



**JOINT WORK SESSION MEETING
AGENDA
CITY OF CREVE COEUR
CITY COUNCIL AND EMPLOYEE PENSION BOARD
300 NORTH NEW BALLAS RD
NOVEMBER 12, 2018
6:00 PM**

CALL TO ORDER

ROLL CALL

DISCUSSION ITEMS

- 1. Approval of Work Session Minutes dates September 11, October 8, October 22 and Special Work Session Dated October 29, 2018.**
- 2. City of Creve Coeur Actuarial Valuation as of July 1, 2018**
Summary: Joint Pension Board-City Council Work Session to discuss the actuarial valuation as of July 1, 2018, possible change in mortality table for next year and employer contribution for FY2019.

Pursuant to Section 610.022 RSMo., the City Council could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. And/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Posted: _____ posted 11/8/2018
Deborah Ryan, MPCC
City Clerk



**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
SEPTEMBER 11, 2018
6:00 PM**

CALL TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Tuesday, September 11, 2018 at 6:00 PM.

Council Member, Ward 2 AJ Wang
Council Member, Ward 2 Ellen Lawrence
Council Member, Ward 3 Robert Hoffman
Council Member, Ward 1 Alexis Travers
Council Member, Ward 4 Susan Baseley
Council Member, Ward 1 Heather Silverman

Council Member, Ward 3 Charlotte D'Alfonso -- **Absent**
Council Member, Ward 4 Scott Saunders -- **Absent**

ROLL CALL

DISCUSSION ITEMS

1. Approval of August 13, 2018 City Council Work Session Meeting Minutes

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Robert Hoffman, Council Member, Ward 3
SECONDER:	Susan Baseley, Council Member, Ward 4
AYES:	Wang, Lawrence, Hoffman, Travers, Baseley, Silverman
ABSENT:	D'Alfonso, Saunders

2. Golf Course Review

Jason Valvero gave an update of the overall golf course operations (exhibit A).

Council Member Hoffman stated the course is in good shape this year.

Council Member Baseley asked if the drone clubs were interested in using the golf course for an event(s).

Jason Valvero stated the clubs want more open space and recommended they use Conway Park.

Mark Perkins thanked Corey and his crew for keeping our course in good shape.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
SEPTEMBER 11, 2018
6:00 PM**

Council Member Baseley asked if the city could sell golf course merchandise to help increase revenue.

Tim Brinks stated there is some merchandise on hand, but don't have a lot of room to display it.

Council Member Hoffman asked about the replacement of the maintenance bridge.

Corey Gettemeier stated staff is exploring additional pricing as the original bid was high.

Mayor Glantz asked where do we go from here.

Mark Perkins

Adjourned at 6:53 pm

Submitted by:
Deborah Ryan

RESULT:	ITEM DISCUSSED
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**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 8, 2018
6:00 PM**

CALL TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Monday, October 8, 2018 at 6:00 PM.

Council Member, Ward 2 AJ Wang
Council Member, Ward 2 Ellen Lawrence
Council Member, Ward 3 Robert Hoffman
Council Member, Ward 3 Charlotte D'Alfonso
Council Member, Ward 3 Scott Saunders
Council Member, Ward 1 Alexis Travers
Council Member, Ward 3 Susan Baseley
Council Member, Ward 1 Heather Silverman

ROLL CALL

DISCUSSION ITEMS

1. Police Building Update

STAFF PRESENT: City Administrator Mark Perkins, Public Works Director Jim Heines, City Attorney Carl Lumley, Finance Director Lori Obermueller,

BUILDING TASK FORCE MEMBERS PRESENT: Dick Kutta, Richard Koch, Fran Cantor, Joe Martinich

ALSO PRESENT: Colette Herman

Mark Perkins reviewed the Police Building project to date. Discussion of possible date of project being fully under roof and possible change orders. (Exhibit A)

Joe Martinich asked if there is a third party commissioner reviewing.

Colette Herman asked what are members looking to accomplish with this project.

Joe Martinich stated operating correctly and as planned. The third party commissioner would test the installed systems to ensure that they are running to proper specs and efficiently.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 8, 2018
6:00 PM**

Colette Herman stated the contractor is under contract to fix if not operating to standards. Commissioner will come at a cost, beginning at about \$5,000.

Discussion to not spend the additional funding for a third party commissioner

Adjourned at 6:40 pm

Submitted by: Deborah Ryan, City Clerk

RESULT:	ITEM DISCUSSED
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**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 22, 2018
6:00 PM**

CALL TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Monday, October 22, 2018 at 6:00 PM.

Council Member, Ward 2 AJ Wang
Council Member, Ward 2 Ellen Lawrence
Council Member, Ward 3 Robert Hoffman
Council Member, Ward 3 Charlotte D'Alfonso
Council Member, Ward 1 Alexis Travers
Council Member, Ward 3 Susan Baseley
Council Member, Ward 1 Heather Silverman

Council Member, Ward 3 Scott Saunders -- **Absent**

ROLL CALL

DISCUSSION ITEMS

1. 39 North Old Olive Redesign

STAFF PRESENT: City Administrator Mark Perkins, City Attorney Carl Lumley, Community Development Director Jason Jaggi, Finance Director Lori Obermueller, City Engineer Matt Wohlberg, Public Works Director Jim Heines, Assistant City Administrator Sharon Stott.

PLANNING AND ZONING COMMISSION PRESENT: Don Magruder, Matt Schuh, Jim Myers, Tim Carney, Gene Rovak

ALSO PRESENT: Lee Cannon, Loral Harrington and Janet Welder of the STLEDP

Loral Harrington reviewed the history of the project/area, status of the proposed project, meetings that have been held and the discussed the future goals of the project. (Exhibit A) Estimated construction should begin FY2021.

Council Member Baseley asked about the timeline and the breakdown of the phases. It would be helpful for Council to review.

Loral Harrington stated creating the timeline break down is the next step in the process after the meetings that are currently scheduled.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 22, 2018
6:00 PM**

Council Member Wang asked if there is any information on the Schnucks as they have discussed updating that store for many years.

Loral Harrington stated the plan is to keep operating the current store when the new store is being built. Schnucks will have to acquire property from Bayer.

Adjourned at 6:55 pm

Submitted by: Deborah Ryan, City Clerk

RESULT:	ITEM DISCUSSED
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**SPECIAL WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 29, 2018
6:00 PM**

CALL TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Monday, October 29, 2018 at 6:00 PM.

Council Member, Ward 2 AJ Wang
Council Member, Ward 2 Ellen Lawrence
Council Member, Ward 3 Robert Hoffman
Council Member, Ward 3 Charlotte D'Alfonso
Council Member, Ward 4 Scott Saunders
Council Member, Ward 1 Alexis Travers
Council Member, Ward 4 Susan Baseley

Council Member, Ward 1 Heather Silverman -- **Absent**

DISCUSSION ITEM: CITY ADMINISTRATOR

To create a subcommittee to review RFQ for hiring agencies.

Mayor Glantz stated Mark Perkins' last day is quickly approaching and would like to get moving on the search and posting for the City Administrator's position and asked if the Council would like to look locally, nationally or internationally.

Council Member Hoffman stated a national search with a head hunting agency would be the best option.

Mark Perkins stated the fees for an agency is approximately \$25,000 and highly suggested using an agency. Mr. Perkins stated he could put together a letter in the next business day or two to gather proposals and then have Council or a few review and choice.

Council Member Lawrence stated she would like herself and Alexis Travers to be on the proposal selection committee.

Mark Perkins suggested posting in ICMA, MML and St. Louis Municipal League.

Mayor Glantz asked how long would it take to get back the proposals.

Mark Perkins stated a couple of weeks.

Council Member Saunders asked if the city should run the job posting before selecting the agency.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
OCTOBER 29, 2018
6:00 PM**

Mark Perkins suggested waiting and talk with the agencies and develop a candidate profile that the city is looking for.

Mayor Glantz asked if it was reasonable to expect agencies to be narrowed down by next week.

