



**AGENDA  
CITY OF CREVE COEUR  
EMPLOYEE PENSION BOARD OF  
TRUSTEES  
ONLINE MEETING  
MAY 31, 2023  
3:00 PM**

**ZOOM MEETING INFORMATION**

This will be an online-only meeting. Members of the public may access live audio and/or video at the following link:

<https://us02web.zoom.us/j/84672552047?pwd=TjZwb1pScEMvNnRSRIBWRnh4a1hPUT09>

Meeting ID: 846 7255 2047 Phone: 1-646-931-3860

**CALL TO ORDER**

**APPROVAL OF AGENDA**

**APPROVAL OF MINUTES**

**Approval of the April 18th Employee Pension Board of Trustees Meeting Minutes**

**NEW BUSINESS**

- Resolution & Joinder Agreement for Dissolving and Transferring Administrative Authority to LAGERS
- Draft 45 Day Notice of Proposed Pension Changes
- Powerpoint from Budget Work Session on May 8th

**ADJOURNMENT**

Posted by: \_\_\_\_\_

Date/Time posted: \_\_\_\_\_



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MAY 31, 2023  
3:00 PM**

***If you need special accommodations to attend a meeting, services may be arranged by contacting the Office of the City Administrator in advance.***



**MINUTES  
CITY OF CREVE COEUR  
EMPLOYEE PENSION BOARD OF  
TRUSTEES  
ONLINE MEETING  
APRIL 18, 2023  
3:00 PM**

**ZOOM MEETING INFORMATION**

**Due to extreme circumstances regarding the COVID-19 pandemic, this meeting will be held online only. Members of the public may access live audio and/or video at the following link:**

**<https://us02web.zoom.us/j/86477772031?pwd=Z2pWVm9XTVpXRVo2Qm1SeHFjZ3ZOQT09>**

**Meeting ID: 864 7777 2031 Phone: +16469313860**

**CALL TO ORDER**

Meeting was called to order by Michael Karasick at 3:05 p.m.

In attendance:

Joseph Martinich-Council Liaison  
Michael Karasick-Chair  
Carol Lippman-Board Member  
Michel Breitenstein-Employee Representative  
Lori Obermoeller-Director of Finance  
Tracy Brothers-Senior Accounting Associate  
Jack Dwyer-Sunpointe Investments  
Mark Perkins-City Administrator  
Sharon Stott- Assistant City Administrator  
Lee Bordouris-Sunpointe Investments  
Jonathan McIntosh-Employee Representative

**PUBLIC COMMENTS**

**APPROVAL OF AGENDA**

Motion to Approve Agenda  
Result: Approved (Unanimous)  
Mover: Joe Martinich  
Seconder: Jonathan McIntosh  
Ayes: Breitenstein, Lippman, Karasick



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**APPROVAL OF MINUTES**

**Approval of the March 22, 2023 Special Employee Pension Board of Trustees Meeting Minutes**

Motion to Approve Minutes from 3/22/23 Pension Meeting

Result: Approved (Unanimous)

Mover: Joe Martinich

Secunder: Jonathan McIntosh

Ayes: Breitenstein, Lippman, Karasick

**REPORTS**

**1st Quarter Report-Commerce (Report Only)**

**1st Quarter Report-Sunpointe (Presenting)**

(1) Portfolio Implementation Update:

a. On 1/25/23 we sold \$393,479 of Vanguard Total Stock Market and invested the proceeds in Vanguard Total Bond (\$251,154) and PIMCO Income (\$150,000) to keep the portfolio near its target allocation.

b. On 3/9/23 we sold Vanguard FTSE Developed Markets (\$250,518), Vanguard Total Stock Market (\$150,616) and Vanguard Total Bond (\$99,935) to raise funds for the Commerce account. We journaled \$500,000 to Commerce on 3/13/23 to raise funds for future distribution payments and keep the account above its minimum balance.

(2) Asset Allocation:

a. At the end of the first quarter, the portfolio was 60.2% risky assets and 39.8% risk mitigation assets, near its target of 60% risky assets and 40% risk mitigation.

b. The portfolio remains in line with the constraints in the investment policy statement (IPS).

(3) Quarterly Performance Report:

a. The portfolio gained 4.5% during the first quarter as equity and bond markets rose.



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- b. For the quarter, the portfolio lagged the primary benchmark by 90 basis points (one basis point is 0.01%).
  - i. The risk mitigation (bond) bucket nearly matched the Bloomberg US Aggregate (+2.8% vs. +3.0%). The portfolio's shorter duration positioning than the benchmark led to the slight underperformance.
  - ii. The risky asset (equity) bucket lagged MSCI ACWI IMI by 90 basis points (+5.6% vs. +6.9%). The portfolio's overweight to value was a significant detractor as the value index trailed the broad US index by 8.2%. The tilts toward small-cap and US equities also hurt performance.
- c. The portfolio outperformed the primary benchmark (60/40) by 220 basis points over the trailing one-year period ending 3/31/23. The portfolio outperformed the secondary benchmark by 140 basis points over this period.
- d. Through 3/31/2023, the portfolio's fiscal YTD return is 6.1%.

(4) Private Investment Pricing:

- a. Related to the LAGERS discussion, we shared some information about the current pricing of private equity and real estate.
- b. The long-term illiquidity premium (expected outperformance of private vs. public investments) is generally accepted to be somewhere in the range of 2-5% and as you can see below, that has been the case over the last 7 years.
- c. However, over the past 12 months, both private equity and real estate have significantly outperformed their public counterparts because asset owners and funds have been slow to write down the value of their private investments. We would expect that trend to reverse over the next several quarters as either public markets rally, private investments are written down, or some combination of the two.

Real Estate

as of 12/31/22		1 Year	3 Years	5 Years	7 Years
MSCI US REIT (Total Return)	Public	-24.5%	-0.1%	3.7%	4.6%
NCREIF NPI Returns – National	Private	5.5%	8.1%	7.5%	7.5%
Difference (Public-Private)		-30.0%	-8.2%	-3.8%	-2.9%



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Private Equity

as of 9/30/22		1 Year	3 Years	5 Years	7 Years
Russell 3000	Public	-17.6%	7.7%	8.6%	10.9%
Cambridge Associates US Private Equity	Private	2.2%	19.0%	16.5%	15.4%
Difference (Public-Private)		-19.8%	-11.3%	-7.9%	-4.5%

**NEW BUSINESS**

**Follow up questions and answers to the 3/22/23 LAGERS pension meeting**

Lori referenced the document with follow-up questions and answers to the 3/22/23 LAGERS pension meeting. A question was raised about LAGERS assumed return rate. It is 7%. Mike is going to look into what their actuarial assumptions and what their level of leverages in their portfolio are. The City will not be responsible for LAGERS under-performing, so they will be a little insulated if they don't make the 7%. A question was raised about the timeline for a decision about moving to LAGERS. It will be brought to the budget meeting next week and also on May 8th. Mark agreed that, that was the plan before a decision would be made. It would be helpful to have Mike at the May 8th budget meeting work session. Mike continued discussion regarding if LAGERS does not meet it's 7% goal. Mark says there is a policy in place with regard to how much the LAGERS rate can vary from year to year. It is to regulate the impact of market swings. Mike is concerned about how far the pool of \$5 million dollars would go before being drained. Then the city would be liable for losses. Lori says we are fully funding for the retirees once they are transferred over to LAGERS. Mark agrees that the board has to sign off on the move to LAGERS.

**OLD BUSINESS**

**RETIREMENT ACTIVITY**

**1 Retired Employee: Brad Holmes (Community Devel-Building Dept) March 2023**



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**ADJOURNMENT**

Motion to Adjourn

Result: Approved (Unanimous)

Mover: Mike Karasick

Seconder: Carol Lippman

Ayes: Breitenstein, Martinich, McIntosh

DRAFT



# MEMORANDUM

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**DATE:** May 26, 2023

**TO:** Mark Perkins, City Administrator

**FROM:** Lori Obermoeller, Director of Finance

**SUBJECT:** Joinder Agreement

In 2017, all Creve Coeur employees hired after June of 2006 were enrolled in the Missouri Local Government Employees Retirement System (LAGERS). Employees hired prior to June 2006 stayed in the City's Legacy Pension Plan.

At the time of joining LAGERS, there was also a strong interest in having LAGERS assuming responsibility for administration of the Legacy Plan, as the State Legislature had recently adopted legislation allowing LAGERS to handle administration of closed public defined benefit plans. However, transferring administration of the Creve Coeur Legacy Plan to LAGERS was not practical at that time.

There is now an opportunity to transfer administration of the Plan to LAGERS, thereby reducing the city's administrative costs and financial risk. The 23 active employees in the Legacy plan would be transferred to a LAGERS benefit with their previous service credit.

After considerable discussion with the City Council, Pension Board and Finance Committee, the City Council has requested staff to prepare the necessary legislation to close the Legacy Retirement Plan and transfer administration to LAGERS. Therefore, the attached Resolution and Joinder Agreement have been drafted.

Prior to the transfer of the administration of the Legacy plan to LAGERS, the City Council has indicated its intention of providing a cost-of-living adjustment to retirees in the amount of 0.75% for each year of retirement since 2002, and 0.5% annually going forward.

Staff is recommending the Pension Board approve and execute these agreements.

**RESOLUTION \_\_\_\_\_**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE DEFINED BENEFIT RETIREMENT PLAN FOR EMPLOYEES OF THE CITY OF CREVE COEUR, MISSOURI, CONCURRING WITH THE ANTICIPATED APPROVAL BY THE CITY COUNCIL OF AN AGREEMENT WITH THE MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM TO OPERATE THE RETIREMENT PLAN.**

**WHEREAS**, Section 70.621 RSMo authorizes the Missouri Local Government Employees Retirement System (“LAGERS”) to operate the City of Creve Coeur’s Defined Benefit Retirement Plan for Employees of the City (the “Legacy Plan”) pursuant to an approved agreement; and

**WHEREAS**, prior to approval of such agreement by the City Council, Section 70.621 RSMo requires a concurring resolution of the Board of Trustees of the Legacy Plan approving such agreement; and

**WHEREAS**, the Board of Trustees recognizes the benefits to plan participants of transferring responsibility for operation of the Legacy Plan from the Board to LAGERS; and

**WHEREAS**, this Resolution was considered at a public meeting after posting of required public notice and all persons who presented themselves at said meeting and desiring to be heard were given an opportunity to be heard and a copy of the proposed Resolution has been made available for public inspection prior to its consideration by the Board of Trustees; and

**WHEREAS**, the Board of Trustees has determined that it is fully and sufficiently informed on the matter and that the proposed Resolution is in the best interests of participants in the Legacy Plan; and

**WHEREAS**, the Board of Trustees recognizes that it will be dissolved in due course upon the completion of transfer of operational authority for the Legacy Plan to LAGERS;

**NOW, THEREFORE**, be it resolved by the Board of Trustees of the Defined Benefit Retirement Plan for Employees of the City of Creve Coeur, Missouri, as follows:

**Section 1:**

The Board of Trustees approves entering into an agreement with LAGERS substantially in the form of **Exhibit A** attached hereto, regarding the operation of the Legacy Plan and the Chairperson of the Board or his designee are hereby authorized and directed to enter into and execute that agreement. The agreement as executed shall be consistent with the provisions and intent of this Resolution with such changes as are determined by the executing officer to be necessary, desirable, convenient or proper in order to carry out the matters herein authorized. The Chairperson and his designated representatives are hereby authorized and directed to take any and all actions necessary, desirable, convenient, or proper in order to carry out the intent of this Resolution, the matters herein authorized, and the rights and duties of the Board under the agreements.

**Section 2.** The Board of Trustees shall be dissolved upon the completion of transfer of operational authority for the Legacy Plan to LAGERS pursuant to the approved agreement.

