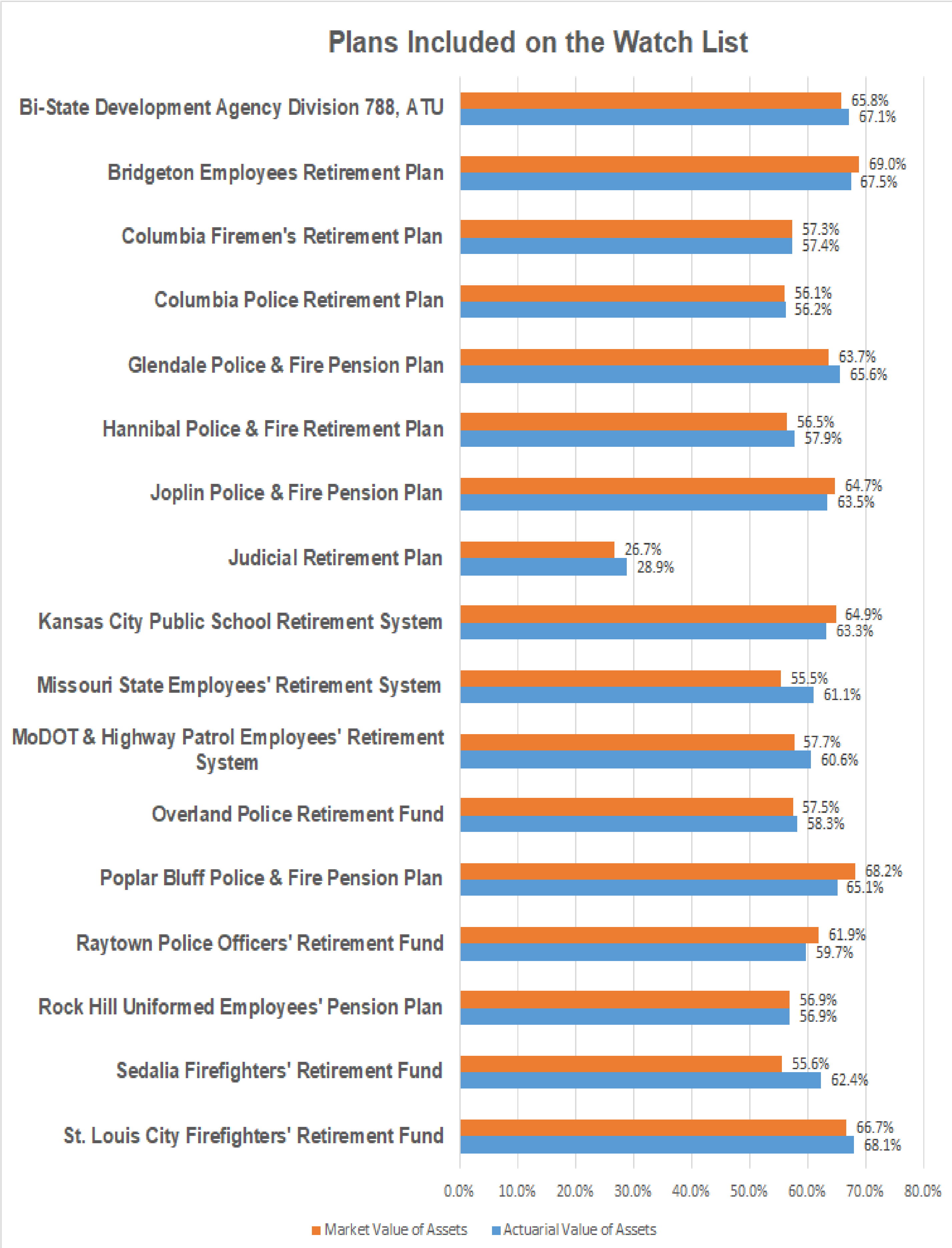
JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

ANNUAL WATCH LIST

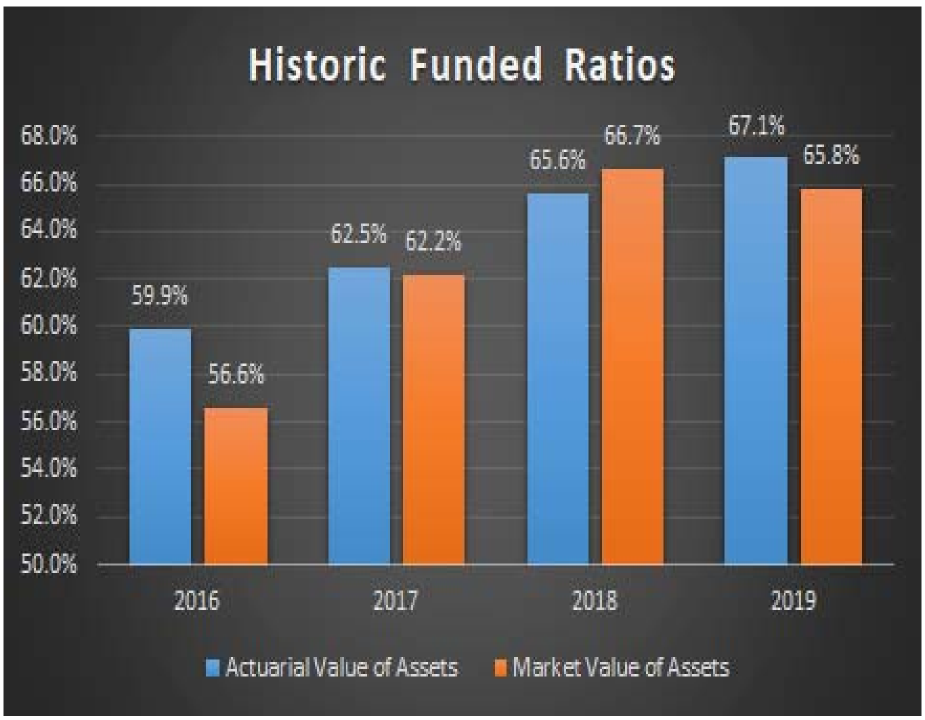
December 1, 2020

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vested, retired, surviving beneficiary, disabled members, and for some plans, terminated nonvested members who have not withdrawn employee contributions.


Plans Included on the Watch List
Bi-State Development Agency Division 788, ATU
65.8%
67.1%
Bridgeton Employees Retirement Plan
69.0%
67.5%
Columbia Firemen's Retirement Plan
57.3%
57.4%
Columbia Police Retirement Plan
56.1%
56.2%
Glendale Police & Fire Pension Plan
63.7%
65.6%
Hannibal Police & Fire Retirement Plan
56.5%
57.9%
Joplin Police & Fire Pension Plan
64.7%
63.5%
Judicial Retirement Plan
26.7%
28.9%
Kansas City Public School Retirement System
64.9%
63.3%
Missouri State Employees' Retirement System
55.5%
61.1%
MoDOT & Highway Patrol Employees' Retirement System
57.7%
60.6%
Overland Police Retirement Fund
57.5%
58.3%
Poplar Bluff Police & Fire Pension Plan
68.2%
65.1%
Raytown Police Officers' Retirement Fund
61.9%
59.7%
Rock Hill Uniformed Employees' Pension Plan
56.9%
56.9%
Sedalia Firefighters' Retirement Fund
55.6%
62.4%
St. Louis City Firefighters' Retirement Fund
66.7%
68.1%
0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
80.0%
Market Value of Assets
Actuarial Value of Assets

BI-STATE DEVELOPMENT AGENCY
DIVISION 788, A.T.U. EMPLOYEES' PENSION PLAN

- Rate of return on investments equaled 2% (Market) and 5.7% (Actuarial) vs. 7% assumed.
- Effective with the 4/1/16 valuation, the assumed rate of return was lowered from 7.25% to 7%.
- Unfunded Actuarial Accrued Liability is amortized on a closed 30-year period effective April 1, 2003. As of 4/1/19, 14 years remain on the amortization period.
- At its 11/9/17 meeting, the Pension Committee voted to maintain the total weekly contribution rate of $175 per active participant. The actuary does not recommend decreasing the contribution rate below this level.
- 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.
- The contribution history below is taken from the plan's 3/31/19 Financial Statements (pg. 23), which revised the contribution history to include the previous amounts from the Clerical Plan.



Fiscal Year ending 6/30,	EMPLOYER RECOMMENDED CONTRIBUTION	EMPLOYER ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2019	$10,281,297	$10,281,297	100%
2018	$9,393,252	$9,393,252	100%
2017	$9,626,600	$9,626,600	100%
2016	$9,342,714	$9,342,714	100%
2015	$9,199,407	$9,199,407	100%

As of 4/1/19

Market Value: $139,763,901

Actuarial Value: $142,494,408

Liabilities: $212,320,074

Membership:

Active: 1,420 **Inactive**: 1,372

Normal Retirement Formula:

$40 times years of service for those retiring with less then 25 years of service. $55 times years of service for those retiring with 25 or more years of service.

Normal Retirement Eligibility: 25 years of service, age 65, or age 55 with 20 years of service.

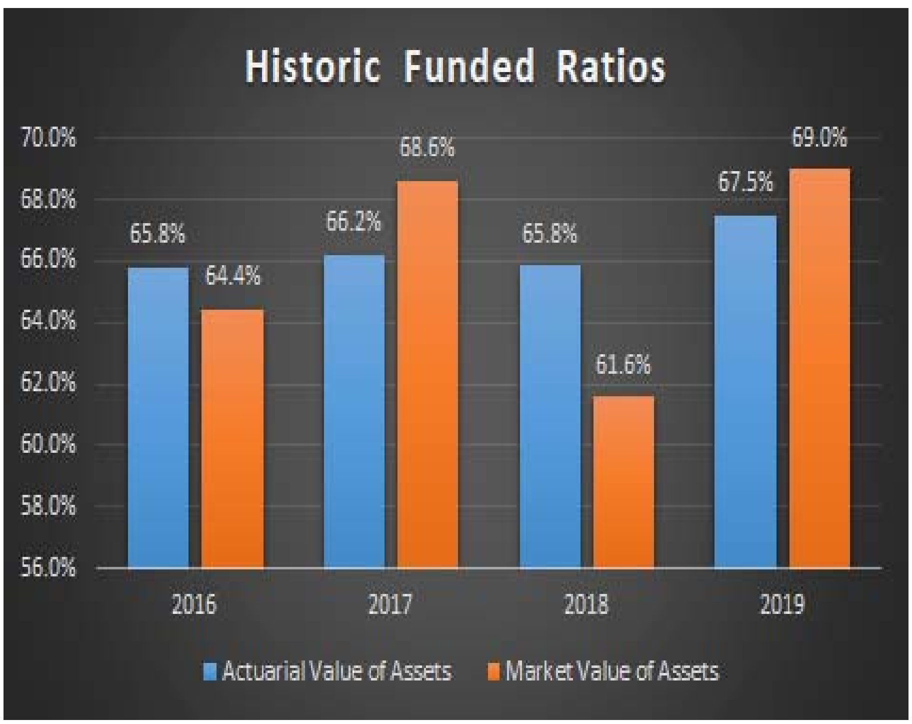
Social Security Coverage: Yes

COLA: Ad hoc COLA

Assumed rate of return: 7%

BRIDGETON EMPLOYEES RETIREMENT PLAN

- Rate of return on investments equaled 17.61% (Market) and 7.52% (Actuarial) vs. assumed 7.5%.
- For plan years 2018 and 2019, the City contributed the full actuarially determined contribution (slightly exceeding it). Previously, the City had not contributed the full ADC since 2008.
- Effective with the 1/1/18 valuation, the City has changed its funding policy by adopting a 30-year closed amortization period for payment of unfunded liabilities.
- The plan was frozen to new employees as of January 1, 2012. For employees hired after 1/1/12, the City uses a matching component to its 457 deferred compensation plan. Recently, the City Council has discussed the possibility of joining Missouri LAGERS and migrating the 58 employees not covered by this plan to LAGERS. In March 2020, LAGERS's actuary prepared an initial actuarial valuation for the City to consider.
- In April 2015, voters approved a hotel/motel tax increase to generate an additional $900,000 in revenue annually.
- The actuary comments that "the chief reasons for the increase in annual cost as a percentage of payroll is the fact that the payroll is declining as the plan is closed to new entrants."