Mark Perkins stated he could have the names of some agencies put together by close of business tomorrow.

Mayor Glantz suggested having himself, Council Member Saunders, Lawrence and Travers on the sub committee to narrow and make a recommendation to Council for the agency selection.

Mayor Glantz asked if there is a structure in place to continue operating during the interim.

Council Member Travers stated by proxy is should be Sharon Stott.

Carl Lumley stated the Charter indicates that the City Administrator can name someone to serve in the capacity in his absence; however, does not cover in absence. Carl Lumley stated Mayor Glantz could, with the approval of the Council, could name an interim City Administrator and suggested the sub committee review RFP and narrow down agencies and present a list of three to Council with a recommendation for one by the November 12, 2018 Council meeting.

Mark Perkins stated it will be difficult to get together by the 12th but could hold a special meeting to make a recommendation.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Robert Hoffman, Council Member, Ward 3
SECONDER:	Susan Baseley, Council Member, Ward 4
AYES:	Wang, Lawrence, Hoffman, D'Alfonso, Saunders, Travers, Baseley
ABSENT:	Silverman

1. To adjourn at 6:30 pm

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Robert Hoffman, Council Member, Ward 3
SECONDER:	AJ Wang, Council Member, Ward 2
AYES:	Wang, Lawrence, Hoffman, D'Alfonso, Saunders, Travers, Baseley
ABSENT:	Silverman

Executive Session (if needed)



City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

SCHEDULED

Meeting: 11/12/18 06:00 PM
Department: City Council
Category: Report
Prepared By: Lori Obermoeller
Department Head: Lori Obermoeller

STAFF REPORT

City of Creve Coeur Actuarial Valuation as of July 1, 2018

Joint Pension Board-City Council Work Session to discuss the actuarial valuation as of July 1, 2018, possible change in mortality table for next year and employer contribution for FY2019.

**Retirement Plan for Employees of
the City of Creve Coeur
Actuarial Valuation as of July 1, 2018**

Presented by
The St. Louis Office of
Milliman, Inc.

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Suite 1750
St. Louis, Missouri 63102



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October 25, 2018

Board of Trustees
 Retirement Plan
 City of Creve Coeur
 300 N. New Ballas Road
 St. Louis, Missouri 63141

RE: July 1, 2018 Actuarial Valuation Results

Dear Members of the Board:

As requested, we performed an actuarial valuation of the Retirement Plan for Employees of the City of Creve Coeur as of July 1, 2018, for the Plan Year ending June 30, 2019. Our findings are set forth in this actuary's report. This report reflects the benefit provisions in effect as of July 1, 2018.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the Plan's Administrative Staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the Plan have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Plan. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the Plan.

This valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.



October 25, 2018
Board of Trustees

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The City has the final decision regarding the appropriateness of the assumptions and adopted them as presented in this report.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the Fund. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Fund's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the City of Creve Coeur and its employees (for their use in administering the Plan). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.



October 25, 2018
Board of Trustees

The signing actuaries are independent of the City. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael J. Zwiener', with a stylized flourish at the end.

Michael J. Zwiener, FSA
Consulting Actuary

MJZ/dmm

**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Contents

	<u>Page</u>
Introduction and Purpose	1
Discussion of Valuation Results	2
Summary of Valuation Results	5
Statement of Assets as of June 30, 2018	6
Statement of Income and Disbursements	7
Development of Actuarial Value of Assets	8
Statement of Accrued Benefits	9
Development of Actuarially Determined Contribution	10
Historical Investment Returns on Market Value Basis	11
Actuarial Methods	12
Actuarial Assumptions	13
Summary of Plan Provisions	15
Demographic Information	18
Glossary of Terms	21

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Introduction and Purpose

In this report, we present the results of the July 1, 2018 actuarial valuation for the Retirement Plan for Employees of the City of Creve Coeur.

PURPOSES OF THE VALUATION

The actuarial valuation of the Plan is intended to accomplish several purposes:

- In general, the determination of current levels of employer contributions which, together with prior funding, will accumulate monies sufficient to meet benefit payments when due under the terms of the Plan;
- review plan experience for the year ended on the valuation date to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application; and
- assessment of the relative funded position of the plan on an ongoing basis, i.e., through a comparison of plan assets and projected plan liabilities.

This work product was prepared solely for the City of Creve Coeur for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Discussion of Valuation Results

1. Actuarially Determined Contribution

The results of this valuation are used to actuarially determine contribution amounts to the Fund for the July 1, 2018 – June 30, 2019 fiscal year. A comparison of actuarially determined contribution amounts for the current and immediately preceding valuation are summarized below.

	<u>Actuarial Valuation as of</u>	
	<u>July 1, 2017</u>	<u>July 1, 2018</u>
Actuarially Determined Employer Contribution*	\$1,159,936	\$1,262,474
Actuarially Determined Employer Contribution**	1,241,132	1,347,691
Actual Employer Contribution	1,188,826	N/A

* Assuming payment as of first day of plan year

** Assuming payment as of last day of plan year

2. Plan Assets

The market value of plan assets increased from \$24,250,103 at July 1, 2017 to \$25,729,821 at June 30, 2018. Valuation assets are defined to be actuarial value using an asset smoothing method. The results are presented on page 8. A balance sheet and statement of income and disbursements are presented on pages 6 and 7. Investment income (net of investment expenses) on a market value basis was \$1,849,705 for a return of 7.7%. During the prior year, investment return was 11.43%. Contributions to the fund were \$1,287,867 and benefit payments were \$1,657,854.

On an actuarial value basis, fund assets are \$25,291,347 on July 1, 2018, compared to \$24,015,386 on July 1, 2017. Net investment income was \$1,645,948 for return of 6.9%. The development of the actuarial value of assets is shown on page 8.

3. Actuarial Assumptions, Methods and Plan Provisions

The interest discount rate was updated from 7.00% to 6.75% for both the actuarial accrued liability and the actuarial present value of accumulated plan benefits.

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All other actuarial assumptions, methods, and Plan provisions remained the same as the prior valuation. Descriptions of all actuarial assumptions, methods, and Plan provisions can be found on pages 11-16.

4. Plan Population

The number of active participants decreased from 46 on July 1, 2017 to 40 on July 1, 2018. The number of retirees/beneficiaries/alternate payees increased from 72 to 78, and the number of deferred vested participants remained at 29.

5. Plan Experience

Plan experience resulted in a small overall experience loss for the plan year ending June 30, 2018, prior to taking into account the assumption changes. The decrease in discount rate from 7.00% to 6.75% increased the Actuarial Accrued Liability by about \$793,000.

6. GASB 67/68

Results under GASB 67 and 68 are presented in a separate report.

7. Funded Status

Accrued Benefit Basis

Another measure of a plan's funded status is the relationship of the market value of plan assets to the present value of benefits accrued to date. The amounts for the current and prior year are shown in the following table:

	<u>07/01/2017</u>	<u>07/01/2018</u>
	\$	\$
a) Present Value Vested Accrued Benefits	27,309,910	29,678,099
b) Present Value All Accrued Benefits	27,836,041	30,192,891
c) Market Value of Assets	24,250,103	25,729,821
d) Ratio: (c)/(a)	88.8%	86.7%
e) Ratio: (c)/(b)	87.1%	85.2%

The interest discount utilized for this purpose was 7.00% in 2017 and 6.75% in 2018. The discount rate that is required to value plan liabilities on a settlement basis is typically lower than the "ongoing basis" discount rate. Therefore, these amounts should not be used to assess the plan's funded status on a settlement basis.

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Accrued Liability Basis

The most common measure of a public sector plan's funded status is dividing the Plan Assets by the Actuarial Accrued Liability. As of the valuation date, this ratio is 78.83% using Actuarial Value of Assets and 80.20% using the Market Value of Assets.

