

**REGULAR MEETING OF THE ANNUITY AND PENSION BOARD
EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE
789 N. WATER ST. (Employees' Retirement System)
TUESDAY, NOVEMBER 28, 2023 – 9:00 A.M.**

Special Notice: The meeting will be held remotely via video conference. Instructions on how to observe the meeting will be available on ERS's website (www.cmers.com) prior to the meeting.

Please note and observe the following remote attendance etiquette to ensure a smooth and productive meeting:

- In order to cut down on background noise, participants in the meeting should put their phones on mute when they are not participating.
- At the start of the meeting, the Chairman will announce the names of the members of the Board present on the call, as well as anyone else who will be participating.
- Please request to be recognized by the Chairman if you would like to speak.
- Those participating on the call should identify themselves whenever they speak, and should ensure that the other participants on the call can hear them clearly.

REGULAR MEETING

- I. Approval of Minutes.
A. Regular Meeting Held October 24, 2023.

- II. Chief Investment Officer Report.

- III. Investment Committee Report.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following items (III.A. and III.B.) as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Board may then vote to reconvene in open session following the closed session.

- A. Approval of Real Estate Manager Side Letter.
- B. Approval of Recommendation regarding Real Estate Manager.
- C. Approval of Loomis Sayles Guideline Change.

- IV. New Business.
- A. Approval of New Actuarial Tables for Pension Benefits – Presentation by Cavanaugh Macdonald.
 - B. Retirements, Death Claims, and Refunds (October).

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (IV.C.), as provided in Section 19.85(1)(g), Wisconsin State Statutes, to confer with legal counsel concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved. The Board may then vote to reconvene in open session following the closed session.

- C. Proposed Amendment of Board Rule – Retirement and Death Benefits XVII.E.4.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (IV.D.), as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Board may then vote to reconvene in open session following the closed session.

- D. Proposed Amendment of the Contract with BakerTilly.
- E. Conference Requests – November 2023 Board Meeting.
- F. Proposed 2024 Board and Committee Meeting Dates.

V. Medical Reports.

- A. All Duty & Ordinary Disability Applications & Re-examinations (November).

VI. Unfinished Business.

- A. Pending Legal Opinions and Service Requests Report.
- B. Pending Legislation Report.
- C. Executive Director's Report – Inventory of ERS Projects.

VII. Informational.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (VII.A.), as provided in Section 19.85(1)(g), Wisconsin State Statutes, to confer with legal counsel concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved. The Board may then vote to reconvene in open session following the closed session.

- A. Pending Litigation Report.
- B. Conferences.
- C. Class Action Income 2023 YTD.
- D. Adjusted Quarterly Cost Basis of Equity.
- E. Minutes of the Administration & Operations Committee Meeting Held October 18, 2023.
- F. Minutes of the Investment Committee Meeting Held November 9, 2023.
- G. Report on Bills.
- H. Deployment of Assets.
- I. Securities Lending Revenue and Budget Report.
- J. Preliminary Performance Report and Asset Allocation.

MEETING REMINDERS

INVESTMENT COMMITTEE MEETING

THURSDAY, DECEMBER 7, 2023 – 9:00 A.M.

789 N. WATER ST.

REGULAR MEETING OF THE ANNUITY AND PENSION BOARD

TUESDAY, DECEMBER 19, 2023 – 9:00 A.M.

789 N. WATER ST.

ADMINISTRATION & OPERATIONS COMMITTEE MEETING

WEDNESDAY, DECEMBER 20, 2023 – 9:00 A.M.

789 N. WATER ST.

I.

APPROVAL OF MINUTES

- A. Regular Meeting Held October 24, 2023.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE
ANNUITY AND PENSION BOARD**

Minutes of the Regular Meeting
held October 24, 2023 via teleconference

The meeting was called to order at 9:02 a.m.

Board Members Present: Matthew Bell, Chair
 Deborah Ford
 Timothy Heling
 Molly King
 Rudolph Konrad

Retirement System Staff Not Present: Tom Klusman (excused)
 Nik Kovac (excused)
 Aycha Sawa (excused)

Retirement System Staff Present: Jerry Allen, Executive Director
 Melody Johnson, Deputy Director
 Daniel Gopalan, Chief Financial Officer
 David Silber, Chief Investment Officer
 Erich Sauer, Deputy Chief Investment Officer
 Thomas Courtright, Pension Investment Analyst
 Gust Petropoulos, Deputy Director – Disability
 Mary Turk, Business Operations Analyst
 Jan Wills, Board Stenographer

Others Present: Christine Webb, Ryan Young, Brown & Brown; Erin Scharlau, Carolyn Stittleburg, Legislative Audit Bureau; Patrick McClain, Alex Foundos, City Attorney's Office; Terry Siddiqui, DS Consulting, Inc., eight members of the public called in to the meeting.

Regular Meeting.

Approval of Minutes.

Regular Meeting Held September 26, 2023. It was moved by Mr. Konrad, seconded by Mr. Heling, and unanimously carried, to approve the minutes of the Regular Meeting Held September 26, 2023.

Chief Investment Officer Report. As a matter of information, Board members received the October 24, 2023 Performance Update. Mr. Sauer said the Fund as of September 30, 2023, had a value of \$5.47 billion. He said the Fund had a -2.1% return in September, net of fees, and underperformed the blended benchmark by approximately 37 basis points. Mr. Sauer commented the main relative performance drivers were Manager Selection, with Private Equity subtracting 83 basis points and Real Estate adding 19 basis points. He said the overall impact from the allocation was 21 basis points, attributable primarily to the overweight in Private Equity. He added the Fund has underperformed the benchmark in the year-to-date period and one-year periods, while outperforming in the five-, 10-, 15- and 20-year periods. Mr. Sauer remarked as of October 23,

2023, the Fund was at -1.8% month-to-date, which brought the year-to-date return to 1.8%, and the Fund value to \$5.37 billion.

He noted 10 of the Fund's 16 active mandates are outperforming year-to-date, and the Fixed Income and Real Assets asset classes are outperforming their respective benchmarks year-to-date. He said year-to-date the Fund has seen a gain in the value of investments of \$117.0 million, paid benefits and expenses of \$366.5 million, and received contributions of \$153.9 million. Mr. Sauer concluded that the ERS is withdrawing \$30 million from UBS for benefit payments this month.

Mr. Silber said the next Investment Committee Meeting is November 9. He added that Mr. Walters left his position a couple weeks ago because of a family decision to move to another state. Mr. Silber said the investment department now has two vacant positions, and recruitment for these positions was posted to the public last Friday. He added that DER and the budget office have been great to work with. Mr. Silber said the Fund's return was now under 2%, net of fees, as of October 23rd. He commented that some of the Fund's Fixed Income managers are yielding over 6% in their portfolio's now. Mr. Silber said there are negative marks in Real Estate year-to-date due to the rise in interest rates. He added that the Fund is generating low single-digit returns in Hedge Funds and Private Equity year-to-date. Mr. Silber said that about seven stocks have generated the majority of the S&P 500 index's return year-to-date. He said most benchmarks for small-cap indices, mid-cap indices, value indices and emerging market indices have negative year-to-date returns. Discussion ensued.

Administration & Operations Committee Report. Ms. King reported that the A&O Committee met on October 18 at 9:00 a.m. and Brown & Brown presented, and stated that both the property casualty and cyber insurance policy costs would be lower under a proposal from with Cincinnati Insurance Company rather than with the current carrier, Hanover. Ms. King said the A&O Committee recommended approval of the proposal for property casualty Insurance with the Cincinnati Insurance Company. Ms. King said the Cyber Insurance policy proposal had a substantial decrease and the committee also recommended approval of the Cyber Insurance. She said the committee also recommended approval of the Fiduciary Insurance.

Renewal of Property Casualty Insurance. It was moved by Ms. Ford, seconded by Mr. Konrad, and unanimously carried, to approve the Cincinnati proposal on file for property casualty insurance.

Renewal of Fiduciary and Cyber Insurance. It was moved by Ms. Ford, seconded by Mr. Konrad, and unanimously carried, to approve the proposal on file from Brown & Brown for renewal of fiduciary and cyber insurance.

Mr. Bell advised that the Annuity & Pension Board may vote to convene in closed session on the following item as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Board may then vote to reconvene in open session following the closed session.

It was moved by Ms. King, seconded by Mr. Heling and unanimously carried, to convene in closed session by the following roll call vote: AYES: Mses. Ford and King; Messrs. Bell, Heling, and Konrad. NOES: None.

The Board convened in closed session at 9:26 a.m.

The Board reconvened in opened session at 9:42 a.m.

Approval of Banking Services Contract. It was moved by Mr. Konrad, seconded by Ms. King, and unanimously carried, to approve the banking services contract with the firm selected in closed session pursuant to the form of contract on file.

New Business.

Retirements, Death Claims, and Refunds (September). Mr. Allen presented the following activity for the months of September 2023.

Administrative Withdrawal	\$0.00
Full Refund	\$0.00
Active Death Benefits reported	\$0.00
Deferred Death	\$17,404.25
Deferred Death-Member Only Refund	\$0.00
Ordinary Death Benefits reported	\$0.00
Retired Death Benefits reported	\$39,949.07
Survivor Death – Termination Benefits reported	\$6,507.37
Refund of Member Contributions paid	\$384,502.00

Discussion ensued. It was moved by Mr. Heling, seconded by Ms. Ford, and unanimously carried, to approve the Retirements, Death Claims, and Refunds (September 2023).

Conference Requests – October 2023 Board Meeting. Staff noted that there were no Conference Requests this month. Mr. Bell said he has the opportunity to present at the 2024 NCPERS conference on the topic of New Trustees.

Medical Reports.

All Duty & Ordinary Disability Applications & Re-examinations (October). Mr. Petropoulos presented certifications (October 2023) of the Fire and Police Medical Panel Physicians and the Medical Council relative to Duty & Ordinary Disability Retirement benefits as follows:

<u>Police – Re-examinations – Duty</u>	<u>Recommendation</u>
Jill Riley	Approval

Fire – Re-examinations – DutyRecommendation

Andrew Korducki

Approval

Police – Re-examinations – OrdinaryRecommendation

Ruby Esqueda

Approval

Kara Kathrein

Approval

Todd Rendon

Approval

Laticia Robinson

Approval

Matthew Schulze

Approval

GC – Re-examinations – DutyRecommendation

Sahagian Grimes

Approval

GC – Re-examinations – OrdinaryRecommendation

Linda Gifford

Approval

Mr. Petropoulos noted one applicant for duty and ordinary disability withdrew her application, even though the Medical Council approved her ordinary disability. He said her withdrawal letter would be part of the record.

It was moved by Mr. Heling, seconded by Mr. Konrad, and unanimously carried, to approve the Duty & Ordinary Disability Applications & Re-examinations (October).

Unfinished Business.

Pending Legal Opinions and Service Requests Report. Mr. McClain said the Joint and Survivor Benefits Legal Opinion is completed and would be provided at next month's meeting. Mr. Allen said the service request regarding the banking services contract is now completed. He also said that on September 25, the City Attorney's office approved sending the contract for Abbott Capital Private Equity Investors 2024 Vehicle to outside counsel.

Pending Legislation Report. Mr. Allen said charter ordinance amendments relating to the ERS were adopted by the Common Council and consist of amendments related to Act 12. He said there was also a resolution related to the City's enrollment in the Wisconsin Retirement System adopted on October 10, 2023. Mr. Allen commended Mr. McClain for his draftsmanship on all the amendments related to Act 12.

Executive Director's Report – Inventory of ERS Projects. As a matter of information, Staff presented a report on the ERS projects and updated the Board on ERS activities, a copy of which is on file with the ERS. Discussion ensued.

Informational.

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is or is likely to become involved. The Board may then vote to reconvene in open session following the closed session.

Mr. Bell stated the Board did not convene in closed session as noticed.

- 1) Pending Litigation Report.
- 2) Conferences.
- 3) Class Action Income 2023 YTD.
- 4) Minutes of the Administration & Operations Committee Meeting Held September 20, 2023.

The following is a list of activities since the last Board meeting, copies sent with meeting notice and attached to minutes:

- 5) Report on Bills.
- 6) Deployment of Assets.
- 7) Securities Lending Revenue and Budget Report.
- 8) Preliminary Performance Report and Asset Allocation.

Mr. Bell accepted and placed the Informational items on file.

There being no further business to come before the meeting, it was moved by Ms. King and seconded by Ms. Ford, to adjourn the meeting.

Mr. Bell adjourned the meeting at 10:06 a.m.

Bernard J. Allen
Secretary and Executive Director

NOTE: All proceedings of the Annuity and Pension Board Meetings and related Committee Meetings are recorded. All recordings and material mentioned herein are on file in the office of the Employees' Retirement System, 789 N. Water Street, Suite 300.)

II.

CHIEF INVESTMENT OFFICER REPORT

Milwaukee Employees' Retirement System - November 28, 2023

Fund as of October 31, 2023

*Fund value of \$5.33b.

*Fund return of -1.9% in Sept., net of fees, underperformed by approximately 9bp.

*Primary Relative Perf. Drivers:
Manager Selection

Real Estate -10bp
Reams -7bp

Public Equity

-Value & Small Cap biases -16bp
-10 of 11 mandates outperformed 21bp

*Fund has underperformed the benchmark in the YTD and 1-year periods, while outperforming in the 5, 10, 15, and 20-year periods.

Nov. Update (as of 11/20/23)

*Fund return 4.2% MTD

*Fund return 6.0% YTD

*Fund value \$5.55b

10 out of 16 active mandates outperforming YTD.

*Fixed Income and Real Assets asset classes outperforming their respective benchmarks YTD.

*Investment Change: \$338.1m

*Benefits & Expenses: 406.8m

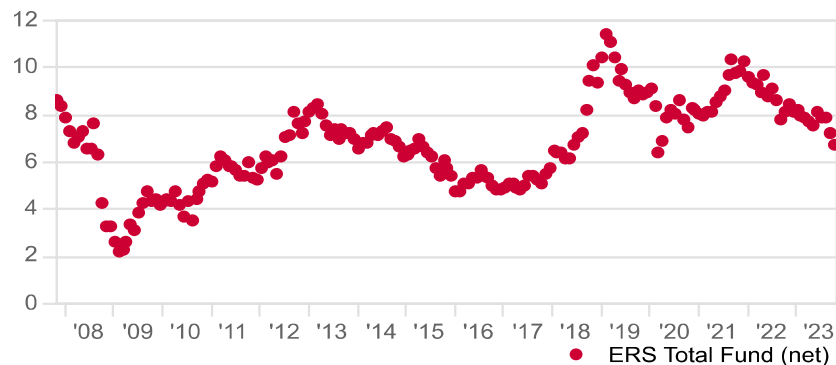
*Contributions: 156.5m

Monthly Withdrawals:

Fund's current cash balance sufficient to cover November benefit payments.