January 1,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$1,653,998	N/A	N/A
2019	$1,725,085	$1,725,090	100%
2018	$1,697,979	$1,700,000	100.1%
2017	$1,687,909	$1,680,000	99.5%
2016	$1,680,519	$1,525,000	91%

As of 1/1/20

Market Value: $32,134,577*

Actuarial Value: $31,434,961

Liabilities: $46,571,048

Membership:

Active: 71 **Inactive**: 180

Normal Retirement Formula:

2% of compensation times years of service

Normal Retirement Eligibility:

Age 60 with 5 years of service

Social Security Coverage: Yes

COLA: No COLA

Assumed Rate of Return: 7.5%

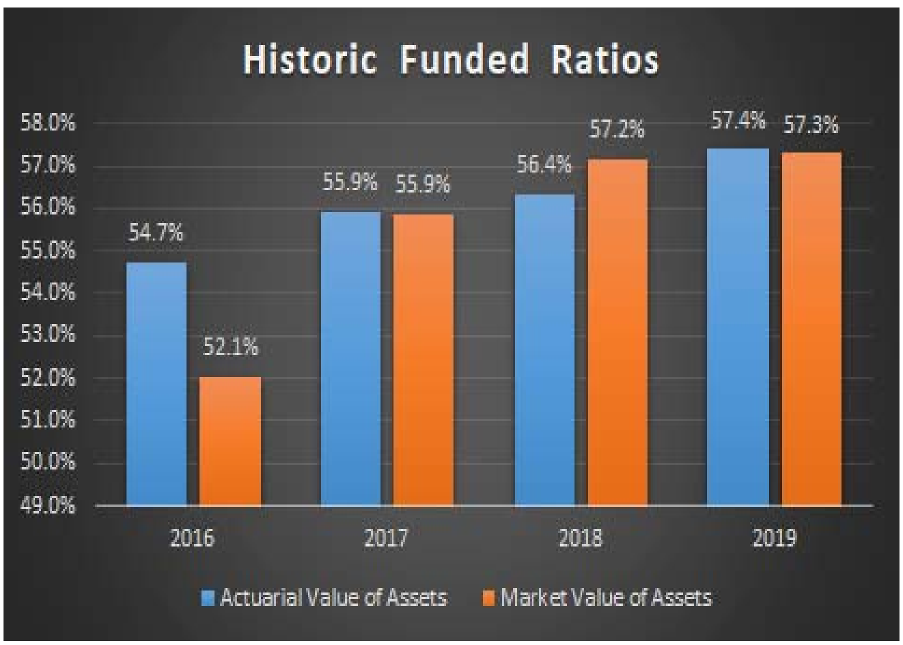
Salary: 4%

*Market Value from 1/1/20 actuarial valuation including accrued contribution of $1,725,090

COLUMBIA FIREMEN'S & POLICE RETIREMENT SYSTEMS

- The Fire and Police plans are commingled for investment purposes. Rate of return on investments equaled 5.4% (Market) & 7.2% (Actuarial) vs. 7% assumed.
- The employer continues to meet or exceed the ADC. The actuary notes that "For the continued well-being of the fund, the fund must receive contributions at least at the levels recommended in the actuarial valuation."
- In the past 10 years, the City has twice reset the amortization period. First, for the 2010 valuation, the City changed the amortization period from 17 years to 29 years. Second, for the 2016 valuation, the City changed the amortization period from 23 years to 30 years. As of the 9/30/19 valuation, 27 years remain. On page A-13 of the valuation, the actuary comments that "Periods above 17 to 23 years generally indicate that the UAAL payment is less than the interest in the UAAL. This situation is referred to as 'negative amortization.' Negative amortization is increasingly viewed as undesirable." On page A-9, the actuary expects that "in nominal dollars, the UAAL is expected to increase until the amortization period becomes approximately 17 years, at which point it would be expected to decline…"
- 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. The actuary notes that "the normal cost decreased as more active members came into the post October 1, 2012 benefit plan."
- Fire employees contribute 16.32% of pay (4% for those hired on/after 10/01/12) and do not participate in Social Security. Police employees contribute between 7.45% & 8.35% of pay (4.5% for those hired on/after 10/01/12) & do participate in Social Security.

FIREMEN'S RETIREMENT FUND



Year Ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2019	$5,306,842	$5,306, 842	100%
2018	$5,426,042	$5,426,042	100%
2017	$4,789,910	$4,789,910	100%
2016	$5,226,250	$5,226,250	100%
2015	$4,751,496	$7,751,496	163%

Fire as of 9/30/19

Market Value: $86,967,494

Actuarial Value: $87,096,048

Liabilities: $151,662,295

Membership:

Active: 137 **Inactive**: 164

Normal Retirement Formula:

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

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

Normal Retirement Eligibility:

Age 65 or 20 years of service

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

COLA Annual Minimum: 2%

Social Security Coverage: No

Assumed Rate of Return: 7%

Salary: 3.25%

COLUMBIA FIREMEN & POLICE RETIREMENT SYSTEMS (Continued)

POLICE RETIREMENT SYSTEM

Police as of 9/30/19

Market Value: $56,143,587

Actuarial Value: $56,226,578

Liabilities: $100,081,780

Membership:

Active: 157

Inactive: 204

Assumed Rate of Return: 7%

Salary: 3.25%

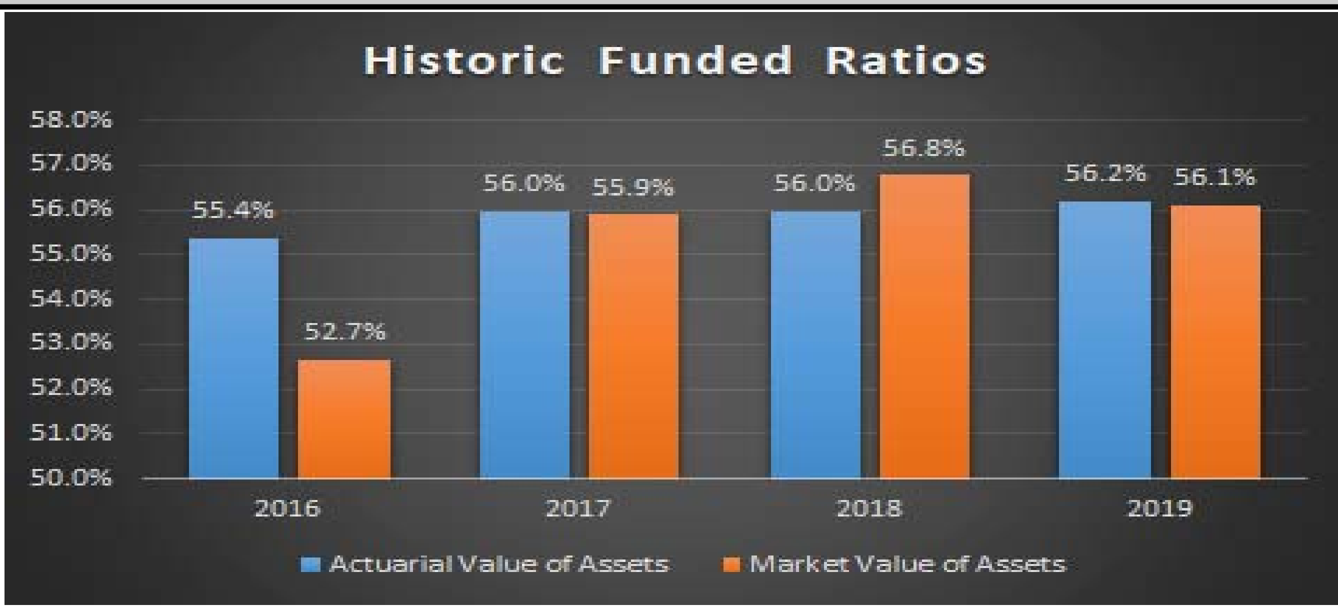
Social Security Coverage: Yes

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

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

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

COLA: Annual increase of 0.6%.



Year ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2019	$4,019,648	$4,019,648	100%
2018	$3,796,494	$3,796,494	100%
2017	$3,365,161	$3,365,161	100%
2016	$3,812,192	$3,812,192	100%
2015	$3,486,784	$5,486,784	157%

From: James McDonald
To: Michael Ruff
Subject: Re: Columbia Fire and Police Pension Plans
Date: Wednesday, November 11, 2020 2:42:04 PM

Michael

Thanks for sending this over. Having looked it over I don't see anything that would need to be changed or clarified.

Thanks

On Fri, Nov 6, 2020 at 3:19 PM Michael Ruff <mruff@senate.mo.gov> wrote:

> Hello Jim,
>
> Thank you for talking with me this afternoon about the Columbia Police and Fire Pension plans. As I mentioned, each year, the Joint Committee on Public Employee Retirement (JCPER) compiles a report for the committee's review that includes any defined benefit retirement plan that has a funded ratio of less than 70% on a market value basis. We have used information from the plan year 2019 annual survey (including the September 30, 2019 actuarial valuation) to prepare this report. This report is designed to increase awareness of trends in plan funding and contribution levels.
>
> I am attaching an information sheet that will be presented to the JCPER at its fourth quarter meeting on Tuesday, December 1, 2020 at 1pm in Room 117 in the State Capitol. Please feel free to review this information and respond with any additional information or thoughts you believe appropriate. If you would like to respond, please provide any information or comments by Wednesday, November 18.
>
> Thank you for your ongoing cooperation with the JCPER. Please do not hesitate to contact me 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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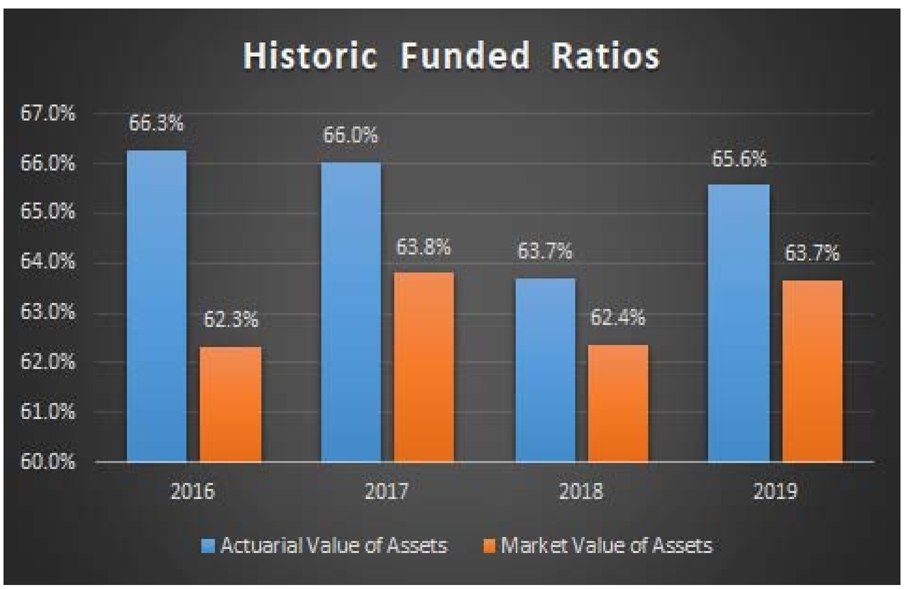
Jim McDonald CPA
Assistant Finance Director
City of Columbia
701 E. Broadway
P.O. Box 6015
Columbia Mo, 65205
Tel: 573-874-7388

GLENDALE POLICE & FIRE PENSION PLAN

- Investment return equaled 5.2% (market) and 6.1% (actuarial) vs. 7% assumed.
- Updated mortality tables.
- The plan has historically been funded from two sources: a dedicated property tax levy and an employee contribution of 3.25%. The City's Financial Statements note that "For fiscal year 2020, the City will be contributing $250,000 in monthly installments of $20,833 from the Prop P Fund to help close the unfunded gap."
- The actuary writes that "the targeted city contribution...decreased from $414,326...to $399,345...while the contribution made in 2018-2019 was not as high as the recommendation it was much greater than in prior years."
- At the June 2020 municipal election, City voters adopted Proposition E to increase the property tax rate used to fund the plan to a rate not to exceed $0.24 per $100 of assessed valuation. Previously, the tax levy has only produced sufficient revenue to meet the full annual required contribution one time (2007) since 2002. The tax rate had been set at $0.076 (residential), $0.076 (commercial) and $0.1 (personal) per $100 of assessed valuation.
- In previous years, the Plan reduced the assumed rate of return from 7.5 to 7.25 and from 7.25 to 7.
- The City is currently working with LAGERS to migrate employees from the City plan to LAGERS.



Year Ending 6/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$399,345	N/A	N/A
2019	$414,326	$385,226	93%
2018	$376,231	$132,195	35%
2017	$370,101	$130,456	35%
2016	$333,799	$130,235	39%

As of 7/1/19

Market Value: $5,602,985

Actuarial Value: $5,772,240

Liabilities: $8,803,033

Membership:

Active: 22 **Inactive**: 21

Normal Retirement Formula: 50% of compensation for the 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

Assumed Rate of Return: 7%

Salary: 3.5%

From:	Daniel Lawrence
To:	Michael Ruff
Subject:	RE: Glendale Police and Fire Pension Plan
Date:	Thursday, November 12, 2020 3:50:40 PM
Attachments:	2020taxrateinfo.pdf

Michael:

Attached is the 2020 and 2019 pages for property tax. As you can see the passage of Prop E allowed the City to increase revenue from 2019 of $139,510 up to $501,849 for 2020. The City received the actuarial results from Lagers earlier in the week as we move forward with the plan to move all Pension activities to MO. Lagers. I believe the first step is for Public Works and Administrative which is already in Lagers to move to the 2% benefit level from 1.5% and employees would need to contribute 4% of payroll. Next the Fire and Police employees would join Admin and PW in Lagers and finally the frozen Glendale Plan of retirees would be managed by Lagers. All of this should be completed by 03/31/2021. The extra property tax funds is needed to properly manage the underfunded balance of the current Glendale Plan. If you have any further questions please let me know.

Thank you,

Dan Lawrence
City of Glendale

From: Michael Ruff <mruff@senate.mo.gov>
Sent: Friday, November 6, 2020 2:02 PM
To: Daniel Lawrence <dlawrence@glendalemo.org>
Subject: Glendale Police and Fire Pension Plan

Hello Dan,
Thank you for talking with me this afternoon about the City of Glendale's police and fire pension plan. The Joint Committee on Public Employee Retirement (JCPER) is in the process of compiling its annual watch list of pension plans that have a funded ratio below 70% based on market value of assets. This information is based off the plan year 2019 annual survey including the actuarial valuation and the City's financial statements. This list is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet that will be presented to the JCPER at its fourth quarter meeting on Tuesday, December 1, 2020 at 1pm in Room 117 in the State Capitol. You and I have talked periodically about the Prop E tax levy change in June and the City's plan to move employees to LAGERS in the future. Could the City please provide the JCPER with an update on the status of the move to LAGERS, the tax rate adopted by the City and an estimate of the revenue expected from the passage of Prop E?