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Summary of Valuation Results

	<u>7/1/2017</u>	<u>7/1/2018</u>
Participant Data		
Number of Participants:		
Active participants	46	40
Terminated vested participants	29	29
Retirees and beneficiaries	<u>72</u>	<u>78</u>
Total	147	147
Assets		
Market Value	24,250,103	25,729,821
Investment Yield	11.4%	7.7%
Actuarial Value	24,015,386	25,291,347
Investment Yield	4.5%	6.9%
Actuarial Present Values		
Accrued Liability	30,186,089	32,083,624
- Actuarial Value of Assets	<u>24,015,386</u>	<u>25,291,347</u>
Unfunded Actuarial Liability	6,170,703	6,792,277
Funded Ratio (Market Value Basis)	80.3%	80.2%
Funded Ratio (Actuarial Value Basis)	79.6%	78.8%
Costs and Contributions		
Normal Cost	314,178	291,592
% of Covered Payroll	8.83%	9.04%
Actuarially Determined Contribution	1,159,936	1,262,474
% of Covered Payroll	32.60%	39.15%
Funded Status of Accumulated Benefits		
Present Value of Accrued Benefits	27,836,041	30,192,891
Funded Ratio (Market Value Basis)	87.12%	85.22%
Funded Ratio (Actuarial Value Basis)	86.27%	83.77%

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**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Statement of Assets as of June 30, 2018

<u>Assets</u>	<u>Market Value</u>
1. Commerce	\$7,201,537
2. Schwab	18,528,284
3. Total Assets	<u>25,729,821</u>
 <u>Liabilities</u>	
None	
 Net Assets	 <u>25,729,821</u>

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Statement of Income and Disbursements

1. Market Value of Assets as of June 30, 2017	\$24,250,103
2. Income	
a. Employer Contributions	1,188,826
b. Employee Contributions	99,041
c. Net Earnings	<u>1,893,838</u>
d. Total Income	3,181,705
3. Expenses	
a. Employee Benefit Distributions	1,657,854
b. Expenses	<u>44,133</u>
d. Total Expenses	1,701,987
4. Net Increase (Decrease) = (2c) - (3d)	1,479,718
5. Market Value of Assets as of June 30, 2018 = (1) + (4)	25,729,821
6. Net Rate of Return	7.7%

This work product was prepared solely for the City of Creve Coeur for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Development of Actuarial Value of Assets

1.	Actuarial Value Beginning of Year	\$24,015,386
2.	Market Value End of Year	25,729,821
3.	Market Value Beginning of Year	24,250,103
4.	Non-Investment Cash Flows ⁽¹⁾	(369,987)
5.	Investment Income	
a.	Market Total: (2) - (3) - (4)	1,849,705
b.	Assumed Rate of Return	7.00%
c.	Expected Investment Return ⁽²⁾	1,684,558
d.	Gain/(Loss): (5a) - (5c)	165,147
6.	Phased-In Recognition of Investment Gains/(Losses)	
a.	Current Year: (1/3) x (5d)	55,049
b.	(1/3) of Gain/(Loss) during plan year ending June 30, 2017	328,380
c.	(1/3) of Gain/(Loss) during plan year ending June 30, 2016	(422,039)
d.	Phased-In Investment Gain to be Recognized in Future Years	(38,610)
7.	Actuarial Value End of Year: (1) + (4) + (5c) + (6e)	25,291,347
8.	Excess of Market Value over Actuarial Value: (2) - (7)	438,474
9.	Approximate Rate of Return on Actuarial Value	6.9%
10.	Ratio of Actuarial Value of Assets to Market Value of Assets: (7) / (2)	98.3%

⁽¹⁾ Contributions less benefit payments

⁽²⁾ Assumed Rate times (3) + (4) times Assumed Rate/2

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**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Statement of Accrued Benefits

	<u>July 1, 2017</u>	<u>July 1, 2018</u>
1. Accumulated Plan Benefits		
a. Actuarial Present Value of Vested Benefits		
i. Participants currently receiving payments	\$16,014,879	\$18,545,877
ii. Active Participants	9,287,367	8,892,656
iii. Deferred Vested Participants	<u>2,007,664</u>	<u>2,239,566</u>
iv. Total Vested Benefits	27,309,910	29,678,099
b. Actuarial Present Value of Non-Vested Benefits	526,131	514,792
c. Total Actuarial Present Value of Accumulated Plan Benefits = (aiv) + (b)	27,836,041	30,192,891
2. Net Assets (Market Value) available for benefits	\$24,250,103	\$25,729,821
3. Funded Ratio		
a. Vested Benefits = (2) / (1aiv)	88.8%	86.7%
b. Accumulated Benefits = (2) / (1c)	87.1%	85.2%
4. Net Assets (Actuarial Value) available for benefits	\$24,015,386	\$25,291,347
5. Funded Ratio		
a. Vested Benefits = (4) / (1aiv)	87.9%	85.2%
b. Accumulated Benefits = (4) / (1c)	86.3%	83.8%

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Development of Actuarially Determined Contribution

1. Accrued Liability	
a. Active Participants	\$11,298,181
b. Terminated Vested Participants	2,239,566
c. Retired Participants	<u>18,545,877</u>
d. Total	32,083,624
2. Actuarial Value of Assets	25,291,347
3. Covered Payroll	3,224,888
4. Unfunded Actuarial Liability (UAL)	6,792,277
a. Outstanding UAL from July 1, 2015	5,346,789
b. Outstanding UAL after July 1, 2015	1,445,488
5. Normal Cost:	
a. Expected Employee Contributions	96,747
i. As a percentage of Covered Payroll: (5a) / (3)	3.00%
b. Employer Normal Cost	194,845
i. As a percentage of Covered Payroll: (5b) / (3)	6.04%
c. Total Normal Cost: (5a) + (5b)	291,592
6. 10-Year Amortization of UAL from July 1, 2015	921,296
7. 15-Year Amortization of Additional UAL after July 1, 2015	146,333
8. Employer Cost	
a. Actuarially Determined Contribution: (4b) + (5) + (6)	1,262,474
b. Payable as of the end of the plan year: (8a) x 1.0675	1,347,691
c. As a percentage of Eligible Payroll: (8b) / (3)	39.15%
9. Funded Ratio: (2) / (1d)	78.83%

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Historical Investment Returns on Market Value Basis

Year Ended June 30	Rate of Return				
	<u>Annual</u>	<u>Cumulative</u>	<u>Last 5 Years</u>	<u>Last 10 Years</u>	<u>Last 20 Years</u>
1995	8.09%	8.09%	N/A	N/A	N/A
1996	14.35%	11.18%	N/A	N/A	N/A
1997	18.08%	13.43%	N/A	N/A	N/A
1998	17.31%	14.39%	N/A	N/A	N/A
1999	8.46%	13.18%	13.18%	N/A	N/A
2000	9.27%	12.52%	13.42%	N/A	N/A
2001	-5.76%	9.70%	9.12%	N/A	N/A
2002	-10.64%	6.93%	3.20%	N/A	N/A
2003	1.59%	6.32%	0.28%	N/A	N/A
2004	13.39%	7.01%	1.17%	7.01%	N/A
2005	6.21%	6.93%	0.60%	6.82%	N/A
2006	8.62%	7.07%	3.50%	6.27%	N/A
2007	16.67%	7.78%	9.17%	6.14%	N/A
2008	-8.15%	6.56%	6.99%	3.58%	N/A
2009	-18.25%	4.69%	0.21%	0.69%	N/A
2010	12.16%	5.14%	1.31%	0.95%	N/A
2011	19.62%	5.94%	3.28%	3.39%	N/A
2012	0.23%	5.62%	0.19%	4.58%	N/A
2013	12.87%	5.99%	4.41%	5.69%	N/A
2014	17.86%	6.55%	12.34%	6.10%	6.55%
2015	1.99%	6.33%	10.22%	5.67%	6.24%
2016	1.15%	6.09%	6.58%	4.92%	5.59%
2017	11.43%	6.32%	8.87%	4.44%	5.29%
2018	7.69%	6.37%	7.85%	6.12%	4.84%

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Actuarial Methods

Following are brief descriptions of the actuarial cost and asset valuation methods used in the valuation.