**Section 3.** This Resolution shall become effective immediately upon adoption.

ADOPTED BY VOTE OF \_\_\_ OF THE \_\_\_ MEMBERS OF THE BOARD OF TRUSTEES THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

\_\_\_\_\_  
MICHAEL KARASICK  
CHAIRPERSON

\_\_\_\_\_  
SECRETARY

ATTEST:

\_\_\_\_\_  
KELLIE HENKE, CITY CLERK, MPCC

**EXHIBIT A**  
**JOINDER AGREEMENT**

## **Joinder Agreement**

WHEREAS, the City of Creve Coeur, Missouri (“City”), is an employer in the Missouri Local Government Employees Retirement System (“LAGERS”) and is the sponsor of the Defined Benefit Retirement Plan for Employees of the City of Creve Coeur, Missouri (the “Plan”), which is a plan that is similar in purpose to LAGERS within the meaning of Section 70.621.1 RSMo; and

WHEREAS, the Board of Trustees of the Plan (“Pension Board”) is the current governing body of the Plan; and

WHEREAS, the Plan is frozen, and the City by Resolution \_\_\_\_\_ and Pension Board by Resolution \_\_\_\_\_ have approved entry into an agreement whereby LAGERS assumes all duties and responsibilities of operating the Plan, effective no later than \_\_\_\_\_; and

WHEREAS, the current Pension Board for the Plan will dissolve, and LAGERS will assume all operational duties and responsibilities for the Plan, and the board of LAGERS shall become the governing board of the Plan in accordance with Section 70.621 RSMo; and

WHEREAS, the City agrees that assets of the Plan shall be transferred to LAGERS’ benefit reserve fund created pursuant to Section 70.715 RSMo upon the termination of the Plan in a manner consistent with state and federal law and regulations; and

WHEREAS, the City shall continue to have sole responsibility for full funding of the Plan including related expenses; and

WHEREAS, it is understood that in entering into this Agreement the City is also acting as agent for the Pension Board;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties agree as follows:

1. The City of Creve Coeur, by and through the City Council, irrevocably delegates and cedes to LAGERS all duties and responsibilities of operating the Plan in accordance with Section 70.621 RSMo.
2. The board of LAGERS shall become the governing board of the Plan in accordance with Section 70.621 RSMo.
3. Assets of the Plan shall be transferred to LAGERS’ benefit reserve fund created pursuant to Section 70.715 RSMo upon the termination of the Plan in a manner consistent with state and federal law and regulations.

4. The City will timely make available to LAGERS staff all personnel and financial data necessary for the administration of the Plan including the original files for each active participant. Such original files will be sent to LAGERS.
5. In any case of a question as to the membership status, eligibility for benefits or the amount thereof, or any other question related to benefits under the existing Creve Coeur Defined Benefit Retirement Plan, the City agrees that LAGERS is to decide the question.
6. The City Administrator and the duly authorized designees of the City Administrator are hereby authorized, empowered, and directed to act on behalf of the City to take any and all actions required to continue the frozen statute of the Creve Coeur Employees' Retirement Plan and discontinue contributions to it as required herein.
7. The City, to the extent permitted by law, agrees to hold LAGERS harmless from any liability with respect to this transaction, apart from those obligations imposed on LAGERS by Sections 70.600 – 70.755 RSMo., provided the transaction is completed according to the terms contained herein.
8. The City, to the extent permitted by law, agrees to indemnify and to hold LAGERS harmless from any and all claims, liabilities, losses, damages, court costs, and reasonable expenses (including reasonable attorneys' fees) that LAGERS may incur or suffer as a result of any discrepancy between the amount or other feature of the benefit of a participant or beneficiary as determined by the City and communicated by the City to LAGERS, and the amount or other feature of the benefit of a participant or beneficiary in accordance with the Plan document as determined by LAGERS or as determined by a final decision of a court with jurisdiction over the matter.
9. LAGERS, to the extent permitted by law, agrees to hold the City harmless from any liability with respect to this transaction, apart from those obligations imposed on the City under its Charter, Code, and Ordinances, provided the transaction is completed according to the terms contained herein.
10. The City Administrator and the duly authorized designees of the City Administrator are hereby authorized and directed to take any and all actions required to place the foregoing resolutions into effect, and the City confirms it understands such actions must include amending applicable sections of the City Code, and revising relevant Ordinances, such actions are to be taken promptly in accordance with local, state, and federal laws and procedures.
11. This Agreement will be effective as of the date agreed upon by the City and LAGERS following the receipt by LAGERS of the Plan participant and beneficiary data requested

by LAGERS and the determination by LAGERS that such data are reasonably acceptable.

12. IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year last executed by a party below and acknowledge receipt of one copy of the contract.

CITY OF CREVE COEUR, MISSOURI

MISSOURI LOCAL GOVERNMENT  
EMPLOYEES RETIREMENT SYSTEM

\_\_\_\_\_  
City Administrator Mark Perkins  
Date: \_\_\_\_\_

\_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

ATTEST:

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Title: \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

BOARD OF TRUSTEES OF THE DEFINED  
BENEFIT RETIREMENT PLAN FOR  
EMPLOYEES OF THE CITY OF CREVE  
COEUR, MISSOURI.

\_\_\_\_\_  
Title:  
Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Title:

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

## NOTICE OF PROPOSED PENSION CHANGES PER SECTION 105.675 RSMO

The City Council of the City of Creve Coeur is considering several "substantial proposed changes" in pension benefits as defined by Section 105.660 RSMo and other changes for: (1) the Defined Benefit Retirement Plan for Employees of the City of Creve Coeur as amended and restated effective March 8, 2021 (the "Legacy Plan") as well as for (2) the Missouri Local Government Employees Retirement System ("LAGERS") as it applies to City employees and retirees, as follows:

1. Adding two cost of living adjustments ("COLA") to the Legacy Plan:

(a) For all Benefits payable pursuant to Article IV of the Legacy Plan on or after September 1, 2023, the amount of the monthly Retirement Benefit paid for July 2023 for each Participant or Beneficiary of a Participant who first retired or received payment of such Benefit prior to January 1, 2023 shall be increased for purposes of subsequent payments by seventy-five one hundredth percent (0.75%) multiplied by the number of full years since the later of January 1, 2002 or the retiring Participant's actual Early, Late or Normal Retirement Date which triggered the payment of Benefits. Notwithstanding the foregoing, Participants who received a cash-out of their Accrued Benefit pursuant to Section 5.03, shall not be eligible for the Benefit described in the preceding sentence.

(b) For all Benefits payable pursuant to Article IV of the Legacy Plan on or after October 1, 2024, the monthly Retirement Benefit for each Participant or Beneficiary of a Participant who has received at least twelve monthly Benefit payments shall be increased on a yearly basis effective October 1, 2024 and subsequently each year effective October 1 by fifty one hundredth percent (0.50%). Notwithstanding the foregoing, Participants who received a cash-out of their Accrued Benefit pursuant to Section 5.03, shall not be eligible for the Benefit described in the preceding sentence.

2. Closing the Legacy Plan as to all active employees who are Participants in the Legacy Plan, and any subsequently rehired employee who would otherwise thereby become a Participant in the

Legacy Plan, causing them to cease to be such Participants and instead become members in LAGERS under Sections 70.600 et seq RSMo.

3. Changing the benefit structure under LAGERS for future retirees to Benefit program L-6, whereby a member with credited service covered by benefit program L-6 shall receive an allowance for life equal to two percent of the member's final average salary multiplied by the number of years of such credited service (See Section 70.655.1(5) RSMo).

4. Entering into an agreement with LAGERS for that system to take over management, operation and administration of the Legacy Plan for remaining Participants, with corresponding changes including regarding procedures, requirements, and time of payment and forms of benefits.

As provided in Section 105.675 RSMo, statements regarding the cost of the aforesaid substantive proposed changes have been prepared in accordance with section 105.665 RSMo. and are being made available as public information for at least forty-five calendar days before the City Council considers taking final action to adopt said substantial proposed change in benefits. These statements of costs have been filed in the office of the City Clerk, 300 N. New Ballas Rd, Creve Coeur, Missouri 63141, and have been filed with the state joint committee on public employee retirement. Interested parties may view a copy of this cost information at the office of the City Clerk and/or by submitting a request for such information to the City Clerk or the state joint committee.

This notice was posted on the City lobby bulletin board \_\_\_\_\_, 2023

This notice was posted on City employee bulletin boards \_\_\_\_\_, 2023

This notice was posted on the City website \_\_\_\_\_, 2023

This notice was sent to the state joint committee \_\_\_\_\_, 2023

Verified by: \_\_\_\_\_



October 7, 2022 E-Mail

Mr. Jeff Pabst  
Education and Outreach Coordinator  
Missouri Local Government  
Employees Retirement System  
P.O. Box 1665  
Jefferson City, Missouri 65102

**Re: The City of Creve Coeur (#9103) – Local Defined Benefit Plan Joining LAGERS**

Dear Mr. Pabst:

As you requested, we have determined the computed employer contribution rate for the City of Creve Coeur General and Police departments as of February 28, 2022 assuming members of the local defined benefit plan are allowed to join LAGERS. It was assumed that all members would join LAGERS and that prior service would be granted for **benefit and eligibility purposes**. For purposes of this study, service as of February 28, 2022 was used. However, actual service at time of membership would be included if the proposed members were allowed to join LAGERS. The results are shown based on current benefit provisions and benefit changes being considered by the subdivision (LT-8(65), L-12, LT-14(65) and L-6, 5 year FAC, 4% member contribution rate, and regular retirement).

The results to add new members are based upon a 15-year amortization of the increase in the unfunded actuarial accrued liability (UAAL). The change in benefit provisions are based upon a 20-year amortization of the increase in the unfunded actuarial accrued liability (UAAL). A summary of the active member data used for the initial valuation is shown below:

**Active Members as of February 28, 2022**

<u>Division</u>	<u>Number</u>	<u>Payroll</u>	<u>Avg. Payroll</u>	<u>Avg. Age</u>	<u>Average Service</u>	
					<u>Benefit</u>	<u>Eligibility</u>
General	33	\$2,049,465	\$62,105	44.2 years	4.0 years	7.6 years
Police	27	1,917,624	71,023	33.2 years	4.6 years	6.0 years

**Active Members as of February 28, 2022**

**Including New Prospective Members with Prior Service for Benefits and Eligibility**

<u>Division</u>	<u>Number</u>	<u>Payroll</u>	<u>Avg. Payroll</u>	<u>Avg. Age</u>	<u>Average Service</u>	
					<u>Benefit</u>	<u>Eligibility</u>
General	43	\$2,894,940	\$67,324	47.5 years	9.1 years	11.9 years
Police	42	3,382,261	80,530	39.1 years	10.7 years	11.6 years

The cost to the employer if the proposed **General** members were allowed to join LAGERS with service used for benefit and eligibility purposes is shown below:

<b>As of February 28, 2022</b>	<b>Current Data</b>	<b>New Data</b>
	<b>Current Provisions</b>	<b>Current Provisions</b>
	<b>General</b>	<b>General</b>
Normal Cost Rate	6.2%	5.9%
Casualty Rate	0.3	0.3
Prior Service Cost Rate	<u>0.9</u>	<u>12.0</u>
Total Employer Contribution Rate	7.4%	18.2%
Change in Employer Contribution Rate as a Percent of Payroll		10.8%
Increase in Unfunded Actuarial Accrued Liability		\$3,635,841

Below are projections needed to comply with Missouri State disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. The first projection is based on current benefit provisions and members reported as of February 28, 2022. The second projection reflects the addition of the proposed active members as of February 28, 2022.