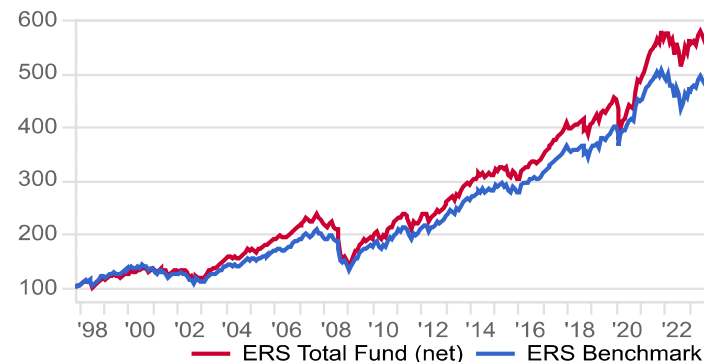
Total Fund - 10-Year Rolling Returns

11/28/1997 to 10/31/2023



Growth of \$100 - Total Fund & ERS Benchmark

11/28/1997 to 10/31/2023



Return Data

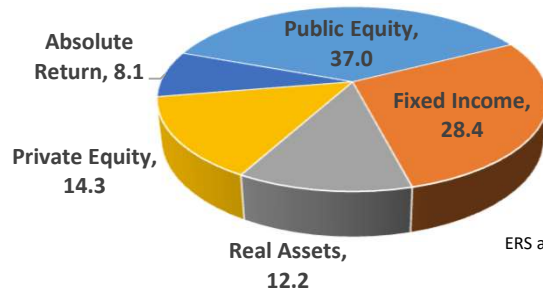
Source Data: Monthly Return

	1 Month	YTD	1 Year	5 Year	10 Year	15 Year	20 Year
Total Fund (net)	-1.9	1.8	4.1	6.8	6.7	8.5	7.0
ERS Benchmark	-1.8	3.9	6.2	6.1	6.2	7.9	6.6

Total Fund - 20-Year Risk & Return Data

	Return	Std Dev	Tracking Error	Info Ratio (arith)	Sharpe Ratio	Alpha	Beta
Total Fund (net)	7.0	10.2	2.5	0.1	0.5	-0.2	1.1
ERS Benchmark	6.6	9.1	--	--	0.6	0.0	1.0

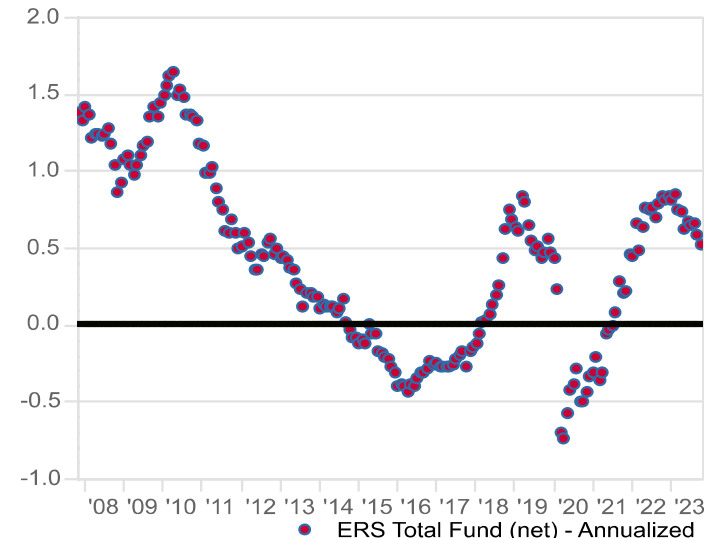
ERS Allocation as of October 31, 2023



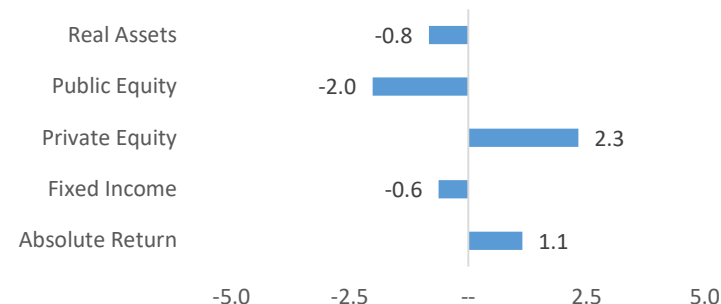
ERS allocation weights may not total 100% due to rounding

Total Fund - 10-Year Rolling Excess Returns

11/28/1997 to 10/31/2023



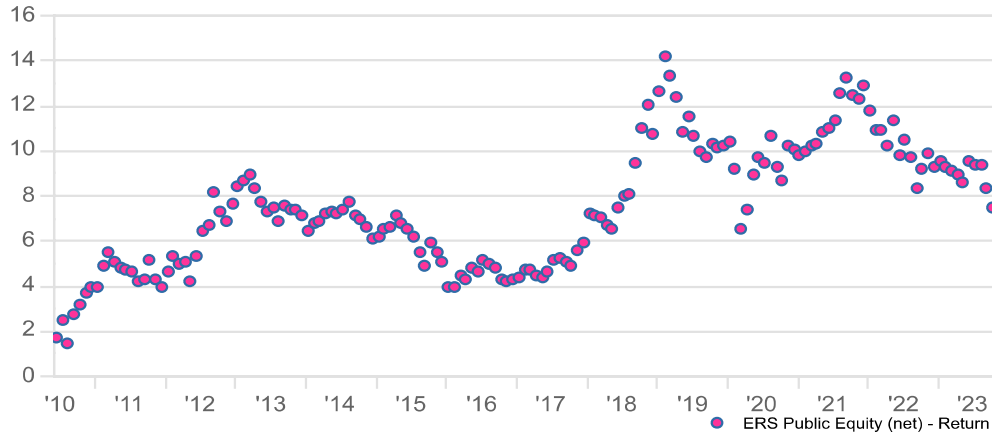
Asset Allocation vs Policy as of October 31, 2023



Milwaukee Employees' Retirement System - November 28, 2023

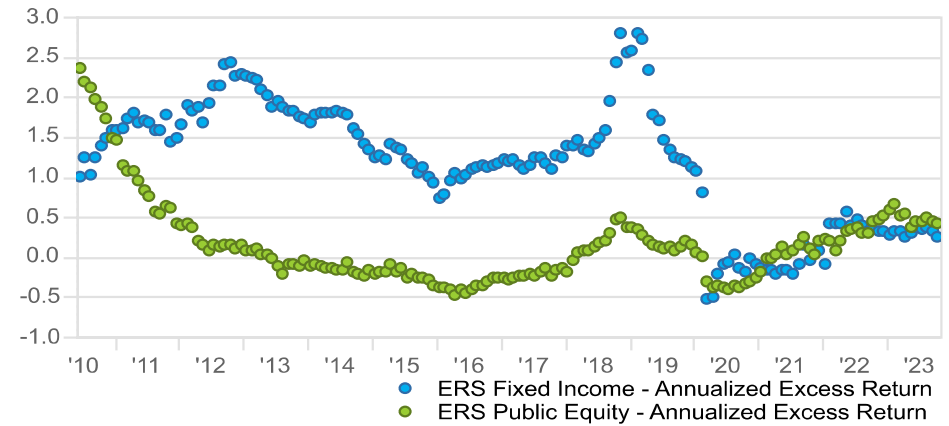
Public Equity - 10-Year Rolling Returns

06/30/2000 to 10/31/2023



Asset Class - 10-Year Rolling Excess Returns

06/30/2000 to 10/31/2023

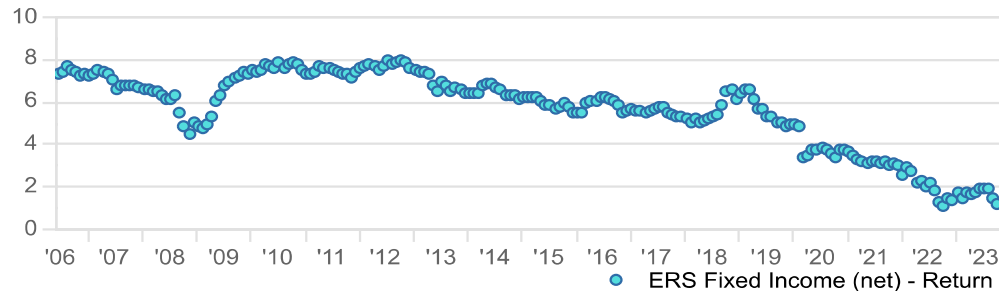


Return Data

	1 Month	YTD	1 Year	5 Year	10 Year	15 Year	20 Year
Public Equity	-3.4	5.2	10.0	7.9	7.8	10.2	7.7
Public Equity (net)	-3.4	5.0	9.6	7.5	7.5	9.8	7.4
Public Equity Benchmark	-3.3	5.7	9.4	7.1	7.0	9.3	7.2
MSCI ACWI IMI NR USD	-3.3	5.7	9.4	7.1	6.6	9.1	7.3

Fixed Income - 10-Year Rolling Returns

06/28/1996 to 10/31/2023



Return Data

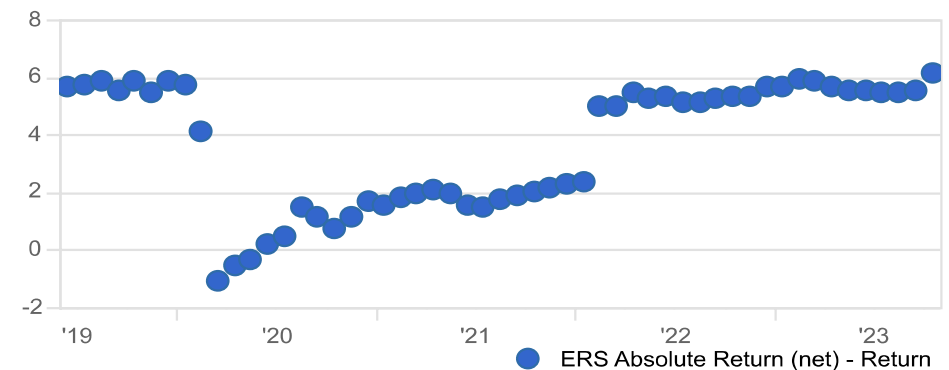
	1 Month	YTD	1 Year	5 Year	10 Year	15 Year	20 Year
Fixed Income	-1.9	-2.0	1.2	0.3	1.3	4.5	4.0
Fixed Income (net)	-1.9	-2.1	1.1	0.2	1.1	4.3	3.9
Bbg US Agg Bond TR USD	-1.6	-2.8	0.4	-0.1	0.9	2.6	2.8

Risk Adjusted Returns (6/30/14 - 10/31/23)

	Return	Std Dev	Sharpe Ratio	Max Drawdown
Public Equity (net)	6.8	15.5	0.4	-25.3
Fixed Income (net)	0.8	6.4	-0.1	-13.6
Absolute Return (net)	5.5	9.6	0.4	-27.1

Absolute Return - 5-Year Rolling Returns

06/30/2014 to 10/31/2023



Return Data

	1 Month	YTD	1 Year	3 Year	5 Year	7 Year
Absolute Return (net)	0.3	4.2	6.7	13.8	6.1	5.5
90-Day T-Bill + 3%	0.7	6.9	8.2	5.2	4.9	4.7

III.

INVESTMENT COMMITTEE REPORT

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following items (III.A. and III.B.) as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Board may then vote to reconvene in open session following the closed session.

- A. Approval of Real Estate Manager Side Letter.
- B. Approval of Recommendation regarding Real Estate Manager.
- C. Approval of Loomis Sayles Guideline Change.

Guideline Updates

1. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF US TREASURY FUTURES.

- INTEREST RATE FUTURES ARE AN EFFICIENT AND LIQUID TOOL USED TO MANAGE PORTFOLIO DURATION AND YIELD CURVE EXPOSURES. INTEREST RATE FUTURES ALLOWS US TO ADJUST PORTFOLIO DURATION/YIELD CURVE EXPOSURES UP OR DOWN IN AN EFFICIENT MANNER WITHOUT INCURRING TRADING COSTS AND TURNOVER OF INDIVIDUAL CASH BONDS. THIS ALLOWS US THE POTENTIAL TO RETAIN INCOME AND YIELD IN THE PORTFOLIO.

2. THE RATIONALE FROM THE INVESTMENT TEAM FOR THE REQUEST TO INVEST IN INDIVIDUAL BANK LOANS.

- THE TEAM'S PREFERENCE IS TO INVEST IN INDIVIDUAL BANK LOANS GIVEN THE RISKS WE SEE MORE BROADLY IN THE LOAN MARKET AND WE ARE WORKING TO GET ALL OF OUR FD ACCOUNTS SET UP. TODAY, WE ARE STILL <1% IN BANK LOANS ACROSS MSFD ACCOUNTS BUT HAVE ADDED UBER AND CARNIVAL EXPOSURES MORE RECENTLY IN '23.
- WE ARE COMFORTABLE WITH AN AGGREGATE 15% LIMIT ON INDIVIDUAL LOANS/LOAN FUND EXPOSURE.

3. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF CDX.

- CREDIT DEFAULT SWAPS ARE AN EFFICIENT AND LIQUID TOOL USED TO 1) MANAGE DEFAULT RISK OF A BASKET OF ISSUERS AND/OR 2) TO INCREASE/DECREASE EXPOSURE TO CREDIT MARKETS. CDX ALLOWS US TO ADJUST CREDIT EXPOSURE UP OR DOWN IN THE PORTFOLIO IN AN EFFICIENT MANNER WITHOUT INCURRING TRADING COSTS OF INDIVIDUAL CORPORATE CASH BONDS AND WE CAN ALSO USE CDX AS A WAY TO HELP GAIN EXPOSURE WHILE PUTTING PHYSICAL CAPITAL TO WORK.

4. THE RATIONALE FROM THE INVESTMENT TEAM TO ELIMINATE THE 144A PERCENTAGE LIMIT.

- 144A-FOR-LIFE SECURITIES HAVE ENJOYED A GROWING PRESENCE IN THE HIGH YIELD UNIVERSE, POINTING TO BROAD MARKET ACCEPTANCE, ADEQUATE LIQUIDITY AND PUBLIC-MARKET LEVELS OF TRANSPARENCY. 144A-FOR-LIFE SECURITIES CURRENTLY REPRESENT APPROXIMATELY 86% OF NEW US HIGH YIELD DEAL VOLUME.
- THE SIZE AND SCOPE OF THE 144A MARKET HAS REACHED A POINT WHERE NOT INVESTING IN THESE SECURITIES COULD BE COSTLY. WE BELIEVE THAT INVESTORS SHOULD EXAMINE THEIR GUIDELINES IN ORDER TO TAKE ADVANTAGE OF THE POTENTIAL OPPORTUNITIES OFFERED IN THE 144A MARKET.

Guideline Updates Cont.

5. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF CURRENCY FORWARDS (BOTH DELIVERABLE AND NON-DELIVERABLE).

- CURRENCY FORWARDS ARE USED TO MANAGE THE PORTFOLIO'S FOREIGN CURRENCY RISK AND MAY BE UTILIZED FOR BOTH HEDGING AND NON-HEDGING PURPOSES. WE UTILIZE FX FORWARDS TO EXPRESS A STRATEGIC VIEW IN OUR CLIENTS' PORTFOLIOS WHETHER WE ARE HEDGING CURRENCY RISK AWAY OR TO OBTAIN CURRENCY EXPOSURE. IF WE ANTICIPATE CURRENCY WEAKNESS WE WILL USE FX DERIVATIVES TO REDUCE SUCH CURRENCY RISK OR IF WE DO PERCEIVE VALUE IN A CURRENCY WE WILL OVERLAY SUCH DERIVATIVES TO GAIN EXPOSURE TO SUCH A CURRENCY.
- IN ORDER TO COVER ITS DERIVATIVES OBLIGATIONS, THE PORTFOLIO WILL ENSURE IT MAINTAINS LIQUID ASSETS SUFFICIENT TO MEET ITS OBLIGATIONS, CONSISTENT WITH THE LOOMIS SAYLES COVER POLICIES AND PROCEDURES AS TO NOT CREATE LEVERAGE IN THE PORTFOLIO. A SHORT POSITION IN A FORWARD CONTRACT IS CONSIDERED COVERED SO LONG AS THE ACCOUNT OWNS SECURITIES DENOMINATED IN THE SAME CURRENCY AS THE FORWARD CONTRACT IN AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT REQUIRED TO BE DELIVERED UNDER THE FORWARD CONTRACT.

6. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF THE SENIOR LOAN FUND.

- WE BELIEVE CREDIT RISKS ARE GREATER IN THE LOAN MARKET TODAY AND IN DETERIORATING CREDIT CONDITIONS, PRICING COULD REFLECT THE POTENTIAL FOR LOWER RECOVERY VALUES -- CREATING POTENTIAL OPPORTUNITY. IN ADDITION, IF A WAVE OF CREDIT DOWNGRADES WERE TO COME IN SINGLE B QUALITY LOANS, CLO'S HAVE LIMITED CAPACITY TO OWN/BUY CCC RATED SECURITIES. A REDUCED BID FROM THE CLO MARKET HAS THE POTENTIAL TO PUT PRESSURE ON BANK LOAN VALUATIONS ACROSS ALL CREDIT QUALITIES, WHICH IN TURN, MAY CREATE OPPORTUNITIES/ENTRY POINTS FOR SPECIFIC IDIOSYNCRATIC RISK/ISSUERS WHERE WE ARE COMFORTABLE WITH THE UNDERLYING CREDIT FUNDAMENTALS. WE'VE JUST BEGUN TO ADD INDIVIDUAL BANK LOANS WHERE PERMISSIBLE, BUT HAVE NOT BEEN ADDING VIA THE LOAN FUND GIVEN THE RISKS WE BELIEVE EXIST MORE BROADLY IN THE LOAN MARKET.
- WE ARE COMFORTABLE WITH AN AGGREGATE 15% LIMIT ON INDIVIDUAL LOANS/LOAN FUND EXPOSURE.

Manager: Loomis, Sayles & Company
Role: Opportunistic Fixed Income

Objectives and Guidelines

Investment Objectives

Time Horizon	Performance Standard	
	<u>Universe</u>	<u>Index</u>
Less than one market cycle (rolling 3-year periods).	Rank in upper 50% of a Peer Group. ¹	
One market cycle (rolling 5-year periods).	Rank in the upper 40% of a Peer Group ¹	Exceed (after fees) the Benchmark Index + 1.0%. ²

Investment Guidelines

- The effective duration of the aggregate portfolio should be no less than 50% and no more than 250% of the Bloomberg Barclays US Aggregate Index.
- Up to 20% of the market value of the portfolio may be issues rated B- by Standard and Poor's and Fitch or B3 by Moody's. If the ratings assigned to an instrument by Standard & Poor's, Moody's, and/or Fitch are not the same, the highest rating of these ratings agencies will be used.
- If an instrument is not rated by Standard & Poor's, Moody's, and Fitch, the equivalent rating determined by the Loomis Sayles Research Department will be used.
- ~~and A~~an additional 5% may be invested in issues not rated by Standard & Poor's, Moody's, and Fitch. ~~non-rated issues.~~
- Loomis must notify ERS of the downgrade of corporate, non-corporate and 144(a) securities below B- or B3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investors Service and Fitch within three (3) business days. Loomis must provide quarterly credit updates so long as it retains the security(ies). Corporate, non-corporate and 144(a) securities rated below B- and B3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investors Service and Fitch may not exceed 3% of the market value of the portfolio.
- Asset-backed securities that are downgraded below BBB- or Baa3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investor Services and Fitch must be sold within 90 days following the downgrade. Loomis must notify ERS of the downgrade in writing within 3 business days and provide a written update to ERS on the downgraded security on a weekly basis.
- The average quality of the portfolio must be BBB-/Baa3 or better. ~~Unrated~~ U.S. Treasury and U.S. Federal Government Agency securities are permissible and will be treated as AAA/Aaa rated for purposes of average quality calculations.
- No security, except securities issued or guaranteed by the U.S. Government or its agencies or instrumentalities, or index derivatives will comprise more than 5% of the portfolio, at the time of purchase.

