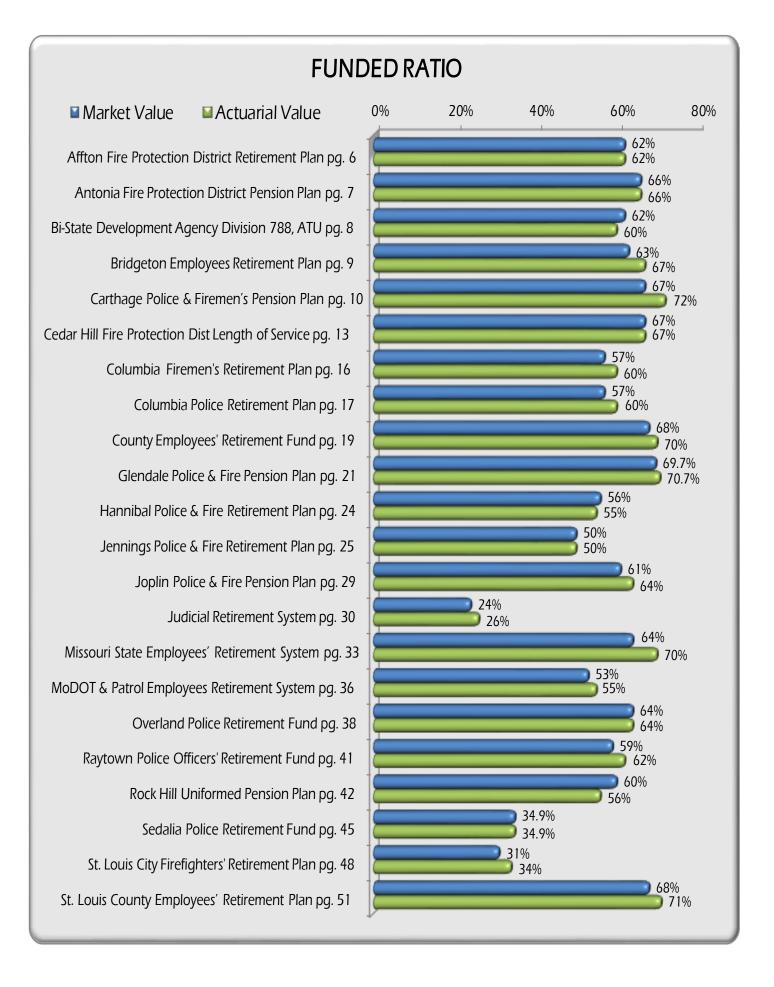


JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

WATCH LIST

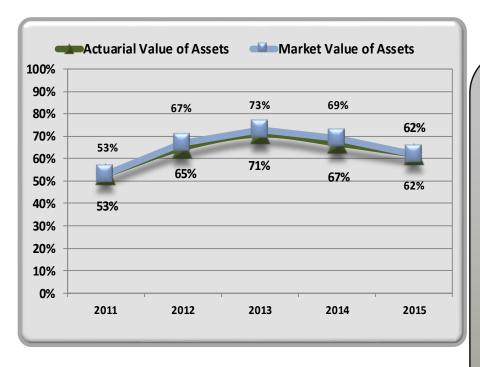
2016



Please Note: For purposes of the Watch List, the term "inactive" includes terminated vested, retired, surviving beneficiary, and disabled members.

AFFTON FIRE PROTECTION DISTRICT RETIREMENT **PLAN**

- Rate of return on investments equaled -0.2% (Market) vs. 6.5% assumed.
- Assets are valued at market value except for 2008 loss which was smoothed over 5 years.
- The actuarial cost method was changed from the Aggregate method to the Entry Age Normal Method with a 30 year amortization of the unfunded liability.
- The plan updated its mortality tables to reflect current life expectancies based on the most recent Society of Actuaries study. This change increased the target contribution.
- Plan provisions were modified effective 01/01/13. The benefit multiplier was changed from 2.1667% to 1.7333%. Accrued benefits are not modified; however, new and prospective service will be at new provision levels. Lump sum benefit payments were also ceased.
- Employee contributions were implemented in 2010 at 4% and then 7% thereafter.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2015	\$315,183	\$304,357	97%
2014	\$248,521	\$300,403	120%
2013	\$264,490	\$298,054	113%
2012	\$393,592	\$1,308,442	332%
2011	\$364,433	\$304,844	84%
2010	\$345,598	\$284,870	82%

As of 1/1/16

Market Value: \$7,399,630 Actuarial Value: \$7,399,630 AAL: \$12,011,620

MEMBERSHIP:

Active: 39 Inactive: 26

Normal Retirement Formula:

52% (from 65%) of compensation Reduced for less than 30 years Supplemental Benefit: \$500 monthly to age 62 if em-

ploved on 01/01/09 and have at least 30 vrs service as of 12/31/09

Normal Retirement Benefits:

Age 60 with 5 years of service

Social Security Coverage: Yes

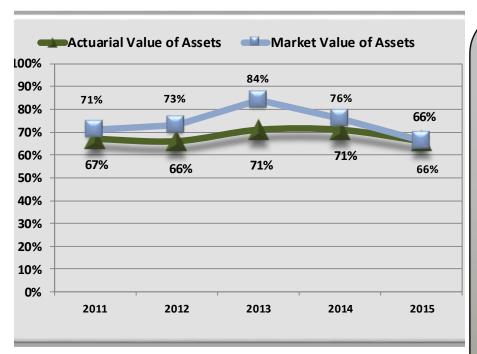
COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 6.5% **Salary:** 3.5%

ANTONIA FIRE PROTECTION DISTRICT PENSION PLAN

- Rate of return on investments equaled –0.51% vs. 6.0% assumed.
- Plan was frozen in February 2009. The FPD implemented a defined contribution plan for employees in 2010. The DC plan was terminated and proceeds distributed in 2013.
- Joined LAGERS in July 2012.
- Lump sum payment option eliminated.
- Closed 15 year amortization policy beginning in 2014.
- Actuarial valuation is performed on January 1. Financial statements completed as of October 31. FPD annual report completed as of November 30.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$104,304	n/a	n/a
2015	\$85,237	\$74,250	87%
2014	\$68,700	\$75,000	109%
2013	\$58,625	\$75,000	128%
2012	\$66,317	\$91,317	138%
2011	\$58,078	\$58,078	100%

As of 1/1/16

Market Value: \$1,904,873 Actuarial Value: \$1,904,873 AAL: \$2,883,647

MEMBERSHIP:

Active: 15 Inactive: 6

Normal Retirement Formula:

2.25% of compensation for first 24 years of service plus 1% for the next 6 years of service Formula frozen 01/01/09

Normal Retirement Benefits:

Age 55 or 30 years of service

Social Security Coverage: Yes

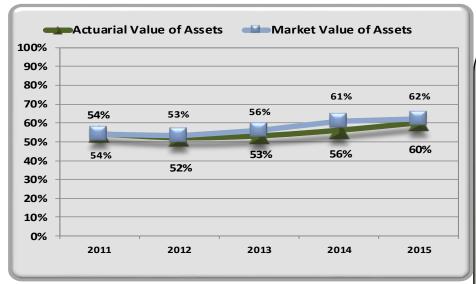
COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: N/A

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

- Rate of return on investments equaled 6.1% (Market) and 10.0% (Actuarial) vs. 7.25% assumed.
- Investment gains/losses are smoothed over a 5 year period.
- Unfunded Actuarial Accrued Liability is amortized on a closed 30 year period effective April 1, 2003.
- The weekly recommended contribution for plan year 15/16 equals \$152.44 per active participant.
- With the April 1, 2010 actuarial valuation, an additional 5 year weekly contribution of \$8.87 was
 calculated for the plan to achieve a 60% funded ratio. The actuary has estimated this same
 amount would be required to achieve a 65% and 70% funded ratio over 5 years. This additional
 contribution continues to be made.
- Employees contribute approximately 30% of weekly contributions.
- The Employer continues to meet the full ADC.
- Effective April 1, 2015, this plan merged with the 788 Clerical Unit ATU plan pursuant to a resolution and vote of the membership and acceptance by the plans' pension committees. The Clerical Unit ATU plan had previously been on the JCPER Watch List.
- This plan was included on the State Auditor's "watch list" in 2014.