Valuation Date	Estimated Projected Payroll	Current Data - Current Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars	
Feb. 28/29				
2022	\$2,049,465	7.4%	\$151,660	\$279,479
2023	2,105,825	7.4	155,831	278,981
2024	2,163,735	7.4	160,116	277,895
2025	2,223,238	7.4	164,520	276,167
2026	2,284,377	7.4	169,044	273,736
2027	2,347,197	7.4	173,693	270,536
2028	2,411,745	7.4	178,469	266,498
2029	2,478,068	7.4	183,377	261,544
2030	2,546,215	7.4	188,420	255,594
2031	2,616,236	7.4	193,601	248,562

Valuation Date	Estimated Projected Payroll	New Data - Current Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars	
Feb. 28/29				
2022	\$2,894,940	18.2%	\$526,879	\$3,915,320
2023	2,974,551	18.2	541,368	3,830,117
2024	3,056,351	18.2	556,256	3,729,069
2025	3,140,401	18.2	571,553	3,610,797
2026	3,226,762	18.2	587,271	3,473,815
2027	3,315,498	18.2	603,421	3,316,526
2028	3,406,674	18.2	620,015	3,137,215
2029	3,500,358	18.2	637,065	2,934,035
2030	3,596,618	18.2	654,584	2,705,007
2031	3,695,525	18.2	672,586	2,448,001



The cost to the employer if the proposed **Police** members were allowed to join LAGERS with service used for benefit and eligibility purposes is shown below:

	Current Data	New Data
	Current Provisions	Current Provisions
<b>As of February 28, 2022</b>	<b>Police</b>	<b>Police</b>
Normal Cost Rate	6.2%	6.1%
Casualty Rate	0.6	0.6
Prior Service Cost Rate	<u>0.1</u>	<u>15.6</u>
Total Employer Contribution Rate	6.9%	22.3%
Change in Employer Contribution Rate as a Percent of Payroll		15.4%
Increase in Unfunded Actuarial Accrued Liability		\$5,819,962

Below are projections needed to comply with Missouri State disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. The first projection is based on current benefit provisions and members reported as of February 28, 2022. The second projection reflects the addition of the proposed active members as of February 28, 2022.

Valuation Date	Estimated Projected Payroll	Current Data - Current Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars	
Feb. 28/29				
2022	\$1,917,624	6.9%	\$132,316	\$135,480
2023	1,970,359	6.9	135,955	143,597
2024	2,024,544	6.9	139,694	152,245
2025	2,080,219	6.9	143,535	161,460
2026	2,137,425	6.9	147,482	171,280
2027	2,196,204	6.9	151,538	181,747
2028	2,256,600	6.9	155,705	192,903
2029	2,318,656	6.9	159,987	204,799
2030	2,382,419	6.9	164,387	217,482
2031	2,447,936	6.9	168,908	231,008

Valuation Date	Estimated Projected Payroll	New Data - Current Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars	
Feb. 28/29				
2022	\$3,382,261	22.3%	\$754,244	\$5,955,442
2023	3,475,273	22.3	774,986	5,827,971
2024	3,570,843	22.3	796,298	5,676,607
2025	3,669,041	22.3	818,196	5,499,267
2026	3,769,940	22.3	840,697	5,293,708
2027	3,873,613	22.3	863,816	5,057,522
2028	3,980,137	22.3	887,571	4,788,116
2029	4,089,591	22.3	911,979	4,482,708
2030	4,202,055	22.3	937,058	4,138,305
2031	4,317,612	22.3	962,827	3,751,694



Below are results for the General department under the alternate benefit provisions being considered. All of the results are shown assuming the proposed members are allowed to join LAGERS. A separate supplemental dated October 7, 2022 was completed for members currently participating in LAGERS as of February 28, 2022.

<b>As of February 28, 2022</b>	<b>New Data Current Provisions</b>	<b>New Data L-12 Benefit*</b>	<b>New Data LT-14(65) Benefit</b>	<b>New Data L-6 Benefit</b>
	<b>General</b>	<b>General</b>	<b>General</b>	<b>General</b>
Normal Cost Rate	5.9%	7.0%	7.1%	8.4%
Casualty Rate	0.3	0.4	0.4	0.5
Prior Service Cost Rate	<u>12.0</u>	<u>13.9</u>	<u>13.9</u>	<u>15.9</u>
Total Employer Contribution Rate	18.2%	21.3%	21.4%	24.8%
Change in Employer Contribution Rate as a Percent of Payroll		3.1%	3.2%	6.6%
Increase in Unfunded Actuarial Accrued Liability		\$743,510	\$755,487	\$1,510,797

\* It was assumed that all service credited prior to the date of adoption would continue to be covered under the 2.00% benefit multiplier up to age 65 (i.e., LT-8(65) benefit program).

Below are projections needed to comply with Missouri State disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision.

General Division:

**L-12 Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
Feb. 28/29										
2022	\$2,894,940	18.2%	\$526,879	\$3,915,320	21.3%	\$616,622	\$4,658,830	3.1%	\$89,743	\$743,510
2023	2,974,551	18.2	541,368	3,830,117	21.3	633,579	4,568,780	3.1	92,211	738,662
2024	3,056,351	18.2	556,256	3,729,069	21.3	651,003	4,460,980	3.1	94,747	731,910
2025	3,140,401	18.2	571,553	3,610,797	21.3	668,905	4,333,875	3.1	97,352	723,078
2026	3,226,762	18.2	587,271	3,473,815	21.3	687,300	4,185,791	3.1	100,029	711,976
2027	3,315,498	18.2	603,421	3,316,526	21.3	706,201	4,014,925	3.1	102,780	698,400
2028	3,406,674	18.2	620,015	3,137,215	21.3	725,622	3,819,344	3.1	105,607	682,129
2029	3,500,358	18.2	637,065	2,934,035	21.3	745,576	3,596,963	3.1	108,511	662,928
2030	3,596,618	18.2	654,584	2,705,007	21.3	766,080	3,345,548	3.1	111,496	640,541
2031	3,695,525	18.2	672,586	2,448,001	21.3	787,147	3,062,697	3.1	114,561	614,695



General Division:

**LT-14(65) Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date Feb. 28/29	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2022	\$2,894,940	18.2%	\$526,879	\$3,915,320	21.4%	\$619,517	\$4,670,807	3.2%	\$92,638	\$755,487
2023	2,974,551	18.2	541,368	3,830,117	21.4	636,554	4,580,678	3.2	95,186	750,561
2024	3,056,351	18.2	556,256	3,729,069	21.4	654,059	4,472,770	3.2	97,803	743,700
2025	3,140,401	18.2	571,553	3,610,797	21.4	672,046	4,345,523	3.2	100,493	734,726
2026	3,226,762	18.2	587,271	3,473,815	21.4	690,527	4,197,260	3.2	103,256	723,445
2027	3,315,498	18.2	603,421	3,316,526	21.4	709,517	4,026,176	3.2	106,096	709,650
2028	3,406,674	18.2	620,015	3,137,215	21.4	729,028	3,830,332	3.2	109,013	693,117
2029	3,500,358	18.2	637,065	2,934,035	21.4	749,077	3,607,642	3.2	112,012	673,607
2030	3,596,618	18.2	654,584	2,705,007	21.4	769,676	3,355,866	3.2	115,092	650,859
2031	3,695,525	18.2	672,586	2,448,001	21.4	790,842	3,072,599	3.2	118,256	624,597

General Division:

**L-6 Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date Feb. 28/29	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2022	\$2,894,940	18.2%	\$526,879	\$3,915,320	24.8%	\$717,945	\$5,426,117	6.6%	\$191,066	\$1,510,797
2023	2,974,551	18.2	541,368	3,830,117	24.8	737,689	5,331,064	6.6	196,321	1,500,946
2024	3,056,351	18.2	556,256	3,729,069	24.8	757,975	5,216,296	6.6	201,719	1,487,227
2025	3,140,401	18.2	571,553	3,610,797	24.8	778,819	5,080,077	6.6	207,266	1,469,280
2026	3,226,762	18.2	587,271	3,473,815	24.8	800,237	4,920,536	6.6	212,966	1,446,721
2027	3,315,498	18.2	603,421	3,316,526	24.8	822,244	4,735,660	6.6	218,823	1,419,134
2028	3,406,674	18.2	620,015	3,137,215	24.8	844,855	4,523,287	6.6	224,840	1,386,072
2029	3,500,358	18.2	637,065	2,934,035	24.8	868,089	4,281,091	6.6	231,024	1,347,055
2030	3,596,618	18.2	654,584	2,705,007	24.8	891,961	4,006,573	6.6	237,377	1,301,566
2031	3,695,525	18.2	672,586	2,448,001	24.8	916,490	3,697,049	6.6	243,904	1,249,048



Below are results for the Police department under the alternate benefit provisions being considered. All of the results are shown assuming the proposed members are allowed to join LAGERS. A separate supplemental dated October 7, 2022 was completed for members currently participating in LAGERS as of February 28, 2022.

<b>As of February 28, 2022</b>	<b>New Data Current Provisions</b>	<b>New Data L-12 Benefit*</b>	<b>New Data LT-14(65) Benefit</b>	<b>New Data L-6 Benefit</b>
	<b>Police</b>	<b>Police</b>	<b>Police</b>	<b>Police</b>
Normal Cost Rate	6.1%	6.9%	7.2%	8.3%
Casualty Rate	0.6	0.7	0.7	0.8
Prior Service Cost Rate	<u>15.6</u>	<u>17.2</u>	<u>17.3</u>	<u>19.1</u>
Total Employer Contribution Rate	22.3%	24.8%	25.2%	28.2%
Change in Employer Contribution Rate as a Percent of Payroll		2.5%	2.9%	5.9%
Increase in Unfunded Actuarial Accrued Liability		\$740,645	\$802,951	\$1,605,449

\* It was assumed that all service credited prior to the date of adoption would continue to be covered under the 2.00% benefit multiplier up to age 65 (i.e., LT-8(65) benefit program).

Below are projections needed to comply with Missouri State disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision.

Police Division:

**L-12 Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2022	\$3,382,261	22.3%	\$754,244	\$5,955,442	24.8%	\$838,801	\$6,696,087	2.5%	\$84,557	\$740,645
2023	3,475,273	22.3	774,986	5,827,971	24.8	861,868	6,563,787	2.5	86,882	735,816
2024	3,570,843	22.3	796,298	5,676,607	24.8	885,569	6,405,697	2.5	89,271	729,090
2025	3,669,041	22.3	818,196	5,499,267	24.8	909,922	6,219,559	2.5	91,726	720,292
2026	3,769,940	22.3	840,697	5,293,708	24.8	934,945	6,002,941	2.5	94,248	709,233
2027	3,873,613	22.3	863,816	5,057,522	24.8	960,656	5,753,231	2.5	96,840	695,709
2028	3,980,137	22.3	887,571	4,788,116	24.8	987,074	5,467,616	2.5	99,503	679,501
2029	4,089,591	22.3	911,979	4,482,708	24.8	1,014,219	5,143,081	2.5	102,240	660,373
2030	4,202,055	22.3	937,058	4,138,305	24.8	1,042,110	4,776,377	2.5	105,052	638,073
2031	4,317,612	22.3	962,827	3,751,694	24.8	1,070,768	4,364,020	2.5	107,941	612,327



Police Division:

**LT-14(65) Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date Feb. 28/29	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2022	\$3,382,261	22.3%	\$754,244	\$5,955,442	25.2%	\$852,330	\$6,758,393	2.9%	\$98,086	\$802,951
2023	3,475,273	22.3	774,986	5,827,971	25.2	875,769	6,625,686	2.9	100,783	797,716
2024	3,570,843	22.3	796,298	5,676,607	25.2	899,852	6,467,031	2.9	103,554	790,424
2025	3,669,041	22.3	818,196	5,499,267	25.2	924,598	6,280,153	2.9	106,402	780,886
2026	3,769,940	22.3	840,697	5,293,708	25.2	950,025	6,062,605	2.9	109,328	768,896
2027	3,873,613	22.3	863,816	5,057,522	25.2	976,150	5,811,757	2.9	112,334	754,234
2028	3,980,137	22.3	887,571	4,788,116	25.2	1,002,995	5,524,778	2.9	115,424	736,663
2029	4,089,591	22.3	911,979	4,482,708	25.2	1,030,577	5,198,634	2.9	118,598	715,926
2030	4,202,055	22.3	937,058	4,138,305	25.2	1,058,918	4,830,055	2.9	121,860	691,750
2031	4,317,612	22.3	962,827	3,751,694	25.2	1,088,038	4,415,532	2.9	125,211	663,838

Police Division:

**L-6 Benefit Program, 4% Member Contribution Rate, 5 year FAS, Normal Retirement**

Valuation Date Feb. 28/29	Estimated Projected Payroll	New Data - Current Provisions			New Data - Alternate Plan			Change Due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2022	\$3,382,261	22.3%	\$754,244	\$5,955,442	28.2%	\$953,798	\$7,560,891	5.9%	\$199,554	\$1,605,449
2023	3,475,273	22.3	774,986	5,827,971	28.2	980,027	7,422,952	5.9	205,041	1,594,981
2024	3,570,843	22.3	796,298	5,676,607	28.2	1,006,978	7,257,009	5.9	210,680	1,580,402
2025	3,669,041	22.3	818,196	5,499,267	28.2	1,034,670	7,060,598	5.9	216,474	1,561,331
2026	3,769,940	22.3	840,697	5,293,708	28.2	1,063,123	6,831,067	5.9	222,426	1,537,359
2027	3,873,613	22.3	863,816	5,057,522	28.2	1,092,359	6,565,566	5.9	228,543	1,508,043
2028	3,980,137	22.3	887,571	4,788,116	28.2	1,122,399	6,261,026	5.9	234,828	1,472,910
2029	4,089,591	22.3	911,979	4,482,708	28.2	1,153,265	5,914,157	5.9	241,286	1,431,449
2030	4,202,055	22.3	937,058	4,138,305	28.2	1,184,980	5,521,414	5.9	247,922	1,383,109
2031	4,317,612	22.3	962,827	3,751,694	28.2	1,217,567	5,078,995	5.9	254,740	1,327,301



The long term cost (C) of providing retirement benefits depends only on the benefits (B) that are paid to participants, the expenses (E) of administering the plan, and the investment return (I) generated on invested assets:  $C = B + E - I$ . For a given level of benefits, the cost of providing those benefits is lowered if administrative expenses are lowered or investment income is increased.

The long term costs are financed by a series of employer and member contributions. The series of contributions is flexible. If more is contributed in early years, less has to be contributed in later years, and vice-versa. Over time the series of contributions has to have the same value as benefits and expenses. The actuary determines each year's contribution based on a funding method and a set of actuarial assumptions. The chosen funding method and assumptions do not affect the long term cost of providing retirement benefits, but have a strong impact on the series of contributions made to fund the benefits.

The methods and assumptions used were the same as those used in the annual actuarial valuations as of February 28, 2022. In particular, the assumed rate of investment return was 7.00% and the assumed rate of payroll growth was 2.75%.

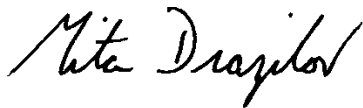
If future experience follows the LAGERS assumptions, the contribution rates calculated in this report will remain approximately level. If future experience is worse than the LAGERS assumptions, the contribution rates will gradually increase over time.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Mita D. Drazilov is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the Academy of Actuaries to render the actuarial opinions contained herein.

Please call if you have any questions.

Sincerely,  
Gabriel, Roeder, Smith & Company



Mita D. Drazilov, ASA, FCA, MAAA

MDD:sc





February 17, 2023

Lori Obermoeller, MBA, CPFO  
Director of Finance  
City of Creve Coeur  
300 N. New Ballas Road  
Creve Coeur, MO 63141

**Re: The City of Creve Coeur – Local Defined Benefit Plan Joining LAGERS**

Dear Ms. Obermoeller:

Per your request, we have compiled the various actuarial reports into this one document to present an estimated total annual LAGERS contribution should the city convert its current, locally administered, defined benefit plan to LAGERS. It was assumed that all active participants in the city's defined benefit plan would join LAGERS and that their prior service would be granted for benefit and eligibility purposes.

The estimates shown here are based on the actuarial valuations dated October 7, 2022 and February 1, 2023 and the lump sum payment letter dated October 25, 2022. The figures included here are estimates of the cost to the city for all active employees being enrolled in LAGERS as well as LAGERS assuming the administrative duties of the city's closed pension plan. These estimates may differ from the actual costs should changes occur in the data used to perform these estimates (e.g., payroll, defined benefit plan assets). Also, the ten-year projections assume no annual change in the percent of payroll contribution rate.

For the City of Creve Coeur to transition its pension plan to LAGERS, four processes must be completed by the city.

1. Adopt changes to current LAGERS plan to ensure there are no benefit impairments imposed on the current city plan participants
2. Amend Creve Coeur pension plan document to adopt necessary changes for LAGERS administration
3. Close the Creve Coeur pension plan and convert active participants to LAGERS
4. Transition administration of closed Creve Coeur pension plan and move assets to LAGERS

It is projected that the city will have more than sufficient assets to fully fund the liabilities associated with the benefit recipients and terminated vested participants in the city's defined benefit plan after the active participants are converted to LAGERS. If this is the case and the city transfers the full amount of assets to fund

the liabilities of the benefit recipients and terminated vested participants to LAGERS, no further contributions will be due for the city's closed defined benefit plan. All future contributions, then, would be for the LAGERS participants.

Assuming the above four steps take place, the estimated total annual ten-year LAGERS contributions for the city's general and police departments is shown here. These estimates do not include any up-front contributions.

<b>Total Annual LAGERS Contribution: LT-14 (65)</b>			<b>Total Annual LAGERS Contribution: L-6</b>		
2023	\$1,512,323		2023	\$1,717,716	
2024	\$1,553,912		2024	\$1,764,953	
2025	\$1,596,644		2025	\$1,813,489	
2026	\$1,640,552		2026	\$1,863,360	
2027	\$1,685,667		2027	\$1,914,602	
2028	\$1,732,023		2028	\$1,967,254	
2029	\$1,779,654		2029	\$2,021,353	
2030	\$1,828,594		2030	\$2,076,941	
2031	\$1,878,880		2031	\$2,134,056	
2032	\$1,930,550		2032	\$2,192,743	

The excess assets from the city's closed defined benefit plan are estimated to be \$7 million. These assets may be used to pay down the unfunded liabilities of the LAGERS participants. Below are the estimated ten-year LAGERS contributions for the city's general and police departments assuming a \$3.5 million contribution is made up-front to each department.

<b>Total Annual LAGERS Contribution: LT-14 (65)</b>			<b>Total Annual LAGERS Contribution: L-6</b>		
2023	\$864,396		2023	\$1,069,788	
2024	\$888,166		2024	\$1,099,208	
2025	\$912,591		2025	\$1,129,436	
2026	\$937,687		2026	\$1,160,495	
2027	\$963,474		2027	\$1,192,409	
2028	\$989,969		2028	\$1,225,200	
2029	\$1,017,193		2029	\$1,258,893	
2030	\$1,045,166		2030	\$1,293,513	
2031	\$1,073,908		2031	\$1,329,084	
2032	\$1,103,441		2032	\$1,365,634	

I am happy to discuss the information in this letter. Please let me know if you have any questions or concerns. I am also happy to meet with city officials in-person.

Sincerely,

Jeff Kempker, CEBS, CRC  
 Assistant Executive Director, External Affairs



The Initial Valuation for  
**The City of Creve Coeur**  
Legacy Plan as of November 30, 2022



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February 1, 2023

The City of Creve Coeur  
Creve Coeur, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of the actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, the legacy plan benefits that may be administered by the Missouri Local Government Employees Retirement System (LAGERS). This report contains the information needed to comply with Missouri state disclosure requirements regarding the adoption of LAGERS benefits by a political subdivision (Sections 105.660 - 105.685 RSMo).

If there are active members still participating in the legacy plan, the contribution requirement to pay for benefits likely to accrue as a result of future service of your employees is described as the current cost plus the disability cost. This contribution rate, expressed as a percent of active member payroll, will depend on the benefit provisions of the legacy plan.

The contribution requirement to pay for benefits likely to result from service rendered by your employees before joining LAGERS is described as the prior service cost. The value established for prior service is called the actuarial accrued liability. The value of the actuarial accrued liability in excess of the actuarial value of assets is called the unfunded actuarial accrued liability.

Section 70.730 of the Revised Statutes of Missouri requires participating employers to contribute the current cost, disability cost and prior service cost. The employer contribution rate for a legacy plan valuation group will be expressed as a dollar amount. These contributions are mandatory after official action has been taken to join the System.

The total annual dollar costs shown on the results pages represent the dollar cost for a one-year period based on the data reported for this actuarial valuation. In budgeting amounts for LAGERS contributions, you should consider any changes in data which have been made since data was submitted for the valuation and any changes anticipated to be made before the end of the period for which you are preparing the budget.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of this report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the Actuarial Standards of Practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 28, 2022.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

The computed contributions required for LAGERS participation will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the state law which governs LAGERS. Summary of benefit provisions can be found in Appendix III.

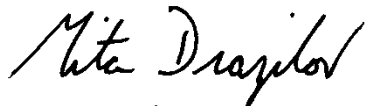
Please note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to join the System. You may wish to make notice of this report in the official minutes of the next meeting of your governing body. This action would not be binding on your subdivision, yet would establish the beginning date of the 45-day waiting period.

In accordance with the LAGERS Board policy, the employer contributions established by this valuation report are valid for purposes of joining the System for a one-year period from the date of this valuation which was November 30, 2022. The valuation was based on data furnished from your records concerning individual employees.

If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City, Missouri.

Mita D. Drazilov and Judith A. Kermans are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Mita D. Drazilov, ASA, FCA, MAAA



Judith A. Kermans, EA, FCA, MAAA

MDD/JAK:dj



## The City of Creve Coeur General Members

	<b>Legacy Plan as of November 30, 2022</b>
Actuarial Accrued Liability	
Active Members	\$ -
Inactive Members	1,139,068
Retirants and Beneficiaries	8,532,425
Total	\$ 9,671,493
Actuarial Value of Assets*	\$ 9,671,493
Unfunded Actuarial Accrued Liability	\$ -
Prior Service Cost	\$ -

\* Market value of assets for the legacy plan.

A 15-year level dollar amortization period was used for the legacy plan.

Total market value of assets for General and Police members as of November 30, 2022 was reported to be \$30,428,449. Per LAGERS staff, the allocation between the General and Police subdivisions was estimated based on the ratio of the actuarial accrued liability. However, assets exceeded the actuarial accrued liability by \$2,919,867 which was excluded for the base results of the General subdivision.

The City is also considering two separate scenarios regarding increases to future retiree monthly benefits.

- 1) For current retirees, a one-time increase in benefits of 0.5% per full year of retirement since July 1, 2001 would increase the actuarial accrued liability by approximately \$337,080.
- 2) Adopting a 0.5% compound cost-of-living-adjustment going forward would increase the actuarial accrued liability by approximately \$372,499.

In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other and with the assumptions that must be used.

**The results provided in this report are as of the valuation date of November 30, 2022. Please request an updated payment amount upon electing to join LAGERS if any significant changes have occurred.**



## The City of Creve Coeur General Members

Valuation Year	Estimated Employer Contribution Annual Dollars	Unfunded Actuarial Accrued Liability
2022	\$ -	\$ -
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.

## The City of Creve Coeur Police Members

	<b>Legacy Plan as of November 30, 2022</b>
Actuarial Accrued Liability	
Active Members	\$ -
Inactive Members	467,617
Retirants and Beneficiaries	13,233,150
Total	\$ 13,700,767
Actuarial Value of Assets *	\$ 13,700,767
Unfunded Actuarial Accrued Liability	\$ -
Prior Service Cost	\$ -

\* Market value of assets for the legacy plan.

Total market value of assets for General and Police members as of November 30, 2022 was reported to be \$30,428,449. Per LAGERS staff, the allocation between the General and Police subdivisions was estimated based on the ratio of the actuarial accrued liability. However, assets exceeded the actuarial accrued liability by \$4,136,322 which was excluded for the base results of the Police subdivision.

The City is also considering two separate scenarios regarding increases to future retiree monthly benefits.

- 1) For current retirees, a one-time increase in benefits of 0.5% per full year of retirement since July 1, 2001 would increase the actuarial accrued liability by approximately \$633,145.
- 2) Adopting a 0.5% compound cost-of-living-adjustment going forward would increase the actuarial accrued liability by approximately \$585,199.