- Up to 20% of the market value of the portfolio may be invested in total equities (common and preferred) as determined at the time of purchase. Common stock shall be limited to 5% of the market value of the portfolio, as determined at the time of purchase.
- Sector limitations (as a percentage of the portfolio's market value) are limited to the following ranges:

Sector	Min	Max
US Treasuries	0%	100%
US Agencies	0%	50%
Corporates	0%	100%
Mortgage-Backed Securities	0%	50%
Asset-Backed Securities, including a 5% sub-limit in Collateralized Loan Obligations	0%	25%
Investment Grade Yankees and Non-Corporates ⁽³⁾	0%	25%
Non-Investment Grade Yankees and Non-Corporates ⁽³⁾	0%	20%
Non-US Dollar / Non-Canadian Dollar	0%	20%
144(a) Securities	0%	50 100%
<u>Individual Bank Loans*</u>	<u>0%</u>	<u>15%</u>
Canadian Dollar Issues	0%	20%
<u>Eligible derivatives include currency forwards (deliverable and non-deliverable)⁽⁴⁾ and US Treasury Futures⁽⁵⁾</u>	<u>N/A</u>	<u>N/A</u>
<u>Long-only (sell protection) Index Credit Default Swaps</u>	<u>0%</u>	<u>30%⁽⁶⁾</u>

- Minimum credit ratings for individual holdings, specific to the sectors, are as follows:

Sector	Minimum Rating
Corporates & Non-Corporates	B-/B3
Asset-Backed Securities	BBB-/Baa3
Collateralized Loan Obligations	BB-/Ba3
144(a) Securities	B-/B3
Cash equivalents, commercial paper and repurchase agreements	A1/P1

¹ As measured by the Callan Core Opportunistic Fixed Income Peer Group

² As measured by the Bloomberg Barclays Capital Aggregate Index

³ Canadian issued bonds do not count towards the Yankee limit.

⁴ Currency forwards may be used for hedging purposes only.

⁵ US Treasury Futures may be used for both hedging and non-hedging purposes. Derivatives used to manage duration, interest rate and yield curve strategies may require notional amounts in excess of the portfolio's market value. US Treasury Futures will be limited by the duration restriction of the portfolio.

⁶ Notional limit of 30%. Index credit default swaps shall not be used to create leverage or for speculative purposes and will be calculated at their notional value for guideline purposes. Liabilities resulting from CDX must be fully collateralized by cash, cash equivalents and U.S Treasuries.

* Investment in individual bank loans will generate a transaction cost associated with both the purchase and sale of these loans. The counterparty on these trades determines how they will settle and most choose ClearPar. ClearPar is the primary platform and supported by most banks. Bank loans that do not settle on this platform are prohibitively labor intensive and it is not likely many trades will occur away from the ClearPar platform.

Portfolios participating in a bank loan trade will be charged by ClearPar a pro-rata share of the trade (a "subtrade"). ClearPar will deliver the invoice to the Loomis and, in turn, Loomis will deliver this invoice to your custodian to pay from the assets of the portfolio. While you may elect to pay the invoice directly, directing the custodian to pay the invoices from the portfolio assets will facilitate proper performance calculations for your portfolio. As of the current date, the subtrade fee structure is as follows:

<u>Subtrades per Master Trade</u>	<u>Subtrade Fee per Subtrade</u>
<u>1-5</u>	<u>\$19</u>
<u>6-21</u>	<u>\$110 divided by number of subtrades</u>
<u>22 or more</u>	<u>\$5</u>

There is also a volume discount schedule that is applied once trades on the platform exceed 5,000.

**EMPLOYEES' RETIREMENT SYSTEM OF
THE CITY OF MILWAUKEE**

LOOMIS, SAYLES & COMPANY, L.P.

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

IV.

NEW BUSINESS

- A. Approval of New Actuarial Tables for Pension Benefits – Presentation by Cavanaugh Macdonald.
- B. Retirements, Death Claims, and Refunds (October).

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (IV.C.), as provided in Section 19.85(1)(g), Wisconsin State Statutes, to confer with legal counsel concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved. The Board may then vote to reconvene in open session following the closed session.

- C. Proposed Amendment of Board Rule – Retirement and Death Benefits XVII.E.4.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (IV.D.), as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Board may then vote to reconvene in open session following the closed session.

- D. Proposed Amendment of the Contract with BakerTilly.
- E. Conference Requests – November 2023 Board Meeting.
- F. Proposed 2024 Board and Committee Meeting Dates.



Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

April 18, 2023

Mr. Jerry Allen
Executive Director
Employees' Retirement System
City of Milwaukee
789 N. Water Street, Suite 300
Milwaukee, WI 53202

Re: Considerations Regarding Joint and Survivor Factors

Dear Jerry,

As you are aware, the Annuity and Pension Board for the Employees' Retirement System of the City of Milwaukee (CMERS) has recently adopted several proposed changes to the System's actuarial assumptions following Cavanaugh Macdonald's routine study of actuarial experience during the five-year period ending December 31, 2021. The list of assumption changes includes new mortality rates based on the recently released Pub-2010 family of mortality tables. Now that the new set of actuarial assumptions has been finalized, we have begun work to update actuarial factors for the System's optional benefits. Specifically, Section 36-05-7 of the City of Milwaukee Ordinances (Ordinance) states, "any member may elect to convert the retirement allowance into a reduced retirement allowance that is the actuarial equivalent of the retirement allowance otherwise payable as follows..." The reduced retirement allowance mentioned in Section 36-05-7 refers to the joint and survivor optional benefits that members may elect upon retirement.

In the past, the System's actuary has provided a single table of joint and survivor factors for all groups. However, there are a few variations between member groups that impact the actuarial value of the optional benefits:

1. There are multiple cost-of-living adjustment (COLA) schedules during retirement.
2. Unlike in the recent past, the System has just adopted different mortality rates for Policemen and Firemen versus General Employees.
3. The male-to-female ratio for active Policemen and Firemen is quite different from that of active General Employees.

While it is important to note that CMERS would still be in compliance with the definition of Actuarial Equivalent under Chapter 36 of the Ordinance if it continues to use a single table for all members, we believe using multiple tables warrants consideration given the factors mentioned above. To help the System make an informed decision, Cavanaugh Macdonald has analyzed the potential impact to member benefits if CMERS chooses to adopt separate tables for the different groups. Based on our analysis and discussions with CMERS staff, our calculations are based on the following benefit provisions and assumptions.



1. COLA Schedules
 - a. General Employees
 - i. Tier 1 members receive no COLA after the first year of retirement; 1.5% after the second, third and fourth years; and 2.0% thereafter.
 - ii. Tier 2 members receive a 2.0% COLA after their fifth year of retirement if they are receiving a service retirement.
 - iii. Tier 2 members receive no COLA if they receive anything other than a service retirement.
 - b. Policemen and Firemen begin receiving a COLA after their first year of retirement equal to the annual rate increase in CPI-U index, capped at 3.0%. Our assumption is 2.5% per year.
2. Healthy Annuitant Mortality
 - a. General Employees
 - i. Members: PubG-2010 Below Median Retirees Mortality Table with a one-year age setback for males and a two-year age set forward for females, projected to 2040 using SOA scale MP-2021 (sex distinct)
 - ii. Beneficiaries: Pub-2010 Below Median Contingent Survivor Mortality Table with a one-year age setback for males and a two-year age set forward for females, projected to 2040 using SOA scale MP-2021 (sex distinct)
 - b. Policemen and Firemen
 - i. Members: PubS-2010 Retirees Mortality Table with a one-year age set forward for both males and females, projected to 2040 using SOA scale MP-2021 (sex distinct)
 - ii. Beneficiaries: PubS-2010 Contingent Survivor Mortality Table with a one-year age set forward for both males and females, projected to 2040 using SOA scale MP-2021 (sex distinct)
3. Male-to-Female Ratio
 - a. General Employees
 - i. Members: 55% Male/45% Female
 - ii. Beneficiaries: 45% Male/55% Female
 - b. Policemen and Firemen
 - i. Members: 85% Male/15% Female
 - ii. Beneficiaries: 15% Male/85% Male
4. For blending factors into a single table, General Employees factors were blended 50%/50% with Policemen and Firemen factors.

When estimating the overall impact to the separate groups, we focused on the 100% Joint and Survivor option and the following key retirement ages: 48 to 58 for Policemen and Firemen, 55 to 65 for General Tier 1, and 60 to 70 for General Tier 2. General Tier 2 applies to members who have enrolled since January 1, 2014, so this group does not yet have a significant impact on the System's retirement experience compared to Policemen, Firemen and General Tier 1 members over the next five years. However, looking at their impact gives CMERS a sense of the long-term impact of moving away from a single table of factors.

For Policemen and Firemen our calculations show that, based on the assumptions listed above, the average impact to their benefit amount at key retirement ages is a small decrease of about 0.2% with differences ranging from a 0.2% increase to a 1.0% decrease. For General Tier 1 members, the average impact to benefit amounts at their key retirement ages is an increase of about 0.9% with increases ranging from 0.1% to 1.8%. For General Tier 2 members who are eligible for a service retirement (i.e., receiving a 2.0% COLA after 5 years), the average impact to benefit amounts at their key retirement ages is an increase of about 1.6% with



increases ranging from 0.7% to 2.6%. Finally, for General Tier 2 members who are not eligible for a service retirement (i.e., receive no COLA), the average impact to benefit amounts at their key retirement ages is an increase of about 3.4% with increases ranging from 1.9% to 5.2%. In general, the impact is greater – both to the negative and the positive – as members and their beneficiaries increase in age. Please see the attached Appendices for more detail.

We have not explored any potential legal issues with respect to adopting separate factors for different groups. We are not attorneys and cannot give legal advice on such issues. We suggest that you review any concerns with counsel.

Please let us know if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LL'.

Larry Langer ASA, EA, FCA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink, reading 'Patrice Beckham'.

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink, reading 'Aaron Chochon'.

Aaron Chochon, ASA, EA, FCA, MAAA
Senior Actuary



APPENDIX A

Sample of Joint and Survivor Factors for Comparison (Policemen and Firemen)

Combined Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	48	49	50	51	52	53	54	55	56	57	58
48	0.9240	0.9272	0.9304	0.9334	0.9365						
49	0.9175	0.9209	0.9242	0.9275	0.9308	0.9340					
50	0.9105	0.9140	0.9175	0.9211	0.9246	0.9280	0.9314				
51	0.9030	0.9067	0.9104	0.9141	0.9178	0.9215	0.9251	0.9287			
52	0.8957	0.8995	0.9035	0.9074	0.9113	0.9152	0.9190	0.9228	0.9266		
53		0.8919	0.8960	0.9001	0.9042	0.9083	0.9124	0.9164	0.9204	0.9244	
54			0.8880	0.8923	0.8966	0.9009	0.9052	0.9095	0.9138	0.9180	0.9221
55				0.8838	0.8884	0.8929	0.8975	0.9020	0.9065	0.9110	0.9154
56					0.8796	0.8843	0.8891	0.8939	0.8987	0.9034	0.9081
57						0.8752	0.8802	0.8852	0.8902	0.8952	0.9002
58							0.8706	0.8759	0.8811	0.8864	0.8917

Individual Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	48	49	50	51	52	53	54	55	56	57	58
48	0.9248	0.9283	0.9318	0.9352	0.9386						
49	0.9179	0.9216	0.9253	0.9289	0.9326	0.9361					
50	0.9104	0.9143	0.9182	0.9221	0.9260	0.9297	0.9335				
51	0.9024	0.9065	0.9106	0.9147	0.9188	0.9228	0.9268	0.9307			
52	0.8937	0.8980	0.9024	0.9067	0.9110	0.9153	0.9195	0.9237	0.9279		
53		0.8890	0.8935	0.8981	0.9026	0.9071	0.9117	0.9161	0.9205	0.9249	
54			0.8841	0.8888	0.8936	0.8984	0.9031	0.9079	0.9126	0.9172	0.9218
55				0.8789	0.8839	0.8889	0.8940	0.8990	0.9040	0.9089	0.9138
56					0.8736	0.8788	0.8841	0.8894	0.8946	0.8999	0.9051
57						0.8681	0.8736	0.8791	0.8847	0.8902	0.8957
58							0.8624	0.8682	0.8740	0.8798	0.8856



APPENDIX B

Sample of Joint and Survivor Factors for Comparison (General Tier 1)

Combined Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	55	56	57	58	59	60	61	62	63	64	65
55	0.9020	0.9065	0.9110	0.9154	0.9198						
56	0.8939	0.8987	0.9034	0.9081	0.9128	0.9174					
57	0.8852	0.8902	0.8952	0.9002	0.9052	0.9101	0.9149				
58	0.8759	0.8811	0.8864	0.8917	0.8969	0.9021	0.9073	0.9124			
59	0.8658	0.8714	0.8769	0.8825	0.8880	0.8936	0.8990	0.9045	0.9098		
60		0.8609	0.8667	0.8725	0.8784	0.8842	0.8900	0.8958	0.9016	0.9072	
61			0.8557	0.8619	0.8680	0.8741	0.8803	0.8864	0.8925	0.8986	0.9046
62				0.8504	0.8568	0.8633	0.8697	0.8762	0.8827	0.8891	0.8955
63					0.8448	0.8515	0.8583	0.8651	0.8720	0.8788	0.8856
64						0.8389	0.8460	0.8531	0.8603	0.8675	0.8747
65							0.8327	0.8402	0.8477	0.8553	0.8629

Individual Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	55	56	57	58	59	60	61	62	63	64	65
55	0.9050	0.9090	0.9131	0.9170	0.9210						
56	0.8984	0.9027	0.9069	0.9111	0.9153	0.9195					
57	0.8912	0.8957	0.9002	0.9047	0.9092	0.9136	0.9179				
58	0.8835	0.8882	0.8930	0.8977	0.9024	0.9071	0.9118	0.9164			
59	0.8751	0.8801	0.8851	0.8901	0.8951	0.9001	0.9050	0.9099	0.9147		
60		0.8713	0.8765	0.8818	0.8871	0.8923	0.8976	0.9028	0.9080	0.9131	
61			0.8672	0.8728	0.8783	0.8839	0.8894	0.8950	0.9005	0.9059	0.9113
62				0.8629	0.8687	0.8746	0.8805	0.8863	0.8922	0.8980	0.9037
63					0.8583	0.8644	0.8706	0.8768	0.8830	0.8892	0.8953
64						0.8533	0.8598	0.8663	0.8729	0.8794	0.8859
65							0.8480	0.8549	0.8617	0.8687	0.8756



APPENDIX C

Sample of Joint and Survivor Factors for Comparison (General Tier 2 – Service Retirement)

Combined Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	60	61	62	63	64	65	66	67	68	69	70
60	0.8842	0.8900	0.8958	0.9016	0.9072						
61	0.8741	0.8803	0.8864	0.8925	0.8986	0.9046					
62	0.8633	0.8697	0.8762	0.8827	0.8891	0.8955	0.9018				
63	0.8515	0.8583	0.8651	0.8720	0.8788	0.8856	0.8923	0.8990			
64	0.8389	0.8460	0.8531	0.8603	0.8675	0.8747	0.8819	0.8891	0.8961		
65		0.8327	0.8402	0.8477	0.8553	0.8629	0.8705	0.8781	0.8856	0.8930	
66			0.8263	0.8342	0.8421	0.8501	0.8581	0.8662	0.8742	0.8821	0.8899
67				0.8196	0.8279	0.8363	0.8447	0.8532	0.8617	0.8701	0.8785
68					0.8126	0.8214	0.8302	0.8391	0.8481	0.8570	0.8660
69						0.8055	0.8146	0.8240	0.8334	0.8429	0.8523
70							0.7981	0.8078	0.8176	0.8275	0.8375