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

PRO FORMA - STATE AUDITOR'S REVIEW OF DATA SUBMITTED

9/17/2020

(2020)

Summary Page

For Political Subdivisions Other Than School Districts With a Separate Rate on Each Subclass of Property

City of Glendale	09-096-0036	Pension
Name of Political Subdivision	Political Subdivision Code	Purpose of Levy

The final version of this form MUST be sent to the county clerk.

The information to complete the Summary Page is available from prior year forms, computed on the attached forms, or computed on this page. Information on this page takes into consideration any voluntary reduction(s) taken in previous even numbered year(s). If in an even numbered year, the political subdivision wishes to no longer use the lowered tax rate ceiling to calculate its tax rate, it can hold a public hearing and pass a resolution, a policy statement, or an ordinance justifying its action prior to setting and certifying its tax rate. The information on the Informational Summary Page, at the end of these forms, provides the rate that would be allowed had there been no previous voluntary reduction(s) taken in an even numbered year(s).

	Real Estate			Personal	Prior Method
	Residential	Agriculture	Commercial	Property	Single Rate
A. **Prior year tax rate ceiling** as defined in Chapter 137, RSMo, revised if prior year data changed or a voluntary reduction was taken in a non-reassessment year. (Prior year Summary Page, Line F minus Line H in odd numbered year or prior year Summary Page, Line F in even numbered year)	0.0660	0.0000	0.0710	0.1000	0.0693
B. **Current year rate computed** pursuant to Article X, Section 22, of the Missouri Constitution and Section 137.073, RSMo, if no voter approved increase (Form A, Line 37 & Line 23 prior method)	0.0660	0.0000	0.0700	0.1000	0.0693
C. **Amount of rate increase authorized by voters for current year** if same purpose adjusted to provide the revenue available if applied to the prior year assessed value and increased by the percentage of CPI (Form B, Line 17 & Line 20 prior method)	0.2460	0.2400	0.2400	0.2460	0.2458
D. **Rate to compare to maximum authorized levy to determine tax rate ceiling** (Line B if no election, otherwise Line C)	0.2460	0.2400	0.2400	0.2460	0.2458
E. **Maximum authorized levy** the most recent voter approved rate	0.2460	0.2400	0.2400	0.2460	0.2458
F. **Current year tax rate ceiling** maximum legal rate to comply with Missouri laws. Political subdivision's tax rate (Lower of Line D or Line E)	0.2460	0.2400	0.2400	0.2460	0.2458
G. 1. **Less required sales tax reduction** taken from tax rate ceiling (Line F), if applicable					
G. 2. **Less 20% required reduction 1st class charter county political subdivision NOT submitting an estimated non-binding tax rate to the county(ies)** taken from tax rate ceiling (Line F)					
H. **Less voluntary reduction by political subdivision taken from tax rate ceiling (Line F)** WARNING: A voluntary reduction taken in an even numbered year will lower the tax rate ceiling for the following year.					
I. **Plus allowable recoupment rate** added to tax rate ceiling (Line F) If applicable, attach Form G or H.					
J. **Tax rate to be levied** (Line F - Line G1 - Line G2 - Line H + Line I)	.2460	.0000	.2400	.2460	
AA. **Rate to be levied for debt service,** if applicable (Form C, Line 10)					
BB. **Additional special purposed rate authorized by voters** after the prior year tax rates were set (Form B, Line 17 if a different purpose) Adjusted to provide the revenue available if applied to the prior year assessed value and increased by the percentage of CPI					

Certification

I, the undersigned, FINANCE OFFICER (Office) of CITY OF GLENDALE (Political Subdivision) levying a rate in ST. LOUIS (County(ies)) do hereby certify that the data set forth above and on the accompanying forms is true and accurate to the best of my knowledge and belief.

Please complete Line G through BB, sign this form, and return to the county clerk(s) for final certification.

9/21/2020	Daniel L. Lawrence	DANIEL L. LAWRENCE	314-965-3600
(Date)	(Signature)	(Print Name)	(Telephone)

Proposed rate to be entered on tax books by the county clerk based on the certification from the political subdivision:

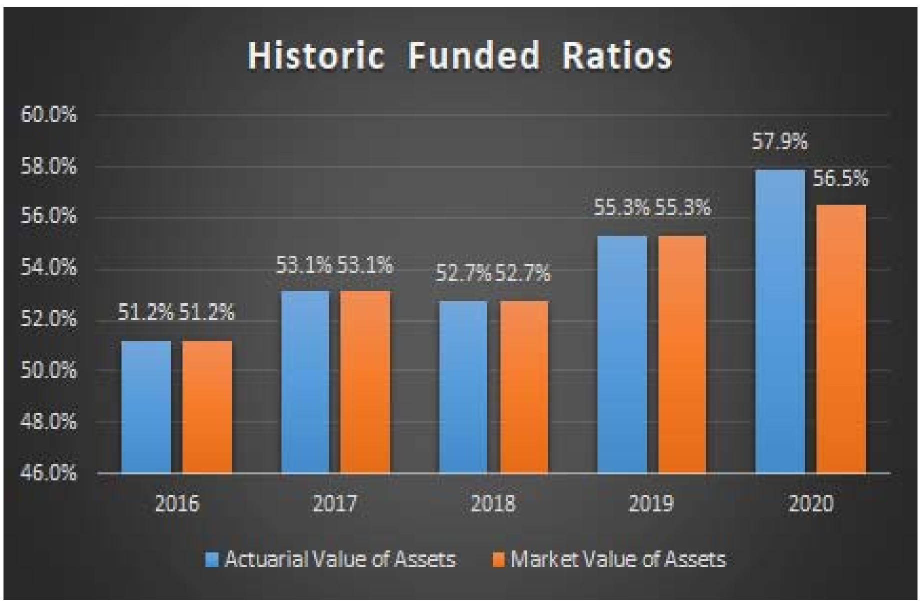
Section 137.073.7 RSMo, states that no tax rate shall be extended on the tax rolls by the county clerk unless the political subdivision has complied with the foregoing provisions of the section.

Lines: J ______ AA ______ BB ______

(Date)	(County Clerk's Signature)	(County)	(Telephone)

HANNIBAL POLICE & FIRE RETIREMENT PLAN

- Rate of return on investments equaled 3.6% (Market) vs. 7% assumed.
- In October 2020, the City Council removed the ad hoc COLA provision effective 7/1/21 and replaced it with authority for the Board to authorize an ad hoc payment of an additional benefit check under certain conditions. The actuarial cost statement indicates that this change would improve the ability of the plan to meet its obligations.
- The actuary completed an experience study for the period 7/1/14—6/30/19. Updated the retirement assumption and updated mortality tables to Pub-2010 Public Safety. Adopted 4-year smoothing of investment gains/losses to "temper investment volatility's effect on contribution levels."
- The plan's actuary writes "Since June 30, 2012, the city has consistently contributed in excess of the recommended contribution and the funded ratio of the plan has gradually increased. In 2016, the funding interest rate was lowered, and generational mortality was introduced. These more conservative assumptions require more robust contributions, which, if made, will cause the plan to continue to improve its funded status."
- The City changed the plan to permit contracting with Standard Insurance for disability coverage.
- Effective July 1, 2016, the employee contribution rate will increase by one-half percent annually until it reaches 15% on July 1, 2021. Employee contributions are 14.5% from July 1, 2020 to June 30, 2021.
- The City made multiple plan modifications effective 7/1/11 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.



Year ending 6/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2021	$1,214,588**	N/A	N/A
2020	$1,283,839**	$1,424,566	111%
2019	$1,321,254	$1,364,514	103%
2018	$1,201,580	$1,298,013	108%
2017	$1,193,766	$1,276,452	107%
2016	$1,066,446	$1,264,977	119%

As of 7/1/20

Market Value: $19,066,850

Actuarial Value: $19,544,755

Liabilities: $33,732,093

Membership:

Active: 73 Inactive: 69

Normal Retirement Formula:

65% of compensation for the first 25 years of service plus 1% for each of the next 5 years of service in excess of 25. Max of 70% of compensation.

Normal Retirement Eligibility: 25 years of service

Hired on/after 7/1/07: Age 55 and 25 years of service

Social Security Coverage: No

COLA: Ad hoc. Max 3% annually. No COLA if funded ratio below 50%. (Repealed 7/1/21)

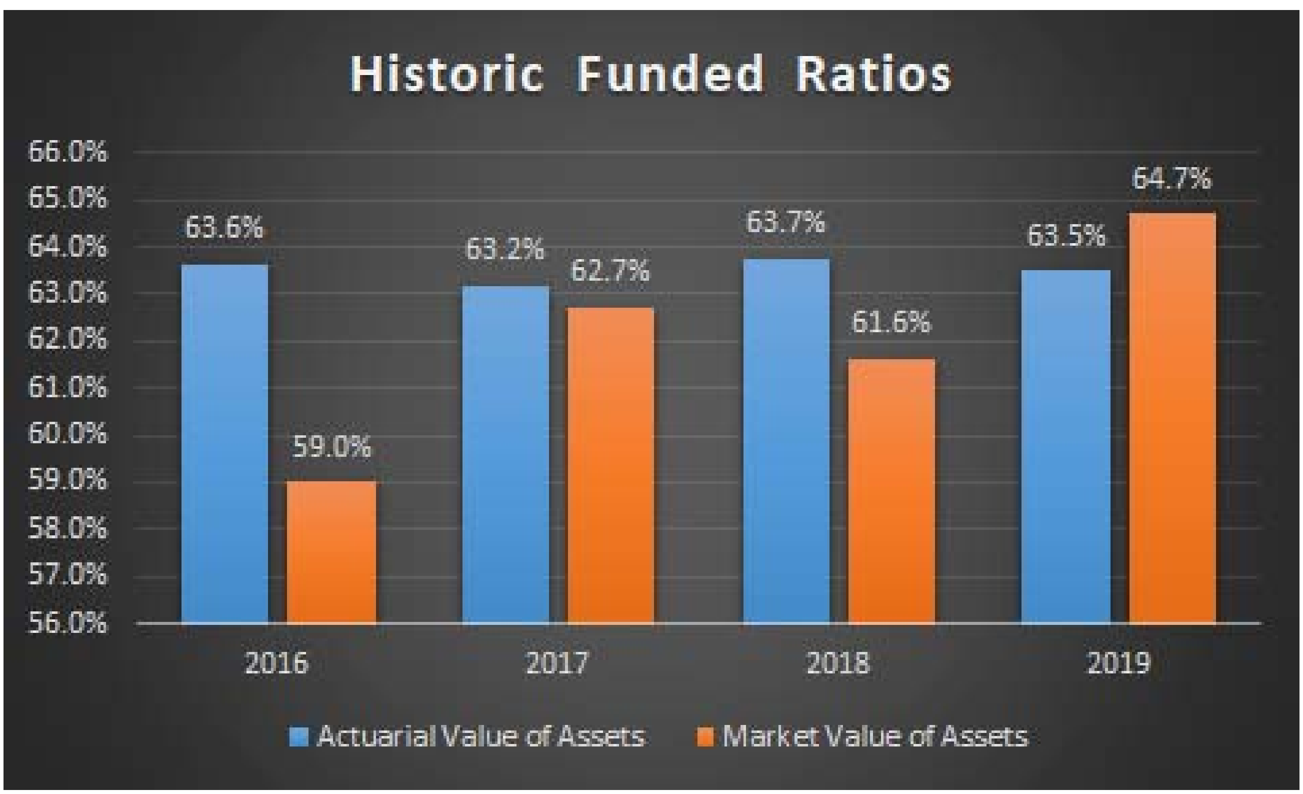
Assumed Rate of Return: 7%

Salary: 3.5%

**The computed contribution decreased from the previous year. However, the plan document provides that the City's actual contribution cannot decrease from one year to the next until the plan is 80% funded.

JOPLIN POLICE & FIRE PENSION PLAN

- Rate of return on investments equaled 11.6% (Market) & 5.7% (Actuarial) vs. 6.75% assumed.
- On 11/5/19, city voters adopted a one-half of one percent sales tax to provide additional funding. The tax will expire when the plan is 120% funded or in twelve years, whichever is earlier.
- In February 2020, the City closed the plan to new entrants. Members hired on/after 2/1/20 are enrolled in LAGERS. Members hired on/before 1/31/09 (Tier 1) remain in the closed Police & Fire Pension Plan. Members hired on/after 1/31/09 (Tier 2) had the option to remain in the closed plan or transfer to LAGERS. 128 of 131 eligible Tier 2 members chose to move to LAGERS.
- In June 2020, the actuary prepared a supplemental actuarial valuation and revised the actuarial assumptions and methods used by the plan due to the closure and membership changes.
- Lowered the assumed rate of return from 6.75 to 5.75.
- Changed the actuarial cost method from Entry Age Normal to the Aggregate Cost Method. Under the Entry Age Normal Cost method, 17 years remained on the closed 30 year amortization period. Under the Aggregate Cost method, the plan will use a ten year paydown period beginning in FY 21.
- Reset the actuarial value of assets from a five-year smoothed value to the market value of assets minus accumulated contributions of transferring members. In future valuations, five-year smoothing will be used.
- 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 hired on/before 1/31/09 contribute 18.08% of pay, which is refunded at retirement. Those hired after 1/31/09 contribute 10% of pay without refund upon retirement.