In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other and with the assumptions that must be used.

**The results provided in this report are as of the valuation date of November 30, 2022. Please request an updated payment amount upon electing to join LAGERS if any significant changes have occurred.**



## The City of Creve Coeur Police Members

Valuation Year	Estimated Employer Contribution Annual Dollars	Unfunded Actuarial Accrued Liability
2023	\$ -	\$ -
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.

# The City of Creve Coeur

## Summary of Data Included in the Valuation

### **Inactive Members as of November 30, 2022**

<b>Division</b>	<b>Number</b>	<b>Annual Benefits</b>	<b>Avg. Age</b>
General	14	\$152,773	57.3 years
Police	4	55,004	47.1 years

### **Retirants and Beneficiaries as of November 30, 2022**

<b>Division</b>	<b>Number</b>	<b>Annual Benefits</b>	<b>Avg. Age</b>
General	49	\$891,869	73.3 years
Police	44	1,291,649	69.4 years

## Comments

**Comment A:** Please see Appendix I that details the Actuarial Funding Policy for legacy plans.

**Comment B:** The long-term cost (C) of providing retirement benefits depends only on the benefits (B) that are paid to participants, the expenses (E) of administering the plan, and the investment return (I) generated on invested assets:  $C = B + I - E$ . For a given level of benefits, the cost of providing those benefits is lowered if administrative expenses are lowered or investment income is increased.

**Comment C:** It is expected that current and future retirees and beneficiaries from legacy plans joining LAGERS will be maintained separately from the Benefit Reserve Fund (BRF). Investment and mortality risk for legacy plan retirees would only affect the computed employer contribution rate of the legacy plan political subdivision. However, once the legacy plan meets certain conditions, the remaining retiree liabilities could be considered pooled with the BRF. These conditions are that the legacy plan has no active members and the actuarial accrued liability for the legacy plan is no greater than a Board established threshold.

Any actuarial experience (positive or negative) subsequent to the legacy plan becoming pooled will be borne by the BRF. While this provides contribution rate stability to the legacy plan, there will be no assets (if any remain) returned to the employer once the last retiree or beneficiary becomes deceased. The employer will also not be asked for additional contributions to the legacy plan if experience is worse than expected. Even if the pooled legacy plan runs out of money, benefits will continue to be paid as long as the scheduled contribution payments have been made.

## **APPENDIX I**

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### **ACTUARIAL FUNDING POLICY – LEGACY PLANS**

# Missouri LAGERS Actuarial Funding Policy – Legacy Plans

## Introduction

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The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board of Trustees (Board) for legacy plans (i.e., old plans) that elect to participate in the Missouri Local Government Employees Retirement System (LAGERS). The Board establishes this Funding Policy to help ensure the systematic accumulation of assets needed to pay future benefits for these legacy plan members of LAGERS and to help ensure that the other participating employers in LAGERS are not materially affected by these legacy plans' participation in LAGERS.

In 2012, the Governmental Accounting Standards Board (GASB) approved two new financial reporting standards. GASB Statement No. 67, "Financial Reporting for Pension Plans" replaces the requirements of Statement No. 25. GASB Statement No. 68, "Accounting and Financial Reporting for Pensions" replaces the requirements of Statements No. 27 and No. 50. The new GASB statements separate accounting cost (expense) from funding cost (contributions), necessitating the creation of this funding policy.

The LAGERS Board of Trustees adopted this Funding Policy in October, 2017. This funding policy shall be reviewed by the Board annually through the completion of the first experience study after adoption of this Funding Policy. Subsequently, it shall be reviewed every five years in conjunction with the experience study.

## Funding Objectives

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1. Maintain adequate assets so that current plan assets plus future contributions and investment earnings should be sufficient to fund all benefits expected to be paid to members and their beneficiaries.
2. Maintain stability of employer contribution rates, consistent with other funding objectives.
3. Maintain public policy goals of accountability and transparency. Each policy element is clear on intent and effect, and each should allow an assessment of whether, how and when the funding requirements of the plan will be met.
4. Monitor material risks to assist in any risk management strategies the Board deems appropriate.
5. Promote intergenerational equity. Each generation of members and employers should incur the cost of benefits for the employees who provide services to them, rather than deferring those costs to future members and employers.
6. Provide a reasonable margin for adverse experience to help offset risks.
7. Review investment return assumption in conjunction with the periodic asset liability study and in consideration of the Board's risk profile.
8. Continue progress of systematic reduction of the Unfunded Actuarial Accrued Liabilities (UAAL).
9. Ensure that the participation in LAGERS by legacy plans does not significantly affect the risks associated with LAGERS participation for other LAGERS participating employers.



# Elements of Actuarial Funding Policy

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## 1. Actuarial Cost Method

The Individual Entry Age Normal actuarial cost method of valuation shall be used in determining the Actuarial Accrued Liability (AAL) and Normal Cost. Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) shall become part of the AAL. The Normal Cost shall be determined on an individual basis for each active member.

## 2. Actuarial (Funding) Value of Assets Method

The investment gains or losses of each valuation period, resulting from the difference between actual investment return and assumed investment return, shall be recognized annually in level amounts over five years in calculating the Funding Value of Assets. Regardless of the results obtained from the smoothing method described above, the Funding Value of Assets shall not diverge from the Market Value of Assets by more than 20%.

## 3. Amortization Method

- a. For each employer, a level percent of payroll amortization method shall be used to systematically pay off the UAAL over a closed period of years.
- b. The amortization period associated with each amortization base for an employer will be a closed period of years.
- c. Changes in the UAAL due to actuarial gains or losses for each annual actuarial valuation or from changes to actuarial assumptions will be amortized over a closed 15-year period. For legacy plans that only have non-active members, changes in the UAAL due to actuarial gains or losses for each annual actuarial valuation or from changes to actuarial assumptions will be amortized over a closed 10-year period.
- d. For legacy plans that have active members, the initial UAAL for a new employer joining LAGERS will be amortized over a closed 20-year period. For legacy plans that only have non-active members, the initial UAAL for a new employer joining LAGERS will be amortized over a closed 15-year period.

## 4. Funding Target, Computed Employer Contribution Rates, Interest Credits and Participation in the Casualty Reserve Fund and Benefit Reserve Fund

- a. The targeted funded ratio shall be 100%.
- b. With the exception of provision 4.h, a valuation group of a legacy plan will be separately experience rated. That is, the legacy plan will not participate in the Casualty Reserve Fund (CRF) nor the Benefit Reserve Fund (BRF) and the actuarial experience of all the legacy plan’s members will only affect the actuarial valuation results of the legacy plan’s valuation group.
- c. For a valuation group (e.g., police), if there are both LAGERS members and legacy plan members, separate employer contribution rates will be computed. The employer contribution rate for a legacy plan valuation group will be expressed as a dollar amount.
- d. When a legacy plan joins LAGERS, if there are both LAGERS members and legacy plan members, the LAGERS valuation group’s employer contribution rate will become the uncapped employer contribution rate.



- e. For the 1% of payroll contribution rate increase limitation provided in Section 70.730 of the Revised Statutes of Missouri (RSMo), a combined employer contribution rate expressed as a percentage of total (i.e., LAGERS plus legacy plan) payroll will be determined (including when the legacy plan has active members and when the legacy plan does not have active members). Both the LAGERS valuation group's employer contribution rate and the combined employer contribution rate shall be subject to the 1% of payroll contribution increase limitation.
- f. Benefit payments for retirees of the legacy plan will be paid out of the Employer Accumulation Fund (EAF) until the conditions in 4.h. are met.
- g. For the year end June 30<sup>th</sup> interest crediting process, interest credits shall first be allocated between legacy plans and LAGERS plans to ensure that legacy plans and LAGERS plans receive the same market value interest credits. After this initial step, for LAGERS plans, the standard interest crediting process will occur. For legacy plans, an interest crediting process will be established to follow the legacy plans' benefit provisions.
- h. When a legacy plan meets the following conditions, the legacy plan may participate in the pooled BRF (this is determined at the valuation group level)
  - i. The legacy plan has no active members.
  - ii. The actuarial accrued liability for the legacy plan is no greater than a Board established threshold.

If applicable, at the time a legacy plan first participates in LAGERS, the legacy plan's initial valuation actuarial accrued liability will be rolled-forward to the legacy plan's LAGERS membership date for purposes of applying this test.

- i. If the legacy plan meets the requirements of provision 4.h, then
  - i. If the legacy plan has a positive UAAL, a fixed payment schedule may be established over a reasonable number of years to be determined by LAGERS Staff (e.g., 10 to 15 years).
  - ii. If the legacy plan has a negative UAAL, the overfunding amount may be used in the computation of the LAGERS plan employer contribution rate.
  - iii. Any actuarial experience (positive or negative) subsequent to the transfer of the legacy plan to the BRF will be borne by the BRF.

## 5. Risk Management

### a. Assumption Changes

- i. The actuarial assumptions used for investment return, wage inflation and mortality shall be those last adopted by the Board based on the most recent experience study and upon the advice of the actuary. All other necessary actuarial assumptions shall be established based upon the professional judgement of the actuary and may be subject to Board approval. The actuary may review legacy plan assumptions in conjunction with the normal five-year experience study process.
- ii. The actuarial assumptions can be updated during the five-year period if significant plan design changes or other significant events occur, as advised by the actuary.

### b. Risk Measures

The following risk measures will be annually determined to provide quantifiable measurements of risk and their movement over time. For employers that have both a legacy plan and a LAGERS plan, combined results may be shown. The risk measures will be measured at the System level and employer level with the exception of (ii) which will be measured at the System level only.



- i. Classic measures currently determined
    - A. Funded ratio (actuarial value of assets / actuarial accrued liability)
    - B. UAAL amortization period (years required to pay down the UAAL based on current funding rates)
  - ii. Dollar standard deviation of investment return / Total Payroll
    - Measures the risk associated with negative asset returns relative impact on the funded status of the plan. A decrease in this measure indicates a decrease in investment risk.
  - iii. Total UAAL / Total Payroll
    - Measures the risk associated with contribution decreases relative impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in contribution risk.
  - iv. Total Actuarial Value of Assets / Total Payroll
    - Measures the risk associated with the ability to respond to asset experience through adjustments in contributions. A decrease in this measure indicates a decrease in asset risk.
  - v. Total AAL / Total Payroll
    - Measures the risk associated with the ability to respond to liability experience through adjustments in contributions. A decrease in this measure indicates a decrease in experience risk. This also provides a long-term measure of the asset risk in situations where the System has a funded ratio below 100%.
- c. Risk Control
- The Board shall carefully monitor the risk measures above and shall consider steps to mitigate risk, particularly as the funded ratio increases. Risk mitigation may involve a reduction in the assumed rate of investment return. Examples of risk mitigating techniques include, but are not limited to:
- i. Review asset allocation with a goal of reducing the standard deviation of the portfolio return
  - ii. Reduce asset-liability mismatching

## Glossary

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1. **Actuarial Accrued Liability (AAL):** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”
2. **Actuarial Assumptions:** Estimates of future plan 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.