Individual Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	60	61	62	63	64	65	66	67	68	69	70
60	0.8933	0.8985	0.9036	0.9088	0.9138						
61	0.8849	0.8904	0.8959	0.9013	0.9067	0.9121					
62	0.8757	0.8815	0.8873	0.8931	0.8989	0.9046	0.9102				
63	0.8656	0.8718	0.8779	0.8840	0.8902	0.8963	0.9023	0.9082			
64	0.8546	0.8610	0.8675	0.8740	0.8805	0.8870	0.8934	0.8998	0.9061		
65		0.8494	0.8562	0.8630	0.8699	0.8767	0.8836	0.8904	0.8971	0.9037	
66			0.8438	0.8510	0.8582	0.8654	0.8727	0.8800	0.8871	0.8943	0.9012
67				0.8379	0.8454	0.8531	0.8607	0.8684	0.8761	0.8837	0.8912
68					0.8317	0.8397	0.8478	0.8559	0.8640	0.8721	0.8801
69						0.8253	0.8337	0.8423	0.8509	0.8595	0.8680
70							0.8187	0.8276	0.8366	0.8457	0.8548



APPENDIX D

Sample of Joint and Survivor Factors for Comparison (General Tier 2 – Non-Service Retirement)

Combined Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	60	61	62	63	64	65	66	67	68	69	70
60	0.8842	0.8900	0.8958	0.9016	0.9072						
61	0.8741	0.8803	0.8864	0.8925	0.8986	0.9046					
62	0.8633	0.8697	0.8762	0.8827	0.8891	0.8955	0.9018				
63	0.8515	0.8583	0.8651	0.8720	0.8788	0.8856	0.8923	0.8990			
64	0.8389	0.8460	0.8531	0.8603	0.8675	0.8747	0.8819	0.8891	0.8961		
65		0.8327	0.8402	0.8477	0.8553	0.8629	0.8705	0.8781	0.8856	0.8930	
66			0.8263	0.8342	0.8421	0.8501	0.8581	0.8662	0.8742	0.8821	0.8899
67				0.8196	0.8279	0.8363	0.8447	0.8532	0.8617	0.8701	0.8785
68					0.8126	0.8214	0.8302	0.8391	0.8481	0.8570	0.8660
69						0.8055	0.8146	0.8240	0.8334	0.8429	0.8523
70							0.7981	0.8078	0.8176	0.8275	0.8375

Individual Table

<u>Mem Age</u>	<u>Beneficiary Ages</u>										
	60	61	62	63	64	65	66	67	68	69	70
60	0.9091	0.9129	0.9168	0.9206	0.9244						
61	0.9022	0.9062	0.9103	0.9144	0.9184	0.9225					
62	0.8945	0.8988	0.9031	0.9074	0.9118	0.9162	0.9205				
63	0.8860	0.8905	0.8951	0.8997	0.9044	0.9090	0.9137	0.9184			
64	0.8766	0.8814	0.8862	0.8911	0.8961	0.9010	0.9060	0.9110	0.9160		
65		0.8714	0.8765	0.8816	0.8869	0.8922	0.8975	0.9028	0.9082	0.9135	
66			0.8657	0.8712	0.8767	0.8823	0.8880	0.8937	0.8994	0.9051	0.9108
67				0.8597	0.8655	0.8715	0.8775	0.8835	0.8896	0.8957	0.9018
68					0.8534	0.8596	0.8660	0.8724	0.8789	0.8854	0.8920
69						0.8468	0.8535	0.8603	0.8672	0.8741	0.8811
70							0.8400	0.8471	0.8544	0.8618	0.8692

Sample Calculation Comparing Impact of Survivorship Factors

Comparison is against the current factors in effect and also between the two methodologies for the new factor tables

Item	General - Tier I			Fire / Police		
	Current Table	Combined Table	Separate Table	Current Table	Combined Table	Separate Table
Final Average Salary (\$)	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 90,000.00	\$ 90,000.00	\$ 90,000.00
Service (years)	24	24	24	29	29	29
Max Annual Benefit (\$)	\$ 24,000.00	\$ 24,000.00	\$ 24,000.00	\$ 65,250.00	\$ 65,250.00	\$ 65,250.00
Max Monthly Benefit (\$)	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 5,437.50	\$ 5,437.50	\$ 5,437.50
Age at Retirement (years)	63	63	63	53	53	53
Spouse Age at Retirement (years)	59	59	59	49	49	49
Survivorship Factor (100% survivorship)	0.8603	0.8448	0.8583	0.9080	0.8919	0.8890
Final Monthly Benefit (\$)	\$ 1,720.60	\$ 1,689.60	\$ 1,716.60	\$ 4,937.25	\$ 4,849.71	\$ 4,833.94
Difference from Current (\$ monthly)		(\$ 31.00)	(\$ 4.00)		(\$ 87.54)	(\$ 103.31)
Difference from Current (%)		-1.8%	-0.2%		-1.8%	-2.1%
Difference Between New Table Methods (\$ monthly)			\$ 27.00			(\$ 15.77)
Difference Between New Table Methods (%)			1.6%			-0.3%

Board Report - October 2023

Retirements

Retirement Type	Retirement SubType	Last Name	First Name	Retirement Date	Option	Department
Regular	Deferred	DAVIS	DEBORAH	6/3/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Service	SYKES	JACQUELINE	9/2/2023	MAX	DPW-OPS-FLEET SERVICES
Regular	Deferred	MANISCALCO	ZORA	9/3/2023	100	DEPT OF EMPLOYEE RELATIONS
Regular	Deferred	KRAUSE	HEIDI	9/4/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	RUSHMER	MICHAEL	9/6/2023	MAX	URBAN FORESTRY
Regular	Deferred	DELEON	KATHLEEN	9/7/2023	60	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	O'KEEFE	DONNA	9/7/2023	MAX	CITY OF MILWAUKEE
Regular	Service	JOZWIAK	DAVID	9/8/2023	100	FIRE - FIREFIGHTING
Regular	Deferred	QUESADA	MARY ELLEN	9/9/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Service	SPENCE	JEFFREY	9/9/2023	50	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	LAFOUNTAIN	VICKI	9/11/2023	MAX	GENERAL CITY
Regular	Deferred	SEPPI-BERN	CARA	9/12/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Service	BIRCH	CAROLYN	9/16/2023	MAX	MILWAUKEE POLICE DEPARTMENT
Regular	Service	MEDHIN	TEODROS	9/16/2023	50	COMMON COUNCIL - CITY CLERK
Regular	Service	MARTINSON	STEPHEN	9/17/2023	100	FIRE - FIREFIGHTING
Regular	Service	SVENSSON	STEVEN	9/17/2023	100	MILWAUKEE POLICE DEPARTMENT
Regular	Deferred	WARREN	AUDREY	9/19/2023	58	MILWAUKEE POLICE DEPARTMENT
Regular	Service	VICHATHEP	SOUPHAPHONE	9/19/2023	100	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	LIEN	LISA	9/21/2023	100	HEALTH DEPARTMENT
Regular	Service	LITTLE	TRENT	9/22/2023	MAX	MILWAUKEE POLICE DEPARTMENT
Regular	Service	KASPER	MIRTA	9/26/2023	50	HEALTH-CONSUMER PROTECTION
Regular	Service	THRASHER	ELLARY	9/27/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	ZACHARI	SUSANNA	9/28/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Deferred	NANKIN	ANGELA	9/29/2023	MAX	CITY OF MILWAUKEE
Regular	Service	ABNEY	JOHN	9/29/2023	50	MILWAUKEE PUBLIC SCHOOLS
Regular	Service	PETERSIK	RICHARD	9/29/2023	100	LIBRARY - ADMINISTRATION SRVC
Regular	Service	SCHAEFER	MICHAEL	9/30/2023	100	DPW-WATER-BUSINESS
Regular	Deferred	RIDEOUT	JEFFERY	10/1/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Service	ALAMO	ALICIA	10/1/2023	MAX	MILWAUKEE PUBLIC SCHOOLS
Regular	Conversion (Duty Disability to Regular)	PODLEWSKI	GLENN	10/5/2023	100	DPW-OPS-SANITATION

Board Report - October 2023

Deaths

Type	Last Name	First Name	Death Date	Payment Date	Amount
Ordinary Death	JERVING	PETER	2/7/2023	10/31/2023	\$ 63,390.38
Retiree Death-Termination	ADAMS	JAMES	4/19/2023	10/31/2023	\$ 10,492.58
Retiree Death-Termination	BATTON	GERTRUDE	4/20/2023	10/31/2023	\$ 172.19
Retiree Death-Termination	BROADY	DELORES	10/18/2021	10/31/2023	\$ 411.55
Retiree Death-Termination	CLAYTON	LILLIE	7/23/2023	10/31/2023	\$ 1,012.10
Retiree Death-Termination	CLEMENCE	DAVID	9/14/2023	10/31/2023	\$ 3,544.00
Retiree Death-Termination	COCKFIELD	EDDIE	11/23/2021	10/31/2023	\$ 289.77
Retiree Death-Termination	DOWNER	CASSIE	1/21/2022	10/31/2023	\$ 552.11
Retiree Death-Termination	DOWNING	DAVID	6/19/2022	10/31/2023	\$ 1,164.67
Retiree Death-Termination	EMMETT	DIANE	8/7/2023	10/31/2023	\$ 98.69
Retiree Death-Termination	FRANK	WAYNE	4/6/2022	10/31/2023	\$ 773.54
Retiree Death-Termination	HARVEY	JONI	7/7/2023	10/31/2023	\$ 1,116.45
Retiree Death-Termination	HENNING	VICTORIA	9/13/2023	10/31/2023	\$ 427.72
Retiree Death-Termination	HENZL	EDWARD	2/23/2021	10/31/2023	\$ 595.26
Retiree Death-Termination	HOPGOOD	GERALDINE	8/10/2023	10/31/2023	\$ 148.17
Retiree Death-Termination	SALLEY	MARION	8/26/2023	10/31/2023	\$ 208.29
Retiree Death-Termination	STONE	CATHERINE	4/17/2022	10/31/2023	\$ 964.87
Retiree Death-Termination	WALSH	JOHN	2/21/2022	10/31/2023	\$ 797.95
Retiree Death-Termination	WELYTOK	ZIGMUND	8/26/2023	10/31/2023	\$ 2,874.94
Retiree Death-Termination	ZICKUHR	MARY	9/8/2023	10/31/2023	\$ 165.32
Surv Death-Termination	ANTKOWSKI	BEATRICE	9/15/2023	10/31/2023	\$ 1,716.39
Surv Death-Termination	BERNHARDT	SHIRLEY	12/5/2022	10/31/2023	\$ 267.98
Surv Death-Termination	CREEGAN	SALLY	8/21/2023	10/31/2023	\$ 775.86
Surv Death-Termination	ELTON	EVELYN	7/21/2023	10/31/2023	\$ 499.64
Surv Death-Termination	GAWIN	CAROLINE	9/16/2023	10/31/2023	\$ 73.63
Surv Death-Termination	KINNE	DORIS	6/4/2022	10/31/2023	\$ 117.83
Surv Death-Termination	MUELLER	JOAN	6/28/2023	10/31/2023	\$ 989.47
Surv Death-Termination	NELSON	LOIS	7/29/2021	10/31/2023	\$ 773.89
Surv Death-Termination	OLIVA	ROSALEA	9/30/2023	10/31/2023	\$ 308.25
Surv Death-Termination	RAUEN	CAROLYN	8/29/2023	10/31/2023	\$ 3,815.46
Surv Death-Termination	SANSOUCY	GRACE	9/9/2023	10/31/2023	\$ 201.84
Surv Death-Termination	SCHWALBACH	JOANN	7/24/2023	10/31/2023	\$ 1,081.77
Surv Death-Termination	WSZALEK	LEONARDA	9/14/2023	10/31/2023	\$ 276.33

TOTAL \$ 100,098.89

Type	Last Name	First Name	Death Date	Payment Date	Amount
Retiree Death-Cont Opt	BARNES	TYRONE	9/29/2015	10/1/2023	
Retiree Death-Cont Opt	BARTNIK	RICHARD	9/15/2019	10/1/2023	
Retiree Death-Cont Opt	BENTLEY	JAMES	9/19/2023	10/1/2023	
Retiree Death-Cont Opt	BOLCEREK	DANIEL	9/20/2023	10/1/2023	
Retiree Death-Cont Opt	BRAZGEL	JOSEPH	6/23/2019	10/1/2023	
Retiree Death-Cont Opt	BUCK	TONI	8/19/2023	10/1/2023	
Retiree Death-Cont Opt	CIGANEK	KRISTIN	12/6/2017	10/1/2023	
Retiree Death-Cont Opt	DRAGER	JAMES	3/4/2016	10/1/2023	
Retiree Death-Cont Opt	DURRAH	DENISE	12/13/2022	10/1/2023	
Retiree Death-Cont Opt	GUTOWSKI	JOHN	5/15/2020	10/1/2023	
Retiree Death-Cont Opt	HAACK	THOMAS	6/2/2015	10/1/2023	
Retiree Death-Cont Opt	HINSENKAMP	MARTIN	1/6/2017	10/1/2023	
Retiree Death-Cont Opt	KIRKLEWSKI	MATTHEW	6/13/2018	10/1/2023	
Retiree Death-Cont Opt	MARTIN	DANIEL	10/11/2023	10/1/2023	
Retiree Death-Cont Opt	MINOR	ODELL	3/6/2019	10/1/2023	
Retiree Death-Cont Opt	MONROE	ALLAN	9/20/2023	10/1/2023	
Retiree Death-Cont Opt	MUNKACSY	ALBERT	10/15/2023	10/1/2023	
Retiree Death-Cont Opt	OSSE	MARLENE	12/10/2020	10/1/2023	
Retiree Death-Cont Opt	PERRY	MITCHELL	5/1/2018	10/1/2023	
Retiree Death-Cont Opt	THOMPSON	THEODORE	10/16/2023	10/1/2023	
Retiree Death-Cont Opt	VER BRUGGE	ROBERT	10/2/2023	10/1/2023	
Retiree Death-Cont Opt	WEBSTER	CLYDE	10/4/2023	10/1/2023	
Retiree Death-Cont Opt	WHITE	KATHLEEN	9/21/2023	10/1/2023	
Retiree Death-Cont Opt	WINIGER	KENNETH	10/22/2023	10/1/2023	

Board Report - October 2023

Withdrawals

Type	Last Name	First Name	Payment Date	Amount
Administrative Withdrawal	CHAMBERS	TYSHA	10/31/2023	\$ 2,360.94
Administrative Withdrawal	CURETON	ANGELA	10/31/2023	\$ 323.45
Administrative Withdrawal	EHLERS	LAURA	10/31/2023	\$ 892.60
Administrative Withdrawal	EZELL	LAQUISHA	10/31/2023	\$ 2,262.06
Administrative Withdrawal	GOLDEN	PRESTON	10/31/2023	\$ 398.17
Administrative Withdrawal	KOZUB	KRIS	10/31/2023	\$ 3,300.99
Administrative Withdrawal	LARSON	NOAH	10/31/2023	\$ 1,571.25
Administrative Withdrawal	LEWIS	DEONTE	10/31/2023	\$ 3,526.52
Administrative Withdrawal	LINDSEY	TERRANCE	10/31/2023	\$ 1,424.35
Administrative Withdrawal	MACK	JEFFREY	10/31/2023	\$ 824.75
Administrative Withdrawal	MCAFEE	KAYLA	10/31/2023	\$ 1,371.62
Administrative Withdrawal	VANN	MARSHA	10/31/2023	\$ 396.01
Full Refund	GUARDIOLA	NATALIA	10/31/2023	\$ 23,768.48
Full Refund	HARMON	JAMIE	10/31/2023	\$ 11,049.32
Full Refund	MARTIN	ROBERT	10/31/2023	\$ 11,572.93
Full Refund	MCMURTRY	DENNIS	10/31/2023	\$ 8,743.97
Full Refund	NELSON-SLOCUM	LUREAN	10/31/2023	\$ 30,455.79
Full Refund	OBY	SHARITA	10/31/2023	\$ 52,107.25
Full Refund	RODRIGUEZ	MERARI	10/31/2023	\$ 12,142.15
Member Only Refund	GALANTE	HOLLAND	10/31/2023	\$ 4,151.58
Member Only Refund	JARZEMSKY	LYNN	10/31/2023	\$ 3,133.05
Member Only Refund	JOHNSON	TRENASE	10/31/2023	\$ 7,143.69
Member Only Refund	OHANIAN	ARPY	10/31/2023	\$ 6,018.54
Member Only Refund	RATATORI	CHRISTINA	10/31/2023	\$ 6,131.70
Member Only Refund	ROGERS	ELTON	10/31/2023	\$ 4,886.56
Member Only Refund	SANTIAGO	RENAE	10/31/2023	\$ 791.67
TOTAL				\$ 200,749.39

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Conference Requests – November 2023 Board Meeting

Erich Sauer,	Due Diligence
Thomas Courtright	
Sponsor:	CastleArk
Location:	Chicago, IL
Date(s):	January 4, 2024
Estimated Cost:	\$75.00 per person

2024

Board and Committee Meeting Dates

All meetings begin at 9:00 a.m. unless otherwise noted.