Actuarial Cost Method

Entry Age Normal:

The Entry Age Normal Cost Method on an individual basis is used. Normal costs are computed as a level percentage of pay.

The Unfunded Entry Age Accrued Liability as of July 1, 2015 is amortized over a 10 year period. Each year, the amortization period will decrease by 1 until it reaches 0 years as of July 1, 2025. Any subsequent Unfunded Entry Age Accrued Liability is amortized over a 15 year period.

Asset Valuation Method

A three-year smoothed value, with difference between actual investment return and expected investment return recognized in equal installments over a three-year period.

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Actuarial Assumptions

Following are the primary actuarial assumptions used in performing the valuation.

Interest Rates 6.75% per annum as of July 1, 2018; 7.00% per annum in 2017

Annual Pay Increases 4.00% per year

Mortality RP-2000 Combined Healthy Table with a 70% Blue Collar adjustment with a fully generational projection of mortality improvement using Scale BB

Turnover Rates are as follows:

<u>Age</u>	<u>Percentage</u>
25	10%
35	8%
45	4%
55	0%

Rate of Disability None assumed.

Retirement Non-Uniformed participants are assumed 60% retirement at their Unreduced Early Retirement Age, if it is prior to their Normal Retirement Age. Retirement rates of 5% are assumed between their Unreduced Early Retirement Age and age 65, at which a retirement rate of 100% is assumed. Uniformed participant retirement rates are as follows:

<u>Age</u>	<u>Percentage</u>
55	60%
55 - 61	5%
62	100%

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Expenses

None assumed.

Marriage

For retired members, actual marital status and spouse birth date is used. For active members, 100% are assumed married with males assumed three years older than their spouses.

Form of Payment

It is assumed that all employees will elect a life annuity with 120 months guaranteed.

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Summary of Plan Provisions

A summary of the current primary provisions of the Plan are described below. A complete description of the provisions can be found in the local statutes.

Effective Date

Last amended and restated effective July 1, 2013.

Eligibility

Full-time employees enter the Plan on the July 1 on or immediately following their completion of two years of continuous employment and attainment of age 21. No Employees hired after May 23, 2006 may enter the Plan.

Employee Contributions

Participants are required to contribute 3% of salary. Contributions accumulate at an interest rate of 5%.

Credited Service

Elapsed time, in years and completed months, from date of hire..

Final Average Compensation

Average of the high 60 consecutive months in the last 120 months.

Normal Retirement Age

Age 55 for a uniformed participant and age 65 for a non-uniformed participant.

Normal Retirement Benefit

A benefit equal to Final Average Compensation times 1.7% times Credited Service not to exceed 30 years. If a participant elected not to participate in the City's defined contribution plan, then the multiplier would be 2.0%.

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Normal Form of Payment

The benefit is payable for 120 months guaranteed and for the member's lifetime, thereafter.

Unreduced Early Retirement Eligibility

The participant will be eligible to retire with an unreduced benefit prior to their Normal Retirement Age when the sum of their age and Credited Service equals 85.

Early Retirement Age

Age 50 with at least 20 years of Credited Service.

Early Retirement Benefit

The actuarial equivalent of a benefit calculated in the same manner as the Normal Retirement Benefit with Final Average Compensation and Credited Service determined as of the Early Retirement Date.

Late Retirement Benefit

If a member remains employed after his Normal Retirement Date, he will receive a monthly benefit equal to the benefit computed using service and pay as of his late retirement date. Benefits commence on the first day of the month following actual retirement.

Pre-Retirement Death Benefit

The Surviving Spouse of a Participant who is actively employed and has satisfied Early or Normal Retirement eligibility requirements is entitled to a Death Benefit determined as if the Participant had retired on his date of death, selected a Joint & 2/3 Survivor Annuity and died the next day.

The Surviving Spouse of any other actively employed vested participant is entitled to a Death Benefit determined as follows:

- i) assume the Participant separated from service on date of death
- ii) survived to the earliest possible retirement eligibility date
- iii) retired with a Joint and 2/3 Survivor Annuity, and
- iv) died the next day

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Vested Termination

Members who terminate employment are eligible for a monthly benefit calculated in the same manner as the Normal Retirement Benefit, multiplied by the applicable vesting percentage:

<u>Sum of Attained Age & Years of Credited Service</u>	<u>Vesting Percentage</u>
50	50%
51	60%
52	70%
53	80%
54	90%
55 and after	100%

However, if a participant has at least 8 years of Credited Service, then they are fully vested.

Refund of Contribution

If a participant terminates employment without a vested benefit, then the participant will receive a refund of contributions with interest. If the sum of benefit payments received by a retiree or beneficiary is less than the sum of contributions with interest, then the difference may be paid to their beneficiary as an additional death benefit.

Optional Forms of Payment

Life Annuity

Joint & 50% Survivor Annuity

Joint & 2/3 Survivor Annuity

Joint & 100% Survivor Annuity

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Distribution of Active Participants by Age and by Years of Service

Number of Participants by Age-Service Groups

Attained Age	Years of Service										Total
	Under 1 No.	1 to 4 No.	5 to 9 No.	10 to 14 No.	15 to 19 No.	20 to 24 No.	25 to 29 No.	30 to 34 No.	35 to 39 No.	40 and up No.	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	1	1	0	0	0	0	0	2
40 to 44	0	0	0	1	2	1	0	0	0	0	4
45 to 49	0	0	0	2	2	2	0	0	0	0	6
50 to 54	0	0	0	2	2	4	4	0	0	0	12
55 to 59	0	0	0	1	1	3	2	2	0	0	9
60 to 64	0	0	0	0	1	0	0	2	1	0	4
65 to 69	0	0	0	2	0	0	1	0	0	0	3
70 and up	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	9	9	10	7	4	1	0	40

Average Age 53.3

Average Service 21.5

Average Compensation by Age-Service Groups (for Groups with 5 or more Participants)

Attained Age	Years of Service										Average
	Under 1 No.	1 to 4 No.	5 to 9 No.	10 to 14 No.	15 to 19 No.	20 to 24 No.	25 to 29 No.	30 to 34 No.	35 to 39 No.	40 and up No.	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	N/A	N/A	0	0	0	0	0	N/A
40 to 44	0	0	0	N/A	N/A	N/A	0	0	0	0	N/A
45 to 49	0	0	0	N/A	N/A	N/A	0	0	0	0	80,014
50 to 54	0	0	0	N/A	N/A	N/A	N/A	0	0	0	82,821
55 to 59	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0	69,165
60 to 64	0	0	0	0	N/A	0	0	N/A	N/A	0	N/A
65 to 69	0	0	0	N/A	0	0	N/A	0	0	0	N/A
70 and up	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	66,984	84,555	82,565	72,429	N/A	N/A	0	78,656

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Inactive Participants - Summary by Age

Deferred Vested Participants

<u>Age Group</u>	<u>No. of</u>	<u>Total Monthly Benefit Amount</u>	<u>Average Monthly Benefit Amount</u>
Less than 30	0	\$0	\$0
30 - 34	0	\$0	\$0
35 - 39	1	\$962	\$962
40 - 44	6	\$4,756	\$793
45 - 49	2	\$1,381	\$691
50 - 54	6	\$5,953	\$992
55 - 59	9	\$9,301	\$1,033
60 and over	5	\$3,800	\$760
Total	29	\$26,153	\$902

Retired Participants

<u>Age Group</u>	<u>No. of</u>	<u>Total Monthly Benefit Amount</u>	<u>Average Monthly Benefit Amount</u>
Less than 55	2	\$5,106	\$2,553
55 - 59	6	\$16,493	\$2,749
60 - 64	14	\$34,546	\$2,468
65 and over	56	\$92,501	\$1,652
Total	78	\$148,646	\$1,906

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Summary of Changes in Participant Data

	<u>Active Participants</u>	<u>Retired Participants</u>	<u>Terminated Vested Participants</u>	<u>Total</u>
Count as of July 1, 2017	46	72	29	147
New Entrants	0	0	0	0
Rehired	0	0	0	0
Retired	(5)	6	(1)	0
Lump Sum Payouts	0	0	0	0
Died with Beneficiary	0	(1)	0	(1)
New Alternate Payees	0	1	0	1
New Beneficiaries	0	1	0	1
Died without Beneficiary	0	(1)	0	(1)
Certain Period Expired	0	0	0	0
Terminated with Vesting	(1)	0	1	0
Terminated without Vesting	0	0	0	0
Data Corrections	0	0	0	0
Total Changes	(6)	6	0	0
Count as of July 1, 2018	<u>40</u>	<u>78</u>	<u>29</u>	<u>147</u>

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Glossary of Terms

Actuarial Liability

The difference between the actuarial present value of all Fund benefits and the actuarial value of future normal costs. Also referred to as “actuarial accrued liability.”

Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method

A mathematical budgeting procedure of allocating the dollar amount of the actuarial present value of retirement fund benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

Experience Gain (Loss)

The difference between actual experience and anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.

Amortization

Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with a lump sum payment.

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Normal Cost

The actuarial present value of retirement fund benefits allocated to the current year by the actuarial cost method.

Unfunded Actuarial Liability

The difference between actuarial liability and the valuation assets.

Most retirement systems have unfunded actuarial liability. They arise each time new benefits are added, each time an actuarial loss is realized and when actuarial assumptions are modified.

Accumulated Benefits

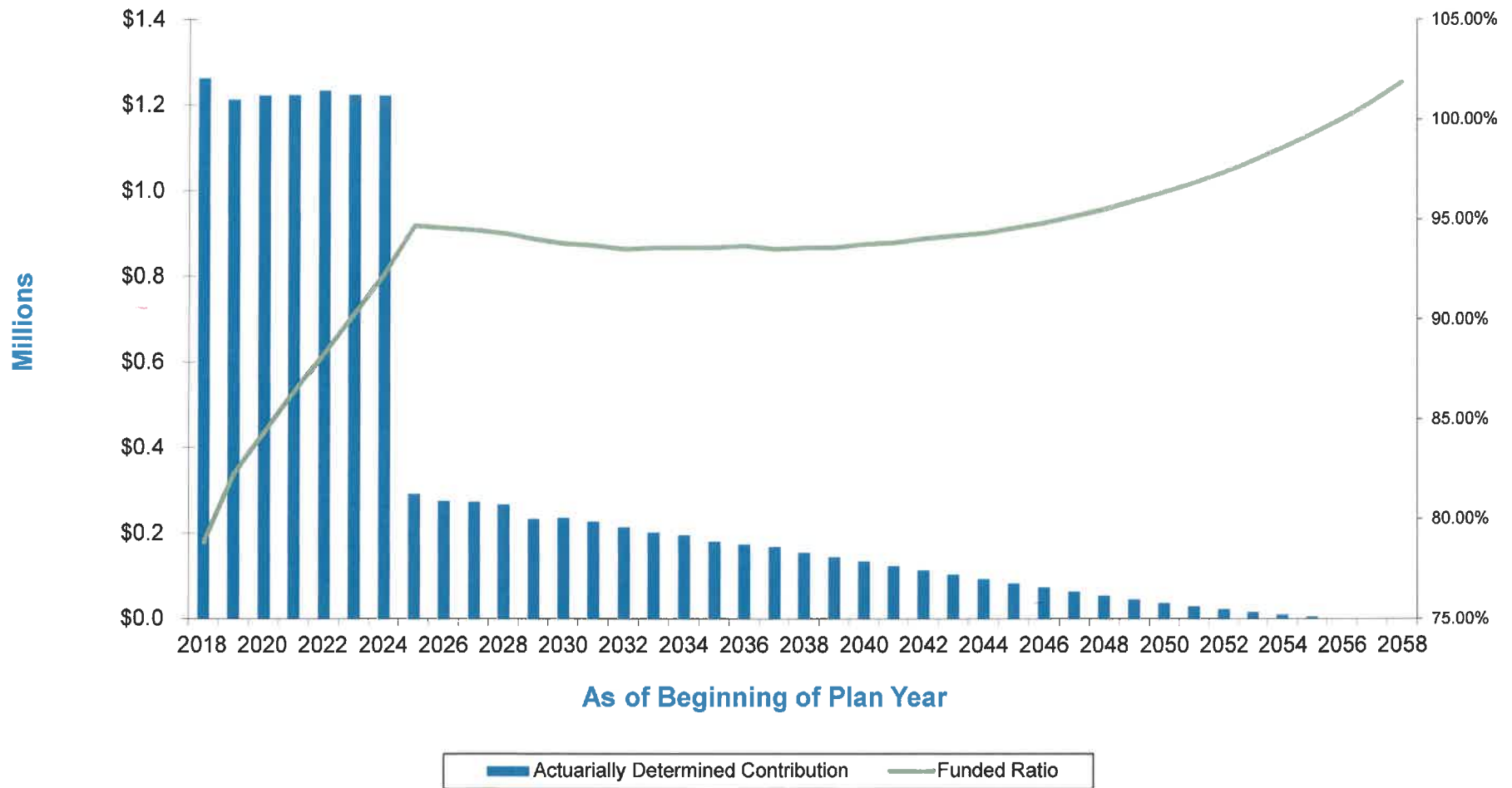
Sometimes referred to as Accrued Benefits. These are the benefits that have been earned by all plan members as of the valuation date.

Actuarially Determined Contribution

This is the annual contribution determined in accordance with a plan's funding policy - typically the sum of the Normal Cost and an Amortization payment towards the Unfunded Actuarial Liability.

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Retirement Plan for Employees of the City of Creve Coeur 2018 Projections



Assumptions are the same as 2018 valuation except for the following:

- Expenses remain the same
- Employer contributes Actuarially Determined Contribution each year
- Employees contribute 3% of salary

Name of Plan	Funded Ratio	Actuarial Value of Assets	Actuarial Accrued Liability	Interest Rate	Prior Year Interest Rate
Pattonville-Bridgeton FPD Retirement Plan	89%	\$ 31,924,179	\$ 36,023,022	7.750%	
University of MO Retirement, Disability & Death Benefit Plan	88%	\$ 3,433,435,252	\$ 3,892,721,464	7.750%	
Bothwell Regional Health Center Retirement Plan	86%	\$ 45,609,455	\$ 53,049,883	7.750%	
Public Education Employees Retirement System (non-Teacher)	86%	\$ 4,157,426,545	\$ 4,809,665,957	7.750%	8.000%
Public School Retirement System	85%	\$ 35,419,277,279	\$ 41,744,618,662	7.750%	8.000%
St. Louis County Employees Retirement Plan	71%	\$ 644,413,232	\$ 903,910,334	7.750%	
Kansas City Public School Retirement System	70%	\$ 684,412,437	\$ 981,514,827	7.750%	8.000%
Modot & Highway Patrol Employees' Retirement System	55%	\$ 2,086,654,348	\$ 3,761,733,004	7.750%	
Missouri State Employees Retirement System	70%	\$ 8,878,057,191	\$ 12,751,162,753	7.650%	8.000%
Judges Retirement System	26%	\$ 143,468,860	\$ 547,621,617	7.650%	8.000%
St. Louis City Firefighter's Retirement Plan	42%	\$ 45,120,452	\$ 107,261,214	7.625%	
Ferguson Pension Plan	106%	\$ 25,044,816	\$ 23,615,388	7.500%	
Hazelwood City Council Members Retirement Plan	100%	\$ 148,994	\$ 148,994	7.500%	
Hazelwood Retirement Plan	88%	\$ 36,085,758	\$ 41,097,041	7.500%	
Kansas City Employees' Retirement System	83%	\$ 1,055,813,977	\$ 1,268,159,303	7.500%	
Rock Community FPD Retirement Plan	82%	\$ 15,466,053	\$ 18,928,882	7.500%	
St. Louis Employees Retirement System	82%	\$ 797,664,391	\$ 974,143,079	7.500%	
Kansas City Civilian Police Employees' Retirement System	79%	\$ 130,604,532	\$ 165,081,932	7.500%	
St. Louis Public School Retirement System	79%	\$ 901,076,683	\$ 1,133,555,454	7.500%	8.000%
Kansas City Firefighters' Pension System	78%	\$ 488,878,575	\$ 624,244,469	7.500%	
St. Louis Police Retirement System	78%	\$ 744,511,885	\$ 954,458,462	7.500%	7.750%
Kansas City Police Retirement System	76%	\$ 821,895,127	\$ 1,076,824,221	7.500%	
County Employees Retirement Fund	71%	\$ 477,065,373	\$ 672,625,878	7.500%	
Bridgeton Employees Retirement Plan	66%	\$ 28,190,166	\$ 42,833,166	7.500%	
Raytown Policemen's Retirement Fund	60%	\$ 10,744,781	\$ 17,763,413	7.500%	
Lagers Staff Retirement Plan	100%	\$ 9,898,905	\$ 9,944,748	7.250%	
North Kansas City Hospital Retirement Plan	98%	\$ 254,741,289	\$ 258,780,745	7.250%	7.000%
Local Government Employees Retirement System	95%	\$ 6,320,171,438	\$ 6,671,352,337	7.250%	
Olivette Salaried Employees' Retirement Plan	77%	\$ 19,483,954	\$ 25,313,425	7.250%	
Glendale Pension Plan	66%	\$ 5,297,142	\$ 7,994,061	7.250%	7.500%
St. Joseph's Policemen's Pension Fund	69%	\$ 37,470,811	\$ 54,228,718	7.100%	7.500%
Maplewood Police & Fire Retirement Fund	183%	\$ 12,339,403	\$ 6,741,053	7.000%	
Metro North Fire Protection District Retirement Plan	121%	\$ 2,045,064	\$ 1,696,840	7.000%	
Community Fire Protection District Retirement Plan	99%	\$ 26,842,748	\$ 27,022,230	7.000%	