3. **Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or “actuarial gain” as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation ASA and ultimately to Fellowship with the designation FSA.
6. **Amortization:** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
7. **Asset Liability Study:** A comprehensive strategic asset allocation review designed to assess the continuing appropriateness of the Investment Objectives and Asset Allocation Policy. It includes a study of future benefit payments, liabilities, required funding, the appropriateness of the actuarial interest rate assumption and the prospective funded status of liabilities. It may also include a study of portfolio design for optimal diversification and comparisons with peer practices.
8. **Entry Age Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as a level percentage of pay over the working lifetime of the plan’s members.
9. **Experience Study:** An actuarial investigation of demographic and economic experiences of the system during the period studied. The investigation is made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.
10. **Funding Value of Assets:** The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets.
11. **Market Value of Assets:** The fair value of plan assets as reported in the plan’s financial statements.
12. **Normal Cost (NC):** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.
13. **Unfunded Actuarial Accrued Liability (UAAL):** The difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”

## **APPENDIX II**

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### **SUMMARY OF FINANCIAL ASSUMPTIONS**

# Summary of Assumptions Used in Actuarial Valuations

## Assumptions Adopted by the Board of Trustees after Consulting with Actuary

1. The investment return rate used in making the valuations was 7.00% per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. The price inflation rate used in making the valuations was 2.25% and the wage inflation rate used in making the valuations was 2.75%. The 7.00% investment return rate translates to an assumed real rate of return over price inflation of 4.75% and over wage inflation of 4.25%. Adopted 2021.
2. The healthy retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubG-2010 Retiree Mortality Table for males and females. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 115% of the PubNS-2010 Disabled Retiree Mortality Table for males and females. The pre-retirement mortality tables used were 75% of the PubG-2010 Employee Mortality Table for males and females of General groups and 75% of the PubS-2010 Employee Mortality Table for males and females of Police, Fire and Public Safety groups. Mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scale to the above described tables. Adopted 2021.
3. The probabilities of withdrawal and disability from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2021.
4. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2021.
5. Total active member payroll is assumed to increase 2.75% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2021.
6. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
7. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.

## Schedule 1.

### Separations From Active Employment (Not Including Death-in-Service) Before Age & Service Retirement and Individual Pay Increase Assumptions

		Percent of Active Members Separating Within Next Year							
Sample Ages	Years of Service	General/Public Safety Members				Police		Fire	
		Men		Women		Disability	Withdrawal	Disability	Withdrawal
		Disability	Withdrawal	Disability	Withdrawal				
All	0		20.00%		23.00%		18.00%		12.00%
	1		18.00		21.00		17.00		10.00
	2		16.00		18.00		16.00		8.00
	3		13.00		15.00		14.00		8.00
	4		12.00		13.00		13.00		7.00
25	5 & Over	0.07%	8.80	0.02%	12.40	0.10%	10.80	0.07%	6.00
30		0.10	7.10	0.03	10.20	0.11	8.50	0.11	4.50
35		0.13	5.60	0.06	7.80	0.16	6.30	0.25	3.20
40		0.18	4.10	0.09	5.80	0.22	4.60	0.39	2.40
45		0.25	3.10	0.15	4.40	0.34	3.40	0.62	1.90
50		0.37	2.40	0.22	3.50	0.53	2.10	0.95	1.30
55		0.57	1.70	0.32	2.50	0.88	1.10	1.46	0.70
60		0.86	1.10	0.45	1.40		0.00		0.00
65			0.00		0.00		0.00		0.00

### Percent Increase in Individual's Pay During Next Year

Sample Ages	General/ Public Safety	Police	Fire
25	6.75%	6.55%	7.15%
30	5.95	5.75	6.05
35	5.35	5.25	5.15
40	4.85	4.75	4.45
45	4.25	4.25	4.05
50	3.85	3.85	3.85
55	3.65	3.65	3.45
60	3.45	3.45	2.75
65	3.15	3.15	2.75



## Schedule 2.

### Percent of Eligible Active Members Retiring Within Next Year Without Rule of 80 Eligibility

#### Early Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
55	3.00%	3.00%	50	2.50%	2.25%
56	3.00%	3.00%	51	2.50%	2.25%
57	3.00%	3.00%	52	3.00%	2.25%
58	3.00%	3.00%	53	3.00%	2.25%
59	3.00%	3.00%	54	3.50%	2.25%

#### Normal Retirement

Retirement Ages	General Members		Retirement Ages	Police/ Public Safety	Fire
	Men	Women			
60	10%	10%	55	11%	13%
61	10	10	56	11	13
62	25	15	57	11	13
63	20	15	58	11	13
64	20	15	59	11	13
65	25	25	60	11	15
66	25	30	61	11	20
67	20	25	62	22	20
68	20	25	63	18	20
69	20	20	64	18	20
70	100	100	65	100	100

## Schedule 2. (Concluded)

### Percent of Eligible Active Members Retiring Within Next Year With Rule of 80 Eligibility

Retirement Ages	General Members		Police/ Public Safety	Fire
	Men	Women		
50	20%	15%	25%	25%
51	20	15	25	20
52	15	15	15	20
53	15	15	15	20
54	15	15	15	20
55	15	15	15	20
56	15	15	15	20
57	15	15	15	25
58	15	15	15	25
59	15	15	15	25
60	15	15	15	35
61	15	15	25	35
62	25	15	20	45
63	25	15	20	45
64	25	20	20	45
65	30	25	100	100
66	30	25		
67	20	25		
68	20	25		
69	20	25		
70	100	100		

## **APPENDIX III**

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### **SUMMARY OF BENEFIT PROVISIONS**

# The City of Creve Coeur – Legacy Plan Brief Summary of Benefit Provisions as of November 30, 2022

## Eligibility Requirements – Plan Participation

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. Full-time means works at least 35 per seven-day work period.

No new participants on or after May 23, 2006.

## Eligibility Requirements – Normal Retirement

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

## Eligibility Requirements – Early Retirement

Early Retirement Age: 50  
Years of Vesting Service: 20

Benefits are actuarially reduced for commencement before Normal Retirement Date.

## Normal Retirement Benefit

The Monthly Pension payable to a retired Participant shall be 1.7% times Final Average Compensation times credited service, not to exceed thirty years. If a participant elected not to participate in the City's defined contribution plan, then the multiplier would be 2.0%.

## Death Benefits

A Qualified Joint and Survivor Annuity is payable to the spouse of a Participant who dies after becoming eligible for Normal or Early Retirement.

## Method of Payment of Normal Retirement Pension Benefit

The Monthly Normal Retirement Pension is payable in the following form:

For the Life of the Participant with 120 payments guaranteed.



# The City of Creve Coeur – Legacy Plan Brief Summary of Benefit Provisions as of November 30, 2022

## Benefits on Termination of Employment - Vesting

Employees are Vested in their Accrued Monthly Pension Benefit in accordance with the following Schedule:

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

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

The deferred benefit is computed in the same manner as a normal retirement benefit. Deferred benefits are payable any time after reaching the normal retirement age.

## Cost-of-Living-Allowance

None.



## **APPENDIX IV**

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### **RISK COMMENTARY**

## Risk Commentary

The determination of the accrued liability and the actuarially determined contribution (i.e., total employer contribution rate) requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. **Investment Risk** – actual investment returns may differ from the expected returns;
2. **Asset/Liability Mismatch Risk** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. **Contribution Risk** – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability, contributions and contribution rates differing from expected;
5. **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
6. **Other Demographic Risks** – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

# Risk Commentary (Concluded)

## PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures are described below.

### **RATIO OF MARKET VALUE OF ASSETS TO PAYROLL**

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

### **RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL**

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

### **RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS**

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

### **DURATION OF ACTUARIAL ACCRUED LIABILITY**

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

## ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.





February 1, 2023 E-mail

Mr. Bill Betts, Executive Director  
Missouri Local Government  
Employees Retirement System  
P.O. Box 1665  
Jefferson City, Missouri 65102

Dear Mr. Betts:

Enclosed is the report of the November 30, 2022 Initial Actuarial Valuation of the Legacy Plan for the employees of:

The City of Creve Coeur

Sincerely,  
Gabriel, Roeder, Smith & Company

A handwritten signature in black ink that reads "Mita Drazilov". The signature is fluid and cursive, with the first name "Mita" being more prominent than the last name "Drazilov".

Mita D. Drazilov, ASA, FCA, MAAA

MDD:dj  
Enclosure



# LEGACY to LAGERS Defined Benefit Plan Considerations

Monday, May 8, 2023



# Pension Objectives

1. Determine LAGERS Plan Level
  - Option 1 - LT-14 (65)
  - Option 2 - L6
  
2. Determine Retirees COLA Amount
  - 0.50% - \$964K
  - 0.75% - \$1.4M
  - 1.00% - \$1.9M
  - 1.25% - \$2.4M
  
3. Determine How to Allocate the Retirees COLA
  - % to Current Retirees for each year since retirement
  - % for Future COLA



# Background of the LEGACY Plan & LAGERS

- In 2017 Employees hired after June 2006 were enrolled in LAGERS; Employees prior to June 2006 remained in LEGACY Plan
- Strong interest in LAGERS assuming responsibility for administration of LEGACY Plan – However, LAGERS didn't and still doesn't handle active plans
- Now there's a way to achieve this goal of having LAGERS administer the LEGACY Plan
- 93 LEGACY retirees/beneficiaries receiving a benefit
  - \$1,957 average monthly benefit
- 18 Vested terminated LEGACY participants waiting to receive a benefit
  - \$962 average monthly benefit
- 23 Active LEGACY employees
- 81 Active LAGERS employees



# Benefits of LAGERS Administering Closed LEGACY Plan

- Save approximately \$92K annually in administrative costs
  - Investment Advisor, Administration of Retiree Checks, Fiduciary Training, Annual Actuarial Reports, GASB 75 Reports, etc.
- Elimination of the Pension Board
- Elimination of Fiduciary Risk to the Board Members & City
- Predictability of Costs
  - LAGERS rate can increase no more than 1% per year
  - Legacy annual contribution dependent on unpredictable variables
- Investment Earnings Assumption (higher rate means lower payment)
  - LAGERS 7%
  - Legacy 6% and will probably go lower
- Elimination of Staff Time needed to provide support, analysis & record-keeping



# Benefits of Moving all Employees to LAGERS and Upgrading LAGERS Plan

- More Competitive with Surrounding Cities
  - 100% of cities that require a 4% employee contribution are in a higher plan
  - Current LT-8 (65) falls in the middle range of plans offered, but is on the low end of the plans offered by comparator cities
- LAGERS offers a COLA – LEGACY does not
- LEGACY Plan caps at 30 years – LAGERS does not have a cap on years of service
- 75.7% of employees surveyed listed retirement benefits as the most requested enhancement



# LEGACY vs LAGERS

	LEGACY	LAGERS
Current Active Members	24	81
Funded Ratio	86.2%	96.5%
Years to Vesting	8	5
Normal Retirement Age	General - 65 Police - 55	General - 60 Police - 55
Disability Benefit	No	Yes
Rule of 85/80*	Rule of 85	Rule of 80 - Not Selected
Portable to Other MO Cities	No	Yes
COLA	No	Yes, up to 4% per Year
Employee Contribution	4%	4%
Wage Base	Salary & Longevity	Salary, OT, Recurring Lump Sum Payments
Benefit Factor	1.7%**	Varies upon Plan
3% City Contr. to 401a Plan	Yes for those with the 1.7% Benefit Factor	No
Final Average Salary (FAS)***	60 months	60 months
*Years of Service plus age = Rule of 80 or 85		
**4 employees elected 2%		
***LAGERS offers 2 options for FAS - 36 or 60 months		



# Calculating Benefits LEGACY vs LAGERS

**Example of a 20 Year Employee with Final Average Salary of \$70,000**

<b>Life Option</b>	<b>LEGACY Plan</b>	<b>CURRENT LAGERS LT-8 until 65</b>	<b>LAGERS LT-8 after 65</b>	<b>OPTION 1 LAGERS LT-14 until 65</b>	<b>OPTION 1 LAGERS LT-14 after 65</b>	<b>OPTION 2 LAGERS L6</b>
Benefit Factor	1.70%	2.00%	1.50%	2.00%	1.75%	2.00%
Final Average Salary	\$5,833	\$5,833	\$5,833	\$5,833	\$5,833	\$5,833
Credited Service	20	20	20	20	20	20
<b>Monthly Benefit for Life</b>	<b>\$1,983</b>	<b>\$2,333</b>	<b>\$1,750</b>	<b>\$2,333</b>	<b>\$2,042</b>	<b>\$2,333</b>

**NOTES: LAGERS provides a COLA each year, where the LEGACY Plan does not  
The 1.7% Legacy Plan Members receive a 3% Defined Contribution from the City**