	EMPLOYER RECOMMENDED CONTRIBUTION	EMPLOYER ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
14/15	\$8,716,712	\$8,716,712	100%
13/14	\$8,764,558	\$8,764,558	100%
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%

As of 4/1/15

Market Value: \$ 123,027,014 Actuarial Value: \$ 117,889,375 AAL: \$ 197,892,376

MEMBERSHIP:

Active: 1,332 **Inactive:** 1,295

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

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

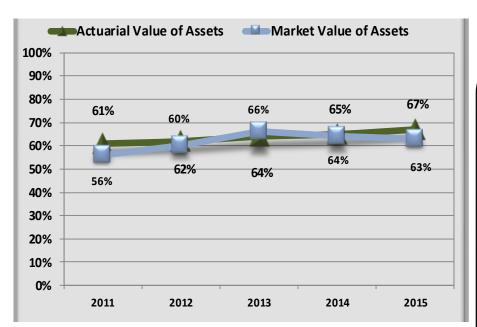
COLA: Ad Hoc COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7.25%

BRIDGETON EMPLOYEES RETIREMENT PLAN

- Rate of return on investments equaled –2.5% (Market) and 6.3% (Actuarial) vs. assumed 7.5%
- Investment gains/losses are smoothed over a 3 year period.
- Audited by the State Auditor in 2016 with an overall performance rating of Poor.
- Included on the State Auditor's "watch list" in 2014.
- Open 30 year period for amortization of unfunded liabilities.
- In April 2015, voters approved a hotel/motel tax increase to generate an additional \$900,000 in revenue annually. According to the State Auditor, city officials are increasing the annual contribution by \$200,000 each year until the full contribution is met.
- Employees do not make a payroll contribution to this plan.
- The Employer has not met the ARC since 2007.
- This plan was <u>frozen to new employees</u> as of January 1, 2012
- For employees hired after 1/1/12, the City uses a matching component to its 457 deferred compensation plan.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$1,680,519	N/A	N/A
2015	\$1,750,340	\$1,200,000	68%
2014	\$1,740,187	\$1,000,000	57%
2013	\$1,767,398	\$1,000,000	57%
2012	\$1,745,095	\$1,000,000	57%
2011	\$1,529,511	\$900,000	65%

As of 01/01/16

Market Value: \$26,070,396 Actuarial Value: \$27,699,927 AAL: \$41,623,235

MEMBERSHIP:

Active: 106 Inactive: 147

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%

*Market Value from actuarial valuation as of 1/1/16 including accrued contribution.

CARTHAGE POLICE & FIREMEN'S PENSION PLAN

- Rate of return on investments equaled 0% (market) and 2.29% (actuarial) vs. 7% assumed.
- Investment gains and losses are smoothed over a five year period.
- In 2016, lowered the normal retirement age from age 58 to age 55.
- Decreased the assumed rate of return from 8.0 to 7.0 in 2013. Decreased the salary inflation assumption from 4.0 to 3.5 in 2013.
- Unfunded liabilities are amortized over an open thirty year period.
- The plan's actuarial valuation is performed on January 1 for the plan year beginning July 1. The actual contribution numbers for years 2013 to 2015 are for the period July 1 to June 30. For years 2011 and 2012, the actual contribution numbers are for the period January 1 to December 31.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$449,784	N/A	N/A
2015	\$370,191	\$380,711	103%
2014	\$361,180	\$394,050	109%
2013	\$346,065	\$363,577	105%
2012	\$328,432	\$299,056	91%
2011	\$317,672	\$314,932	99%

As of 1/1/16 for the year beginning July 1, 2016

Market Value: \$6,337,520 Actuarial Value: \$6,819,725 AAL: \$9,448,399

MEMBERSHIP:

Active: 48 Inactive: 53

BENEFITS:

Normal Retirement Formula: 2.5% of compensation for first 20 years of service plus 1% for the next 15 years

Normal Retirement Benefits: Age 55 with 10 years of service

Social Security Coverage: Yes

COLA: No COLA

ACTUARIAL ASSUMPTIONS: Interest: 7% Salary: 3.5%

From: <u>Maria Gutierrez-Fisher</u>

To: Michael Ruff

Subject: FW: Carthage Police & Firemen"s Pension Plan

Date: Tuesday, October 25, 2016 1:15:37 PM

Attachments: <u>image001.png</u>

SKM C554e16102511370.pdf

Michael,

I will be having more discussion with the plan actuary, Dan Nichols, in the near future; however, the email below from Randy Conner may help explain some inconsistencies.

I will be in touch.

Thank you,

Maria

From: Conner, Randy [mailto:RConner@CBIZ.com]

Sent: Tuesday, October 25, 2016 11:55 AM

To: Maria Gutierrez-Fisher < m.gutierrez@carthagemo.gov>

Cc: Nichols, Dan < DNichols@CBIZ.com>

Subject: RE: Carthage Police & Firemen's Pension Plan

Maria.

I made a few changes to the JCPER summary exhibit (attached). It looks like that the changes to interest rate and salary scale were effective with the 1/1/2013 valuation. The recommended contribution which Dan calculates each year as part of the January 1 valuation is for the fiscal year beginning on the following July 1st. The contribution schedule seems to be mismatching recommended fiscal year contributions with calendar year contributions. Since the new GASB standards went into effect Dan has been showing actual fiscal year contributions (since the fiscal year beginning July 1, 2013) in his report. I've written those in. I couldn't find actual contributions for the fiscal years ending 6/30/2013 and 6/30/2012, but I've got a feeling that what's being shown in the schedule is inaccurate.

2015 was a bad year for investment returns. We've seen that across all of the plans we work with, and that's led to lower funding ratios. It appears that it is the city's policy to contribute at least the actuarially recommended contribution each year. That would suggest that funding ratios would increase in future years.

When Dan gets back Thursday, he might have something to add. Regards, Randy Conner, A.S.A., E.A. Consulting Actuary



CBIZ Retirement Plan Services

6900 College Boulevard, Suite 300 Overland Park, KS 66211

p: 913-906-4233 f: 913-345-0172

NYSE Listed:CBZ

e: rconner@cbiz.com

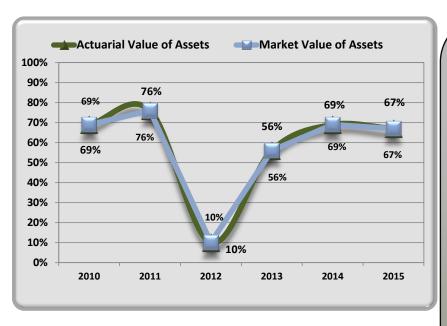
To learn more about CBIZ Retirement Plan Services, visit our website: www.cbiz.com/retirement

CBIZ Retirement Plan Services is a trade name under which certain subsidiaries of CBIZ, Inc. market investment advisory, third party administration, actuarial and other corporate retirement plan services.

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CEDAR HILL FPD LENGTH OF SERVICE AWARDS PROGRAM

- This plan provides a pension benefit for volunteer members of the fire protection district.
- Benefit payments in 2012 exceeded \$140,000 which greatly depleted plan assets.
- Active members do not make a monetary contribution to this plan.
- The plan does not smooth investment gains/losses.
- Plan closed to new members as of 12/01/14.
- The plan's 12/1/15 actuarial valuation contained newly supplied information, including a
 figure for actuarial accrued liability. Previously, the valuation only contained a figure for
 present value of accrued benefits. This impacts the funded ratio for 2015 because it had
 previously been calculated using present value of accrued benefits.
- The 12/1/15 actuarial valuation also included a schedule of sponsor contributions for the previous six years. This schedule's information, which is included below, differs from what had been previously reported to the JCPER.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$18,508	\$24,196	130%
2015	\$24,257	\$19,564	81%
2014	\$19,064	\$27,462	144%
2013	\$22,197	\$27,430	124%
2012	\$27,117	\$27,310	101%
2011	\$26,310	\$23,013	87%

AS OF 12/01/15

Market Value: \$ 113,594 Actuarial Value: \$ 113,594 AAL: \$ 170,528

MEMBERSHIP:

Active: 15 Inactive: 12

BENEFITS:

Normal Retirement Formula:

\$15 per month times years of ser-

vice

Maximum: \$450 per month

Life annuity guaranteed for 10 years **Normal Retirement Benefits:**Age 65 with 5 years of service

COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 4.75%

From: <u>Terry Soer</u>
To: <u>Michael Ruff</u>

Subject: RE: Cedar Hill Fire Protection District LOSA

Date: Wednesday, October 26, 2016 2:12:22 PM

Hi Michael,

I have sent this information on to our CPA and also our Pension Attorney for some advice. I hope they will come back with some comments that I can forward on to you. Thanks.

