENS SUMMARY

Survey of Public Employee Retirement Systems in Missouri

Background

The financial condition and long-term sustainability of public employee retirement plans has been a recent topic of discussion nationwide. This survey provides information and reports key data of Missouri public employee defined benefit (DB) retirement plans that help indicate financial condition of the plans.

Our survey focuses on public employee DB retirement plans, due to the risks to the sponsoring governments and ongoing liabilities associated with such plans. A typical DB plan guarantees monthly payments to eligible members, beginning upon retirement. Benefits are calculated based on a formula that considers employees' salaries, length of service, and a multiplier. Generally, a large portion of contributions are paid by the sponsoring government. DB plans use an actuarial valuation process to determine the actuarial value of plans' liabilities, assets, and related annual required contributions.

As of December 31, 2012, there were 89 DB plans in Missouri, covering approximately 546,000 members. These plans reported actuarial assets totaling approximately \$57 billion and actuarial accrued liabilities totaling approximately \$73 billion. Ninety-four percent of all employees participating in public employee DB retirement plans in Missouri are members of the 15 plans selected for additional analysis in our report.

Survey Results

There are several key indicators of plan financial condition. These indicators should not be viewed individually, but in combination with other indicators along with a plan's actuarial assumptions and policies. In addition, the indicators should not be reviewed at a single point in time, but trends in the indicators should be reviewed over an extended period. Our review of various indicators found the financial condition of Missouri plans varied widely, with some indicating very good financial condition and others indicating very poor financial condition. Many plans have experienced worsened financial condition in recent years, primarily due to economic and financial market downturns associated with the recession from 2007 to 2009.

The most often cited indicator of plan financial condition is the funded ratio. In simple terms, the funded ratio is the percentage of the present value of future retirement benefit payments previously earned by employees (actuarial accrued liabilities) that are covered by plan assets as of a specific date. The aggregate funded ratio of Missouri plans has decreased from 83 percent to 78 percent between 2003 and 2012, but is higher than aggregate funded ratios reported at the national level. In 2012, 40 of the 89 Missouri plans (covering 67 percent of statewide members) had funded ratios of 80 percent or higher, which is down from 47 such plans in 2003. Aggregate unfunded actuarial accrued liabilities for the Missouri plans has nearly doubled in the past 10 years, from \$8.18 billion in 2003 to \$16.02 billion in 2012.

Actual contributions paid as a percentage of the annual required contribution (ARC) calculated by the plan's actuary measures an employer's commitment to achieving the plan's overall funding goals. In aggregate, Missouri plans received 94 percent of ARC in 2012. However, 34 plans (covering 33 percent of statewide members) received less than 100 percent of the ARC in 2012. The failure of sponsoring governments to fully fund the ARC makes it difficult for the plans to reach financial goals.

ARC as a percentage of covered payroll (also referred to as contribution rate) can indicate the stress the required contribution level could assert on the government's budget and operations. The aggregate ARC as a percentage of covered payroll in 2012 for the 15 selected plans was 14.18 percent, an increase from 9.70 percent in 2003.

Investment income often provides the largest portion of DB plan assets. Another key indicator is a comparison of long-term annualized market rates to assumed rates of investment return. Several of the 15 selected plans underperformed their assumed rates of return for the 10-year period ended in 2012. However, of the 10 largest plans, which cover 92 percent of statewide members, only 1 plan underperformed the investment return assumptions on both the 10-year and longer-term basis.

Other key indicators of financial condition include ARC as a percentage of the sponsoring government's budget and unfunded actuarial accrued liability as a percentage of covered payroll.

The financial condition of the 89 Missouri public employee DB plans is impacted by various external factors and decisions made by the plans' governing boards and sponsoring governments. Key influences of financial condition identified and discussed in this survey include economic conditions and investment performance, benefit structure, board governance, investment policy, contribution and funding policies, and selection of actuarial assumptions and methods. Because the interaction of factors that impact a plan's financial condition can vary among DB plans, it is difficult to compare the plans.

Our survey identified various key practices DB plans should follow to support adequate financial condition. Many of these practices have been implemented by Missouri plans, including the 15 selected plans. Governing boards and sponsoring governments of many of the largest and statewide plans in Missouri have taken measures to strengthen financial condition. However, it will take time before the effect of such changes become fully evident.

The appendixes to this survey present key background, financial, and actuarial data for each of the 89 Missouri public employee DB plans.

Because of the compound nature of this report, no overall rating is provided.

STATE AUDITOR'S WATCH LIST FOR MISSOURI'S PUBLIC PENSION PLANS

Plan Name	Members	Funded Ratio	% of Contribution Made
Bi-State Development Agency Division 788 ATU*	2,341	52%	100%
Bridgeton Employees Retirement Plan*	262	62%	57%
Columbia Firemen's Retirement Plan*	255	54%	100%
Columbia Police Retirement Plan*	293	54%	100%
Joplin Police & Fire Pension Plan*	326	54%	112%
KC Transportation Authority Union Employees Pension Plan	806	69%	89%
Kansas City Police Retirement System	2,613	76%	52%
Kansas City Civilian Police Employees' Retirement System	763	76%	64%
Kansas City Firefighter's Pension System	1,802	79%	91%
Kansas City Employees' Retirement System	5,639	79%	78%
Kansas City Public School Retirement System	9,682	80%	68%
MoDOT & Patrol Employees' Retirement System*	17,869	46%	100%
St. Louis County Employees Retirement Plan	7,537	67%	100%
Springfield Police & Fire Retirement Fund	891	59%	171%
University City Non-Uniformed Retirement Plan	225	78%	84%

*Watch List Criteria: Plans with funded ratios of at least 70%, **or**
Plans not receiving at least 95% of the required contribution*

*Also included on the JCPER Watch List

EMPLOYER CONTRIBUTION RATES

Employer Contribution Rates

**Approved by Boards of Trustees in 2014
for
Fiscal Year 15/16**

Plan	Total Assets (Market Value)	Total Assets (Actuarial Value)	Liabilities	Actuarial Funded Ratio	Unfunded Actuarial Accrued Liability
PSRS	\$34,380,608,561	\$31,846,599,387	\$38,483,183,932	82.75%	\$6,636,584,545
	Recommended Matching Contribution 15/16 28.42%		Adopted Matching Contribution 15/16 29.00%		

Plan	Total Assets (Market Value)	Total Assets (Actuarial Value)	Liabilities	Actuarial Funded Ratio	Unfunded Actuarial Accrued Liability
PEERS	\$3,846,322,885	\$3,584,719,233	\$4,211,488,832	85.12%	\$626,769,599
	Recommended Matching Contribution 15/16 13.55%		Adopted Matching Contribution 15/16 13.72%		

Plan	Total Assets (Market Value)	Total Assets (Actuarial Value)	Liabilities	Actuarial Funded Ratio	Unfunded Actuarial Accrued Liability
MOSERS	\$9,136,781,826	\$8,637,758,955	\$11,494,571,835	75.15%	\$2,856,812,880
	Recommended Employer Contribution 15/16 15.95%	\$322.0 million	Adopted Employer Contribution 15/16 16.97%	\$342.5 million	

Plan	Total Assets (Market Value)	Total Assets (Actuarial Value)	Liabilities	Actuarial Funded Ratio	Unfunded Actuarial Accrued Liability
MPERS	\$1,937,268,639	\$1,795,264,291	\$3,650,241,741	49.18%	\$1,854,977,450
	Recommended Employer Contribution 15/16 55.09%	\$196.0 Million	Adopted Matching Contribution 15/16 58.00%	\$206.0 Million	