January	23	Board (<i>Tuesday</i>)
February	8	Investment (<i>Thursday</i>)
	27	Board (<i>Tuesday</i>)
March	20	A&O (<i>Wednesday</i>)
	26	Board (<i>Tuesday</i>)
April	17	A&O (<i>Wednesday</i>)
	18	Investment (<i>Thursday</i>)
	23	Board (<i>Tuesday</i>)
May	28	Board (<i>Tuesday</i>)
June	6	Investment (<i>Thursday</i>)
	18	A&O (<i>Tuesday</i>)
	25	Board (<i>Tuesday</i>)
July	23	Board (<i>Tuesday</i>)
September	5	Investment (<i>Thursday</i>)
	19	A&O (<i>Thursday</i>)
	24	Board (<i>Tuesday</i>)
October	22	Board (<i>Tuesday</i>)
November	7	Investment (<i>Thursday</i>)
	26	Board (<i>Tuesday</i>)
December	5	Investment (<i>Thursday</i>)
	12	A&O (<i>Thursday</i>)
	17	Board (<i>Tuesday</i>)

V.

MEDICAL REPORTS

- A. All Duty & Ordinary Disability Applications & Re-examinations (November).

MERITS	CITY OF MILWAUKEE EMPLOYEES' RETIREMENT SYSTEM	Page Number: 1 OF 1
	Medical Panel Approvals Report	DATE RAN : 11/16/2023
Approved by Executive Director	Pension Board Meeting Date 11/28/2023	TIME RAN : 13:19

DOCTOR DECISION

<u>Case Number</u>	<u>Name</u>	<u>Title</u>	<u>Employer</u>	<u>Case Type</u>	<u>Case Sub-Type</u>	<u>City</u>	<u>Union</u>	<u>Third</u>	<u>Disability Date</u>	<u>Comments</u>
21	HENDRICKS, CHAD	FIRE FIGHTER	FIRE	DD 75%	Re-Examination	Approved	Approved		08/22/2003	
1000	LOCKE, THOMAS	FIRE FIGHTER	FIRE	DD 75%	Re-Examination	Approved	Approved		05/25/2012	
1265	HOTH, SCOTT	HEAVY EQUIPMENT OPERATOR	MFD	DD 75%	Re-Examination	Approved	Approved		10/01/2023	
668	BERGET, KENNETH	FIRE FIGHTER	MILWAUKEE FIRE DEPT	DD 75%	Re-Examination	Approved	Approved		09/23/2008	
1219	MANNEY, CHRISTOPHER	POLICE OFFICER	MPD	DD 75%	Re-Examination	Approved	Approved		11/12/2014	
553	JULY, ANGELA	POLICE OFFICER	POLICE	DD 75%	Re-Examination	Approved	Approved		10/01/2022	
559	LOPEZ-DEVEREAUX, STACY	POLICE OFFICER	POLICE	DD 75%	Re-Examination	Approved	Approved		12/01/2022	

Number of Cases: 7

This report includes Fire duty disabilities with an application date prior to July 29, 2016; Police MPA duty disabilities with an application date prior to June 19, 2016; and Police MPSO duty disabilities with an application date prior to January 1, 2016.

MERITS	CITY OF MILWAUKEE EMPLOYEES' RETIREMENT SYSTEM	Page Number: 1 OF 1
	Medical Council Approvals Report	DATE RAN : 11/07/2023
	Board Meeting: 11/28/2023	TIME RAN : 08:48

<u>Name</u>	<u>Title</u>	<u>Employer</u>	<u>CaseType</u>	<u>Case Sub-Type</u>	<u>Disability Date</u>	<u>Medical Council Meeting Date</u>	<u>In Person Exam Waiver</u>
JASSO, MICHAEL	FIREFIGHTER	MFD	Ordinary Disability	Re-Examination	04/25/2018	11/03/2023	
MAIER, CRAIG	CUSTODIAL WORKER II	DEPARTEMTN OF PUBLIC WORK	Ordinary Disability	Application	06/18/2023	11/03/2023	
PADGETT, NATASHA	POLICE OFFICER	MPD	Duty Disability 75%	Re-Examination	11/18/2016	11/03/2023	
RIGHTMYRE, BRUCE	LIEUTENANT	MFD	Duty Disability 75%	Re-Examination	08/01/2020	11/03/2023	
SARDINA, KRISTOPHER	POLICE OFFICERS	MILWAUKEE POLICE DEPARTME	Duty Disability 75%	Application	03/28/2023	11/03/2023	
SHAW, CORLISS	EMERGENCY COMM OPERATOR I	MPD	Ordinary Disability	Re-Examination	09/14/2019	11/03/2023	
STEBPKE, CHAD	Police	MPD	Ordinary Disability	Re-Examination	12/04/2020	11/03/2023	
SWANSON, TINA	FOOD SERVICE ASST	MPS	Duty Disability 75%	Re-Examination	05/03/2018	11/03/2023	

Number of Cases: 8

This report includes all GC disabilities; all ordinary disabilities; Fire duty disabilities with an application date on/after July 29, 2016; Police MPA duty disabilities with an application date on/after June 19, 2016; and Police MPSO duty disabilities with an application date on/after January 1, 2016.

MERITS	CITY OF MILWAUKEE EMPLOYES' RETIREMENT SYSTEM	Page Number:	1 OF 1
	Medical Council Denials Report	DATE RAN :	11/07/2023
	Board Meeting: 11/28/2023	TIME RAN :	08:48

<u>Case Number</u>	<u>Name</u>	<u>Title</u>	<u>Employer</u>	<u>CaseType</u>	<u>Case Sub-Type</u>	<u>Disability Date</u>	<u>Medical Council Meeting Date</u>	<u>In Person Exam Waiver</u>
1556	SARDINA, KRISTOPHER	POLICE OFFICERS	MILWAUKEE POLICE DEPARTME	OD	Application	03/28/2023	11/03/2023	

Number of Cases: 1

This report includes all GC disabilities; all ordinary disabilities; Fire duty disabilities with an application date on/after July 29, 2016; Police MPA duty disabilities with an application date on/after June 19, 2016; and Police MPSO duty disabilities with an application date on/after January 1, 2016.

VI.

UNFINISHED BUSINESS

- A. Pending Legal Opinions and Service Requests Report.
- B. Pending Legislation Report.
- C. Executive Director's Report – Inventory of ERS Projects.



November 28, 2023 Board Meeting

PENDING LEGAL OPINIONS AND SERVICE REQUESTS REPORT

PART 1. LEGAL OPINIONS - OFFICE OF CITY ATTORNEY

05/04/23

Optional Joint and Survivor Benefits

Pension Board has requested a legal opinion on whether it has administrative discretion to determine whether to adopt a combined set of actuarial tables applying to both General City and Public Safety employees and separate sets tables for each employment class and further for beneficiaries eligible for cost of living adjustments distinct from those beneficiaries who are not so eligible.

PART 2. LEGAL OPINIONS - OUTSIDE LEGAL COUNSEL

None.

PART 3. SERVICE REQUESTS - OFFICE OF CITY ATTORNEY

None.

PART 4. SERVICE REQUESTS - OUTSIDE LEGAL COUNSEL

04/25/23

Real Estate Investment Manager

ERS requests legal assistance in the reviewing of various legal documents and subsequent negotiations as it relates to a private real estate investment.

04/16/23 City Attorney's Office approves referral of this matter to Reinhart Boerner Van Deuren SC.

10/30/23 Reinhart completed its legal review and negotiation of the Side Letter and Amended Limited Partnership Agreement.

11/09/23 Approved by the Investment Committee pursuant to Board Rule VII.G.2.b.

09/22/23

Abbott Capital Private Equity Investors 2024 Vehicle

Investment staff requests legal assistance in negotiation of the Side Letter and Limited Partnership Agreement.

09/25/23 City Attorney's Office has approved referring this matter to Reinhart Boerner Van Deuren SC to conduct the negotiations of the LPA and Side Letter.



November 28, 2023 Board Meeting

PENDING LEGISLATION REPORT

PART 1. PENDING CHARTER ORDINANCES FOR COMMON COUNCIL ACTION

None.

PART 2. PENDING CHANGES TO THE RULES & REGULATIONS

None.

PART 3. PENDING LEGISLATIVE COMMITTEE REFERRALS

Pension Contribution Offset

12/13/16 ERS requested legal guidance on whether the 5.8% pension contribution offset for public safety employees pursuant to recent labor contract settlements or interest arbitration, is includable as "salary" for adjusting duty disability retirement allowance.

02/16/17 City Attorney issued a legal opinion advising that since members receiving a duty disability retirement allowance have not paid the member contributions, they are not entitled to the 5.8% pension contribution offset. 02/27/17 Opinion referred to Legislative Committee for consideration on whether the pension contribution offset received by general city and protective service members should be included in the calculation of the Conversion to Service Retirement and Extended Life retirement allowances.

07/31/17 Committee recommended this matter be held pending resolution of litigation.

PART 4. PENDING STATE LEGISLATION

None.

Employees' Retirement System – Executive Director's Report

November 2023

I. Personnel Update

- A. ERS is working with DER to fill the positions of ERS Fiscal Services Assistant and Investment Analyst- Senior.

II. Member Services

- A. New retirees on payroll in October - 34; 31 are currently anticipated for the November payroll.
- B. Retiree/Employee deaths in September - 37.
- C. There was an MPD Retirement Workshop on 10/13/23 and 28 attended.
- D. The last Retirement Workshop for 2023 will be on Friday, 11/17/2023 and this will be mainly for General City employees.
- E. Attended the MRPA meeting on 10/11/23 to give an update on any changes to the Retiree Health Insurance for 2024 and also took the opportunity to assure the members that there would be absolutely no changes to their monthly pension payments due to the ERS plan closing to new employees as of 1/1/24. Assured them that this was only for new employees as of 1/1/24. There were approximately 70 retirees in attendance at this meeting.
- F. We will be at the Open Enrollment Fairs that the city has set up to answer any questions related to Pension, Retiree Health Insurance and Retiree/Active Life Insurance. In addition, ERS will also be having virtual fairs where people can call or email their questions to get answers that they need right away.
- G. Below is a breakdown of to-date ERS benefits payouts/active/deferred counts:

Category	Count
Annuitants	
Death - Duty	26
Death - Ordinary	99
Disability - Duty	362
Disability - Ordinary	575
Retirement	12,756
Separation	39
Total Annuitants	13,857
Active	11,149
Deferred	3,181
Total Population	28,187

III. Financial Services

- A. Staff has been meeting with the Wisconsin Legislative Audit Bureau (LAB) to work on the 2023 financial audit. There have been some delays with Baker Tilly providing LAB the 2022 workpapers mostly due to issues related to indemnification and waiver of claims. We hope to have it resolved after the November Board meeting. David Silber has also met with LAB to discuss our investment policies and processes.
- B. DER has recently implemented the PP17 (August 19th) market studies and reclassifications in PP22. The market studies and reclassifications mostly affected positions in Financial Services and Member Services. Employees were given retro payments for PP's 17-21.
- C. DER has started implementing matrix placements for ERS positions that had their positions market studied and/or reclassified. The matrix placements allow for employees with up to 10 years of service to get an additional increase in salary. If an employee has at least 1 year of service they will get an increase of 1% per year of service. The maximum increase is 10% for employees who have at least 10 years of service with the City. We have completed the matrix placements for 20 employees so far. DER has not given us a timeline for when they expect to complete the matrix placements on the rest of the ERS employees.
- D. We have started training for enrolling and reporting employees who join the WRS after 12/31/23. We expect to have the training completed by the end of the year.
- E. We are working with US Bank as our new banking provider. We have the accounts set up so far and are working with Kerri Stoner-Ford, our relationship manager at US Bank, to keep us on track for the switch-over in January 2024.
- F. The City has issued an RFP for a new Enterprise Reporting System (ERP) to replace its PeopleSoft ERP. We have been reviewing the ERP vendor demo's presented by Oracle, SAP and Workday in the last few weeks. The new ERP will affect a lot of ERS processes as we use the City's ERP for Accounts Payable, HR, employee wage reporting, employee pension contributions, etc.

IV. Information Services

- A. Struts Upgrade and Modernize MERITS Website in progress.
- B. BigFix & IBM Metrics Tool Upgrade in progress.
- C. Firewall Review and Cleanup completed.
- D. Microsoft Office Upgrade completed.
- E. Domain Controller Upgrade in progress.

V. Administration

Adoption of new survivorship actuarial factors pursuant to the 5 year actuarial experience study presented earlier this year is on the Board agenda for the November 28, 2023 meeting following discussion of a CA opinion regarding Board discretion regarding implementation of the results of the study. Staff will notify all ERS members in writing who are eligible for retirement prior to implementation of the new factors, in order for them to make a timely request for a benefit estimate so they can make an informed decision regarding their retirement date and survivor election.

Basic Website Metrics

	2022			2023									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.
Visits	5,538	8,511	4,837	5,930	4,981	5,474	5,447	5,137	4,907	5,735	5,601	5,341	5,626
Users	3,979	7,068	3,496	3,947	3,585	3,894	3,859	3,589	3,380	3,663	3,667	3,490	3,758
Page Views	13,918	20,851	11,753	14,873	11,668	12,933	13,201	12,927	12,220	13,694	13,930	12,747	14,150
Ave. Visit	1:12	:52	1:27	1:39	1:27	1:25	1:28	1:33	1:40	1:32	2:24	1:31	1:35

- In November 2022, numbers are inflated due to IT Vulnerability Audit.

VII.

INFORMATIONAL

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (VII.A.), as provided in Section 19.85(1)(g), Wisconsin State Statutes, to confer with legal counsel concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved. The Board may then vote to reconvene in open session following the closed session.

- A. Pending Litigation Report.
- B. Conferences.
- C. Class Action Income 2023 YTD.
- D. Adjusted Quarterly Cost Basis of Equity.
- E. Minutes of the Administration & Operations Committee Meeting Held October 18, 2023.
- F. Minutes of the Investment Committee Meeting Held November 9, 2023.
- G. Report on Bills.
- H. Deployment of Assets.
- I. Securities Lending Revenue and Budget Report.
- J. Preliminary Performance Report and Asset Allocation.



November 28, 2023 Board Meeting

PENDING LITIGATION REPORT

Part 1. ERS Litigation through the City Attorney

MPA and Kurt Lacina v. City of Milwaukee, et al; Case Nos. 2023AP000301; and 2022CV001965

Kurt Lacina alleges his DDRA was wrongfully offset by a worker's compensation permanent partial disability award by defendants.

****See prior Reports for case history****

- 09/05/23 Appellants' Brief filed. Respondents' Brief due October 5, 2023.
- 10/02/23 Respondents Brief filed with court. Appellants' Reply Brief is due October 17, 2023.
- **10/18/23** Appellants' Reply Brief filed.

Frank Vrtochnick, et al v. City of Milwaukee, et al; Case No. 2023CV003007

Plaintiff alleges the City and the ERS breached the Milwaukee Police Association 2013-2016 collective bargaining agreement and Chapter 36 of the Milwaukee City Charter as it pertains to the inclusion of the 5.8% pension offset in the member's "base salary" for purposes of calculating the duty disability retirement allowance. The plaintiff seeks to have this current litigation classified as a *Class Action to include all other similarly-situated employees hired prior to October 3, 2011 and represented by the Milwaukee Police Association*.

****See prior Reports for case history****

- **11/02/23** Motion hearing held before Judge Yang. Parties agree that the motion for consolidation is to be heard in front of Judge Grayson. Motion to Dismiss to be held in abeyance. Case adjourned for status conference scheduled for December 19, 2023.

Benjean Lara v. City of Milwaukee, et al; Case No. 2023CV005113

Petitioner filed Petition for Writ of Mandamus demanding that the court enter an order requiring the Respondents process his application for disability benefits in accordance with the Findings issued by the Hearing Examiner.

See prior Reports for case history

➤ **11/01/23** Motion hearing held. Court grants Respondents' Motion to Dismiss.

Benjean Lara v. City of Milwaukee, et al; Case No. 2023CV007107

Member filed Petition for Certiorari Review of Pension Board's denial of disability (duty and ordinary) retirement benefits.

See prior Reports for case history

➤ **10/12/23** Legal counsel for Respondents filed Notice of Retainer and Answer with court.

Part 2. ERS Administrative Appeal Hearings through the City Attorney

Jason Rodriguez; Administrative Case No. 1443

➤ Hearing stayed pending outcome of Appellant's state workers compensation (WC) appeal hearing. First WC appeal hearing held May 10, 2022. Second WC appeal hearing expected to occur in August or September, 2023.

James Gentry; Administrative Case No. 1522

➤ Hearing requested. Pending scheduling.

Part 3. Notice of Claim filed with ERS

None.

Part 4. ERS Litigation through Outside Legal Counsel

None.