Terry

From: Michael Ruff [mailto:mruff@senate.mo.gov]
Sent: Wednesday, October 26, 2016 11:47 AM

To: Terry Soer (chfpd@cedarhillfire.com) <chfpd@cedarhillfire.com>

Subject: Cedar Hill Fire Protection District LOSA

Dear Chief Soer:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

I also would like to provide a quick explanation of two differences contained in this year's information sheet. First, the 2015 funded ratio in the chart (67%) is calculated using a different number from previous years. This year, the actuarial valuation included a number for actuarial accrued liability (AAL) for the first time. Previously, the actuarial valuation only contained a number for present value of accrued benefits, which was used to calculate the funded ratio in prior years. This year, because there was a number for AAL in the valuation, we used AAL to calculate the plan's funded ratio. This resulted in the funded ratio of 67%.

Second, this year's actuarial valuation contained a schedule of sponsor contributions for the past six plan years. Previous actuarial valuations did not contain a schedule. This information is different than what was previously reported to the JCPER. However, because this is the most recent information, I have included the schedule on the information page.

Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS

- The Fire and Police plans are commingled for investment purposes. Rate of return on investments equaled -1.5% (Market) & 7.0% (Actuarial) vs. 7.5% assumed. Investment gains/losses are smoothed over a 4 year period.
- The employer continues to meet or exceed the ARC.
- For fiscal year 2015, the City contributed an additional \$5 million in excess of the recommended contribution, divided between the two plans.
- Unfunded liabilities are amortized over a closed 25 year period beginning in plan year 2014.
- A new tier of provisions were passed for employees hired <u>on or after October 1, 2012</u>. 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% 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.
- The plan's actuary has recommended that an updated experience study be conducted prior to the next annual actuarial valuation.
- These plans were included on the State Auditor's watch list in 2014.

FIREMEN'S RETIREMENT FUND



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$4,548,880 (estimated)	N/A	N/A
14/15	\$4,751,496	\$7,751,496	163%
13/14	\$4,674,412	\$4,674,412	100%
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%

AS OF 9/30/15

Market Value: \$ 69,028,862 Actuarial Value: \$ 72,876,702 AAL: \$ 120,598,202

MEMBERSHIP:

Active: 134 Inactive: 150

BENEFITS:

Normal Retirement Formula:

3.5% of compensation for the first 20 years + 2% for next 5 years. Max 80% of compensation; 2% of compensation < 20 years. New hires: 2.5% of compensation x yrs of service, no max.

Normal Retirement Benefits:

Age 65 or 20 years of service Age 55 with 5 yrs of service or Rule of 80 (new hires)

COLA: Annual Max of 2%

ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3.5%

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS (CONTINUED)

POLICE RETIREMENT SYSTEM

As of 09/30/15

 Market Value:
 \$45,810,617
 Membership:

 Actuarial Value:
 \$48,364,215
 Active:
 155

 AAL:
 \$81,021,262
 Inactive:
 171

Normal Retirement Formula:

3% of compensation for first 20 years + 2% for next 5 years Maximum: 70% of compensation

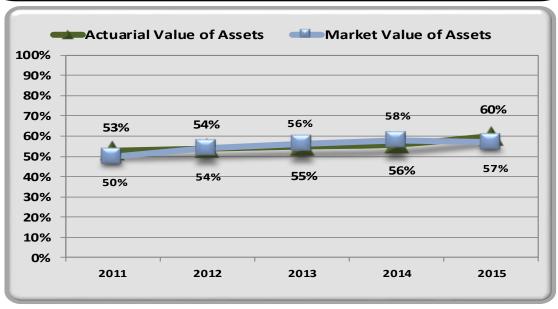
2.0% of compensation up to 25 years + 1.5% each year over 25 years Max—57.5% of compensation (new hires)

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%



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBU- TION	PERCENT CON- TRIBUTED
15/16	\$3,418,657 estimate	N/A	N/A
14/15	\$3,486,784	\$5,486,784	157%
13/14	\$3,245,420	\$3,245,420	100%
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%

 From:
 Michele Nix

 To:
 Michael Ruff

 Cc:
 Janice Finley

Subject: JCPER Plan Information

Date: Monday, November 7, 2016 6:19:10 PM

Michael replaced John Battel as the Finance Director and Plan Administrator for the City of Columbia when John retired in March, 2016.

I have reviewed you worksheet and it looks accurate however, I would like to add that the City made a \$5 million dollar contribution towards the unfunded liability for the Police and Fire plan in FY2015. As such, the funded level rose to 60% as of 9-30-2015.

Please see the following links for information concerning the condition of the plan most recently included in the FY17 budget document.

Overview Page 10 Police Page 341 Fire Page 349

Thanks -m

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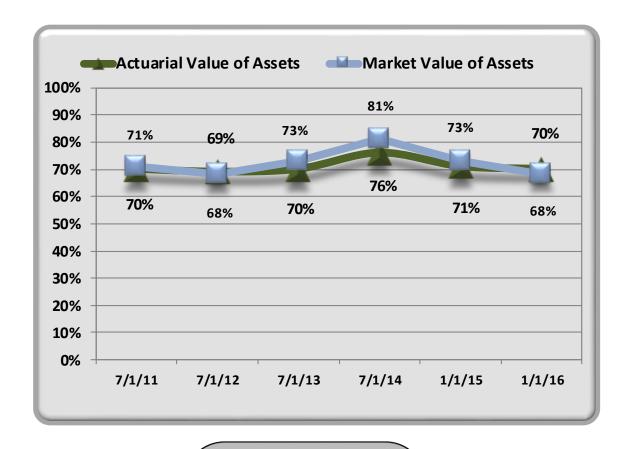
Michele Nix Finance Director 573-874-7368

COUNTY EMPLOYEES' RETIREMENT FUND

- Rate of return on investments equaled 0.02% (market) and 6.45% (actuarial) vs. 7.5% assumed. Investment gains and losses are smoothed over a five year period.
- CERF was established in 1994 and is funded through county receipts of fee and penalty revenue and employee contributions. Employees hired on or after 2/25/02 contribute 6% of pay (non-LAGERS members) and 4% of pay (LAGERS members).
- The plan updated its mortality tables effective with the January 1, 2016 actuarial valuation.
- The plan's actuarial valuation date changed from July 1 to January 1 beginning on January 1, 2015. With the 1/1/15 valuation, the plan made several actuarial assumption changes, including but not limited to: assumed rate of return for investments was lowered from 8.0% to 7.5%, wage increase lowered from 3.0% plus merit to 2.5% plus merit, Social Security wage growth assumption lowered from 4.5% to 3.5%. The impact of some of these assumption changes increased the actuarial liability.
- The ADC has been met or exceeded each year since CERF's inception in 1994 except four times, most recently in 2015.
- The plan's board has discretion to make a matching contribution to members' DC accounts using penalty & fee revenue provided it is not needed to keep the system actuarially sound. The plan's actuary notes that "when the 401(a) matching contribution is netted out of the county contributions, the amount available for pension benefits has actually decreased over time. If this trend continues, the county contributions will represent a decreasing percent of payroll over time. This effect is mitigated over the short term as new employees enter CERF at the higher member contribution rate. If county contributions lag the county portion of the ADC for an extended period of time the funded position of CERF will deteriorate."

	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$25,608,251	N/A	N/A
2015	\$22,051,507	\$19,968,537	90.6%
2014	\$17,483,325	\$19,781,514	113%
2013	\$18,594,085	\$20,348,888	109%
2012	\$18,706,575	\$19,919,125	106%
2011	\$17,486,046	\$19,364,023	110%

- Recommended contribution numbers are found in the January 1, 2016 actuarial valuation, Summary of Historical Results.
- Actual Contribution numbers are derived from County Receipts figures from CERF's Annual Financial Reports, Statements of Changes in Fiduciary Net Position.



As of 12/31/15 & 1/1/16

Market Value: \$432,504,491 Actuarial Value: \$448,784,038 AAL: \$640,399,679

MEMBERSHIP:

Active: 11,291 Inactive: 6634

BENEFITS:

Normal Retirement Formula:

\$29 times years of service; Greater of flat dollar formula, TRR formula-Social Security offset or prior plan formula.