FY Ending 10/31,	RECOMMENDED CONTRIBUTION*	ACTUAL CONTRIBUTION*	PERCENT CONTRIBUTED
2021	$3,942,972 (revised as of 6/1/20 to reflect membership and actuarial changes)	N/A	N/A
2020	$2,921,839	N/A	N/A
2019	$2,814,812	$2,999,709	106.5%
2018	$2,706,972	$2,620,298	96.8%
2017	$2,657,867	$2,601,983	97.8%
2016	$2,708,565	$2,619,993	96.7%

*Contribution information is taken from Actuarial Valuation Report as of October 31, 2019, Page I-2, Schedule of Employer Contributions

As of 10/31/19

Market Value: $44,648,763

Actuarial Value: $43,779,962

Liabilities: $68,950,590

Membership:

Active: 192 Inactive: 166

Normal Retirement Formula:

Hired after 1/31/09: 2.2% of compensation for the first 25 years of service plus 1% for the next 5 years of service. Maximum 60% of compensation.

Hired on/before 1/31/09: 2.5% of compensation for the first 20 years plus 1% for each of the next 5 years. Maximum 65% of compensation.

Normal Retirement Eligibility:

Hired after 1/31/09: Age 60 or 25 YOS

Hired before 1/31/09: 20 YOS

Social Security Coverage: No

COLA: No COLA

Assumed rate of return: 6.75

Salary: 2.5

As of 6/1/20

Actuarial Value: $42,297,918

Membership:

Active: 63 (60 Tier 1, 3 Tier 2)

Inactive: 166

Members transferred to LAGERS: 128 active, 1 terminated vested

Normal Retirement Formula:

Hired after 1/31/09: 2.2% of compensation for the first 25 years of service plus 1% for the next 5 years of service. Maximum 60% of compensation.

Hired on/before 1/31/09: 2.5% of compensation for the first 20 years plus 1% for each of the next 5 years. Maximum 65% of compensation.

Normal Retirement Eligibility:

Hired after 1/31/09: Age 60 or 25 YOS

Hired before 1/31/09: 20 YOS

Social Security Coverage: No

COLA: No COLA

Assumed rate of return: 5.75

Salary: 2.5

Hired on/after 2/1/20: Members are enrolled in the LAGERS L-11 program. 2.5% of compensation X years of service.

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

From:	Haase, Leslie
To:	Michael Ruff
Subject:	RE: Joplin Police and Fire Pension Plan
Date:	Sunday, November 8, 2020 2:17:00 PM

Michael:

This looks good. We don't have anything else to add.

Thanks!
Leslie

From: Michael Ruff <mruff@senate.mo.gov>
Sent: Tuesday, November 03, 2020 2:25 PM
To: Haase, Leslie <LHaase@joplinmo.org>
Subject: Joplin Police and Fire Pension Plan

Hello Leslie,
The JCPER is in the process of preparing its annual report of defined benefit plans that are funded below 70% on a market value basis. The Joplin Police and Fire Plan will be included in this report. I have used information from the September 2019 actuarial valuation and the June 1, 2020 supplemental valuation to show the changes that have occurred with the migration of Tier 2 employees to LAGERS – a "before and after" look at the plan.

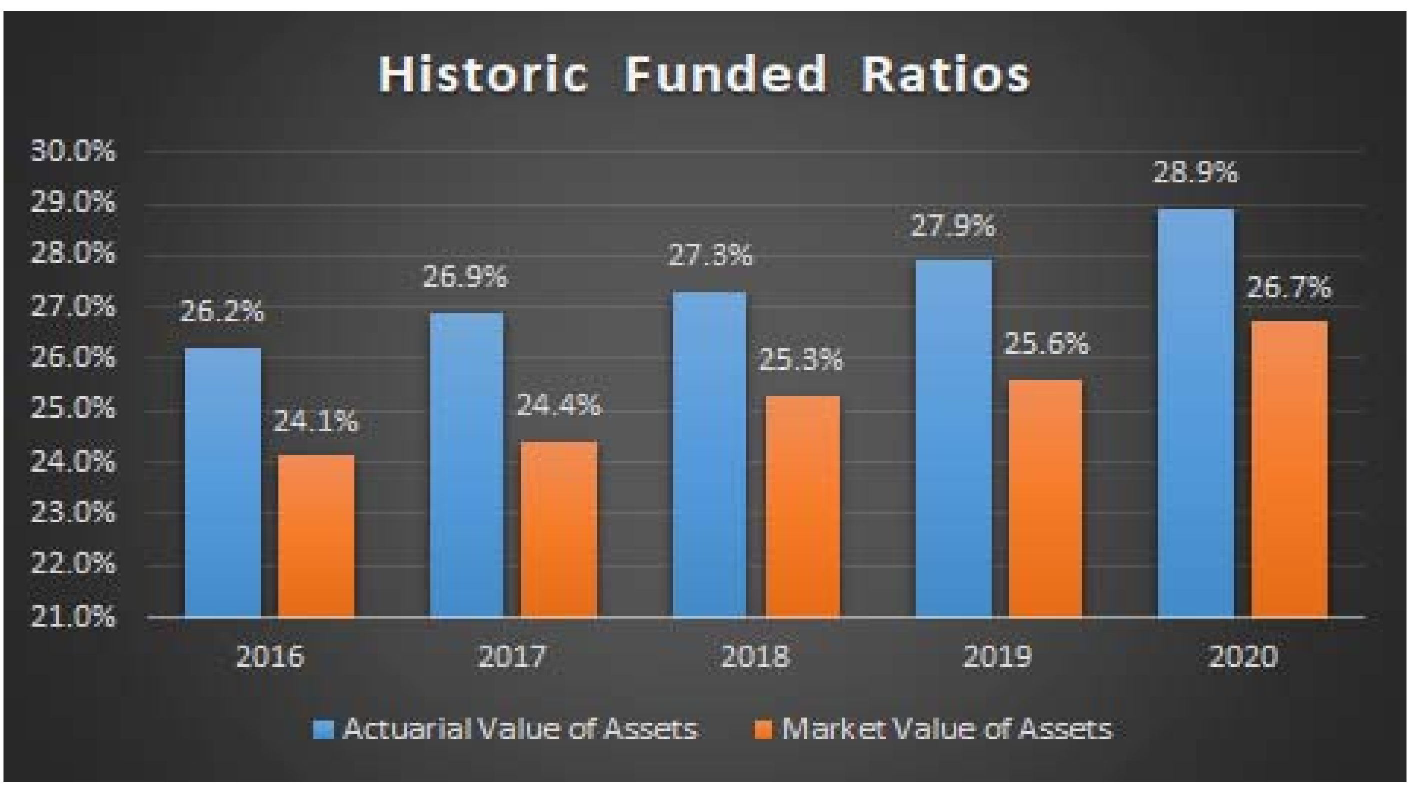
This information will be presented at the JCPER's fourth quarter meeting on Tuesday, December 1, 2020 at 1pm in Room 117 in the State Capitol. Please feel free to review this information and respond with any additional information or thoughts you believe appropriate. If you would like to respond, please provide any information or comments by Wednesday, November 18.

Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact me if you have any questions or comments.

Michael
573-751-1280

JUDICIAL RETIREMENT PLAN

- For the year ending 6/30/20, investment return equaled 5.2% (Market) and 4.5% (Actuarial) vs. 7.1 assumed.
- As of 6/30/20, the board completed its three year reduction schedule for key economic assumptions: investment return, inflation, COLA, wage growth, and payroll growth. As of 6/30/20, lowered investment return to 6.95% and general wage growth to 2.5%. The net impact of these changes was an increase of $6.3 million in actuarial accrued liabilities and an increase of 0.78% in the employer contribution rate.
- The actuary incorporated a programming change to its valuation software that affected the calculation of the COLA for judges who work beyond normal retirement age; the change resulted in a decrease in the actuarial accrued liability of $11.8 million and a decrease in the employer contribution rate of 1.83%.
- Effective 6/30/18, the board modified the method of amortizing the UAAL from a closed 30 year period (adopted 6/30/14) to a layered approach. The cumulative UAAL was established as an initial base to be amortized over 30 years with each year's gains/losses amortized as an additional layer over 30 years.
- Modified the asset smoothing method from an open five-year period to a closed five-year period. Existing unrecognized investment experience as of 6/30/18 will be recognized over a closed seven-year transition period.
- New tier provisions were passed in 2010 requiring increased age and service requirements, as well as employee contributions of 4% for judges serving for the first time on or after 1/01/11. As more employees fall under the 2011 tier, normal cost will decrease.
- The number of active members covered by the 2011 tier increased from 216 in the prior year's valuation to 235. This 2011 tier membership increase resulted in a normal cost rate decrease of 0.47%.
- Prior to 1998, the plan was funded on a pay-as-you-go basis so no pre-funding occurred. When funding on an actuarial basis began, the funded ratio was at 0%.



FY End-ing 6/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUT-ED
2020	$39,174,515	$39,174,515	100%
2019	$38,604,668	$38,604,668	100%
2018	$36,892,203	$36,892,203	100%
2017	$32,670,710	$34,246,826	104.8%
2016	$31,604,527	$33,642,497	106%

The board of trustees has lowered the assumed rate of return six times since the June 30, 2012 valuation date from 8.5 to 6.95.

As of 6/30/20

Market Value: $167,288,066

Actuarial Value: $180,713,310

Liabilities: $624,847,011

Membership:

Active: 418 **Inactive**: 625

Normal Retirement Formula:

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

Normal Retirement Eligibility:

Age 62 with 12 years of service

Age 60 with 15 years of service

Age 55 with 20 years of service

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

Age 67 with 12 years of service

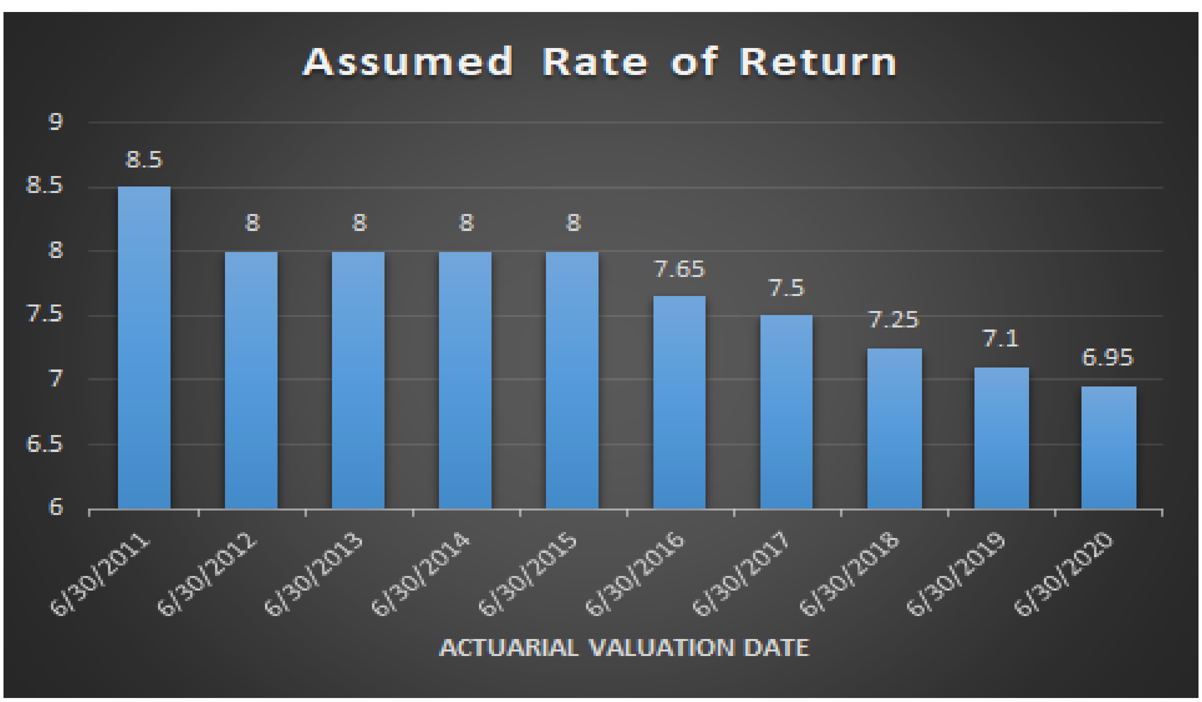
Age 62 with 20 years of service

Social Security Coverage: Yes

COLA: Annual max 5%, 80% CPI

Assumed rate of return: 6.95

General Wage Growth: 2.5



MOSERS
MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

PO Box 209, Jefferson City, MO 65102-0209
(573) 632-6100 or (800) 827-1063
Fax (573) 632-6103 | **www.mosers.org**

November 17, 2020

Mr. Michael Ruff, Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101

Dear Michael:

Thank you for the opportunity to respond to the inclusion of the Judicial Retirement Plan (Judicial Plan) on the annual "Watch List" of the Joint Committee on Public Employee Retirement (JCPER). We would like to offer the following information for the Committee's review.

As you are aware, the Judicial 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 funded status of the Judicial Plan was approximately 0% in 1999 and has increased to the June 30, 2020 funded ratio of 28.9%.

In June 2018, the MOSERS Board of Trustees adopted a funding policy to incrementally reduce the Judicial plan investment rate of return assumption. This policy reduced MOSERS investment rate of return assumption from 7.5% to an eventual investment rate of return assumption of 6.95%, effective with the June 30, 2018 actuarial valuation through the June 30, 2020 actuarial valuation. In June 2020, the Board remained committed to this funding policy through the last incremental reduction of the investment rate of return assumption to 6.95% (from 7.10%).