Valley Park FPD Retirement Plan	94%	\$	5,530,492	\$	5,859,770	7.000%	
Black Jack FPD Retirement Plan	92%	\$	13,147,509	\$	14,283,531	7.000%	
St. Louis Firemen's Retirement System	92%	\$	465,333,704	\$	503,718,897	7.000%	
Creve Coeur FPD Retirement Plan	90%	\$	9,620,138	\$	10,631,792	7.000%	
Ladue Non-Uniformed Employees Retirement Plan	89%	\$	4,612,977	\$	5,171,511	7.000%	
Clayton Non-Uniformed Employee Pension Plan	88%	\$	15,443,000	\$	17,501,806	7.000%	
Clayton Uniformed Employees Pension Plan	88%	\$	39,298,843	\$	44,677,927	7.000%	
Eureka FPD Retirement Plan	88%	\$	10,947,864	\$	12,381,046	7.000%	
St. Louis County Library District Employees' Pension Plan	88%	\$	45,105,978	\$	51,344,759	7.000%	
Bi-State Development Agency Local 2 I.B.E.W	87%	\$	4,053,469	\$	4,673,515	7.000%	7.250%
Brentwood Police & Firemen's Retirement Fund	85%	\$	35,830,520	\$	42,261,343	7.000%	
Fenton FPD Retirement Plan	85%	\$	19,289,002	\$	34,310,646	7.000%	7.250%
Saline Valley Fire Protection District Retirement Plan	85%	\$	2,579,773	\$	3,047,287	7.000%	
Prosecuting Attorneys' & Circuit Attorneys' Retirement System	84%	\$	37,851,019	\$	45,074,928	7.000%	
Metro St. Louis Sewer District Employees Pension Plan	82%	\$	260,826,650	\$	318,049,216	7.000%	
Jackson County Employees Pension Plan	81%	\$	255,800,290	\$	315,021,758	7.000%	
Creve Coeur Employees Retirement Plan	78%	\$	23,220,080	\$	29,581,707	7.000%	
Ladue Police & Fire Pension Plan	78%	\$	31,925,044	\$	41,107,506	7.000%	
Springfield Police & Fire Retirement Fund	77%	\$	367,311,417	\$	479,883,569	7.000%	
High Ridge Fire Protection District Pension Plan	76%	\$	7,506,865	\$	9,932,366	7.000%	
KC Area Transportation Authority Salaried Employees Pension Plan	76%	\$	17,007,073	\$	22,272,288	7.000%	7.500%
Overland Non-Uniform Pension Fund	76%	\$	10,373,904	\$	13,693,032	7.000%	
Metro West FPD Retirement Plan	75%	\$	48,681,825	\$	64,546,767	7.000%	
Berkeley Police & Fire Pension Fund	74%	\$	12,638,858	\$	17,125,602	7.000%	7.500%
Carthage Policemen's & Firemen's Pension Plan	73%	\$	6,956,920	\$	9,534,199	7.000%	
KC Transportation Authority Union Employees Pension Plan	72%	\$	47,143,196	\$	65,361,393	7.000%	7.500%
Bi-State Development Agency Salaried Employees	71%	\$	59,578,888	\$	83,570,358	7.000%	7.500%
Sedalia Firemen's Retirement Fund	65%	\$	6,986,184	\$	10,783,917	7.000%	
Joplin Police & Fire Pension Plan	64%	\$	38,951,859	\$	61,224,035	7.000%	
Overland Police Retirement Fund	61%	\$	12,998,479	\$	21,431,150	7.000%	
Bi-State Development Agency Division 788, A.T.U	60%	\$	122,802,782	\$	205,061,983	7.000%	7.250%
Columbia Firemen's Retirement Plan	55%	\$	75,438,867	\$	137,828,858	7.000%	7.500%
Columbia Police Retirement Plan	55%	\$	50,744,190	\$	91,623,783	7.000%	7.500%
Hannibal Police & Fire Retirement Plan	51%	\$	15,628,079	\$	30,515,641	7.000%	7.500%
Missouri Higher Education Loan Authority PP	92%	\$	39,112,673	\$	42,697,969	6.750%	
Richmond Heights Police & Fire Retirement Plan	123%	\$	53,269,073	\$	43,410,026	6.500%	7.000%
Arnold Police Pension Plan	106%	\$	11,256,652	\$	10,659,050	6.500%	
North Kansas City Policemen's & Firemen's Retirement Fund	95%	\$	48,471,548	\$	50,832,226	6.500%	
Sheriff's Retirement System	92%	\$	42,108,813	\$	45,598,652	6.500%	
University City Police & Fire Retirement Fund	79%	\$	28,159,667	\$	35,475,255	6.500%	

University City Non-Uniformed Retirement Plan	78%	\$	21,614,244	\$	27,801,658	6.500%	
Affton FPD Retirement Plan	65%	\$	7,931,637	\$	12,285,739	6.500%	
Rockhill Police & Firemen's Pension Plan	56%	\$	1,951,255	\$	3,463,654	6.400%	
Florissant Valley FPD Retirement Plan	91%	\$	27,211,946	\$	29,764,379	6.250%	
Mid-County FPD Retirement Plan	82%	\$	1,885,418	\$	2,292,324	6.000%	7.000%
Florissant Employees Pension Plan	80%	\$	10,425,381	\$	13,106,563	6.000%	
Antonia FPD Pension Plan	65%	\$	2,079,590	\$	3,189,496	6.000%	
Jennings Police & Firemen's Retirement Fund	50%	\$	4,184,172	\$	8,291,582	6.000%	
Sedalia Police Retirement Fund	32%	\$	3,238,807	\$	10,089,024	6.000%	
Jefferson City Firemen's Retirement System	89%	\$	15,764,278	\$	17,801,507	5.500%	
Little River Drainage District Retirement Plan	109%	\$	1,302,782	\$	1,190,546	5.000%	
Poplar Bluff Police & Fire Pension Plan	67%	\$	12,694,596	\$	19,018,220	5.000%	5.500%
Mehlville FPD Retirement Plan	50%	\$	5,328,563	\$	10,616,331	5.000%	
Warrenton Fire Protection District Length of Service Awards Program	89%	\$	282,566	\$	317,645	4.750%	
Cedar Hill FPD Length of Svc Awards Program	72%	\$	140,255	\$	194,991	4.750%	
Bi-State Development Agency Division 788 Clerical Unit ATU							