Normal Retirement Benefits:

Age 62 with 8 years of service

Social Security: Yes

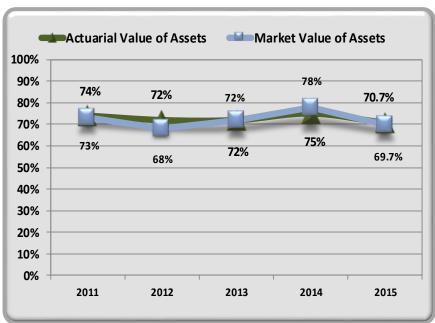
COLA: Annual Max 1%, Total Max 50%, Percent of CPI: 100%

ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 2.5%

GLENDALE POLICE & FIRE PENSION PLAN

- Rate of return on investments equaled 1.8% (market) and 6.9% (actuarial) vs. 7.5% assumed.
- Investment gains and losses are smoothed over a five year period.
- The plan changed its cost method from Aggregate to Entry Age Normal with a 20 year open amortization period for unfunded liabilities.
- The plan updated its mortality tables.
- The plan's actuary attributes this year's increase in the City's contribution to a poor asset return and assumption change for mortality.
- The plan is funded from two sources: a dedicated property tax levy and an employee contribution of 3.25%. The plan's financial statements note that "these are at this time fixed sources of revenue, which are not tied to actuarial experience of this plan, and are not tied to the actuarially recommended contribution."
- The tax levy has only produced sufficient revenue to meet the full annual required contribution one time (2007) since 2002.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$333,799	N/A	N/A
14/15	\$294,386	\$130,695	45%
13/14	\$305,702	\$127,993	42%
12/13	\$311,625	\$128,584	41%
11/12	\$305,145	\$132,462	43%
10/11	\$347,737	\$165,555	48%

As of 7/1/15

Market Value: \$5,271,715 Actuarial Value: \$5,342,441 AAL: \$7,555,918

MEMBERSHIP:

Active: 26 Inactive: 19

BENEFITS:

Normal Retirement Formula: 50% of compensation for first 20 years of service plus 1% of compensation for each year over 20 years

Normal Retirement Benefits: Age 55 with 15 years of service

Social Security Coverage: Yes

COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7.5% **Salary:** 3.75%

 From:
 Andrew Witte

 To:
 Michael Ruff

 Cc:
 Daniel Lawrence

Subject: RE: Glendale Police & Firemen"s Pension Plan

Date: Wednesday, November 2, 2016 11:24:33 AM

OK, thanks for the context and I am glad you sent this to me and I think it is good for me to be the Plan contact here along with Dan.

Andrew Witte, FSA, EA

Aon Hewitt | Retirement and Investment

8182 Maryland Avenue | Suite 1500 | St. Louis, MO 63105

t +1.314.719.3836 | f +1.314.725.2262

Andrew.Witte@aonhewitt.com | aonhewitt.com

From: Michael Ruff [mailto:mruff@senate.mo.gov] Sent: Wednesday, November 02, 2016 10:31 AM

To: Andrew Witte

Subject: RE: Glendale Police & Firemen's Pension Plan

Good morning Andy,

Thank you for your response. The Joint Committee's Watch List has been around since probably the early 2000s although it was previously called "Concerned PERS." The goal of the watch list is to provide public awareness, provide an overview of the affected plans, and have an opportunity for comments and feedback.

The Joint Committee sends the watch list notification to the individuals listed as plan contacts. For Glendale Police & Fire, you and Mr. Lawrence are listed as the contacts. Only a few of the plans list the plan's actuary as the plan contact, which is probably why you haven't received a notification for them. For example, I know that you are one of the actuaries for Jennings Police & Fire but for the JCPER, Ms. Beverly Roche is listed as the plan contact.

Yes, I looked back at Glendale and it was on the Watch List for the November 20, 2013 Joint Committee hearing based on 2012 data.

Michael

From: Andrew Witte [mailto:andrew.witte@aonhewitt.com]

Sent: Wednesday, November 2, 2016 9:42 AM **To:** Michael Ruff mruff@senate.mo.gov>

Cc: Daniel Lawrence < <u>dlawrence@glendalemo.org</u>> **Subject:** RE: Glendale Police & Firemen's Pension Plan

Hello:

Thanks for sending this to us.

Is this 70% "watch list" e-mail a new program? I think it is a good idea but don't recall getting anything like this before for any other clients, and I have had some below 70%

here and there in the past (including this plan a few years ago).

Just looking for context – at a glance I thought the document was very well put together and captured the situation accurately and succinctly.

- Andy

Andrew Witte, FSA, EA

Aon Hewitt | Retirement and Investment

8182 Maryland Avenue | Suite 1500 | St. Louis, MO 63105

t +1.314.719.3836 | f +1.314.725.2262

Andrew.Witte@aonhewitt.com | aonhewitt.com

From: Michael Ruff [mailto:mruff@senate.mo.gov]
Sent: Monday, October 24, 2016 3:48 PM
To: dlawrence@glendalemo.org; Andrew Witte
Subject: Glendale Police & Firemen's Pension Plan

Dear Mr. Lawrence and Mr. Witte:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

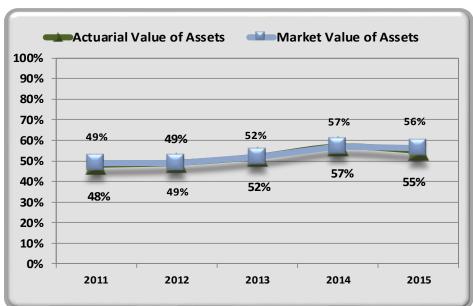
Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

HANNIBAL POLICE & FIRE RETIREMENT PLAN

- Rate of return on investments equaled 1.4% (Market) vs. 7.5% assumed.
- The plan does not smooth investment gains/losses.
- Open 20 year period for amortization of unfunded liabilities.
- Plan members do <u>not</u> participate in Social Security.
- Actuary notes "The city has contributed more than recommended contribution in the last four years.
 This year's asset loss decreased 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 very difficult to recover."
- The City made multiple plan modifications effective <u>7/1/11</u> including: 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.
- Effective July 1, 2016, the employee contribution rate will increase by one-half percent annually until it reaches 15% on July 1, 2021.
- Decreased the salary assumption from 4.0 to 3.5 based on the results of an experience study from May 2015.
- The City has exceeded the actuary's recommended contribution since 2012.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$1,066,446	N/A	N/A
14/15	\$984,663	\$1,237,446	126%
13/14	\$994,809	\$1,214,217	122%
12/13	\$1,010,251	\$1,212,249	120%
11/12	\$921,124	\$1,152,165	125%
10/11	\$1,179,620	\$1,051,162	89%

As of 6/30/15

Market Value:

\$15,326,681

Actuarial Value:

\$15,285,088

AAL:

\$27,598,708

MEMBERSHIP:

Active: 75 Inactive: 67

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:** 3.5%

JENNINGS POLICE & FIRE RETIREMENT FUND

- Rate of return on investments equaled -1.01% (Market) vs. 6% assumed.
- Investment gains/losses are not smoothed.
- Closed 15 year period for amortization of unfunded liabilities. As of 4/1/16, 12 years remain.
- Plan was closed in 1987 with new hires joining LAGERS. No active members remain in the plan; all members are now retired.
- Third time being included on JCPER watch list. Funded ratio has been decreasing since 1996 (94.29% in 1996 —> 50% in 2016)
- Plan officials testified in favor of legislation in 2016 to permit certain political subdivisions to enter into an agreement with LAGERS for transferring the duties and responsibilities of operating a prior pension plan to LAGERS.
- 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 cooperating with Riverview FPD for fire services.
- The City has met the ARC two years (2010 & 2011) since 1999. The contribution is tied to a tax levy. At the April 2016 election, voters approved a property tax increase of 12.5 cents, from 24.5 cents to 37 cents. The fund is projected to be solvent through its remaining lifetime.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$462,216	\$189,890	41%
14/15	\$345,068	\$194,976	57%
13/14	\$315,629	\$195,337	62%
12/13	\$244,685	\$203,049	83%
11/12	\$209,394	\$203,184	97%
10/11	\$201,076	\$210,405	105%

As of 04/01/16

Market Value: \$4,184,172 Actuarial Value: \$4,184,172 AAL: \$8,291,582

MEMBERSHIP:

Active: 0 Inactive: 39

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: N/A

Plan Closed in 1987 with New Hires joining LAGERS.