Actuarial Valuation Date	Employer Contribution Applied	ROR Assumption	ROR Assumption (without Inflation Assumption)
June 30, 2019	FY21	7.10%	4.75%
June 30, 2020	FY22	6.95%	4.70%

This board-adopted funding policy is intended to more closely align the fund's investment return assumption with capital market expectations. While public pension funds across the state and nation are re-evaluating the appropriate level of an investment return assumption to reduce the long-term investment risk, such reduction often requires an increased Employer Contribution Rate to the plan and results in a decreased Funded Ratio. The information contained in the June 30, 2020 annual actuarial valuation (see below) illustrates how a change in the investment return assumption rate can significantly affect the plan's Employer Contribution Rate and Funded Ratio.

JUDICIAL PLAN SENSITIVITY ANALYSIS

Investment Return Assumption	**5.95%**	**6.45%**	**6.95%**	**7.45%**	**7.95%**
Total Employer Contribution (% of pay)	67.34%	64.54%	61.94%	59.49%	57.20%
Total Employer Contribution ($ in millions)	$43.6	$41.8	$40.1	$38.5	$37.1
Actuarial Value of Assets	$180.7	$180.7	$180.7	$180.7	$180.7
Actuarial Accrued Liability	$687.4	$654.9	$624.8	$597.0	$571.3
Funded Ratio	26.3%	27.6%	28.9%	30.3%	31.6%

2010 Pension Reform

As you are aware, the General Assembly passed pension reform relative to judges in the 2010 special session. This reform was implemented as the "Judicial Plan 2011" for judges serving for the first time on or after January 1, 2011. As included in the June 30, 2020 annual actuarial valuation, the ongoing annual cost of the **Judicial Plan 2011** (known as the "Employer Normal Cost") is 16.19% of pay, compared to the **pre-2011** annual cost of 20.96% of pay. Approximately 56% of the 418 Judicial Plan active employees are Judicial Plan 2011 members.

Judicial Plan **Actuarial Valuation Results as of 06/30/20**	**Percents of Payroll**		
	Pre 01/01/11 Hires	**Post 01/01/11 Hires**	**Weighted Average**
Normal Cost	20.96%	20.19%	20.53%
Less **Member** Contributions	0.00%	4.00%	2.26%
Employer Normal Cost	20.96%	16.19%	18.27%
Unfunded Actuarial Accrued Liabilities (UAAL) (level % of payroll amortization with layered bases)			43.67%
Total FY22 Computed Employer Contribution Rate			61.94%
Estimated Employer Contribution ($ in Millions)			$40.1

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.

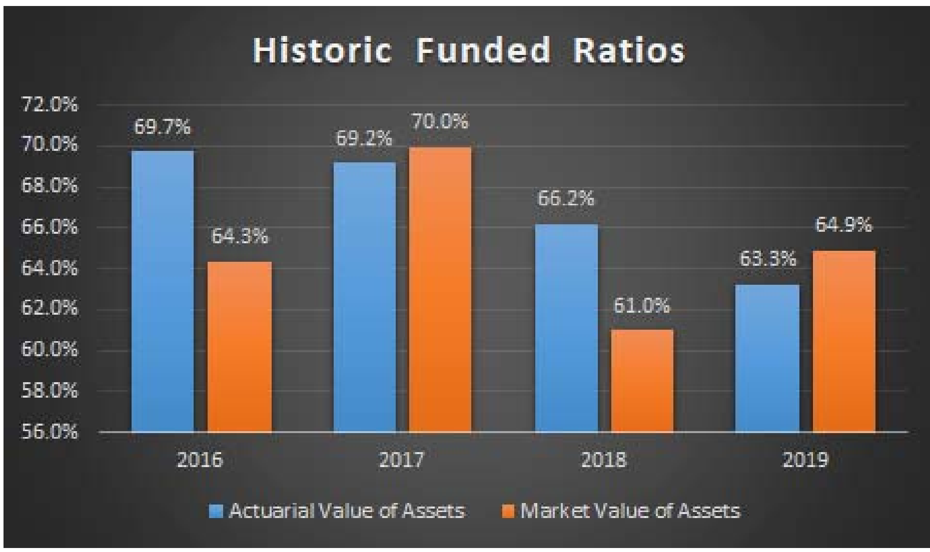
Sincerely,

Ronda Stegmann
Executive Director

cc: MOSERS Board of Trustees

KANSAS CITY PUBLIC SCHOOL RETIREMENT SYSTEM

- For the year ending 12/31/19, net rate of return on investments equaled 18.22% (Market) and 5.7% (Actuarial) versus 7.75% assumed.
- Effective with the 1/1/20 actuarial valuation, the plan's board of trustees lowered the assumed rate of return from 7.75% to 7.5%. This change increased the UAAL by $23.4 million and increased the actuarial contribution rate by 0.88%. The system's actuary is in the process of completing a four-year experience study for the period ended 12/31/19.
- In 2018, the General Assembly passed SB 892 that, in part, increased the employer contribution rate from 9% to 10.5% in calendar year 2019 and then to 12% on 1/1/20. Beginning 7/1/21, a statutory formula will be used to determine the employer contribution rate and depending on valuation results, whether future employee contribution rates may be lowered from the current 9%. The actuary writes "these changes to the determination of the employer contribution rate were a significant step in strengthening the long-term funding of the system and providing a sustainable path towards full funding."
- FY20 is the first year since 2011 in which the actual contribution rate (21%) will exceed the actuarial contribution rate (20.8%).
- Effective with the 1/1/17 valuation, the board of trustees changed the amortization policy for payment of UAAL from an open 30 to a layered approach: initial UAAL as of 1/1/17 is amortized over a closed 30-year period with subsequent pieces amortized over closed 20-year periods.
- The General Assembly passed legislation in 2013 that established a new tier for employees hired on or after 1/1/2014. New hires receive a 1.75% benefit multiplier (instead of 2%) and have increased age and service requirements to age 62 & 5 years of service or rule of 80 (versus age 60 & 5 YOS or rule of 75).



Year ending 12/31,	RECOMMENDED CONTRIBUTION* (In thousands)	ACTUAL CONTRIBUTION* (In thousands)	PERCENT CONTRIBUTED
2019	$22,144	$21,489	97%
2018	$19,125	$17,528	92%
2017	$18,074	$16,927	94%
2016	$20,224	$16,280	80%
2015	$18,866	$14,499	77%

*See Schedule of Employers' Contributions, Financial Statements for the Years Ended December 31, 2019 and 2018, page 25

As of 1/1/20

Market Value: $662,085,840

Actuarial Value: $645,373,172

Liabilities: $1,020,121,813

Membership:

Active: 4,074 Inactive: 7,305*

Normal Retirement Formula:

2% of compensation times years of service. **Hired on/after 1/1/14:** 1.75% of compensation times YOS.

Normal Retirement Eligibility:

Age 60 with 5 years of service or Rule of 75. **Hired on/after 1/1/14:** Age 62 with 5 years of service or Rule of 80.

Social Security Coverage: Yes

COLA: Ad hoc. Annual max 3%

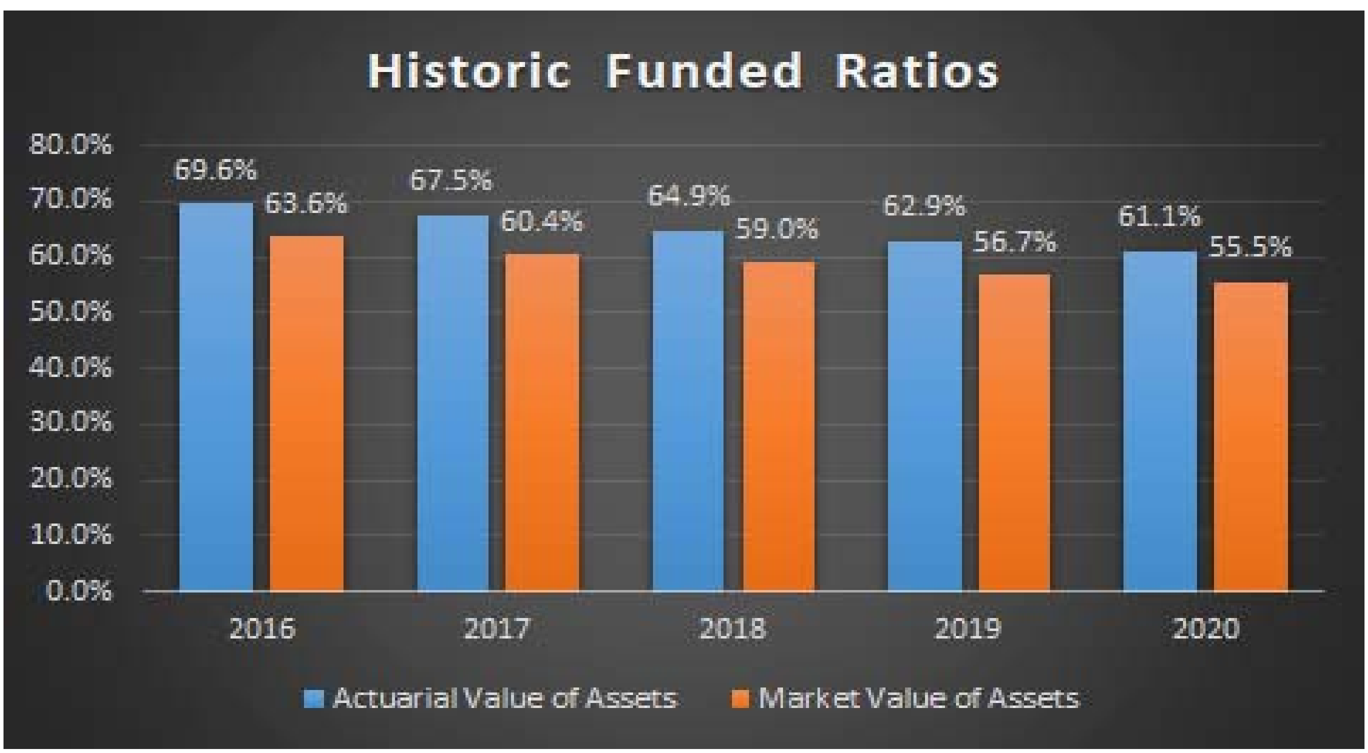
Assumed Rate of Return: 7.5%

Salary Increases: 5%

*2,631 inactives are terminated non-vested and will not receive a benefit.

MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

- For the year ending June 30, 2020, rate of return on investments equaled 5.2% (market) and 3.9% (actuarial) vs. 7.1% assumed.
- As of 6/30/20, the board completed its three-year reduction schedule for key economic assumptions: investment return, inflation, COLA, wage growth, and payroll growth. As of 6/30/20, lowered investment return to 6.95 and wage growth to 2.5. The net impact of these changes was an increase in actuarial accrued liability of $125 million and an increase of 0.46% in the employer contribution rate.
- The actuary incorporated a programming change to its valuation software that affected the calculation of the COLA for members who work beyond normal retirement age; the change resulted in a decrease in the actuarial accrued liability of $121 million and a decrease in the employer contribution rate of 0.45%.
- Effective 6/30/18, the board modified the method of amortizing the UAAL from a closed 30 year period (adopted 6/30/2014) to a layered approach. The cumulative UAAL was established as an initial base to be amortized over 30 years with each year's gains/losses amortized as an additional layer over 30 years.
- Modified the asset smoothing method from an open five-year period to a closed five-year period. Existing unrecognized investment experience as of 6/30/18 will be recognized over a closed seven-year transition period.
- The computed employer contribution rate as a percent of payroll increased from 22.88% for FY21 to 23.51% for FY22.
- In 2018, the Board adopted a new investment portfolio asset allocation. The board is transitioning the portfolio over a 36-month period through 12/31/21. As of 6/30/20, 58% of the transition has been completed with the transition three months ahead of schedule.
- New tier provisions were passed in 2010 requiring increased age and service requirements, as well as employee contributions of 4% for employees hired for the first time on or after 01/01/11. The number of active members covered by the 2011 tier increased from 21,893 (6/30/19) to 23,075 (6/30/20). The actuary writes that "Because the benefit structure is different for MSEP 2011 members...the ongoing cost of the System declines as a larger percentage of active members are covered by MSEP 2011."



Year Ending 6/30	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$436,895,653	$436,895,653	100%
2019	$394,150,042	$394,150,042	100%
2018	$379,557,962	$379,557,962	100%
2017	$322,772,697	$335,217,422	104%
2016	$310,124,928	$329,957,369	106%

- The board of trustees has lowered the assumed rate of return six times since the June 30, 2012 valuation date from 8.50% to 6.95%.
- When describing the growth of the system's liabilities, the actuary writes that "Some of the growth is due to significant changes in the actuarial assumptions...including lowering the investment return assumption from 8.50% to 6.95%."