Client Conferences 2023-2024**Board Meeting: November 28, 2023**

DATE(S)	CONFERENCE(S) / LOCATION(S)	SPONSOR(S)
December 5 – 6, 2023	Apogem's 2023 Annual General Meeting Miami, FL	Apogem Capital
January 17, 2024 11:30 am – 12:30 pm	Callan's 10-year Capital Market Assumptions Virtual	Callan Associates
April 8 – 10, 2024	Callan's 2024 National Conference San Francisco, CA	Callan Associates

Trustee Conferences 2024

Board Meeting: November 28, 2023

DATE(S)		
January 21 – 22, 2024	Pension Communications Summit Washington, DC	NCPERS
January 22 – 24, 2024	Legislative Conference Washington, DC	NCPERS
January 22 – 24, 2024	Visions, Insights, & Perspectives (VIP) Americas Carlsbad, CA	Institutional Real Estate, Inc.
March 4 – 6, 2024	CII Spring 2024 Conference Washington, DC	Council of Institutional Investors
March 8 – 9, 2024	Investment Basics – Certificate Series Course Scottsdale, AZ	International Foundation of Employee Benefit Plans
April 15 – 17, 2024	Pension Bridge The Annual 2024 Half Moon Bay, CA	with.Intelligence
April 17, 2024	8 th Annual Real Estate Midwest Forum Chicago, IL	Markets Group
April 29 – May 1, 2024	Public Funds Roundtable 2024 Beverly Hills, CA	Institutional Investor
May 5 – 8, 2024	Milken Institute 2024 Global Conference Beverly Hills, CA	Milken Institute
May 14 – 15, 2024	10 th Annual Midwest Institutional Forum Chicago, IL	Markets Group
May 18 – 19, 2024	NCPERS Accredited Fiduciary (NAF) Program and Trustee Educational Seminar (TEDS) Seattle, WA	NCPERS
May 19 – 22, 2024	Annual Conference & Exhibition (ACE) Seattle, WA	NCPERS

Trustee Conferences 2024

Board Meeting: November 28, 2023

DATE(S)	CONFERENCE(S) / LOCATION(S)	SPONSOR(S)
June 24 – 26, 2024	Institutional Investor Week Newport, RI	Institutional Investor
July 22 – 23, 2024	Alternatives Forum - ALTSCHI Chicago, IL	Markets Group
August 18 – 20, 2024	Public Pension Funding Forum Boston, MA	NCPERS
September 9 – 11, 2024	CII Fall 2024 Conference Brooklyn, NY	Council of Institutional Investors
September 17, 2024	10 th Annual Great Plains Institutional Forum Minneapolis, MN	Markets Group
October 26 – 27, 2024	NCPERS Accredited Fiduciary (NAF) Program & Program for Advanced Trustee Studies (PATs) Palm Springs, CA	NCPERS
October 27 – 30, 2024	Public Safety Conference Palm Springs, CA	NCPERS
November 9 – 10, 2024	Certificate of Achievement in Public Plan Policy (CAPPP): Pensions Part II San Diego, CA	International Foundation of Employee Benefit Plans

Upcoming Due Diligence Meetings

Date	Manager(s)	Team
January 4, 2024	CastleArk (Chicago, IL)	Erich and Tom

Class Action Income 2023 YTD

Asset Description	Date(s)	Amount
Allergan, Inc.	1/11/2023 \$	82
USA Technologies, Inc.	2/13/2023 \$	10,120
JP Morgan Chase Bank	3/23/2023 \$	568
The Bank of New York Mellon	5/12/2023 \$	428
Nine Bank Settlement - Foreign Exchange Benchmark Rates	5/4/2023 \$	6,101
Array Biopharma, Inc.	5/23/2023 \$	2,363
Valeant Pharmaceuticals Int'l Inc.	7/20/2023 \$	59,687
Teva Pharmaceutical	8/1/2023 \$	4,511
GSE Bonds	8/7/2023 \$	25
The Medicines Company	10/23/2023 \$	127
Kraton Corp.	10/25/2023 \$	1,818
Alibaba Group Holding, Ltd.	10/26/2023 \$	33
Cognizant Technology	11/1/2023 \$	4,190
Total Class Action Income Received in 2023 YTD	\$	90,052

Adjusted Quarterly Cost Basis of Equity September 30, 2023

Date	Market Value of Total Fund	Equity as Percent of Portfolio on a Market Value Basis %	Cost Value of Total Fund	Equity as Percent of Portfolio on Cost Basis %
Jun-16	4,753,379,711	58.9%	4,167,278,877	56.8%
Sep-16	4,878,963,087	59.2%	4,265,248,439	52.6%
Dec-16	4,875,173,931	58.7%	4,259,899,650	51.6%
Mar-17	5,054,238,404	59.5%	4,296,075,081	54.0%
Jun-17	5,141,650,168	59.6%	4,238,775,000	54.0%
Sep-17	5,253,079,121	60.3%	4,219,738,169	54.0%
Dec-17	5,356,413,868	60.7%	4,347,067,963	54.6%
Mar-18	5,360,763,834	54.5%	4,493,669,234	48.5%
Jun-18	5,364,526,404	52.8%	4,508,052,439	47.2%
Sep-18	5,416,752,057	53.2%	4,475,388,278	47.5%
Dec-18	4,952,685,618	50.7%	4,457,976,536	48.9%
Mar-19	5,287,164,709	52.5%	4,458,818,165	48.5%
Jun-19	5,368,388,543	52.2%	4,439,503,880	48.5%
Sep-19	5,336,312,140	51.6%	4,409,684,126	48.6%
Dec-19	5,525,553,595	53.1%	4,370,713,537	48.7%
Mar-20	4,532,932,039	47.6%	4,421,955,418	47.5%
Jun-20	4,904,369,177	52.6%	4,216,408,115	50.3%
Sep-20	5,077,501,527	52.0%	4,228,679,409	49.0%
Dec-20	5,531,306,606	53.5%	4,270,905,026	47.9%
Mar-21	5,693,916,321	53.5%	4,338,199,305	46.1%
Jun-21	6,012,966,775	52.3%	4,337,113,221	45.0%
Sep-21	6,026,295,778	48.4%	4,378,190,704	42.2%
Dec-21	6,218,053,813	47.6%	4,473,429,725	41.0%
Mar-22	6,156,069,941	46.5%	4,642,000,891	41.1%
Jun-22	5,633,734,690	44.6%	4,548,655,130	43.9%
Sep-22	5,276,131,314	43.7%	4,538,899,040	44.8%
Dec-22	5,469,372,844	46.0%	4,476,020,934	44.5%
Mar-23	5,644,257,058	47.6%	4,501,213,423	44.4%
Jun-23	5,654,571,235	43.9%	4,551,510,198	39.4%
Sep-23	5,471,790,350	40.0%	4,563,372,935	35.9%

**EMPLOYES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE
ANNUITY AND PENSION BOARD**

Minutes of the Special Administration and Operations Committee Meeting
held October 18, 2023 via teleconference

The meeting was called to order at 9:05 a.m.

Committee Members Present: Molly King
Aycha Sawa, Chair

Committee Members Not Present: Tom Klusman (excused)

ERS Staff Present: Bernard Allen, Executive Director
Melody Johnson, Deputy Director
Dan Gopalan, Chief Financial Officer
David Silber, Chief Investment Officer
Erich Sauer, Deputy Chief Investment Officer
Jeff Shober, Chief Technology Officer
Mary Turk, Business Operations Analyst
Jan Wills, Board Stenographer

Others Present: Christine Webb, Jennifer Falkenholm, Ryan Young, Brown & Brown Insurance of Hays Companies; Deborah Ford, ERS Board Trustee; Alex Foundos, City Attorney's Office; Terry Siddiqui, DS Consulting, Inc., one member of the public called in to the meeting.

Renewal of Property Insurance. Ms. Webb went over the ERS' property coverage, general liability exposure, personal injury liability, and ERS members using automobiles. She noted there is also an excess liability limit. She said Hanover Insurance has provided the coverage the last few years and the premium last year was \$13,800. Ms. Webb said this year's premium is \$15,029 due to an increase in property limit. She commented that the overall price increase is 8.9%. She said they also received a quote from The Cincinnati Insurance Company at \$11,789. Ms. Webb said they quoted a \$10,000 property deductible instead of \$1,000 because.. She said there would be a \$3,000 savings with The Cincinnati Insurance Company. Discussion ensued.

It was moved by Ms. King, and seconded by Ms. Sawa to approve the Renewal of Property Insurance with The Cincinnati Insurance Company.

Renewal of Fiduciary and Cyber Insurance. The Fiduciary Insurance renewal was discussed and approved at the September 20, 2023 A&O Committee meeting, so Ms. Falkenholm only discussed the Cyber Insurance. She said Cyber Insurance covers the ERS for third party liability associated with network and privacy security, first party coverage for hiring a lawyer, computer forensics firm, or ransom negotiator. She noted the expiring policy has \$5 million with \$100,00 each claim occurrence retention using three carriers. Ms. Falkenholm said that premium cost was \$165,601. She said for the renewal, they went to the incumbent carrier and noted the cyber market

is stabilizing now so higher coverage limits are being offered. Ms. Falkenholm said the new premium rate would be \$109,915 for a 33% reduction over last year. Discussion ensued.

It was moved by Ms. King, and seconded by Ms. Sawa to approve the Renewal of Cyber Insurance.

Ms. Sawa advised that the Administration & Operations Committee may vote to convene in closed session on the following item as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Administration & Operations Committee may then vote to reconvene in open session following the closed session.

ERS Banking Services Contract.

It was moved by Ms. King, and seconded by Ms. Sawa to convene in closed session by the following roll call vote: AYES: Ms. Sawa, Ms. King. NOES: None.

The Committee convened in closed session at 9:35 a.m.

The Committee reconvened in open session at 9:50 a.m.

It was moved by Ms. King, and seconded by Ms. Sawa to approve the finalist identified in closed session for the ERS Banking Services Contract.

It was moved by Ms. King, and seconded by Ms. Sawa to adjourn the meeting.

Ms. Sawa adjourned the meeting at 9:54 a.m.

Bernard J. Allen
Secretary and Executive Director

NOTE: All proceedings of the Annuity and Pension Board Meetings and related Committee Meetings are recorded. All recordings and material mentioned herein are on file in the office of the Employees' Retirement System, 789 N. Water Street, Suite 300.)

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE
ANNUITY AND PENSION BOARD**

Minutes of the Investment Committee Meeting
held November 9, 2023 via teleconference

The meeting was called to order at 9:00 a.m.

Committee Members Present: Matthew Bell
 Deborah Ford
 Timothy Heling
 Thomas Klusman, Chair
 Rudy Konrad
 Aycha Sawa

Committee Members Not Present: Molly King (excused)
 Nik Kovac (excused)

ERS Staff Present: Jerry Allen, Executive Director
 David Silber, Chief Investment Officer
 Erich Sauer, Deputy Chief Investment Officer
 Dan Gopalan, Chief Financial Officer
 Gust Petropoulos, Deputy Director - Disability
 Jan Wills, Board Stenographer

Other present: Mike Joecken, Munir Iman, David Zee, Callan; Bryant Ferguson, Reinhart; Travis Gresham, City Attorney's Office; Terry Siddiqui, DS Consulting, Inc.; four members of the public called in.

Mr. Klusman advised that the Investment Committee may vote to convene in closed session on the following items (I., II., and III.) as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Investment Committee may then vote to reconvene in open session following the closed session.

It was moved by Mr. Bell, and seconded by Ms. Sawa to convene in closed session. The motion carried by the following roll call vote: AYES: Mses. Ford, and Sawa; Messrs. Bell, Heling, Klusman, and Konrad. NOES: None.

The Committee convened in closed session at 9:02 a.m.

Real Estate Manager Due Diligence Report. As a matter of information, Committee members received the closed session due diligence report from the Investment Staff's meeting on July 27, 2023.

The Committee reconvened in open session at 9:52 a.m.

Mr. Klusman noted that two of the three closed session items require approval.

Approval of Real Estate Manager Side Letter. As a matter of information, Committee members received the closed session outside counsel letter and proposed side letter.

It was moved by Ms. Ford, seconded by Mr. Heling and unanimously carried, to approve the Approval of Real Estate Manager Side Letter.

Approval of Recommendation regarding Real Estate Manager. It was moved by Mr. Konrad, for Approval of the Recommendation regarding Real Estate Manager as discussed in closed session, seconded by Ms. Sawa, and unanimously carried.

Approval of Loomis Sayles Guideline Change. As a matter of information, Committee members received the guideline change updates and red-lined document. Mr. Sauer noted the guideline modifications which were presented by Brian Kennedy at a previous meeting. He noted there are two changes to the derivatives mentioned in the guidelines. Mr. Sauer said Loomis is asking to use Treasury futures, for both hedging and non-hedging purposes, as a tool to manage duration in the portfolio, and to use currency forwards as a tool for hedging foreign currency. He added that Loomis is also asking to invest in individual bank loans. Mr. Sauer noted that Loomis also asked to use long-only (sell protection) CDX, a credit default swap index that can be used to quickly increase exposure to credit in the portfolio when credit spreads are attractive. Mr. Sauer noted that Reams uses CDX in their portfolio. He noted that Fitch, one of the three major rating agencies, is being added to the rating guidelines. He stated Staff and Callan both support these modifications. He concluded that Loomis is also asking to eliminate the percentage on 144-A securities. Mr. Zee, the head of Fixed Income Manager Research at Callan, discussed the considerations related to the 144-A request, and suggested that the Committee not make a decision on increasing the 144-A maximum limit until the next meeting.

It was moved by Mr. Konrad, seconded by Mr. Bell, and unanimously carried, to approve, with the exception of keeping the 144-A securities at the current 50%, the Approval of Loomis Sayles Guideline Change.

Callan Upcoming Work Plan. As a matter of information, Committee members received Callan's 2024 Work Plan. Mr. Joecken outlined topics Callan will present at six Investment Committee Meetings in 2024. Topics will include Due Diligence Reports, Public Pension Plan Universe education, Capital Market Projections and Asset Allocation Review, Fixed Income Structure Review, Real Estate Structure Review, Private Equity Pacing Review, Investment Policy Statement Review, Real Estate Performance and Structure Review and Callan Performance Reporting Overview.

2024 Tentative Due Diligence Schedule. As a matter of information, Committee members received from the Investment Staff their 2024 Tentative Due Diligence Schedule. Mr. Sauer noted that investment managers are visited every other year. He said the tentative due diligence schedule for 2024 includes trips to meet with managers at CastleArk, LaSalle, Aptitude, DFA, Brandes, AQR, UBS, Morgan Stanley, William Blair, MFS, DFA, BlackRock, Abbott, Loomis Sayles, Prologis, William Blair, JP Morgan, Mesirow, Polen, and Earnest.

CMERS 3rd Quarter 2023 Performance Update. As a matter of information, Committee members received from the Investment Staff the CMERS 3rd Quarter 2023 Performance Update.

Messrs. Sauer and Silber discussed the 2023 3rd Quarter Performance Update. They provided a Fund Overview and discussed Public Equity, Fixed Income, Absolute Return, and a Recent Performance Update. Mr. Sauer said the markets were down in the third quarter with stocks down 3.4% and bonds down 3.2%. He noted interest rates rose in August and September. He said even the Real Assets benchmark was down 2.9%. Mr. Sauer said the Private Equity benchmark offset some of this. Mr. Sauer also discussed a due diligence visit with Reams and noted the personnel changes. Mr. Sauer said as of November 8, 2023, the ERS Total Fund Market Value is \$5.45 billion. He said the October estimate hasn't changed and is down 1.9% versus down 1.8% for the benchmark. Mr. Sauer said November is up 2.2% versus up 2.5% for the benchmark. He noted the Fund's year-to-date return as of September 30, 2023 is 3.7% net of fees compared with a 5.9% benchmark. Mr. Sauer concluded the year-to-date return is 4.0%, net of fees, with a 6.6% benchmark. Discussion ensued.

It was moved by Mr. Bell and seconded by Mr. Heling to adjourn the meeting.

There being no further business, Mr. Klusman adjourned the meeting at 11:03 a.m.

Bernard J. Allen
Secretary and Executive Director

NOTE: All proceedings of the Annuity and Pension Board Meetings and related Committee Meetings are recorded. All recordings and material mentioned herein are on file in the office of the Employees' Retirement System, 789 N. Water Street, Suite 300.)