Name of Plan	Funded Ratio	Actuarial Value of Assets	Actuarial Accrued Liability	Interest Rate	Prior Year Interest Rate
Maplewood Police & Fire Retirement Fund	183%	\$ 12,339,403	\$ 6,741,053	7.000%	
Richmond Heights Police & Fire Retirement Plan	123%	\$ 53,269,073	\$ 43,410,026	6.500%	7.000%
Metro North Fire Protection District Retirement Plan	121%	\$ 2,045,064	\$ 1,696,840	7.000%	
Little River Drainage District Retirement Plan	109%	\$ 1,302,782	\$ 1,190,546	5.000%	
Arnold Police Pension Plan	106%	\$ 11,256,652	\$ 10,659,050	6.500%	
Ferguson Pension Plan	106%	\$ 25,044,816	\$ 23,615,388	7.500%	
Hazelwood City Council Members Retirement Plan	100%	\$ 148,994	\$ 148,994	7.500%	
Lagers Staff Retirement Plan	100%	\$ 9,898,905	\$ 9,944,748	7.250%	
Community Fire Protection District Retirement Plan	99%	\$ 26,842,748	\$ 27,022,230	7.000%	
North Kansas City Hospital Retirement Plan	98%	\$ 254,741,289	\$ 258,780,745	7.250%	7.000%
Local Government Employees Retirement System	95%	\$ 6,320,171,438	\$ 6,671,352,337	7.250%	
North Kansas City Policemen's & Firemen's Retirement Fund	95%	\$ 48,471,548	\$ 50,832,226	6.500%	
Valley Park FPD Retirement Plan	94%	\$ 5,530,492	\$ 5,859,770	7.000%	
Black Jack FPD Retirement Plan	92%	\$ 13,147,509	\$ 14,283,531	7.000%	
Missouri Higher Education Loan Authority PP	92%	\$ 39,112,673	\$ 42,697,969	6.750%	
Sheriff's Retirement System	92%	\$ 42,108,813	\$ 45,598,652	6.500%	
St. Louis Firemen's Retirement System	92%	\$ 465,333,704	\$ 503,718,897	7.000%	
Florissant Valley FPD Retirement Plan	91%	\$ 27,211,946	\$ 29,764,379	6.250%	
Creve Coeur FPD Retirement Plan	90%	\$ 9,620,138	\$ 10,631,792	7.000%	
Jefferson City Firemen's Retirement System	89%	\$ 15,764,278	\$ 17,801,507	5.500%	
Ladue Non-Uniformed Employees Retirement Plan	89%	\$ 4,612,977	\$ 5,171,511	7.000%	
Pattonville-Bridgeton FPD Retirement Plan	89%	\$ 31,924,179	\$ 36,023,022	7.750%	
Warrenton Fire Protection District Length of Service Awards Program	89%	\$ 282,566	\$ 317,645	4.750%	
Clayton Non-Uniformed Employee Pension Plan	88%	\$ 15,443,000	\$ 17,501,806	7.000%	
Clayton Uniformed Employees Pension Plan	88%	\$ 39,298,843	\$ 44,677,927	7.000%	
Eureka FPD Retirement Plan	88%	\$ 10,947,864	\$ 12,381,046	7.000%	
Hazelwood Retirement Plan	88%	\$ 36,085,758	\$ 41,097,041	7.500%	
St. Louis County Library District Employees' Pension Plan	88%	\$ 45,105,978	\$ 51,344,759	7.000%	
University of MO Retirement, Disability & Death Benefit Plan	88%	\$ 3,433,435,252	\$ 3,892,721,464	7.750%	
Bi-State Development Agency Local 2 I.B.E.W	87%	\$ 4,053,469	\$ 4,673,515	7.000%	7.250%
Bothwell Regional Health Center Retirement Plan	86%	\$ 45,609,455	\$ 53,049,883	7.750%	
Public Education Employees Retirement System (non-Teacher)	86%	\$ 4,157,426,545	\$ 4,809,665,957	7.750%	8.000%
Brentwood Police & Firemen's Retirement Fund	85%	\$ 35,830,520	\$ 42,261,343	7.000%	
Fenton FPD Retirement Plan	85%	\$ 19,289,002	\$ 34,310,646	7.000%	7.250%

Public School Retirement System	85%	\$ 35,419,277,279	\$ 41,744,618,662	7.750%	8.000%
Saline Valley Fire Protection District Retirement Plan	85%	\$ 2,579,773	\$ 3,047,287	7.000%	
Prosecuting Attorneys' & Circuit Attorneys' Retirement System	84%	\$ 37,851,019	\$ 45,074,928	7.000%	
Kansas City Employees' Retirement System	83%	\$ 1,055,813,977	\$ 1,268,159,303	7.500%	
Metro St. Louis Sewer District Employees Pension Plan	82%	\$ 260,826,650	\$ 318,049,216	7.000%	
Mid-County FPD Retirement Plan	82%	\$ 1,885,418	\$ 2,292,324	6.000%	7.000%
Rock Community FPD Retirement Plan	82%	\$ 15,466,053	\$ 18,928,882	7.500%	
St. Louis Employees Retirement System	82%	\$ 797,664,391	\$ 974,143,079	7.500%	
Jackson County Employees Pension Plan	81%	\$ 255,800,290	\$ 315,021,758	7.000%	
Florissant Employees Pension Plan	80%	\$ 10,425,381	\$ 13,106,563	6.000%	
Kansas City Civilian Police Employees' Retirement System	79%	\$ 130,604,532	\$ 165,081,932	7.500%	
St. Louis Public School Retirement System	79%	\$ 901,076,683	\$ 1,133,555,454	7.500%	8.000%
University City Police & Fire Retirement Fund	79%	\$ 28,159,667	\$ 35,475,255	6.500%	
Creve Coeur Employees Retirement Plan	78%	\$ 23,220,080	\$ 29,581,707	7.000%	
Kansas City Firefighters' Pension System	78%	\$ 488,878,575	\$ 624,244,469	7.500%	
Ladue Police & Fire Pension Plan	78%	\$ 31,925,044	\$ 41,107,506	7.000%	
St. Louis Police Retirement System	78%	\$ 744,511,885	\$ 954,458,462	7.500%	7.750%
University City Non-Uniformed Retirement Plan	78%	\$ 21,614,244	\$ 27,801,658	6.500%	
Olivette Salaried Employees' Retirement Plan	77%	\$ 19,483,954	\$ 25,313,425	7.250%	
Springfield Police & Fire Retirement Fund	77%	\$ 367,311,417	\$ 479,883,569	7.000%	
High Ridge Fire Protection District Pension Plan	76%	\$ 7,506,865	\$ 9,932,366	7.000%	
Kansas City Police Retirement System	76%	\$ 821,895,127	\$ 1,076,824,221	7.500%	
KC Area Transportation Authority Salaried Employees Pension Plan	76%	\$ 17,007,073	\$ 22,272,288	7.000%	7.500%
Overland Non-Uniform Pension Fund	76%	\$ 10,373,904	\$ 13,693,032	7.000%	
Metro West FPD Retirement Plan	75%	\$ 48,681,825	\$ 64,546,767	7.000%	
Berkeley Police & Fire Pension Fund	74%	\$ 12,638,858	\$ 17,125,602	7.000%	7.500%
Carthage Policemen's & Firemen's Pension Plan	73%	\$ 6,956,920	\$ 9,534,199	7.000%	
Cedar Hill FPD Length of Svc Awards Program	72%	\$ 140,255	\$ 194,991	4.750%	
KC Transportation Authority Union Employees Pension Plan	72%	\$ 47,143,196	\$ 65,361,393	7.000%	7.500%
Bi-State Development Agency Salaried Employees	71%	\$ 59,578,888	\$ 83,570,358	7.000%	7.500%
County Employees Retirement Fund	71%	\$ 477,065,373	\$ 672,625,878	7.500%	
St. Louis County Employees Retirement Plan	71%	\$ 644,413,232	\$ 903,910,334	7.750%	
Kansas City Public School Retirement System	70%	\$ 684,412,437	\$ 981,514,827	7.750%	8.000%
Missouri State Employees Retirement System	70%	\$ 8,878,057,191	\$ 12,751,162,753	7.650%	8.000%
St. Joseph's Policemen's Pension Fund	69%	\$ 37,470,811	\$ 54,228,718	7.100%	7.500%
Poplar Bluff Police & Fire Pension Plan	67%	\$ 12,694,596	\$ 19,018,220	5.000%	5.500%
Bridgeton Employees Retirement Plan	66%	\$ 28,190,166	\$ 42,833,166	7.500%	
Glendale Pension Plan	66%	\$ 5,297,142	\$ 7,994,061	7.250%	7.500%
Afton FPD Retirement Plan	65%	\$ 7,931,637	\$ 12,285,739	6.500%	
Antonia FPD Pension Plan	65%	\$ 2,079,590	\$ 3,189,496	6.000%	