As of 6/30/20

Market Value: $7,910,830,533

Actuarial Value: $8,711,224,151

Liabilities: $14,258,408,888

Active Members: 45,999

Inactive Members: 89,790

Normal Retirement Formula:

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

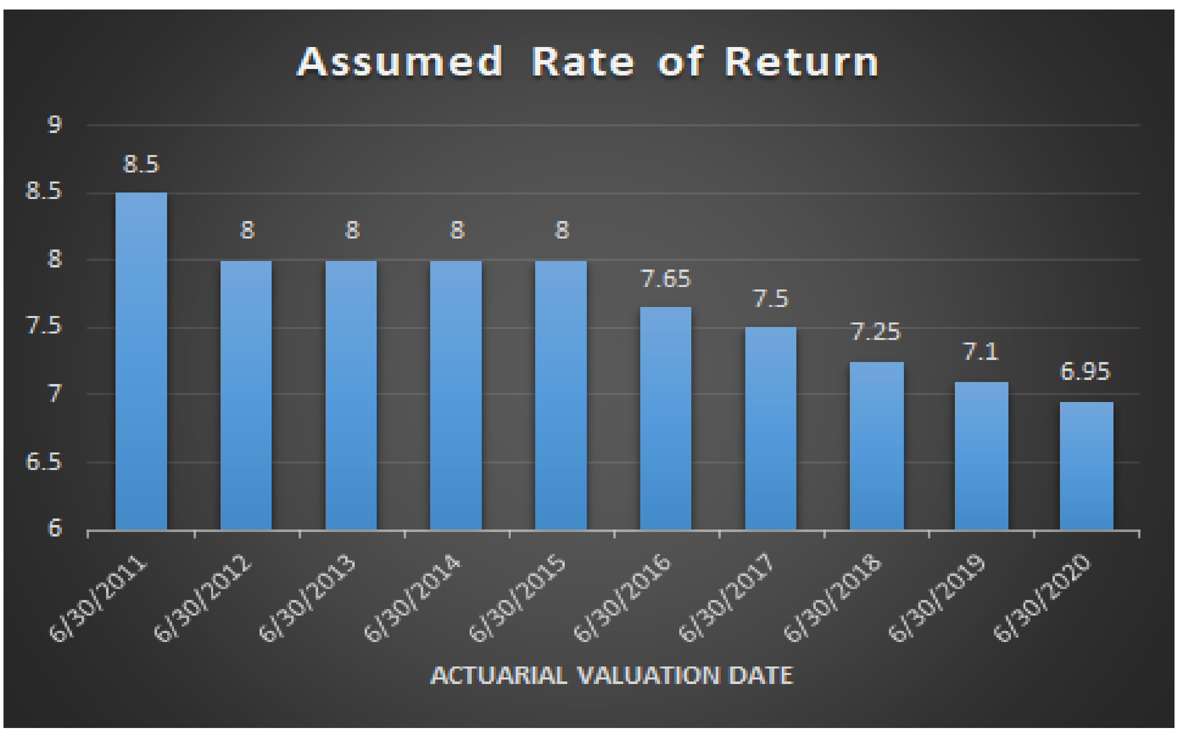
Normal Retirement Eligibility: Age 62 with 5 years of service or Rule of 80. 2011 Tier: Age 67 with 5 years of service or Rule of 90 with minimum age of 55.

Social Security Coverage: Yes

COLA: Annual Max 5%, 80% of CPI

Assumed Rate of Return: 6.95

Salary: 2.5



MOSERS
MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

PO Box 209, Jefferson City, MO 65102-0209
(573) 632-6100 or (800) 827-1063
Fax (573) 632-6103 | www.mosers.org

November 17, 2020

Mr. Michael Ruff, Executive Director
Joint Committee on Public Employee Retirement
State Capitol, Room 219-A
Jefferson City, MO 65101

Dear Michael:

Thank you for the opportunity to respond to the inclusion of the Missouri State Employees' Retirement System (MOSERS) on the annual "Watch List" of the Joint Committee on Public Employee Retirement (JCPER). We would like to offer the following information for the Committee's review.

In June 2018, the MOSERS Board of Trustees adopted a funding policy to incrementally reduce MOSERS' investment rate of return assumption. This policy reduced MOSERS investment rate of return assumption from 7.5% to an eventual investment rate of return assumption of 6.95%, effective with the June 30, 2018 actuarial valuation through the June 30, 2020 actuarial valuation. In June 2020, the Board remained committed to this funding policy through the last incremental reduction of the investment rate of return assumption to 6.95% (from 7.10%).

Actuarial Valuation Date	**Employer Contribution Applied**	**ROR Assumption**	**ROR Assumption (without Inflation Assumption)**
June 30, 2019	FY21	7.10%	4.75%
June 30, 2020	FY22	6.95%	4.70%

This board-adopted funding policy is intended to more closely align the fund's investment return assumption with capital market expectations. While public pension funds across the state and nation are re-evaluating the appropriate level of an investment return assumption to reduce the long-term investment risk, such reduction often requires an <u>increased</u> Employer Contribution Rate to the plan and results in a <u>decreased</u> Funded Ratio. The information contained in the June 30, 2020 annual actuarial valuation (see below) illustrates how a change in the investment return assumption rate can significantly affect the plan's Employer Contribution Rate and Funded Ratio.

MOSERS SENSITIVITY ANALYSIS

Investment Return Assumption	**5.95%**	**6.45%**	**6.95%**	**7.45%**	**7.95%**
Total Employer Contribution (% of pay)	28.43%	25.92%	23.51%	21.20%	18.97%
Total Employer Contribution ($ in millions)	$599.7	$546.7	$495.9	$447.2	$400.1
Actuarial Value of Assets	$8,711.2	$8,711.2	$8,711.2	$8,711.2	$8,711.2
Actuarial Accrued Liability	$15,858.9	$15,023.2	$14,258.4	$13,556.9	$12,912.3
Funded Ratio	54.9%	58.0%	61.1%	64.3%	67.5%

2010 Pension Reform

As you are aware, the General Assembly passed pension reform relative to state employees in the 2010 special session. This reform was implemented as the "MSEP 2011" for state employees hired for the first time on or after January 1, 2011. As included in the June 30, 2020 annual actuarial valuation, the ongoing annual cost of the **MSEP 2011** (known as the "Employer Normal Cost") is 4.08% of pay, compared to the **pre-2011** annual cost of 8.90% of pay. Approximately 50% of the 45,999 MOSERS' active employees are MSEP 2011 members.

Actuarial Valuation Results as of 06/30/20	**Percents of Payroll**		
	MSEP & MSEP 2000	**MSEP 2011**	**Weighted Average**
Normal Cost	8.90%	8.08%	8.53%
Less **Member** Contributions	0.00%	4.00%	1.80%
Employer Normal Cost	8.90%	4.08%	6.73%
Unfunded Actuarial Accrued Liabilities (UAAL) (level % of payroll amortization w layered bases)			16.78%
Total FY22 Computed Employer Contribution Rate			23.51%
Estimated Employer Contribution ($ in Millions)			$495.9

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,

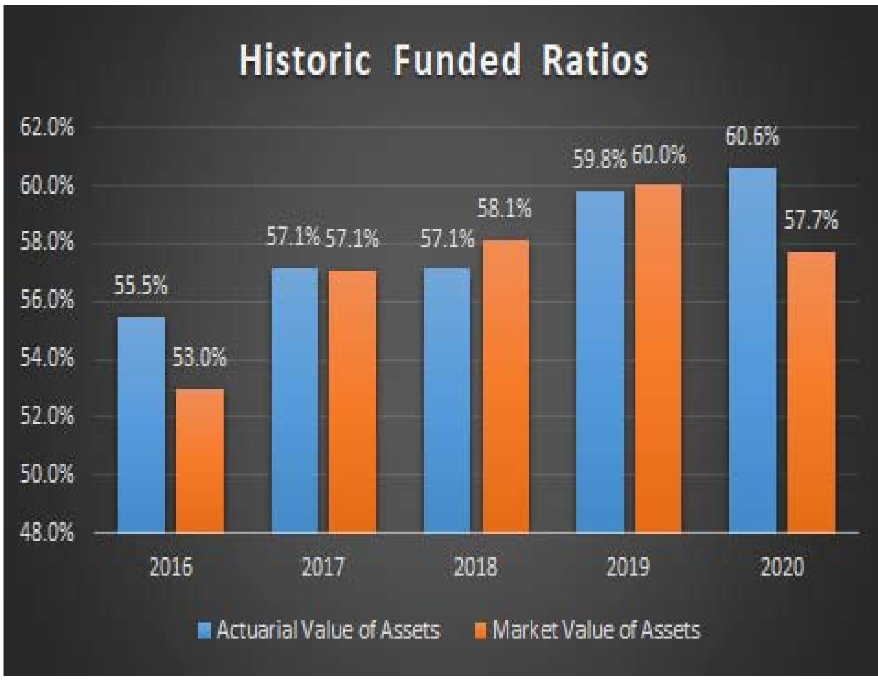
Ronda Stegmann

Ronda Stegmann
Executive Director

cc: MOSERS Board of Trustees

MoDOT & HIGHWAY PATROL EMPLOYEES' RETIREMENT SYSTEM (MPERS)

- Rate of return on investments equaled –0.44% (Market) and 4.9% (Actuarial) vs. 7% assumed as of 6/30/20.
- The Board of Trustees has retained a governance consultant to review board governance policies. The Board's investment consultant completed an asset/liability study. Planning to implement investment portfolio changes.
- The actuary writes that "our modeling indicates that the current economic assumptions are reasonable based on the asset allocation adopted by the Board at the June 18, 2020 Board meeting. However, our modeling indicates a continued trend downward of future expectations of investment returns...there is an increasing likelihood that we will be recommending lowering the investment return assumption within the next couple of years, assuming the trend on future expectations continues."
- Completed a 5-year experience study for the period July 1, 2012 to June 30, 2017. Lowered the assumed rate of return from 7.75 to 7. Updated mortality tables. Adjusted additional assumptions including: price inflation, withdrawal, disability, retirement rate, and wage increases due to merit and longevity.
- New tier provisions were passed in 2010 requiring increased age and service requirements and an employee contribution rate of 4% of pay for employees hired for the first time on or after 01/01/11. As of 6/30/20, 3,131 active members were covered under the 2011 tier.
- In 2009, the actuary presented an accelerated amortization schedule in accordance with 105.684. As of 6/30/20 valuation, the plan uses a closed 4-year amortization period for unfunded retiree liabilities and a closed 19-year amortization period for the remaining unfunded liabilities (for the plan year beginning 7/1/21).
- In September 2014, the Board established a "rate stabilization reserve fund" from experience gains to attempt to maintain the employer contribution rate at or close to its current level (58% of covered payroll).



Year Ending June 30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$210,871,852	$210,871,852	100%
2019	$210,166,927	$210,166,927	100%
2018	$204,955,180	$204,955,180	100%
2017	$206,562,924	$206,562,924	100%
2016	$199,609,396	$199,609,396	100%

As of 6/30/20

Market Value: $2,361,599,888

Actuarial Value: $2,481,329,531

Liabilities: $4,092,097,897

Membership:

Active: 7,355 Inactive: 11,276

Normal Retirement Formula:

Year 2000 Plan: 1.7% of compensation times years of service plus 0.8% to age 62 (temporary benefit under rule of 80 or rule of 90 for the 2011 Tier)

Normal Retirement Eligibility:

Age 62 with 5 years of service or rule of 80. Uniformed Patrol: Mandatory retirement at age 60. Rule of 80 with minimum age of 48.

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

Social Security Coverage: Yes

COLA: Annual Max 5%; 80% of CPI

Assumed rate of return: 7%

Salary: 3%

From:	Scott Simon
To:	Michael Ruff
Subject:	RE: MPERS watch list
Date:	Tuesday, November 3, 2020 1:42:56 PM
Attachments:	image001.png image002.png image004.png

Michael, The "one pager" looks accurate to me. Thanks for the opportunity to review.

ss

Scott L Simon | *Executive Director*
MoDOT & Patrol Employees' Retirement System
PO Box 1930 • Jefferson City, MO 65102-1930
P (573) 298-6020 • F (573) 522-6111
www.mpers.org

From: Michael Ruff <mruff@senate.mo.gov>
Sent: Tuesday, November 3, 2020 12:20 PM
To: Scott Simon <Scott.Simon@mpers.org>
Subject: MPERS watch list

Hello Scott,
Thank you for talking with me this morning about MPERS. I am attaching this year's watch list one-pager for MPERS. It is based on the June 30, 2020 actuarial valuation. I included information on current events happening at MPERS – governance consultant, asset/liability study, and the plan to implement some investment portfolio changes. I also added a portion of GRS's language about the assumed rate of return and capital market expectations (which is something that has come up in other plans' actuarial valuations as well).

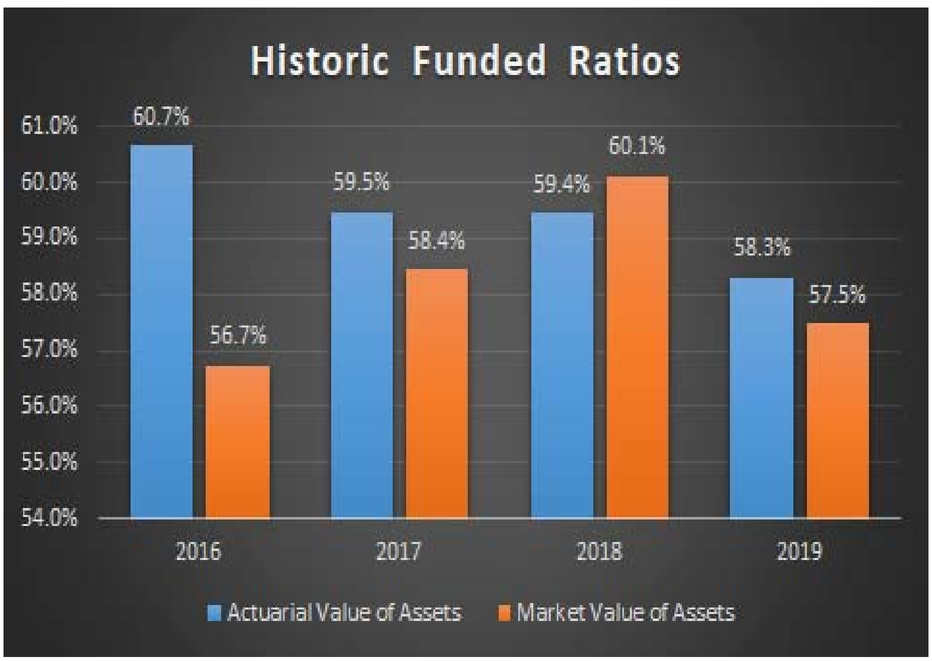
The JCPER will meet on Tuesday, December 1, 2020 at 1pm in Room 117 in the State Capitol. The meeting will be live streamed as an alternative to in-person attendance.