Fiscal Year
2023
Department
Employees' Retirement System

City of Milwaukee
Departmental
Appropriation Budget Balances

As of: 2023-10-31

	Budget	2023-8	2023-9	2023-10	Year to Date Expended	Life to Date Commitments	Remaining Budget
<i>Regular Departmental Appropriations:</i>							
Employee Salaries & Wages	3,749,620.00	-	-	-	-	-	3,749,620.00
Base Pay-Salary & Wage	-	282,274.41	446,134.61	309,243.23	3,101,154.82	-	(3,101,154.82)
Overtime Premium	-	68.94	105.80	202.84	2,026.82	-	(2,026.82)
Other Worked Compensation	-	-	2,659.14	28,350.10	31,292.62	-	(31,292.62)
Non-Worked Compensation	-	-	-	-	8,796.45	-	(8,796.45)
Time Paid Not Worked	-	48,061.35	63,202.15	24,875.56	573,546.84	-	(573,546.84)
Employee Salaries & Wages	\$ 3,749,620.00	330,404.70	512,101.70	362,671.73	\$ 3,716,817.55	\$ -	\$ 32,802.45
Fringe Benefits Applied	1,687,329.00	-	-	-	-	-	1,687,329.00
Fringe Benefits Applied	-	143,734.13	227,171.76	77,777.71	1,499,419.17	-	(1,499,419.17)
Applied Employee Benefits	\$ 1,687,329.00	143,734.13	227,171.76	77,777.71	\$ 1,499,419.17	\$ -	\$ 187,909.83
Operating Expenditures	15,910,400.00	-	-	-	-	-	15,910,400.00
Office Supplies	-	545.65	558.70	438.72	7,237.17	-	(7,237.17)
Printed Forms	-	-	-	6,362.46	19,608.54	-	(19,608.54)
Magazines, Subscription	-	38.71	2,246.27	997.11	6,347.78	-	(6,347.78)
Postal and Mailing Services	-	11,773.30	11,287.91	11,463.07	119,343.00	-	(119,343.00)
Electricity	-	2,357.41	2,186.02	2,145.55	23,861.35	-	(23,861.35)
Films & Other Educational Item	-	-	-	-	998.00	-	(998.00)
Other Operating Supply	-	-	-	-	56,529.30	-	(56,529.30)
Building Rental	-	37,159.03	35,289.40	36,983.53	413,919.40	-	(413,919.40)
Passenger Vehicle Rental	-	-	103.23	-	126.73	-	(126.73)
Printing & Dupl Machine Rental	-	4,176.95	693.65	-	18,390.03	-	(18,390.03)
Consulting	-	47,585.00	-	80,102.40	416,628.95	-	(416,628.95)
Medical, Surgical & Lab	-	13,312.85	18,689.46	17,069.17	145,128.80	-	(145,128.80)
Administrative Charges	-	70,263.96	98,186.20	68,625.92	626,304.18	-	(626,304.18)
Other Professional Services	-	1,015,748.45	391,296.62	-	4,090,722.46	-	(4,090,722.46)
Systems Support	-	43,519.00	62,367.50	40,095.00	461,448.00	-	(461,448.00)
IT Infrastructure	-	-	5,562.00	19,456.08	122,684.24	-	(122,684.24)
Infrastructure	-	541.48	594.20	547.05	9,543.22	-	(9,543.22)
Telephone, Communications	-	3,931.01	5,585.83	5,972.06	62,179.32	-	(62,179.32)
Bldgs-Machinery & Equip Repair	-	422.00	-	-	45,777.11	-	(45,777.11)
Travel & Subsistence	-	1,950.92	3,141.33	4,186.21	33,071.57	-	(33,071.57)
Equipment Repair (Parts & Labo	-	-	-	-	402.29	-	(402.29)
Printing Services	-	1,967.01	-	604.43	14,132.10	-	(14,132.10)
Insurance-Non Health	-	-	-	-	13,800.00	-	(13,800.00)
Other Misc Services	-	1,986.67	867.87	63.67	20,698.58	-	(20,698.58)
Operating Expenditures	\$ 15,910,400.00	1,257,279.40	638,656.19	295,112.43	\$ 6,728,882.12	\$ -	\$ 9,181,517.88
All Equipment	2,036,000.00	-	-	-	-	-	2,036,000.00
Computer Server & Components	-	-	-	-	6,328.76	-	(6,328.76)
Total Equipment	\$ 2,036,000.00	-	-	-	\$ 6,328.76	\$ -	\$ 2,029,671.24
Total Regular Class	\$ 23,383,349.00	1,731,418.23	1,377,929.65	735,561.87	\$ 11,951,447.60	\$ -	\$ 11,431,901.40
<i>Other Departmental Appropriations:</i>							
Pol Pension Lump-Sum Sup Cont	10,000.00	-	-	-	10,000.00	-	-
PABF Payroll	24,000.00	989.28	-	988.53	14,293.01	-	9,706.99
Group Life Insurance Premium	4,200,000.00	325,159.04	320,317.90	322,318.40	3,286,930.77	-	913,069.23
Retiree's Benefit Adjustment	25,000.00	329.15	1,839.49	1,839.49	15,632.80	-	9,367.20
Other Classes	\$ 4,259,000.00	326,477.47	322,157.39	325,146.42	\$ 3,326,856.58	\$ -	\$ 932,143.42
Total Dept Appropriations	\$ 27,642,349.00	2,057,895.70	1,700,087.04	1,060,708.29	\$ 15,278,304.18	\$ -	\$ 12,364,044.82

Monthly Board Report

31-Oct-23

Account number COMALL

CITY OF MILW ALL ACCTS

Page 1 of 3

Manager Mix Report

Account Name/ Account Number	Cash/ % of account	Short Term/ % of account	Equity/ % of account	Fixed/ % of account	R.E. and Other/ % of account	Pendings/ % of account	Total Market Value/ % of consolidation
MILWAUKEE-CASH ACCOUNT	0.00	51,386,228.33	0.00	0.00	0.00	0.00	51,386,228.33
2605491	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.95%
MILWAUKEE-THE NORTHERN TRS	0.00	0.00	170,630,602.40	0.00	0.00	0.00	170,630,602.40
2605496	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	3.15%
MILWAUKEE-ERS EXPENSE FUND	0.00	656,602.50	0.00	0.00	0.00	0.00	656,602.50
2605504	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.01%
MILWAUKEE-PABF BENEFIT PAYMENT	0.00	3,025.00	0.00	0.00	0.00	0.00	3,025.00
2610128	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MILWAUKEE-DFA INTERNATIONAL	0.00	0.00	143,835,704.50	0.00	0.00	0.00	143,835,704.50
2619838	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	2.66%
MILWAUKEE-EARNEST -SL	0.00	2,809,489.94	84,382,002.02	0.00	0.00	0.00	87,191,491.96
2630942	0.00%	3.22%	96.78%	0.00%	0.00%	0.00%	1.61%
MILWAUKEE - UBS A&Q	0.00	0.00	0.00	0.00	264,505,638.40	0.00	264,505,638.40
2637239	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	4.89%
MILWAUKEE-DFA	0.00	0.00	152,238,032.50	0.00	0.00	0.00	152,238,032.50
2637848	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	2.81%
MILWAUKEE-BAIRD	0.00	24,602,362.51	0.00	59,050,315.04	0.00	-222,046.84	83,430,630.71
2674604	0.00%	29.49%	0.00%	70.78%	0.00%	-0.27%	1.54%
MILWAUKEE-CASTLEARK	0.00	1,419,165.23	66,484,575.37	0.00	0.00	-561,853.53	67,341,887.07
2697782	0.00%	2.11%	98.73%	0.00%	0.00%	-0.83%	1.24%
MILWAUKEE - BLACKROCK R1000V	0.00	0.00	169,840,862.70	0.00	0.00	0.00	169,840,862.70
4472746	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	3.14%
MILWAUKEE-LOOMIS SAYLE	3,579,141.24	0.00	7,483,113.24	405,754,924.40	0.00	-1,779,886.72	415,037,292.10
CME01	0.86%	0.00%	1.80%	97.76%	0.00%	-0.43%	7.67%
MILWAUKEE-BRANDES INT'L EQUITY	652,809.28	0.00	277,599,453.40	0.00	1,919,199.99	-134,474.33	280,036,988.40
CME03	0.23%	0.00%	99.13%	0.00%	0.69%	-0.05%	5.17%
MILWAUKEE-REAMS	152,851,235.00	0.00	0.00	765,728,579.20	11,658,819.89	-266,165,028.20	664,073,605.80
CME04	23.02%	0.00%	0.00%	115.31%	1.76%	-40.08%	12.27%
MILWAUKEE-BLAIR	7,175,035.00	0.00	184,263,446.30	0.00	928,742.54	-2,594,549.95	189,772,673.90
CME05	3.78%	0.00%	97.10%	0.00%	0.49%	-1.37%	3.51%

Monthly Board Report

31-Oct-23

Account number COMALL

CITY OF MILW ALL ACCTS

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Manager Mix Report

Account Name/ Account Number	Cash/ % of account	Short Term/ % of account	Equity/ % of account	Fixed/ % of account	R.E. and Other/ % of account	Pendings/ % of account	Total Market Value/ % of consolidation
MILWAUKEE-MFS	2,092,524.97	0.00	169,518,260.80	0.00	415,268.98	0.00	172,026,054.70
CME12	1.22%	0.00%	98.54%	0.00%	0.24%	0.00%	3.18%
MILWAUKEE-POLEN	0.00	1,436,634.57	102,942,147.30	0.00	0.00	0.00	104,378,781.80
2644553	0.00%	1.38%	98.62%	0.00%	0.00%	0.00%	1.93%
MILWAUKEE - PRINCIPAL DRA -SL	0.00	0.00	160,882,542.80	0.00	0.00	0.00	160,882,542.80
2677436	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	2.97%
MILWAUKEE-BLACKROCK GLOBAL-SL	0.00	0.00	218,778,222.50	0.00	0.00	0.00	218,778,222.50
2683493	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	4.04%
MILWAUKEE - APEF X / 4416352	0.00	0.00	0.00	0.00	8,359,862.00	0.00	8,359,862.00
4416352	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.15%
MILWAUKEE - ABBOTT 2023 / 4416356	0.00	0.00	0.00	0.00	1,950,000.00	0.00	1,950,000.00
4416356	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.04%
MILWAUKEE - AQR-SL	0.00	0.00	92,959,474.00	0.00	0.00	0.00	92,959,474.00
4468331	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	1.72%
MILWAUKEE-APTITUDE / 4479682	0.00	0.00	0.00	0.00	168,282,969.10	0.00	168,282,969.10
4479682	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	3.11%
MILWAUKEE - DFA US LCV	308,615.67	0.00	121,386,639.10	0.00	0.00	189,319.27	121,884,574.10
CME15	0.25%	0.00%	99.59%	0.00%	0.00%	0.16%	2.25%
MILWAUKEE - BLACKROCK US G-SL	0.00	0.00	0.00	381,280,906.00	0.00	0.00	381,280,906.00
MULTIPLE	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	7.05%
MILWAUKEE-PRIVATE EQUITY	0.00	0.00	0.00	0.00	753,465,174.00	0.00	753,465,174.00
MULTIPLE	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	13.92%
MILWAUKEE-REAL ESTATE	0.00	-280,519.21	0.00	0.00	487,672,794.65	280,131.50	487,672,406.85
MULTIPLE	0.00%	-0.06%	0.00%	0.00%	100.00%	0.06%	9.01%

Monthly Board Report

31-Oct-23

Account number COMALL

CITY OF MILW ALL ACCTS

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Manager Mix Report

Account Name/ Account Number	Cash/ % of account	Short Term/ % of account	Equity/ % of account	Fixed/ % of account	R.E. and Other/ % of account	Pendings/ % of account	Total Market Value/ % of consolidation
Total for consolidation	166,659,361.16	82,032,988.87	2,123,225,078.93	1,611,814,724.64	1,699,158,469.55	-270,988,388.80	5,411,902,234.12
% for consolidation	3.08%	1.52%	39.23%	29.78%	31.40%	-5.01%	100.00%

Please note that this report has been prepared using best available data. This report may also contain information provided by third parties, derived by third parties or derived from third party data and/or data that may have been categorized or otherwise reported based upon client direction - Northern Trust assumes no responsibility for the accuracy, timeliness or completeness of any such information. Northern Trust assumes no responsibility for the consequences of investment decisions made in reliance on information contained in this report. If you have questions regarding third party data or direction as it relates to this report, please contact your Northern Trust relationship team.

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Employees' Retirement System
Securities Lending Income and Expenses: 2023
As of October 31, 2023

Date	Amounts Expended			Balance
	Income From Lending	Fees	Administrative Transfers	
Balance 12-31-22				\$791,432.47
Quarter 1 Totals	\$207,243.48	\$40,423.69	\$792,000.00	166,252.26
Quarter 2 Totals	\$246,329.07	\$48,650.00	\$0.00	363,931.33
Quarter 3 Totals	\$280,493.17	\$54,996.98	\$0.00	589,427.52
10/04/23	\$2,439.08	\$0.00	\$0.00	\$591,866.60
10/16/23	\$77,475.70	\$15,487.23	\$0.00	\$653,855.07
Current Totals	\$813,980.50	\$159,557.90	\$792,000.00	\$653,855.07

Note: Expenses for Board Travel/Education, Computer Equipment, Publications and Consulting are now paid from the Operations/Management account

MERS PERFORMANCE ESTIMATES
October 31, 2023

Account	2022 Return	1st Quarter 2023	2nd Quarter 2023	3rd Quarter 2023	Oct 2023	YTD Thru 10/31/23
Northern Trust S&P 500 Index	-18.10%	7.50%	8.75%	-3.26%	-2.10%	10.72%
S&P 500	-18.11%	7.50%	8.74%	-3.27%	-2.10%	10.69%
Difference	0.01%	0.00%	0.01%	0.01%	0.00%	0.02%
BlackRock Russell 1000 Value Index	-7.54%	1.02%	4.09%	-3.16%	-3.52%	-1.76%
Russell 1000 Value	-7.54%	1.01%	4.07%	-3.16%	-3.53%	-1.80%
Difference	0.00%	0.02%	0.01%	0.00%	0.01%	0.04%
DFA US Large Cap Value	-4.95%	1.13%	3.42%	-1.45%	-3.99%	-1.04%
Russell 1000 Value	-7.54%	1.01%	4.07%	-3.16%	-3.53%	-1.80%
Difference	2.59%	0.12%	-0.66%	1.72%	-0.46%	0.76%
Polen	-37.54%	14.15%	9.75%	-3.27%	-0.95%	20.03%
S&P 500	-18.11%	7.50%	8.74%	-3.27%	-2.10%	10.69%
Difference	-19.43%	6.65%	1.00%	0.01%	1.16%	9.34%
Earnest	-15.13%	4.69%	4.11%	-4.35%	-3.68%	0.41%
Russell MidCap	-17.32%	4.06%	4.76%	-4.68%	-4.99%	-1.28%
Difference	2.18%	0.63%	-0.65%	0.33%	1.32%	1.69%
CastleArk	-27.99%	5.14%	5.35%	-8.85%	-7.05%	-6.16%
Russell 2000 Growth	-26.36%	6.07%	7.05%	-7.32%	-7.71%	-2.87%
Difference	-1.63%	-0.94%	-1.70%	-1.53%	0.66%	-3.29%
DFA US Small Cap Value	-1.67%	0.83%	4.61%	0.04%	-4.73%	0.52%
Russell 2000 Value	-14.48%	-0.66%	3.18%	-2.96%	-5.97%	-6.46%
Difference	12.81%	1.49%	1.43%	3.00%	1.23%	6.98%
Brandes	-6.88%	11.24%	4.87%	1.81%	-3.69%	14.39%
MSCI EAFE	-14.45%	8.47%	2.95%	-4.11%	-4.05%	2.74%
Difference	7.57%	2.78%	1.92%	5.92%	0.37%	11.65%
William Blair	-28.99%	8.58%	3.18%	-8.26%	-4.03%	-1.37%
MSCI ACWI ex US	-15.57%	7.00%	2.67%	-3.68%	-4.11%	1.47%
Difference	-13.42%	1.58%	0.51%	-4.58%	0.08%	-2.84%
DFA Int'l Small Cap Value	-9.75%	6.53%	0.87%	0.07%	-3.03%	4.28%
MSCI EAFE Small Cap	-21.39%	4.92%	0.58%	-3.51%	-5.87%	-4.16%
Difference	11.64%	1.61%	0.30%	3.58%	2.84%	8.44%
AQR	-20.81%	5.87%	1.85%	-0.77%	-3.77%	2.97%
MSCI EM	-20.09%	3.96%	0.90%	-2.93%	-3.89%	-2.14%
Difference	-0.72%	1.92%	0.95%	2.16%	0.11%	5.11%
BlackRock Global Alpha Tilts	-16.81%	7.56%	6.09%	-3.06%	-2.40%	7.97%
MSCI ACWI	-18.36%	7.31%	6.18%	-3.40%	-3.01%	6.75%
Difference	1.55%	0.26%	-0.09%	0.35%	0.60%	1.22%
MFS	-18.15%	8.46%	6.23%	-5.37%	-2.97%	5.79%
MSCI ACWI	-18.36%	7.31%	6.18%	-3.40%	-3.01%	6.75%
Difference	0.22%	1.16%	0.05%	-1.97%	0.03%	-0.96%
BlackRock Gov't Bond Index	-12.31%	3.19%	-1.36%	-2.98%	-1.18%	-2.40%
Bloomberg Gov't Bond	-12.32%	2.98%	-1.35%	-2.99%	-1.18%	-2.61%
Difference	0.01%	0.21%	-0.01%	0.01%	0.00%	0.21%
Reams	-11.39%	4.03%	-0.58%	-3.81%	-2.12%	-2.63%
Bloomberg US Aggregate	-13.01%	2.96%	-0.84%	-3.23%	-1.58%	-2.77%
Difference	1.62%	1.07%	0.26%	-0.58%	-0.55%	0.14%
Loomis Sayles	-12.21%	3.28%	-0.23%	-2.20%	-2.10%	-1.34%
Bloomberg US Aggregate	-13.01%	2.96%	-0.84%	-3.23%	-1.58%	-2.77%
Difference	0.80%	0.32%	0.62%	1.03%	-0.52%	1.43%
UBS	8.91%	0.93%	0.96%	2.18%	0.31%	4.44%
SOFR + 4%	4.90%	2.08%	2.18%	2.23%	0.77%	7.45%
Difference	4.01%	-1.15%	-1.22%	-0.05%	-0.46%	-3.01%
Aptitude		0.18%	1.15%	1.75%	0.39%	3.52%
SOFR + 4%		2.08%	2.18%	2.23%	0.77%	7.45%
Difference		-1.90%	-1.03%	-0.47%	-0.37%	-3.93%
Principal	-5.88%	1.28%	-0.82%	-3.97%	-1.87%	-5.34%
Blended Benchmark	-5.06%	1.11%	-1.20%	-2.91%	-2.93%	-5.85%
Difference	-0.82%	0.17%	0.38%	-1.06%	1.06%	0.51%
Baird	-1.80%	1.32%	0.47%	1.12%	0.37%	3.32%
Bloomberg Govt/Credit 1-3 Year	-3.69%	1.51%	-0.37%	0.73%	0.31%	2.19%
Difference	1.89%	-0.19%	0.85%	0.39%	0.06%	1.13%
Total MERS	-6.49%	3.33%	2.16%	-1.72%	-1.90%	1.77%

The calculation for the Fund's total rate of return is based on the Modified Dietz method. Although periodic cash flows (i.e., contributions, redemptions) are not time weighted, they are accounted for in the Fund's total rate of return. Therefore, this estimated rate of return may vary slightly from the rate of return reported by the custodian.