From: <u>Matt Rustige</u>
To: <u>Michael Ruff</u>

Cc: Beverly Roche - City of Jennings (BAROCH@CITYOFJENNINGS.ORG); Andrew Witte

Subject: City of Jennings Police and Firemen's Retirement Fund - 2016 Actuarial Valuation and Projected Fund Solvency

Date: Wednesday, October 26, 2016 9:36:10 AM
Attachments: Actuarial Report for 2016 City of Jennings P&F.pdf

<u>City of Jennings Police and Fire Retirement Fund - Solvency Projection - 6% Return Scenario (2016).pdf</u> <u>City of Jennings Police and Fire Retirement Fund - Solvency Projection - 6% Return Scenario and 2 additional</u>

deaths (2016).pdf

Mr. Ruff,

As requested by Ms. Beverly Roche, we are forwarding a copy of the 2016 actuarial valuation report for the City of Jennings Police and Firemen's Retirement Fund. Also included as separate displays are copies of the fund's solvency projection, including one scenario based on data as of 4/1/2016 and a second scenario reflecting two additional retiree deaths after 4/1/2016. As a result of the increased tax rates and resulting higher budgeted revenues beginning in 2016, the fund is now projected to be solvent through its remaining lifetime.

If you have questions or would like to discuss any of these results, please let me know.

Sincerely, Matt Rustige

Matt Rustige, EA, MAAA
Aon Hewitt | Retirement and Investment
8182 Maryland Ave. | 15th Floor | St. Louis, MO 63105
t 314-854-0704 | f 314-725-2262 | m 314.368.4936

matt.rustige@aonhewitt.com | aonhewitt.com | retirementandinvestmentblog.aon.com

Aon is a Principal Sponsor of Manchester United.

From: <u>Matt Rustige</u>
To: <u>Michael Ruff</u>

Cc: BAROCHE@CITYOFJENNINGS.ORG

Subject: RE: Jennings Police & Fire Plan

Date: Monday, November 7, 2016 6:48:36 AM

Mr. Ruff,

We do not have anything to add, but thank you for forwarding and providing the opportunity to comment.

Please note that Beverly Roche's email was incorrect in my original message and has now been corrected within as BAROCHE@CITYOFJENNINGS.ORG (to include the missing "e" in her last name). I have spoken with her and forwarded her copies of our prior correspondence. I apologize for any confusion.

Thank you, Matt Rustige

Matt Rustige, EA, MAAA
Aon Hewitt | Retirement and Investment
8182 Maryland Ave. | 15th Floor | St. Louis, MO 63105
t 314-854-0704 | f 314-725-2262 | m 314.368.4936
matt.rustige@aonhewitt.com | aonhewitt.com | retirement

Aon is a Principal Sponsor of Manchester United.

From: Michael Ruff [mailto:mruff@senate.mo.gov] **Sent:** Thursday, October 27, 2016 2:37 PM

Sent: mursuay, October 27, 2010 2.37 PW

To: Beverly Roche - City of Jennings (BAROCH@CITYOFJENNINGS.ORG); Matt Rustige

Subject: Jennings Police & Fire Plan

Dear Ms. Roche and Mr. Rustige:

Thank you for providing the JCPER with the 4/1/16 actuarial valuation and the two solvency projections for Jennings Police & Fire.

Each year, the Joint Committee on Public Employee Retirement (JCPER) staff compiles a watch list report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. Based on the 4/1/16 actuarial valuation, Jennings Police & Fire has a funded ratio, on a market value basis, of approximately 50%. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the JCPER at its fourth quarter meeting on Wednesday, November 16, 2016. As you might recall, at the April 2016 meeting, the JCPER discussed the successful property tax increase from the April election using the information you had provided. At the November meeting, I plan to mention the projected positive impact of the tax increase as well as the passage of the LAGERS legislation that would permit the City to transfer the duties and responsibilities of administering the plan to LAGERS.

Please feel free to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

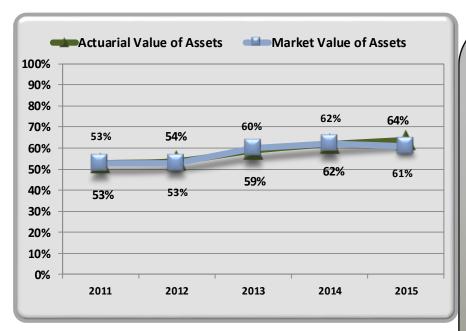
Thank you for your time and consideration.

Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

JOPLIN POLICE & FIRE PENSION PLAN

- Rate of return on investments equaled -0.2% (Market) & 5.7% (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 only contributed 97.8% of the actuarially determined contribution in 2015 but had exceeded the ADC for the previous 4 years.
- This plan was included on the State Auditor's "watch list" in 2014.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$2,708,565	N/A	N/A
14/15	\$2,721,986	\$2,662,322	97.8%
13/14	\$2,737,752	\$2,919,862	107%
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%

As of 10/31/15

Market Value: \$36,069,265 Actuarial Value: \$37,912,204 AAL: \$59,513,531

MEMBERSHIP:

Active: 196 Inactive: 152

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

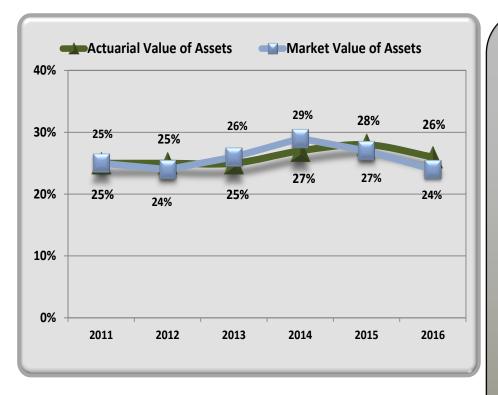
COLA: No COLA

ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 2.5%

JUDICIAL RETIREMENT PLAN

- Rate of return on investments equaled 0.02% (Market) and 5.89% (Actuarial) vs. 7.65% assumed.
- In plan year 2016, the plan used a 28 year amortization period (of a closed 30) for unfunded liabilities.
- In June 2016, actuarial assumptions were changed based on the recent experience study. Assumed rate of return was lowered from 8.0 to 7.65, the asset smoothing period was changed from 3 years to 5 years, and mortality tables were updated. The assumed rate of return will be decreased by 0.15 for four years. The plan's actuary states that "the assumption changes increased the actuarial accrued liability and had an upward effect on the contribution rate."
- 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 01/01/11.
- Previously, the 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.
- The employer continues to meet the ARC.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$33,642,497	\$33,642,497	100%
14/15	\$32,696,686	\$32,696,686	100%
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 of 6/30/16

Market Value: \$132,056,350 Actuarial Value: \$143,468,860 AAL: \$547,621,617

MEMBERSHIP:

Active: 408 Inactive: 567

BENEFITS:

Normal Retirement Formula:

50% of compensation;

Less than service requirement: Pro-rated benefit based on service

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: 7.65% **Salary:** 3%

From: Ronda Stegmann
To: Michael Ruff

Cc: <u>John Watson; Mark Murphy; Jake McMahon</u>

Subject: RE: Judicial Retirement System

Date: Thursday, November 3, 2016 4:29:28 PM

Michael - Thank you for the opportunity to respond to the inclusion of the Judicial Retirement Plan on the annual reporting of the Joint Committee on Public Employee Retirement (JCPER). As you are aware, the Judicial Retirement Plan was operated on a pay-as-you-go basis prior to 1998 when the law was changed to require that the plan be funded on an actuarial basis. The progression of the funded status of the plan beginning in 1998 was 0% and has grown to the 2016 funded ratio of 26.2%.

We hope this information is helpful to the JCPER as it conducts its proceedings. If you have any questions or we can provide additional information, please do not hesitate to contact our office.