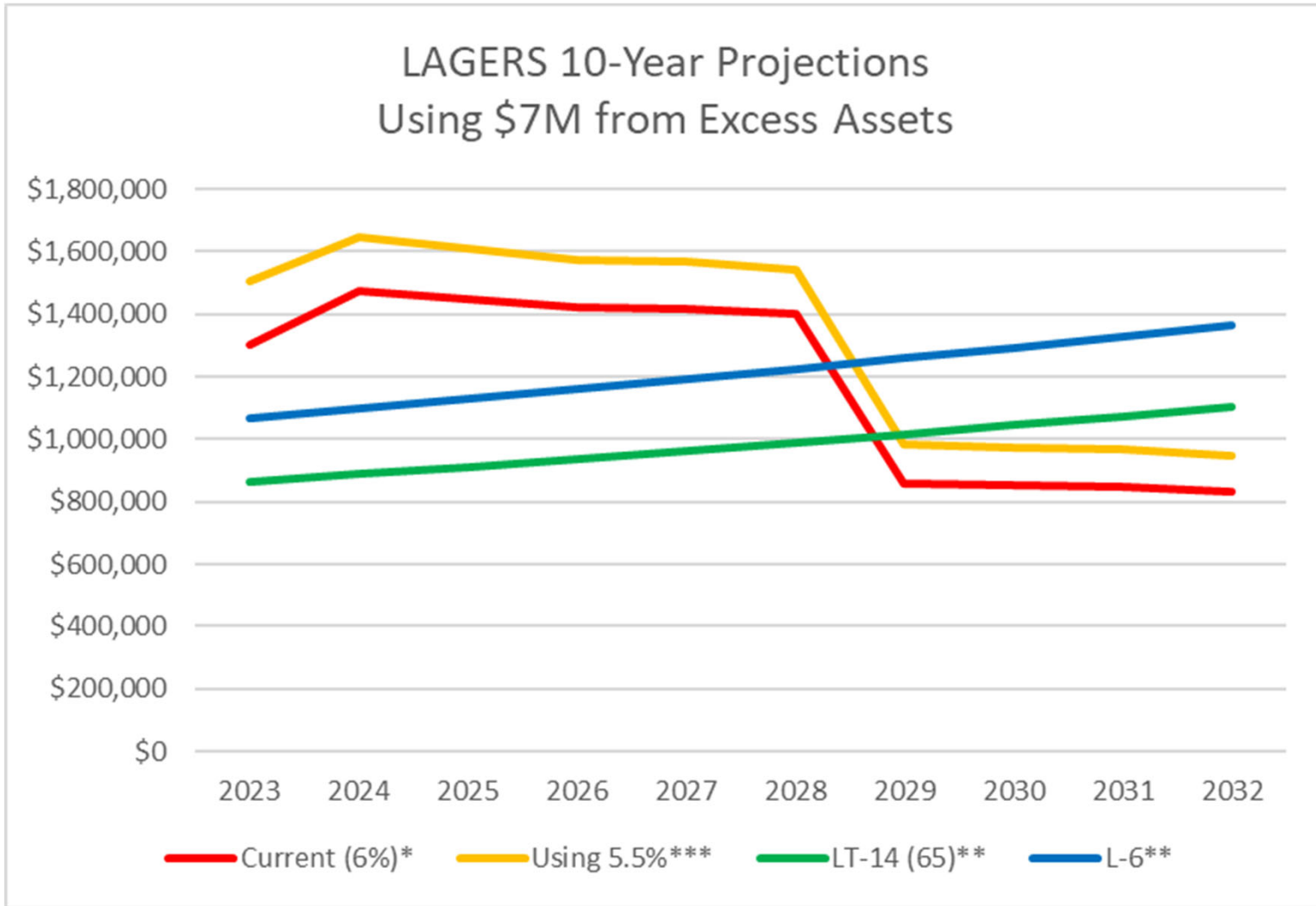


# Annual Conversion Costs per Each LAGERS Plan

Year	Current (6%)*	Using 5.5%***	LT-14 (65)**	L-6**
2023	\$1,303,541	\$1,503,541	\$864,396	\$1,069,788
2024	\$1,476,153	\$1,646,153	\$888,166	\$1,099,208
2025	\$1,449,215	\$1,609,215	\$912,591	\$1,129,436
2026	\$1,422,744	\$1,572,744	\$937,687	\$1,160,495
2027	\$1,416,759	\$1,566,759	\$963,474	\$1,192,409
2028	\$1,401,280	\$1,541,280	\$989,969	\$1,225,200
2029	\$856,325	\$986,325	\$1,017,193	\$1,258,893
2030	\$851,915	\$971,915	\$1,045,166	\$1,293,513
2031	\$848,073	\$968,073	\$1,073,908	\$1,329,084
2032	\$834,820	\$944,820	\$1,103,441	\$1,365,634
<b>Total</b>	<b>\$11,860,825</b>	<b>\$13,310,825</b>	<b>\$9,795,991</b>	<b>\$12,123,661</b>
*Includes City's LEGACY (6%) & LAGERS LT-8 (65) Plans				
**Assumes Legacy Plan Excess Assets of \$7M to pay down unfunded liabilities				
***Using 5.5%				

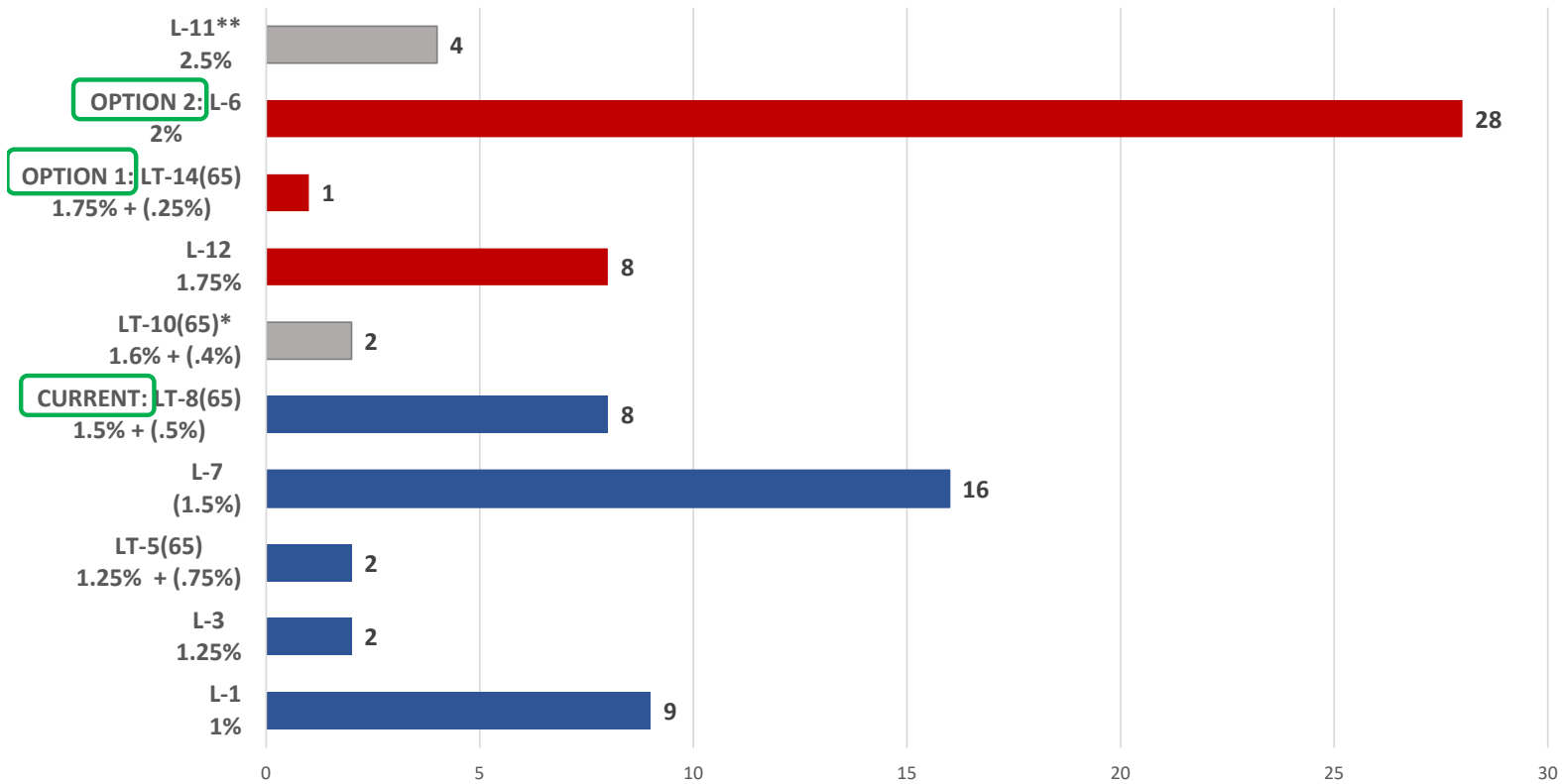


### LAGERS 10-Year Projections Using \$7M from Excess Assets





Number of Cities/Counties  
by LAGERS Plan  
in St. Louis Metropolitan Area  
(Missouri only)  
(n=80)



53.2% of all LAGERS cities/counties in St. Louis Metro Area (Missouri only) are in a higher level plan than Creve Coeur



# Cost-of-Living Adjustment (COLA) Options for LEGACY Plan Current Retirees

- Currently NO COLA in the LEGACY Plan
- COLA was last provided in 2001
- COLA Options (45 Day Notice is Required):
  1. Provide 0.5% to current retirees for each year of retirement prior to 2023 (\$970K)
  2. Provide 0.5% compounding future COLA in each year beginning in 2024 (\$958K)
  3. Decide on Dollar Amount & then How to Allocate (36.2% GF/63.8% PS)
    1. Provide 0.5% COLA (approx. \$964K) - \$349K/\$615K
    2. Provide 0.75% COLA (approx. \$1.4M) - \$507K/\$893K
    3. Provide 1% COLA (approx. \$1.9M) - \$689K/\$1.2M
    4. Provide 1.25% COLA (approx. \$2.4M) - \$869K/\$1.5M



# Impact of 0.25% COLA for each Year since Retirement

## Example Using 9/1/2023 Effective Date

<b>Retirement Date</b>	<b>Monthly Benefit</b>	<b>Years Retired</b>	<b>COLA % Increase</b>	<b>New Monthly Benefit</b>	<b>Monthly Difference</b>	<b>Yearly Difference</b>
9/1/2001	\$2,000	22	5.50%	\$2,110	\$110	\$1,321
9/1/2011	\$2,000	12	3.00%	\$2,060	\$60	\$720
9/1/2013	\$2,000	10	2.50%	\$2,050	\$50	\$600
9/1/2018	\$2,000	5	1.25%	\$2,025	\$25	\$300
4/1/2023	\$2,000	0	0.10%	\$2,002	\$2	\$25