If you have any questions or comments, please feel free to call or email. Thank you.

Michael
573-751-1280

OVERLAND POLICE RETIREMENT FUND

- Rate of return on investments equaled 3.2% (Market) and 5.9% (Actuarial) vs. 7% assumed.
- In November 2020, the City Council increased employee contributions for lieutenants and captains to 8.5%.
- The City Council adopted three changes to the plan in 2017: increased employee contributions from 5% to 7.5%, phased out a retroactive COLA for certain members, and changed the refund of employee contributions upon retirement provision so employee contributions made after April 1, 2017 will not be refunded upon retirement. As part of the collective bargaining agreement approved in November 2018, the employee contribution rate for sergeants, corporals and police officers is now 9.4%.
- The employer contribution was supported by a tax levy of $0.12 that had been insufficient to meet the ADC since 2008. In August 2017, the voters approved a tax levy increase. The current City tax rates are $0.24 residential, $0.36 commercial, $0.367 personal. The actuary writes “These were recently increased...but are still below the recommended rate.” The recommended contribution rate decreased from $0.58 as of 4/1/18 to $0.478 as of 4/1/19.
- 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 plan smooths investment gains and losses over five years.



Year Ending 3/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$1,203,306	N/A	N/A
2019	$1,117,425	$680,159	61%
2018	$1,091,236	$553,559	51%
2017	$1,136,068	$233,363	21%
2016	$1,085,072	$242,311	22%

As of 4/1/19

Market Value: $13,030,126

Actuarial Value: $13,215,954

Liabilities: $22,668,850

Membership:

Active: 42 Inactive: 42

Normal Retirement Formula:

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

Normal Retirement Eligibility:

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

Social Security Coverage: Yes

COLA: Annual Max 3%; 60% of CPI

Assumed Rate of Return: 7%

Salary: 3.5%

From:	Melissa Burton
To:	Michael Ruff
Subject:	Overland Police Pension
Date:	Tuesday, November 10, 2020 8:26:54 AM
Attachments:	2020-18 - Amend Section 200.400 Employee Contributions - Police Pension.pdf

Good morning, Michael,

City Council passed Ordinance #2020-18, increasing employee contributions to the police pension for lieutenants and captains to 8.5 percent. The legislation also addressed the employee contribution level based on the collective bargaining agreement in November 2018.

The Police Chief is the only employee contributing at the 7.5 percent level.

Thanks!

Melissa J. Burton
City Clerk, MMC/MPCC
City of Overland
9119 Lackland Road
Overland, MO 63114
(314) 428-4321
(314) 428-3515 (fax)
www.OverlandMO.org

Sponsored By: Bill No. 19-2020
Police Pension Board of Trustees Ordinance No. 2020-18

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF OVERLAND, MISSOURI, SECTION 200.400: EMPLOYEE CONTRIBUTIONS

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OVERLAND, COUNTY OF ST. LOUIS, STATE OF MISSOURI, AS FOLLOWS:

Section 1: The City Council hereby amends Section 200.400 of the Municipal Code of the City of Overland, Missouri by the deleting the current Section 200.400 and inserting the following in lieu thereof:

Section 200.400 Employee Contributions

Every covered employee of the Police Department of the City shall be assessed and required to pay into the Police Retirement Fund, herein created, a sum equal to the following:

1. five percent (5%) of his/her salary paid prior to April 1, 2017;

2. seven and one-half percent (7 1/2%) of his/her salary paid on or after April 1, 2017;

3. nine and four-tenths percent (9.4%) of an employee's salary paid on or after December 7, 2018, if the employee bears the rank of sergeant's or below; and

4. eight and one-half percent (8 1/2%) of an employee's salary paid on or after November 20, 2020, if the employee bears the rank of lieutenants or captain.

The City in making up its payroll for covered employees of the Police Department shall be authorized and is hereby required to deduct from the compensation and salary due each covered employee for each payroll period a sum representing employee contributions from compensation and such deduction shall be placed in a special fund and shall be paid monthly to the Treasurer of the Board of Trustees. All contributions made by covered employees on or after April 1, 2017, shall be deemed to be "pick-up" contributions under Code Section 414(h)(2). Each covered employee of the Police Department shall execute and deliver to the City Clerk an authorization, in proper form, for the deduction herein described, and no covered employee shall be employed in covered services in the Police Department unless he/she shall execute such authorization.

Section 2: This ordinance shall be in full force and effect from and after its passage and approval according to law.

PASSED this 9th day of November, 2020.

Michael J. Dehnrudt

MAYOR

November 9, 2020

Date of Approval

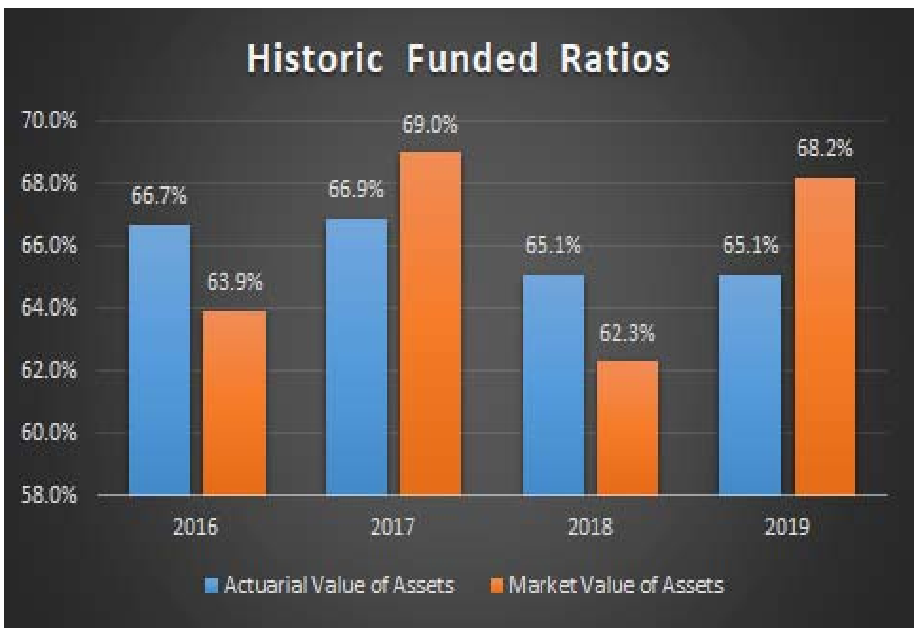
ATTEST:

Melissa J. Buxton

CITY CLERK

POPLAR BLUFF POLICE & FIRE PENSION PLAN

- Market rate of return on investments equaled 17.49% vs. 5.25% assumed.
- Updated mortality tables. The plan experienced an actuarial loss and an increase in the actuarially determined contribution. The actuary identifies several factors for the actuarial loss, including contributions less than the 2019 ADC, higher salaries than in the prior year, and an overall loss due to the experience of the participant group.
- A property tax levy of $0.0976 per $100 of assessed valuation is used to fund the plan. The City has not contributed 100% of the ADC beginning with plan year 2012. The actuary cautions that "Over the years, the plan sponsor has been contributing 30-50% of the ADC. This contribution policy will likely not be enough to cover future benefit obligations and ADC is likely to increase with each year the contribution is under 100%."
- Prior to the 1/1/19 valuation, the plan's actuary conducted a comprehensive review of assumptions. Effective with the 1/1/19 valuation, the following assumptions were changed: increased the assumed rate of return from 5 to 5.25, increased inflation assumption from 2 to 2.25, and updated mortality tables.
- Effective with the January 1, 2015 actuarial valuation, the cost method was changed from the Aggregate method to the Entry Age Normal cost method with a 20-year amortization period for unfunded liabilities. Initial UAAL as of 1/1/15 will be amortized over a closed 20 year period. Subsequent gains and losses are amortized over 15 year periods.



January 1,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$938,667	N/A	N/A
2019	$912,881	$201,001	22%
2018	$850,408	$254,653	30%
2017	$811,036	$253,225	31%
2016	$579,058	$330,864	57%
2015	$543,721	$235,832	43%

As of 1/1/20

Market Value: $13,564,525

Actuarial Value: $12,928,322

Liabilities: $19,868,789

Membership:

Active: 76 **Inactive**: 75

Normal Retirement Formula:

2% of compensation for the first 20 years of service plus 1.5% for each additional year of service. Maximum benefit of $1650 per month.

Normal Retirement Eligibility:

Later of age 55 or 5 years of service.

Social Security Coverage: No

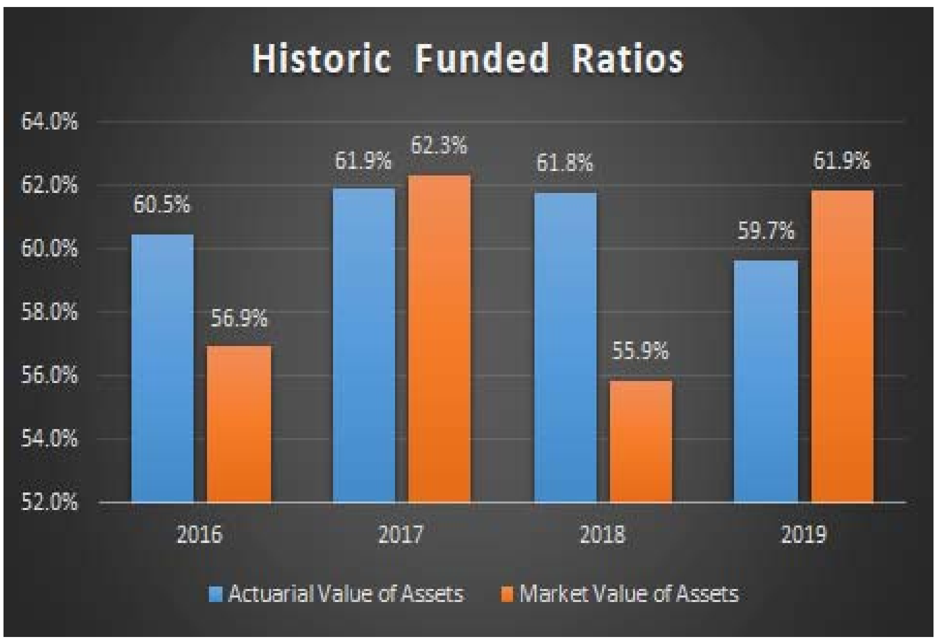
COLA: No COLA

Assumed rate of return: 5.25%

Salary: 3%

RAYTOWN POLICE OFFICERS' RETIREMENT FUND

- Rate of return on investments equaled 21.6% (market) and 5.62% (actuarial) vs. 7.5% assumed.
- Updated mortality tables to Pub2010-Public Safety Mortality Table with the most recent projection scale.
- The actuary writes that "the asset gains experienced in 2019 will be recognized in the four succeeding valuations, and should help the funding status continue to improve. The change to mortality tables reflecting mortality specific to Public Service participants is warranted, and increased plan liabilities just 0.9%. The City policy to contribute the recommended contribution will allow the funded status to gradually improve."
- Effective with the 1/1/16 valuation, the plan implemented five year smoothing of investment gains and losses. This is designed to reduce volatility of market returns and produce more stability in contribution rates.
- The plan utilizes a closed 30-year period for amortization of unfunded actuarial accrued liabilities that began 1/1/14.
- An employee contribution of 3% of pay was ceased in 2000 when the Plan was 101% funded.
- The Plan was frozen as of December 31, 2013 with members moving to LAGERS.



Year ended 12/31,	<u>RECOMMENDED CONTRIBUTION*</u>	<u>ACTUAL CONTRIBUTION*</u>	<u>PERCENT CONTRIBUTED</u>
2020	$635,147	N/A	N/A
2019	$590,127	$590,127	100%
2018	$593,459	$593,459	100%
2017	$608,134	$608,134	100%
2016	$562,862	$562,862	100%

* Contribution history taken from January 1, 2020 Valuation, Page 19, Ten-Year Schedule of Contributions.

As of 1/1/20

Market Value: $10,717,776

Actuarial Value: $10,333,301

Liabilities: $17,322,028

Membership:

Active: 15 **Inactive**: 67

Normal Retirement Formula:

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

Normal Retirement Eligibility:

Age 55 with 20 years of service

Social Security Coverage: Yes

COLA: No COLA

Assumed Rate of Return: 7.5%

Salary: 4%

From: Robert J. Kuehl
To: Michael Ruff
Cc: Randy Hudspeth
Subject: RE: Raytown Police Officers' Retirement Fund
Date: Tuesday, November 3, 2020 3:29:34 PM
Attachments: Raytown Police.pdf

Sir,

Thank you very much for the information; we will discuss internally and provide any information or comments prior to the listed date in the below email.

Have a great and safe day!

Bob

****

Chief Robert J Kuehl
Raytown Police Dept
10000 East 59th St.
Raytown, MO 64133
Off: 816-737-6100

From: Michael Ruff [mailto:mruff@senate.mo.gov]
Sent: Tuesday, November 03, 2020 3:07 PM
To: Robert J. Kuehl
Subject: Raytown Police Officers' Retirement Fund

Dear Chief Kuehl,
Each year, the Joint Committee on Public Employee Retirement (JCPER) staff compiles a report for the committee's review that includes any defined benefit plan that has a funded ratio of less than 70% on a market value basis. We have used information from the January 1, 2020 actuarial valuation and the plan year 2019 annual survey submitted by McCloud & Associates. This report is designed to increase awareness of trends in plan funding and contribution levels.