Sincerely,

Ronda

Ronda Stegmann
Legislative & Policy Coordinator
MOSERS
573-632-6113

www.mosers.org

From: Michael Ruff [mailto:mruff@senate.mo.gov]

Sent: Monday, October 24, 2016 3:59 PM

To: Ronda Stegmann

Subject: Judicial Retirement System

Dear Ronda:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the Judicial Retirement System that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

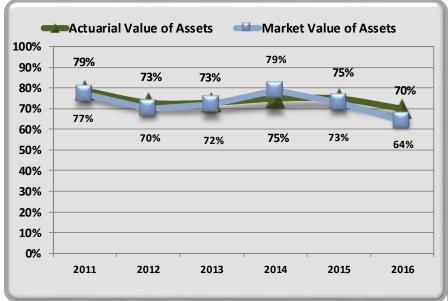
Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

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MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

- For year ending June 30, 2016, rate of return on investments equaled 0.02% (market) and 5.76% (actuarial) vs. 7.65% assumed.
- In June 2016, actuarial assumptions were changed based on the recent experience study. Assumed rate of return was lowered from 8.0 to 7.65, the asset smoothing period was changed from 3 years to 5 years, and mortality tables were updated. The assumed rate of return will be decreased by 0.15 for each of the next four years.
- The computed employer contribution rate as a percent of payroll increased to 19.45% for FY18 from 16.34% in FY17. The plan had an experience loss due to investment losses, higher than expected salary increases, active retirement experience, and service purchases.
- 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.
 As new employees are hired under the 2011 tier and replace MSEP and MSEP 2000 members, the employer normal cost is expected to decrease by 3.3% of payroll relative to the June 30, 2016 valuation.
- The employer continues to meet the recommended contribution.
- Previously on the Watch List in 2009 and 2010 due to the market downturn.



June 30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	% CONTRIB- UTED
2017	\$396,500,000 es- timated	N/A	N/A
2016	\$329,957,369	\$329,957,369	100%
2015	\$329,752,832	\$329,752,832	100%
2014	\$326,370,336	\$326,370,336	100%
2013	\$274,655,284	\$274,655,284	100%
2012	\$263,373,924	\$263,373,924	100%
2011	\$263,418,048	\$263,418,048	100%

As of 6/30/16

Market Value: \$8,109,161,214 Actuarial Value: \$8,878,057,191 AAL: \$12,751,162,753

MEMBERSHIP:

Active: 49,464 **Inactive:** 65,400

BENEFITS:

Normal Retirement Formula:

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

Normal Retirement Eligibility:

Age 62 with 5 years of service or Rule of 80

Hired for the first time on or after 1/1/11: Age 67 with 10 years of service or Rule of 90

Social Security Coverage: Yes

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

ACTUARIAL ASSUMPTIONS:

Interest: 7.65% Salary: 3.0%

From: Ronda Stegmann
To: Michael Ruff

Cc: John Watson; Mark Murphy; Jake McMahon

Subject: RE: MOSERS 2016 Watch List

Date: Thursday, November 3, 2016 4:26:38 PM

Michael - Thank you for the opportunity to respond to the inclusion of the Missouri State Employees' Retirement System (MOSERS) on this annual reporting of the Joint Committee on Public Employee Retirement (JCPER). We would like to offer the following factors contributing to the MOSERS' inclusion on this year's JCPER report.

In June 2016, the MOSERS Board of Trustees voted to:

-reduce the plan's investment rate of return assumption from <u>8.0% to 7.65%</u>, and -strengthen mortality tables associated with potential increased membership longevity.

These adopted plan modifications were a result of recommendations contained in the plan's experience study conducted for the five-year period ending June 30, 2015. These modifications more closely align the fund with future capital market expectations as well as potential longer lifespans of members. Such changes significantly contributed to the decrease in plan's funded ratio and the increase in employer contribution requirements for FY18.

Important to note since June 30, 2016:

-Calendar Year to Date (CYTD) total fund return as of September 30, 2016 equaled <u>11.99%</u>, and

-Total fund growth for the CYTD equaled \$908,223,000.

We hope this information is helpful to the JCPER as it conducts its proceedings. If you have any questions or we can provide additional information, please do not hesitate to contact our office.

Sincerely,

Ronda

Ronda Stegmann
Legislative & Policy Coordinator
MOSERS
573-632-6113

www.mosers.org

From: Michael Ruff [mailto:mruff@senate.mo.gov]

Sent: Monday, October 24, 2016 4:27 PM

To: Ronda Stegmann

Subject: MOSERS 2016 Watch List

Dear Ronda:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. The information sheet is based largely on the June 30, 2016 actuarial valuation. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

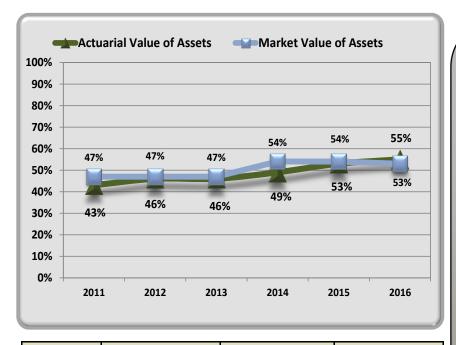
Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

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MoDOT & HIGHWAY PATROL EMPLOYEES' RETIREMENT SYSTEM

- Rate of return on investments equaled 1.08% (Market) and 8.13% (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% effective with the 6/30/13 valuation.
- New tier provisions were passed in 2010 requiring increased age and service requirements, increased vesting period and employee contributions for employees hired for the first time on or after 01/01/11. As of 06/30/16, 1,914 members were covered under the 2011 tier.
- Employees hired for the first time on or after 1/1/11 contribute 4% of pay.
- As of 7/1/16, closed 9-year amortization period for unfunded retiree liabilities and closed 24-year amortization period for the remaining unfunded liabilities.
- In September 2016, the Board voted to certify the FY2018 contribution at the same level as the previous year. 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.
- The Employer continues to meet the ARC.
- The next experience study will likely be performed after the Plan Year 2017 actuarial valuation.
- This plan was included on the State Auditor's "watch list" in 2014.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
16/17	\$211,120,922 (projected)	N/A	N/A
15/16	\$199,609,396	\$199,609,396	100%
14/15	\$200,485,540	\$200,638,571	100%
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%

As of 6/30/16

Market Value: \$1,992,073,946 Actuarial Value: \$2,086,654,348 AAL: \$3,761,733,004

MEMBERSHIP:

Active: 7,441 **Inactive:** 11,018

BENEFITS:

Normal Retirement Formula:

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

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 Max: 5% Percent of CPI: 80%

ACTUARIAL ASSUMPTIONS:

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

 From:
 Scott Simon

 To:
 Michael Ruff

Subject: RE: MPERS 2016 JCPER Watch List

Date: Thursday, October 27, 2016 7:50:12 AM

Michael, The summary looks good. Thanks for sharing.

SS



Scott L. Simon | Executive Director | MoDOT & Patrol Employees' Retirement System

Office Location: 1913 William St., Jefferson City, MO 65109 Mailing Address: PO Box 1930, Jefferson City, MO 65102-1930 Telephone Number: (573) 298-6020 Toll Free: 1-800-270-1271 Fax: (573) 522-6111 Website: www.mpers.org

From: Michael Ruff [mailto:mruff@senate.mo.gov]

Sent: Monday, October 24, 2016 4:13 PM **To:** Scott Simon <Scott.Simon@mpers.org> **Subject:** MPERS 2016 JCPER Watch List

Dear Scott:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. The information is primarily based on the June 30, 2016 actuarial valuation and the information you provided to me from MPERS' recent GASB report as well as information previously provided to the JCPER. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

Last year, you had commented on the term "inactive" regarding membership. Due to space constraints the term "inactive" will continue to be used but the first page of the report will include an explanation of "inactive" including retirees, terminated vested, disabled, and surviving beneficiaries.