## Impact of 0.50% COLA for each Year since Retirement

### Example Using 9/1/2023 Effective Date

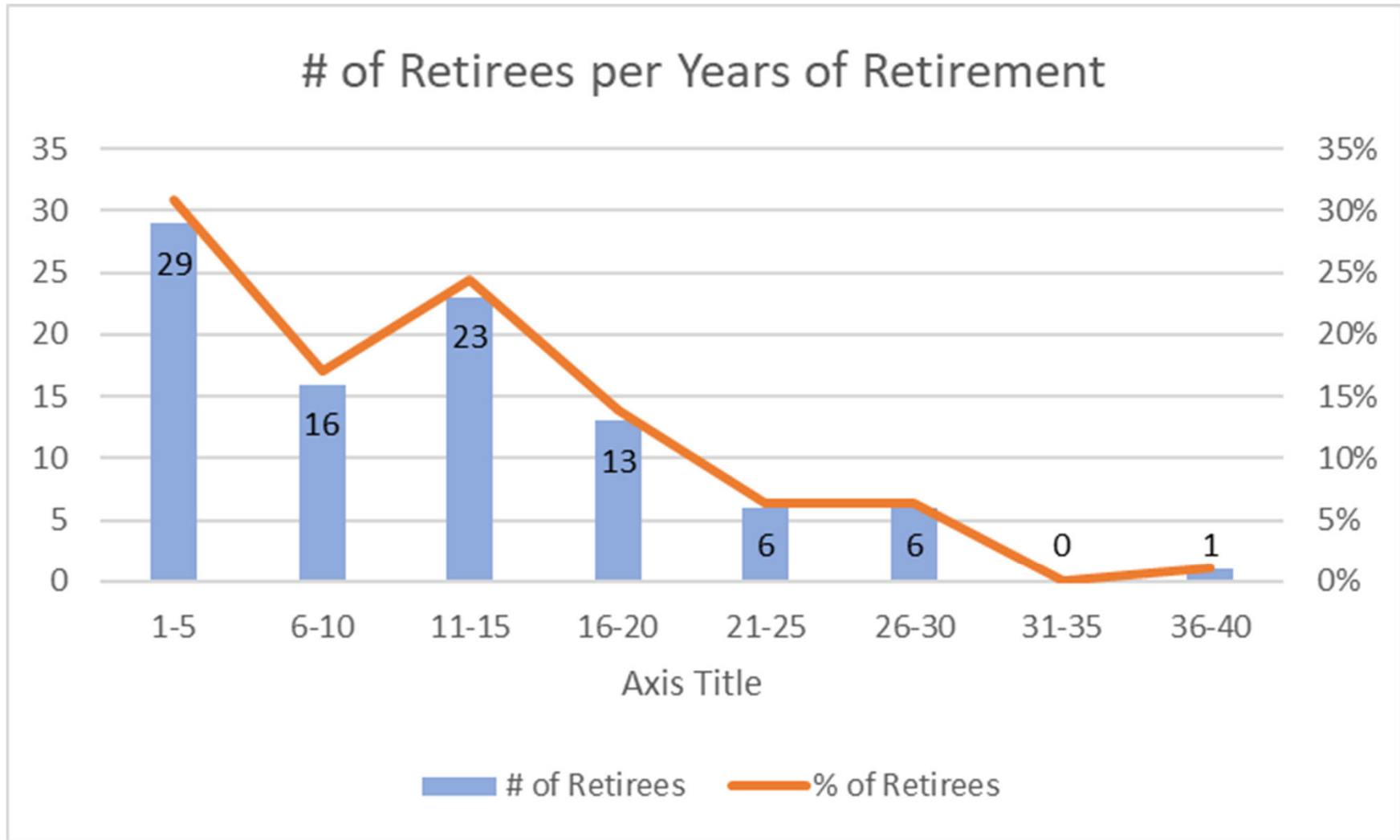
<b>Retirement Date</b>	<b>Monthly Benefit</b>	<b>Years Retired</b>	<b>COLA % Increase</b>	<b>New Monthly Benefit</b>	<b>Monthly Difference</b>	<b>Yearly Difference</b>
9/1/2001	\$2,000	22	11.01%	\$2,220	\$220	\$2,642
9/1/2011	\$2,000	12	6.00%	\$2,120	\$120	\$1,441
9/1/2013	\$2,000	10	5.00%	\$2,100	\$100	\$1,201
9/1/2018	\$2,000	5	2.50%	\$2,050	\$50	\$600
4/1/2023	\$2,000	0	0.21%	\$2,004	\$4	\$50



# 0.50% Compounding COLA for Future

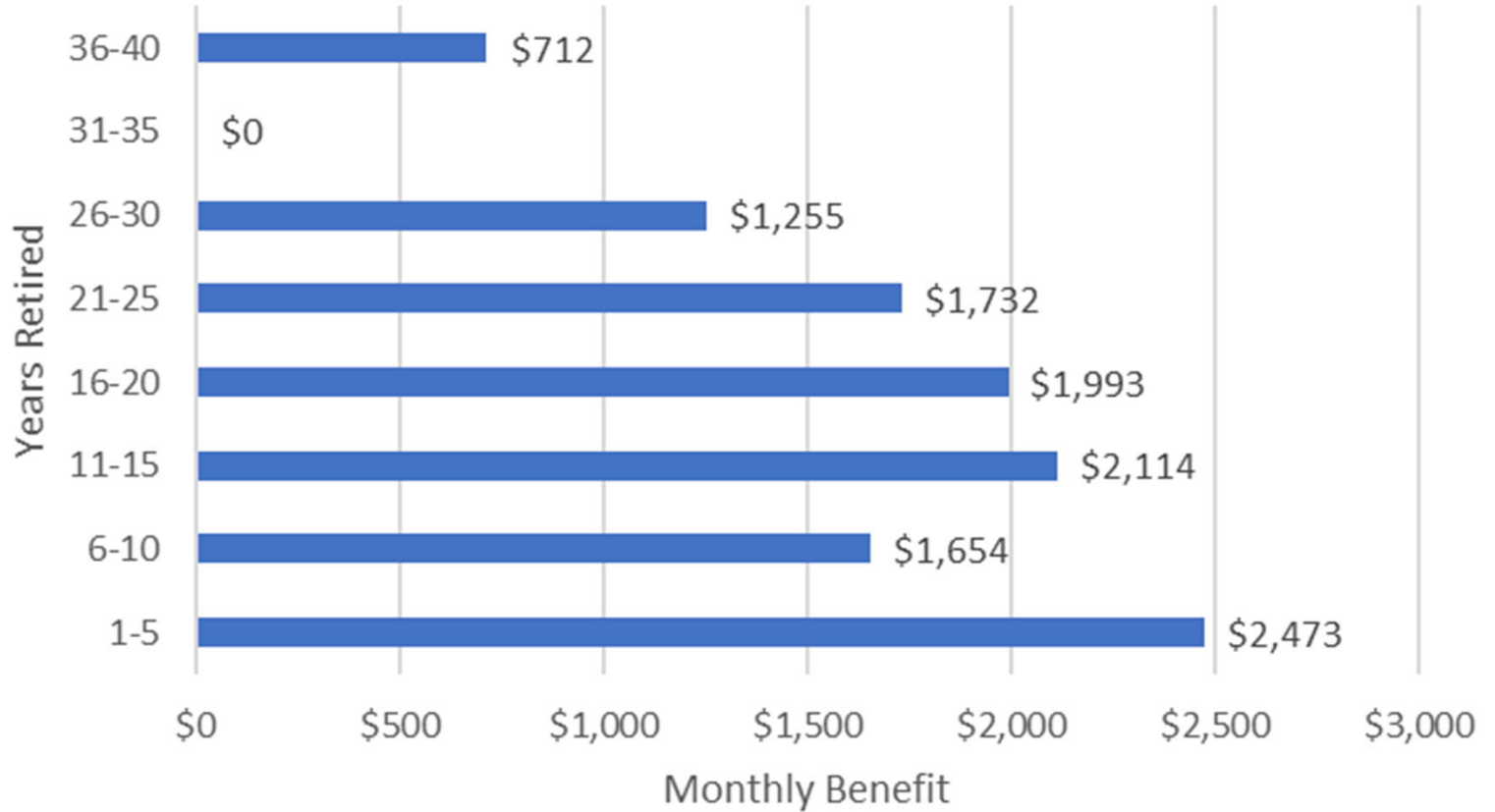
## Example Using 9/1/2023 Effective Date

Retirement Date	Years Retired	COLA % Increase	New Monthly Benefit w/ COLA	Monthly Diff. Since Retirement	Yearly Difference
9/1/2023	0	0.00	\$2,000	\$0	0
9/1/2024	1	0.50	\$2,010	\$10	\$120
9/1/2025	2	0.50	\$2,020	\$20	\$241
9/1/2026	3	0.50	\$2,030	\$30	\$362
9/1/2027	4	0.50	\$2,040	\$40	\$484
9/1/2028	5	0.50	\$2,051	\$51	\$606
9/1/2029	6	0.50	\$2,061	\$61	\$729
9/1/2030	7	0.50	\$2,071	\$71	\$853
9/1/2031	8	0.50	\$2,081	\$81	\$977
9/1/2032	9	0.50	\$2,092	\$92	\$1,102
9/1/2033	10	0.50	\$2,102	\$102	\$1,228





### Average Monthly Benefit per Years of Retirement





## Uniformed vs Non-Uniformed

	# of Retirees	Monthly Benefit	Monthly %
Uniformed	58	\$117,639	63.8%
Non-Uniformed	55	\$66,869	36.2%
	113	\$184,508	100%



## COLA Funding Sources

	# of Retirees	Monthly Benefit	Monthly %
Uniformed	58	\$117,639	63.8%
Non-Uniformed	55	\$66,869	36.2%
	<u>113</u>	<u>\$184,508</u>	<u>100%</u>

<b>Option #3:</b> 0.25% COLA – for each year since retirement	\$485,000
1% Compounding COLA - Going Forward	\$1,916,000
Total Cost of COLA	<u>\$2,401,000</u>
<b>Sources:</b>	
Public Safety Fund (63.8%)	\$1,530,835
General Fund (36.2%)	\$870,165
	<u>\$2,401,000</u>



## COLA Options Based on Dollar Amount Per Each Funding Source

<b>Total .5% COLA</b>		<b>\$964,000</b>
General Fund (36.2%)		\$349,371
Public Safety Fund (63.8%)		\$614,629
		<b>\$964,000</b>

<b>Total .75% COLA</b>		<b>\$1,400,000</b>
General Fund (36.2%)		\$507,385
Public Safety Fund (63.8%)		\$892,615
		<b>\$1,400,000</b>

<b>Total 1% COLA</b>		<b>\$1,900,000</b>
General Fund (36.2%)		\$688,594
Public Safety Fund (63.8%)		\$1,211,406
		<b>\$1,900,000</b>

<b>Total 1.25% COLA</b>		<b>\$2,400,000</b>
General Fund (36.2%)		\$869,803
Public Safety Fund (63.8%)		\$1,530,197
		<b>\$2,400,000</b>



# Transition LEGACY Plan to LAGERS

- Pension Board & Finance Committee Review
- Amend LEGACY Plan document - COLA
  - 45-day public notice
- Adopt changes to current LAGERS plan and convert active employees to LAGERS
  - 45-day public notice
- Close the LEGACY Plan
  - Only 93 retirees and 18 terminated vested participants will remain in the LEGACY Plan
- Transition administration of LEGACY Plan to LAGERS
  - Effective 3 months after closing the LEGACY Plan
  - Pension Board and City Council must adopt an agreement to appoint LAGERS as administrator & Trustee



# Council Direction

- April/May Budget Meetings
  - Council decides on COLA (which option)
  - Council decides on LAGERS Upgrade (LT-14 or L6)
- June/July
  - Amend Legacy Plan Document (Effective 8/1/23)
    - Draft Ordinance (1<sup>st</sup> Reading) & 45-Day Public Notice
    - 2<sup>nd</sup> Reading after 45 Days
  - Adopt Changes to LAGERS Plan (Effective 8/1/23)
    - Draft Ordinance (1<sup>st</sup> Reading) & 45-Day Public Notice
    - 2<sup>nd</sup> Reading after 45 Days
  - Move Active Legacy Employees to LAGERS (Effective 8/1/23)
- October
  - Transition Administration of Legacy Plan to LAGERS (Effective 12/1/23)
    - Update Valuation
    - Draft Ordinance (1<sup>st</sup> Reading) & 45-Day Public Notice
    - 2<sup>nd</sup> Reading after 45 Days
    - Pension Board adopts a Joinder Agreement to appoint LAGERS as Administrator & Trustee
    - City Council adopts a Joinder Agreement to appoint LAGERS as Administrator & Trustee



# Pension Objectives

1. Determine LAGERS Plan Level
  - LT-14 (65)
  - L6
  - 45 Day Notice is Required for Plan Enhancement
  
2. Determine Retirees COLA Amount
  - 0.50% - \$964K
  - 0.75% - \$1.4M
  - 1.00% - \$1.9M
  - 1.25% - \$2.4M
  
3. Determine How to Allocate the Retirees COLA
  - % to Current Retirees for each year since retirement
  - % for Future COLA
  - 45 Day Notice is Required for Plan Enhancement



# Questions and Answers