Sedalia Firemen's Retirement Fund	65%	\$	6,986,184	\$	10,783,917	7.000%	
Joplin Police & Fire Pension Plan	64%	\$	38,951,859	\$	61,224,035	7.000%	
Overland Police Retirement Fund	61%	\$	12,998,479	\$	21,431,150	7.000%	
Bi-State Development Agency Division 788, A.T.U	60%	\$	122,802,782	\$	205,061,983	7.000%	7.250%
Raytown Policemen's Retirement Fund	60%	\$	10,744,781	\$	17,763,413	7.500%	
Rockhill Police & Firemen's Pension Plan	56%	\$	1,951,255	\$	3,463,654	6.400%	
Columbia Firemen's Retirement Plan	55%	\$	75,438,867	\$	137,828,858	7.000%	7.500%
Columbia Police Retirement Plan	55%	\$	50,744,190	\$	91,623,783	7.000%	7.500%
Modot & Highway Patrol Employees' Retirement System	55%	\$	2,086,654,348	\$	3,761,733,004	7.750%	
Hannibal Police & Fire Retirement Plan	51%	\$	15,628,079	\$	30,515,641	7.000%	7.500%
Jennings Police & Firemen's Retirement Fund	50%	\$	4,184,172	\$	8,291,582	6.000%	
Mehlville FPD Retirement Plan	50%	\$	5,328,563	\$	10,616,331	5.000%	
St. Louis City Firefighter's Retirement Plan	42%	\$	45,120,452	\$	107,261,214	7.625%	
Sedalia Police Retirement Fund	32%	\$	3,238,807	\$	10,089,024	6.000%	
Judges Retirement System	26%	\$	143,468,860	\$	547,621,617	7.650%	8.000%
Bi-State Development Agency Division 788 Clerical Unit ATU							



MEMORANDUM

DATE: October 30, 2018

TO: Mark Perkins, City Administrator

FROM: Lori Obermoeller, Director of Finance

SUBJECT: Annual Pension Contribution

The Pension Committee met on October 23, 2018 to discuss the annual actuarial report. In that report the actuary has recommended an annual contribution for FY 2019 of \$1,262,474. This computation was made based on the following assumptions adopted by the Employee Pension Fund Board of Trustees. The assumptions are as follows:

1. Rate of Return – 6.75% (previous rate before June 2018 was 7.0%).
2. Amortization Period – The amortization period was changed to 10-year fixed for unfunded liability as of the October 2015 actuarial report. Any additional unfunded liability after that date will be amortized on a 15-year rolling time period. (The previous amortization period for the unfunded liability was amortized on a 15-year rolling time period.)
3. 4% annual salary increase.

The city made the 1st quarterly payment for FY2019 on 8/6/18 in the amount of \$297,921. Staff is recommending, and with the Pension Boards approval, that the remaining contributions be made on November 13, 2018, November 14, 2018 and November 15, 2018 in the amounts of \$499,459, \$499,094 and \$11,281 respectively. We have a \$500,000 ACH limit which is why the payments are spread out over 3 days.

Since the actuarial computation is based upon an amount computed at July 1, 2018, additional interest at the plans assumed rate of 6.75% is required. The annual contribution will be \$59,488 more than the budgeted amount of \$1,248,267. Keep in mind that when we put the budget together, the assumed pension rate of return was 7%, but the Pension Board lowered the rate to 6.75% at the May 2018 meeting. This additional .5% increased the pension contribution payment by almost \$100,000, which is the reason we are slightly over budget.

We will not need to do a budget amendment at this time because the LAGERS contributions also affect these line items, so we will wait to see if we come in under budget on LAGERS. If we do come in under budget with LAGERS, we will not need a budget amendment for the pension line items.

I would be pleased to respond to any questions.

RESOLUTION NO. _____

**A RESOLUTION APPROVING THE FISCAL YEAR ENDING JUNE 30, 2019 CONTRIBUTIONS TO THE
EMPLOYEE PENSION FUND IN THE TOTAL AMOUNT OF \$1,307,755**

WHEREAS, THE CITY OF CREVE COEUR PROVIDES A DEFINED BENEFIT (DB) PENSION PLAN FOR ELIGIBLE EMPLOYEES, AND

WHEREAS THE PENSION PLAN IS FUNDED THROUGH ANNUAL CONTRIBUTIONS BY THE CITY, AND

WHEREAS, THE ANNUAL ACTUARIAL STUDY HAS RECOMMENDED A CONTRIBUTION OF \$1,262,474 AS OF JULY 1, 2018, AND

WHEREAS, THE CITY HAS MADE ONE PAYMENT OF \$297,921 ON AUGUST 6, 2018 PURSUANT TO THE BUDGET FOR THE 1ST QUARTER OF THE FISCAL YEAR WHICH INCLUDED INTEREST AT AN ANNUAL RATE OF 6.75% PURSUANT TO CITY POLICY, AND

WHEREAS, STAFF IS RECOMMENDING THE REMAINING CONTRIBUTIONS TO BE MADE IN THREE PAYMENTS DUE TO BANK LIMITATIONS, WITH ONE ON NOVEMBER 13TH, ONE ON NOVEMBER 14TH AND ONE ON NOVEMBER 15TH FOR \$499,459, \$499,094 AND \$11,281 RESPECTIVELY AND

WHEREAS, IT IS IMPORTANT TO MAINTAIN THE ANNUAL REQUIRED FUNDING FOR THE PLAN, AND

WHEREAS, THE ANNUAL CONTRIBUTION WAS INCLUDED IN THE FISCAL YEAR 2019 BUDGET, AND

WHEREAS, THE BUDGETED AMOUNT FOR PENSION PAYMENT IS \$59,488 LESS THAN THE RECOMMENDED ACTUARIAL CONTRIBUTION PLUS INTEREST FOR FY 2019.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CREVE COEUR, MISSOURI THAT:

SECTION 1. THE DIRECTOR OF FINANCE IS HEREBY DIRECTED TO MAKE A CONTRIBUTION IN THE AMOUNT OF \$1,009,834 IN THREE PAYMENTS THROUGH NOVEMBER 15TH INCLUDING INTEREST AT AN ANNUAL RATE OF 6.75% TO THE CITY EMPLOYEE DEFINED BENEFIT (DB) PLAN AS APPROPRIATED IN THE FISCAL YEAR 2019 BUDGET AND AUTHORIZED HEREIN.

SECTION 2. THIS RESOLUTION SHALL TAKE EFFECT UPON APPROVAL.

ADOPTED THIS 12TH DAY OF NOVEMBER 2018.

BARRY GLANTZ, MAYOR

ATTEST:

DEBORAH RYAN
CITY CLERK