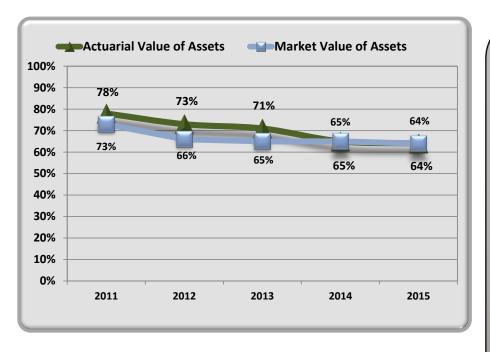
Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

OVERLAND POLICE RETIREMENT FUND

- Rate of return on investments equaled 7.1% (Market) and 6.7% (Actuarial) vs. 7% assumed.
- The plan smooths investment gains and losses over a five year period.
- 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 updating mortality tables.
- The Aggregate Cost Method is utilized by the plan which does not yield an actuarial accrued liability.
- Employer contribution is supported by a tax levy of \$0.12 per \$100 of assessed valuation. The actuary notes "The rate [property tax] is currently 12 cents which is less than one-quarter 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."
- The City has not met the ARC since 2008.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$1,085,072	N/A	N/A
2015	\$1,072,917	\$251,812	23%
2014	\$863,157	\$240,878	28%
2013	\$801,961	\$268,988	34%
2012	\$693,886	\$271,164	39%
2011	\$672,820	\$283,848	42%

As of 04/01/15

Market Value: \$13,330,701 Actuarial Value: \$13,343,394 AAL: \$20,830,124

MEMBERSHIP:

Active: 45 Inactive: 38

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 vears of service

Social Security Coverage: Yes

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

ACTUARIAL ASSUMPTIONS: Interest: 7% Salary: 3.5%

From: Melissa Burton

To: Jason McConachie; Michael Ruff
Subject: Re: Overland Police Retirement Plan
Date: Friday, November 4, 2016 12:41:45 PM
Attachments: 161104 Overland Police JCPER Response.pdf

Mr. Ruff,

The response from the Board of Trustees for the Police Retirement Plan is attached for your review.

Respectfully,

>>> Michael Ruff <mruff@senate.mo.gov> 10/24/2016 4:30 PM >>> Dear Ms. Burton and Mr. McConachie:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016.

Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

Sincerely,

Michael Ruff
Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101
573-751-1280
mruff@senate.mo.gov

City of Overland Police Department

Members of the Joint Committee,

I am writing this letter on behalf of the members of the Overland Police Retirement Pension Fund. As of the last actuarial report, our retirement fund is approximately 64% funded. This has been of great concern for the pension board, as we have seen the fund trend downwards over the past several years. The City of Overland Police Pension Plan is funded in three ways:

- 1. A tax levy of .12 cents per \$100 of assessed valuation of real estate and personal property.
- 2. Employee contributions of 5%.
- 3. Income/Gains in the bond and equities market.

In regards to the current tax rate, the actuarial recommendation given the fund's current and long term obligations is above 50 cents per \$100 of assessed valuation. The current tax rate of 12 cents has not been raised since 1987 and is far lower than other area municipalities with like pension plans. It is the pension board's intent to bring a ballot initiative to the voters to raise the tax to appropriate funding levels in the spring of 2017. Along with the above ballot initiative, we intend to raise employee contributions of 5% to 7.5%.

In terms of employee benefits, currently the plan refunds all contributions to the employee upon retirement. Upon the successful passing of a tax levy increase, it is the pension board's recommendation that all future contributions remain in the pension fund, except in those instances where no other retirement benefit is payable (i.e. early employee resignation/termination). The pension board feels this is a material benefit change, but will be a positive for the long term viability of the pension.

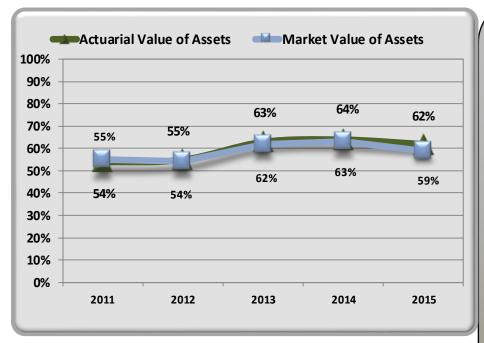
It is of the upmost importance of the pension board to remedy this situation in a manner that is both equitable for the police officers and the citizens of Overland whom we serve. Any recommendations or comments from your committee would be much appreciated. Thank you.

Respectfully,

Lt. Ken Robinson #488 Trustee, Overland Police Pension 2410 Goodale Ave. Overland, Mo 63114 314-428-1212 (B) 314-799-5511 (C)

RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- Rate of return on investments equaled –1.5% (market) and 5.7% (actuarial) vs. 7.5% assumed.
- The plan implemented five year smoothing of investment gains and losses "to realize less volatility
 in asset values and consequently less volatility in contribution amounts." The plan updated to a
 more recent set of mortality tables.
- 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 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 has met or exceeded the ARC since 2011.
- The Plan was frozen as of December 31, 2013 with members moving to LAGERS.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$562,862	N/A	N/A
2015	\$513,291	\$513,291	100%
2014	\$508,285	\$531,116	104%
2013	\$660,842	\$660,842	100%
2012	\$678,787	\$686,270	101%
2011	\$616,618	\$637,728	105%

As of 1/1/16 and 10/31/15

Market Value: \$10,218,583 Actuarial Value: \$10,680,109 AAL: \$17,236,595

MEMBERSHIP:

Active: 45 Inactive: 42

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

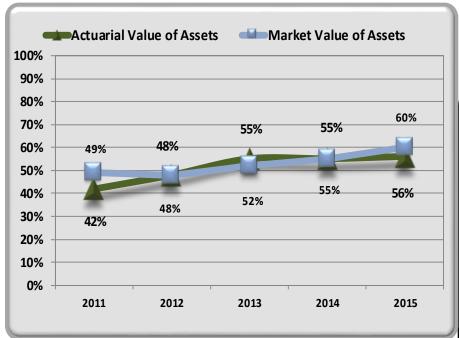
Social Security Coverage:

COLA: No COLA

ACTUARIAL ASSUMPTIONS: Interest: 7.5% Salary: 4%

ROCK HILL UNIFORMED PENSION PLAN

- Rate of return on investments equaled 9.27% (market) compared to 6.4% assumed.
- This plan was closed to new employees effective May 2003. Benefit accruals were frozen as of May 1, 2011.
- All active participants as well as new hires are members of LAGERS as of 09/2007.
- The employer has not met the ARC since 2007.
- Beginning with the May 1, 2016 actuarial valuation, the plan increased the investment rate of return from 6.0 to 6.4 to match expected long term rate of return.
- Employees do not make a payroll contribution to this plan.
- Plan does not smooth investment gains/losses.



Year End- ing March 31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CON- TRIBUTED
2017	\$212,536	N/A	N/A
2016	\$199,227	\$150,000	75%
2015	\$199,227	\$150,000	75%
2014	\$251,551	\$125,000	50%
2013	\$251,551	\$210,325	84%
2012	\$293,522	\$216,269	74%

As of 3/31/15 & 5/1/16

Market Value: \$2,086,252 Actuarial Value: \$1,951,255 AAL: \$3,463,654

MEMBERSHIP:

Active: 7 Inactive: 21

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: 6.4% Salary: 0%

Closed Plan effective October 2003

From: Sandra Stephens

To: Michael Ruff; jyackley@rockhillmo.net
Subject: RE: Rock Hill Uniformed Pension Plan
Date: Monday, October 24, 2016 4:57:22 PM

Attachments: RH FY2016 CAFR - Final.pdf

Mr. Ruff,

There was a contribution for \$150,000 made during 15/16. Please refer to page 18 of the attached CAFR.

Thank you Sandy

Sandra Stephens, CPFO
Assistant Director of Finance, City of Kirkwood
Treasurer, City of Rock Hill
139 S Kirkwood Road
Kirkwood, MO 63122
314 822-5834
stephesf@kirkwoodmo.org

From: Michael Ruff [mailto:mruff@senate.mo.gov]

Sent: Monday, October 24, 2016 4:43 PM
To: jyackley@rockhillmo.net; Sandra Stephens
Subject: Rock Hill Uniformed Pension Plan

Dear Ms. Yackley and Ms. Stephens:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

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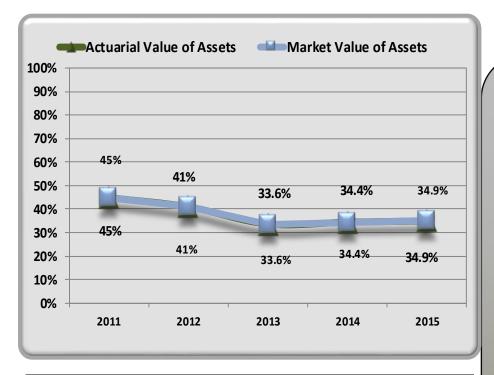
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Sincerely,

Michael Ruff Executive Director Joint Committee on Public Employee Retirement State Capitol, Room 219-A Jefferson City, MO 65101 573-751-1280 mruff@senate.mo.gov