I am attaching an information sheet relating to the Raytown Police Officers' Retirement Fund that will be presented to the JCPER at its fourth quarter meeting on Tuesday, December 1, 2020 at 1pm in Room 117 in the State Capitol. 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 Wednesday, November 18.

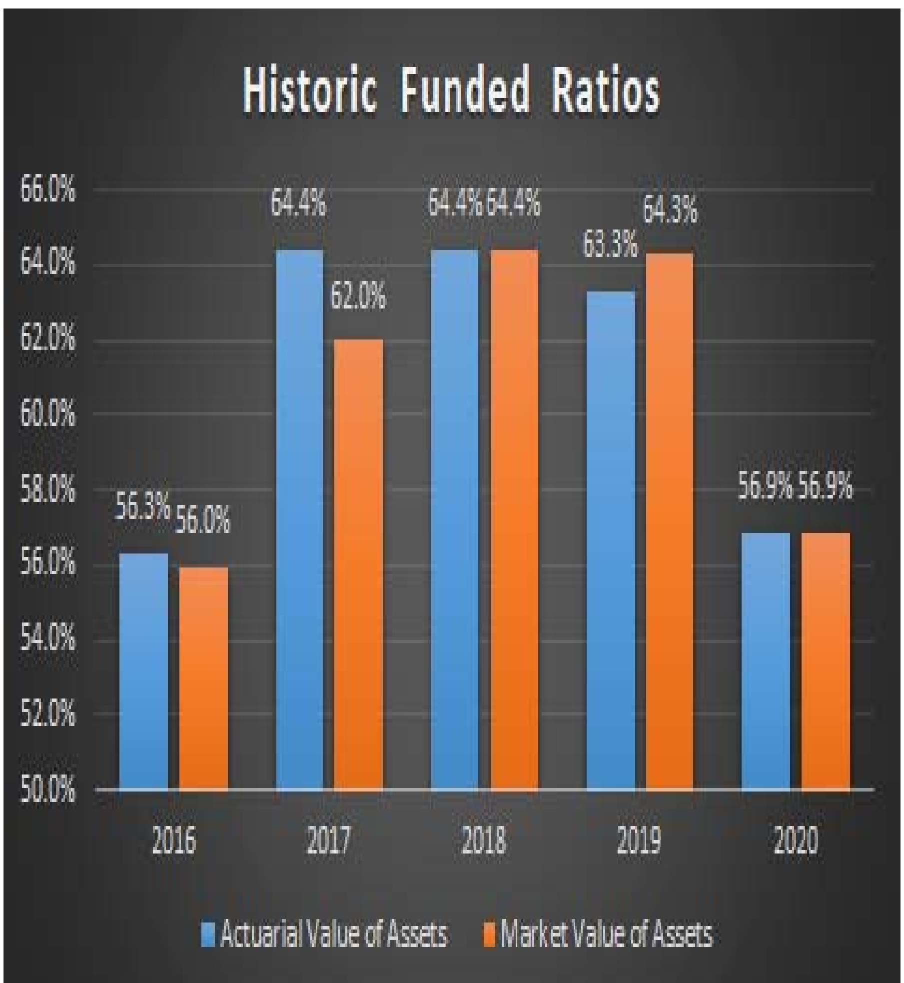
Thank you for your consideration and ongoing cooperation with the JCPER. Please do not hesitate to contact me if you have any questions or would like additional information.

Sincerely,

Michael Ruff

ROCK HILL UNIFORMED EMPLOYEES' PENSION PLAN

- For the fiscal year ended 3/31/20, the rate of return on investments equaled –8.35% (market) compared to 6.4% assumed.
- As of the May 1, 2020 actuarial valuation, the assumed rate of return was lowered from 6.4% to 5.5%. Updated mortality tables.
- The employer has not met the ADC since 2008. The City's 3/31/20 CAFR, page 17, notes that "The liability for the Uniformed Employee Pension Fund continues to be an on-going issue. The City contributions into the plan have averaged 75% of the Actuarial Required Contribution (ARC) for the past six years. The funded ratio has decreased from 63.43% in fiscal year 2019 to 53.69% in fiscal year 2020 as a result of depreciation of investment and City contributions." (The funded ratios identified in the CAFR are based on the 3/31 fiscal year end rather than the May 1 actuarial valuation date.)
- The CAFR page 44 notes that "As of March 31, 2020, the City did not have a formal contribution policy...Based on the actuary's recommendation, the City will research a contribution policy that better reflects the facts that the Plan is frozen and the number of active participants is declining."



As of 5/1/20

Market Value:	$1,904,181
Actuarial Value:	$1,904,181
Liabilities:	$3,344,141

Membership:

Active: 7 **Inactive**: 18

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 Eligibility: Age 60 with 20 years of service.

Social Security Coverage: Yes

COLA: No COLA

Assumed Rate of Return: 5.5

Salary: N/A

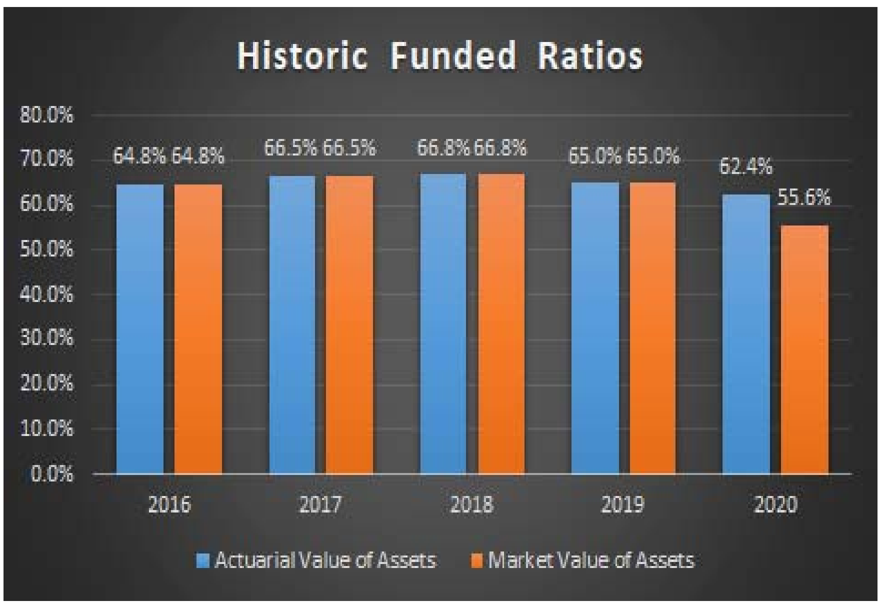
The City has an actuarial valuation performed every other year. This information is from the most recent valuation as of May 1, 2020.

Year Ending March 31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2021	$279,993	N/A	N/A
2020	$178,339	$125,000	70%
2019	$178,339	$150,000	84%
2018	$212,536	$150,000	71%
2017	$212,536	$150,000	71%
2016	$199,227	$150,000	75%

- This plan was closed to new hires in May 2003. Benefit accruals were frozen as of 5/1/11.
- All active participants as well as new hires are members of LAGERS as of September 2007. The City had previously considered transferring the plan to LAGERS under section 70.621 but in fiscal year 2019, the Board of Aldermen held off on transferring the administration and trustee service for the plan to LAGERS due to the downturn in market performance.
- Contribution history is found in the Comprehensive Annual Financial Report for Fiscal Year Ended March 31, 2020, Page 65, Schedule of Contributions.
- *The Recommended Contribution for the Fiscal year ended March 31, 2021 is from the May 1, 2020 Actuarial Valuation, Page 2.

FIREFIGHTERS' RETIREMENT FUND OF THE CITY OF SEDALIA

- Rate of return on investments equaled –6.9% (market) and 4.22% (actuarial) versus 7% assumed.
- Effective with the 4/1/20 actuarial valuation, updated mortality tables to Public Safety 2010. Adopted five-year smoothing of investment gains/losses to "realize less volatility in asset values and consequently less year-to-year volatility in contribution amounts."
- Completed an experience study in November 2017 for the period 4/1/09 to 3/3/17. Updated termination and retirement rate assumptions and updated mortality tables.
- Beginning with the 4/1/16 valuation, the plan adopted a closed 30-year period for amortizing unfunded liabilities with additional UAAL amortized over layered 20-year periods. Previously, it used an open 30.
- The plan is funded by both property tax revenues ($0.051 per $100 of assessed valuation as of 3/31/19) and city-appropriated contributions based on the recommendation of the actuary.
- Discontinued employee contributions effective 4/1/12.
- The actuary writes "The Plan has been making progress toward a safe funding level. The City policy to contribute the recommended contribution will allow the fund status to continue to improve. We recommend a review of the Plan's investment policy with asset managers and a future discussion regarding the discount rate currently being used."



Year ending 3/31,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2021	$461,365	N/A	N/A
2020	$417,212	$428,571	103%
2019	$385,272	$367,813	95%
2018	$362,295	$450,145	124%
2017	$439,494	$353,426	80%
2016	$358,679	$331,451	92%

As of 4/1/20

Market Value: $6,279,520

Actuarial Value: $7,047,180

Liabilities: $11,297,192

Membership:

Active: 41 **Inactive**: 52

Normal Retirement Formula:

50% of Indexed Earnings Base (IEB) in the Year of Retirement

2020 IEB = $59,529

Normal Retirement Eligibility:

Age 55 with 22 years of service

Social Security Coverage: No

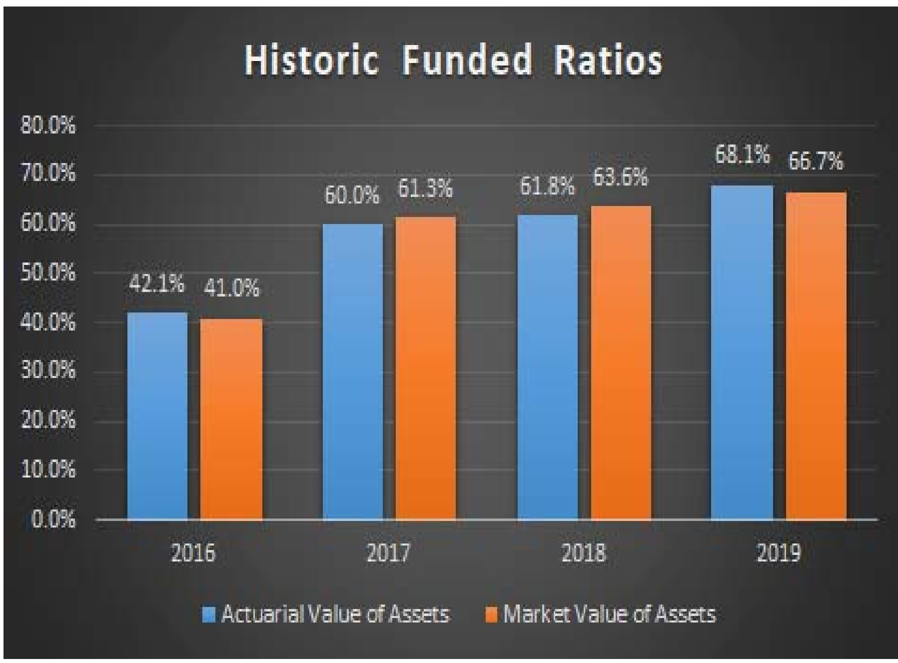
COLA: Annual max 3%

Assumed Rate of Return: 7%

Increases in IEB: 3%

FIREFIGHTERS' RETIREMENT PLAN OF THE CITY OF ST. LOUIS

- Rate of return on investments equaled 1.44% (Market) and 6.72% (Actuarial) vs. 7.25% assumed.
- The actuarially determined contribution decreased from the 9/30/18 valuation to the 9/30/19 valuation due, in part, to lower salary increases.
- Completed an experience study for October 1, 2013 through September 30, 2017. Reduced the assumed rate of return from 7.625 to 7.25. Revised multiple assumptions, including mortality tables, disability rate, withdrawal rate, retirement rate, marriage, and sick leave. Reduced payroll growth from 3 to 2.75 and increases in the Consumer Price Index from 3 to 2.75. These changes reduced the plan's liabilities and resulted in a lower actuarially determined contribution.
- 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.
- The Plan adopted a 30-year closed amortization period effective February 1, 2013 for payment of unfunded liabilities.



FY ending 9/30,	RECOMMENDED CONTRIBUTION	ACTUAL CONTRIBUTION	PERCENT CONTRIBUTED
2020	$8,583,020	N/A	N/A
2019	$8,995,724	$8,995,725	100%
2018	$8,022,799	$8,022,799	100%
2017	$9,262,698	$9,262,698	100%
2016	$9,148,007	$9,148,007	100%

As of 10/1/19

Market Value: $88,559,061

Actuarial Value: $90,372,061

Liabilities: $132,717,952

Membership:

Active: 609 **Inactive**: 119

Normal Retirement Formula (new members since 2/1/13):

2% of average final compensation for the first 25 years of service plus 2.5% (5% for grandfathered participants) in excess of 25 years of service. Maximum of 75% of compensation.

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

Social Security Coverage: No

COLA: 1.5% to 5% not to exceed CPI depending on age and years of service. CPI must be at least 1% to receive a COLA. COLA cap of 25%.

Assumed Rate of Return: 7.25

Salary: 2.75

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