SEDALIA POLICE RETIREMENT FUND

- Rate of return on investments equaled 1.98% (Market) vs. 6% assumed (investment assumption was reduced from 7.5% to 6.0% effective with the 8/01/13 actuarial valuation).
- The reduced investment return assumption increased the accrued liability by \$1.3 million.
- Plan does not smooth investment gains/losses.
- Unfunded Actuarial Accrued Liabilities are amortized over a 25 year period as of 2014.
- The actuary notes three investment assumption scenarios and a time estimate of when the plan will have liabilities that it will not be able to fund using available assets. These estimates include 25 years, 15 years, and 10 years.
- 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 contribution is tied to a \$0.0894 per \$100 assessed valuation tax levy.
- The employer contribution tied to tax levy proceeds is not meeting the ARC.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2016	\$452,528	N/A	N/A
2015	\$456,345	\$448,165	98%
2014	\$459,978	\$384,258	84%
2013	\$387,414	\$235,179	61%
2012	\$364,705	\$231,860	64%
2011	\$429,331 (estimate)	\$222,527	52%

As of 7/31/15

Market Value: \$3,299,533 Actuarial Value: \$3,299,533 AAL: \$9,431,446

MEMBERSHIP:

Active: 32 Inactive: 42

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

From: Arlene Silvey
To: Michael Ruff

Subject: RE: Sedalia Police Retirement Fund

Date: Friday, October 28, 2016 3:14:10 PM

Mr. Ruff:

Just for some information, in 2016, in addition to the tax money that is collected, the City of Sedalia approved an additional budget request of \$230,000.00 that was contributed to the Police Retirement Fund.

Arlene Silvey

Arlene Silvey, MPCC City Clerk City of Sedalia, MO 200 S. Osage Sedalia, MO 65301

asilvev@citvofsedalia.com

From: Michael Ruff [mailto:mruff@senate.mo.gov]

Sent: Monday, October 24, 2016 4:59 PM

To: Arlene Silvey

Subject: Sedalia Police Retirement Fund

Dear Ms. Silvey:

The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels.

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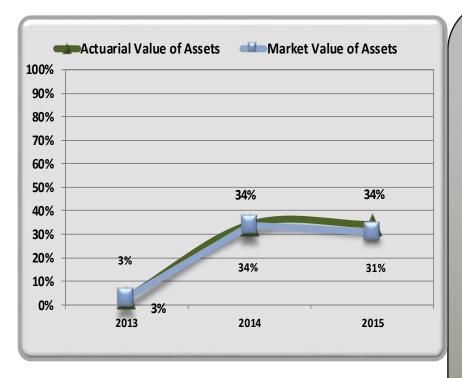
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Sincerely,

Michael Ruff Executive Director Joint Committee on Public Employee Retirement State Capitol, Room 219-A Jefferson City, MO 65101 573-751-1280 mruff@senate.mo.gov

ST. LOUIS CITY FIREFIGHTERS' RETIREMENT PLAN

- Rate of return on investments equaled –4.02% (Market) and 4.83% (Actuarial) vs. 7.625% assumed.
- Investment gains/losses are smoothed over a 5 year period.
- Effective February 1, 2013, benefit accruals under the Firemen's Retirement System of St. Louis were frozen. This plan (The Firefighters' Retirement Plan of the City of St. Louis) was established to provide benefits for service rendered after that date.
- Plan adopted a 30 year closed amortization period effective in 2013 for unfunded liabilities.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
15/16	\$9,148,007	N/A	N/A
14/15	\$7,435,635	\$7,435,635	100%
13/14	\$8,942,435	\$8,942,435	100%

As of 10/01/15

Market Value: \$29,775,598 Actuarial Value: \$31,940,730 AAL: \$94,712,110

MEMBERSHIP:

Active: 607 Inactive: 39

BENEFITS:

Normal Retirement Formula: (new members since 02/01/13)

Ders since U2/U1/13)

2% of compensation for the first 25 yrs of service plus 2.5% (5% for grandfathered participants) in excess of 25 years of service

.

Maximum: 75% of compensation

Normal Retirement Eligibility: Age 55 with 20 years of service

Social Security Coverage: No

COLA: Annual Amount Minimum: 1.5% Annual Amount Maximum: 5%

"CAP"-Total Max: 25%

ACTUARIAL ASSUMPTIONS: Interest: 7.625% Salary: 3%

Deferred Retirement Option Plan (DROP)-only available to members on 02/01/13

From: Fairless, Janice To: Michael Ruff leeserr@stlouis-mo.gov Subject: Re: Firefighters" Retirement Plan of the City of St. Louis Date: Friday, October 28, 2016 2:44:50 PM Michael. The City has paid 100% of the \$9,148,007. Janice On Mon, Oct 24, 2016 at 4:52 PM, Michael Ruff < mruff@senate.mo.gov > wrote: Dear Mrs. Fairless and Mr. Leeser: The Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio on a market value basis of less than 70%. The JCPER staff is in the process of preparing this information based on the annual survey information for plan year 2015. This report is designed to increase awareness of trends in plan funding and contribution levels. This report is not intended to include all information relating to the plan, therefore, contribution information and early retirement provisions are not listed. I am attaching an information sheet relating to the plan that will be presented to the committee at its fourth quarter meeting on Wednesday, November 16, 2016. We welcome you to review this information and respond with any additional information or thoughts you deem appropriate. If you would like to respond, please provide any information or comments by Friday, November 4, 2016. Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact the office if you have any questions or would like additional information.

Sincerely,

Michael Ruff

Executive Director

Joint Committee on Public Employee Retirement

State Capitol, Room 219-A

Jefferson City, MO 65101

573-751-1280

mruff@senate.mo.gov

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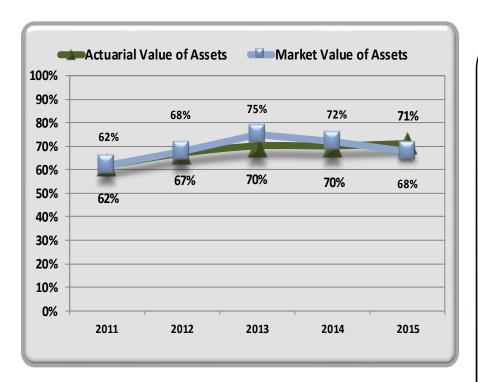
Janice Fairless

Plan Supervisor Firefighters' Retirement Plan e-mail: <u>fairlessj@stlouis-mo.gov</u>

phone: 314-622-3216 fax: 314-622-3228

St. Louis County Employees' Retirement Plan

- Rate of return on investments equaled 1.8% (market) and 9.5% (actuarial) vs. 8.0% assumed rate of return used for plan year 2015.
- Investment gains and losses are smoothed over a four year period.
- Effective 1/1/16, the plan lowered the assumed rate of return from 8.0% to 7.75%, decreased the salary increase assumption from 4.5% to 4.25%, and shortened the amortization period for unfunded liabilities from 30 years to 25 years.
- The plan maintains both uniformed and non-uniformed components.
- Employees do not make a payroll contribution to the plan. Employees participate in Social Security.
- The employer continues to meet the ARC.



	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUT- ED
2016	\$39,938,958	N/A	N/A
2015	\$37,894,303	\$37,894,303	100%
2014	\$36,202,086	\$36,202,086	100%
2013	\$36,628,538	\$36,628,538	100%
2012	\$38,959,667	\$38,959,667	100%
2011	\$30,949,913	\$30,949,913	100%

As of 12/31/15

Market Value: \$594,907,837 **Actuarial Value: \$617,382,097** AAL: \$873,847,697

MEMBERSHIP:

Active: 3893 Inactive: 4221

BENEFITS:

Normal Retirement Formula:

General Employees: 1.5% of compensation times years of service, plus \$15 per month times years of service. Uniformed: 1.6% of compensation times years of service, plus \$30 per month times years of service to age 65, plus \$5 per month times years of service.

Normal Retirement Benefits:

General Employees: Age 65 with 3 years of service

Uniformed: Age 60 with 10 years of service, age 65 with 3 years of service, or Rule of 80

Social Security Coverage: Yes

COLA: Ad hoc cola

ACTUARIAL ASSUMPTIONS:

Interest: 7.75% Salary: 4.25%

Partial Lump Sum Option