The returns shown are gross of fees (except Total MERS, DFA International Small Cap Value, William Blair International Growth, AQR, Principal, UBS, and Aptitude)

ACTUAL ALLOCATIONS

October 31, 2023

		Target	Market Value	Allocation
EQUITY				
Public Equity				
Domestic				
Passive Large Cap Equity	Northern Trust (S&P 500)	3.45%	\$ 170,630,602	3.20%
	BlackRock (Russell 1000 Value)	3.45%	\$ 169,840,863	3.19%
	Sub-Total Passive Large Cap Equity	6.90%	\$ 340,471,465	6.39%
Active Large Cap Equity	Polen (S&P 500)	1.94%	\$ 104,378,782	1.96%
	DFA (Russell 1000 Value)	2.46%	\$ 121,884,574	2.29%
	Sub-Total Active Large Cap Equity	4.40%	\$ 226,263,356	4.25%
Active Mid/Small Cap Equity	Earnest Partners (Russell MidCap)	1.77%	\$ 87,191,492	1.64%
	CastleArk (Russell 2000 Growth)	1.42%	\$ 67,341,887	1.26%
	DFA (Russell 2000 Value)	3.05%	\$ 152,238,032	2.86%
	Sub-Total Active Mid/Small Cap Equity	6.24%	\$ 306,771,412	5.76%
Total Domestic		17.55%	\$ 873,506,233	16.39%
International				
Active International Equity	Brandes (MSCI EAFE)	5.14%	\$ 280,036,988	5.25%
	William Blair (MSCI ACWI ex US)	3.91%	\$ 189,772,674	3.56%
	DFA (MSCI EAFE Small Cap)	2.84%	\$ 143,835,704	2.70%
	AQR (MSCI EM)	1.76%	\$ 92,959,474	1.74%
Total International		13.65%	\$ 706,604,841	13.26%
Global				
Active Global Equity	BlackRock (MSCI ACWI)	4.29%	\$ 218,778,223	4.10%
	MFS (MSCI ACWI)	3.51%	\$ 172,026,055	3.23%
Total Global		7.80%	\$ 390,804,277	7.33%
Total Public Equity		39.00%	\$ 1,970,915,350	36.98%
Private Equity				
	Abbott Capital (Russell 3000 Quarter Lag + 2%)	4.20%	\$ 319,766,559	6.00%
	Mesirow (Russell 3000 Quarter Lag + 2%)	4.20%	\$ 290,554,895	5.45%
	Neuberger Berman (Russell 3000 Quarter Lag + 2%)	1.80%	\$ 57,440,777	1.08%
	Apogem (Russell 3000 Quarter Lag + 2%)	1.80%	\$ 96,012,805	1.80%
Total Private Equity		12.00%	\$ 763,775,036	14.33%
TOTAL EQUITY (Public Equity + Private Equity)		51.00%	\$ 2,734,690,386	51.31%
FIXED INCOME & ABSOLUTE RETURN				
Fixed Income				
Cash		1.00%	\$ 52,045,856	0.98%
Passive Fixed Income	BlackRock (Bloomberg US Government)	7.22%	\$ 381,280,906	7.15%
Active Fixed Income	Reams (Bloomberg US Aggregate)	12.83%	\$ 664,073,606	12.46%
	Loomis Sayles (Bloomberg US Aggregate)	7.95%	\$ 415,037,292	7.79%
	Sub-Total Active Fixed Income	20.78%	\$ 1,079,110,898	20.25%
Total Fixed Income		29.00%	\$ 1,512,437,660	28.38%
Absolute Return				
	Aptitude (SOFR + 4%)	3.00%	\$ 168,944,024	3.17%
	UBS (SOFR + 4%)	4.00%	\$ 265,325,606	4.98%
Total Absolute Return		7.00%	\$ 434,269,630	8.15%
TOTAL FIXED INCOME & ABSOLUTE RETURN		36.00%	\$ 1,946,707,289	36.52%
REAL ASSETS				
Private Real Estate - Core	JP Morgan (NFI-ODCE)	2.50%	\$ 129,407,144	2.43%
	Morgan Stanley (NFI-ODCE)	2.70%	\$ 149,625,395	2.81%
	LaSalle (NFI-ODCE)	2.30%	\$ 111,564,134	2.09%
	Prologis (NFI-ODCE)	1.30%	\$ 86,165,685	1.62%
	New Core Fund (NFI-ODCE)	0.90%	\$ -	0.00%
	Sub-Total Private Real Estate - Core	9.70%	\$ 476,762,359	8.94%
Private Real Estate - Non-Core	Non-Core Real Estate (NFI-ODCE)	0.00%	\$ 10,910,048	0.20%
Public Real Assets	Principal (Blended Benchmark)	3.30%	\$ 160,882,543	3.02%
TOTAL REAL ASSETS		13.00%	\$ 648,554,950	12.17%
TOTAL ERS			\$ 5,329,952,626	100.00%
Total City Reserve Fund R. W. Baird 83,430,631				

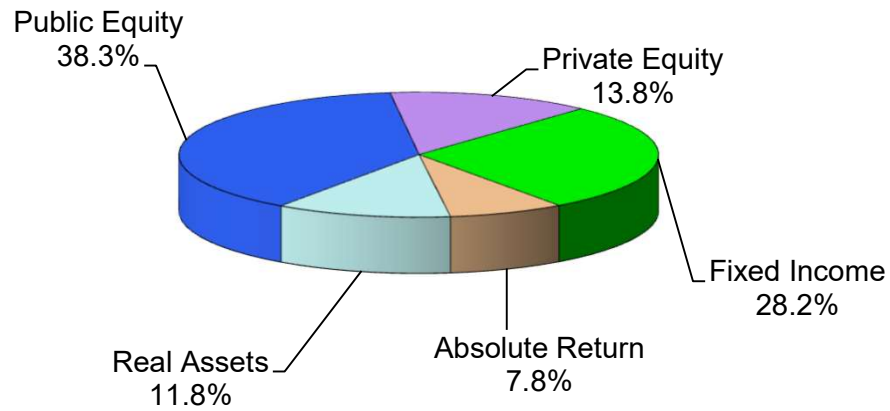
PROJECTED TARGET ALLOCATIONS

Nov 20, 2023

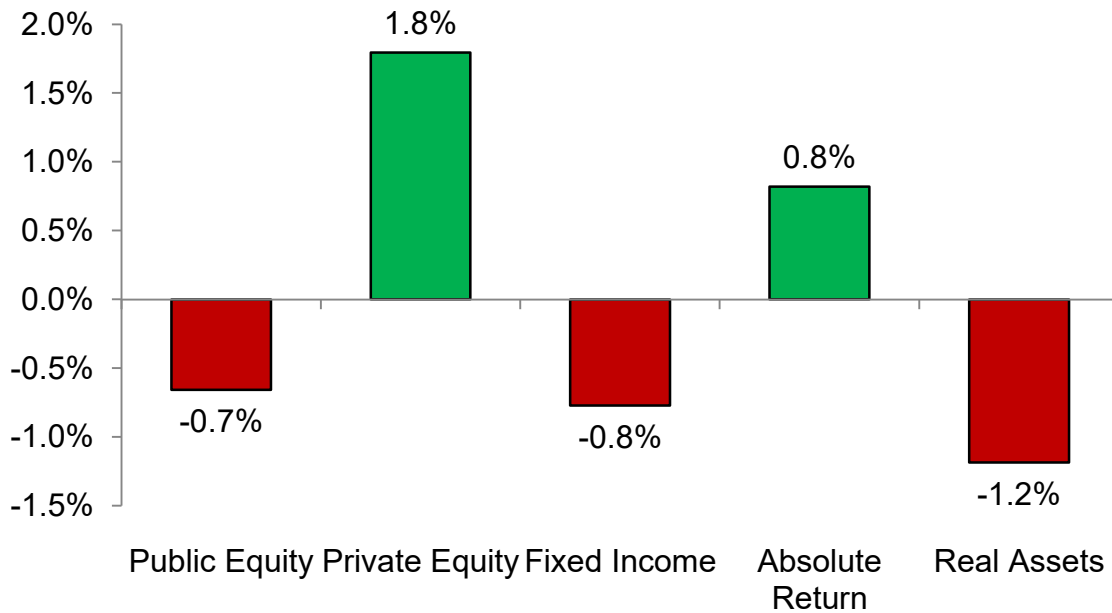
		Target	Market Value	Allocation
EQUITY				
Public Equity				
Domestic				
Passive Large Cap Equity	Northern Trust (S&P 500)	3.45%	\$ 185,266,900	3.34%
	BlackRock (Russell 1000 Value)	3.45%	\$ 179,998,317	3.24%
	Sub-Total Passive Large Cap Equity	6.90%	\$ 365,265,217	6.58%
Active Large Cap Equity	Polen (S&P 500)	1.94%	\$ 115,038,405	2.07%
	DFA (Russell 1000 Value)	2.46%	\$ 129,267,324	2.33%
	Sub-Total Active Large Cap Equity	4.40%	\$ 244,305,728	4.40%
Active Mid/Small Cap Equity	Earnest Partners (Russell MidCap)	1.77%	\$ 93,788,532	1.69%
	CastleArk (Russell 2000 Growth)	1.42%	\$ 73,143,055	1.32%
	DFA (Russell 2000 Value)	3.05%	\$ 165,159,151	2.97%
	Sub-Total Active Mid/Small Cap Equity	6.24%	\$ 332,090,738	5.98%
Total Domestic		17.55%	\$ 941,661,683	16.95%
International				
Active International Equity	Brandes (MSCI EAFE)	5.14%	\$ 301,171,273	5.42%
	William Blair (MSCI ACWI ex US)	3.91%	\$ 209,727,390	3.78%
	DFA (MSCI EAFE Small Cap)	2.84%	\$ 152,450,864	2.74%
	AQR (MSCI EM)	1.76%	\$ 100,141,036	1.80%
Total International		13.65%	\$ 763,490,562	13.75%
Global				
Active Global Equity	BlackRock (MSCI ACWI)	4.29%	\$ 237,421,109	4.27%
	MFS (MSCI ACWI)	3.51%	\$ 187,020,151	3.37%
Total Global		7.80%	\$ 424,441,260	7.64%
Total Public Equity		39.00%	\$ 2,129,593,506	38.34%
Private Equity				
	Abbott Capital (Russell 3000 Quarter Lag + 2%)	4.20%	\$ 319,986,559	5.76%
	Mesirow (Russell 3000 Quarter Lag + 2%)	4.20%	\$ 290,554,895	5.23%
	Neuberger Berman (Russell 3000 Quarter Lag + 2%)	1.80%	\$ 57,440,777	1.03%
	Apogem (Russell 3000 Quarter Lag + 2%)	1.80%	\$ 98,141,574	1.77%
Total Private Equity		12.00%	\$ 766,123,805	13.79%
TOTAL EQUITY (Public Equity + Private Equity)		51.00%	\$ 2,895,717,311	52.14%
FIXED INCOME & ABSOLUTE RETURN				
Fixed Income				
Cash				
		1.00%	\$ 50,377,977	0.91%
Passive Fixed Income	BlackRock (Bloomberg US Government)	7.22%	\$ 391,770,047	7.05%
Active Fixed Income	Reams (Bloomberg US Aggregate)	12.83%	\$ 693,926,414	12.49%
	Loomis Sayles (Bloomberg US Aggregate)	7.95%	\$ 431,811,185	7.77%
	Sub-Total Active Fixed Income	20.78%	\$ 1,125,737,600	20.27%
Total Fixed Income		29.00%	\$ 1,567,885,623	28.23%
Absolute Return				
	Aptitude (SOFR + 4%)	3.00%	\$ 168,944,024	3.04%
	UBS (SOFR + 4%)	4.00%	\$ 265,325,606	4.78%
Total Absolute Return		7.00%	\$ 434,269,630	7.82%
TOTAL FIXED INCOME & ABSOLUTE RETURN		36.00%	\$ 2,002,155,253	36.05%
REAL ASSETS				
Private Real Estate - Core	JP Morgan (NFI-ODCE)	2.50%	\$ 129,407,144	2.33%
	Morgan Stanley (NFI-ODCE)	2.70%	\$ 149,625,395	2.69%
	LaSalle (NFI-ODCE)	2.30%	\$ 111,564,208	2.01%
	Prologis (NFI-ODCE)	1.30%	\$ 86,165,685	1.55%
	New Core Fund (NFI-ODCE)	0.90%	\$ -	0.00%
	Sub-Total Private Real Estate - Core	9.70%	\$ 476,762,432	8.58%
Private Real Estate - Non-Core	Non-Core Real Estate (NFI-ODCE)	0.00%	\$ 11,073,835	0.20%
Public Real Assets	Principal (Blended Benchmark)	3.30%	\$ 168,305,922	3.03%
TOTAL REAL ASSETS		13.00%	\$ 656,142,189	11.81%
TOTAL ERS			\$ 5,554,014,752	100.00%
Total City Reserve Fund		R. W. Baird	83,917,305	

PROJECTED VERSUS POLICY ALLOCATIONS

Asset Mix Using Projected Balances



Asset Allocation vs. Current Policy Benchmark



YTD Market Value Change

December 31, 2022 Market Value including City Reserve & PABF Accounts			\$ 5,550,112,010
Monthly Cash Outflows thru	<u>November 20, 2023</u>		
Retiree Payroll Expense		\$ (384,181,726)	
PABF Payroll Expense		\$ (23,232)	
Expenses Paid		\$ (15,310,055)	
GPS Benefit Payments		\$ (7,313,765)	
Sub-Total Monthly Cash Outflows			\$ (406,828,778)
Monthly Cash Inflows thru	<u>November 20, 2023</u>		
Contributions		\$ 156,492,565	
PABF Contribution		\$ 24,725	
Sub-Total Monthly Contributions			\$ 156,517,290
Capital Market Gain/(Loss)			<u>\$ 338,131,534</u>
Value including City Reserve & PABF Accounts as of	<u>November 20, 2023</u>		<u>\$ 5,637,932,057</u>
Less City Reserve Account ¹			\$ 83,917,305
Less PABF Fund ²			\$ 3,034
Net Projected ERS Fund Value as of	<u>November 20, 2023</u>		<u><u>\$ 5,554,011,718</u></u>

1 The City Reserve Account balance equals the market value currently held in the Baird account.

2 PABF Fund balance equals the market value currently held in the PABF account.

2023 ESTIMATED MONTHLY CASH FLOWS

Revised 11/21/2023

(in 000's)

	<u>12/31/2022</u>	<u>1/31/2023</u>	<u>2/29/2023</u>	<u>3/31/2023</u>	<u>4/30/2023</u>	<u>5/31/2023</u>	<u>6/30/2023</u>	<u>7/31/2023</u>	<u>8/31/2023</u>	<u>9/30/2023</u>	<u>10/31/2023</u>	<u>11/30/2023</u>
<u>Beginning Cash Account Balance</u>												
Townsend Cash Account	5,435	-	-	-	-	-	-	-	-	-	-	-
Cash Contribution Account	-	-	-	-	-	-	-	-	-	-	-	-
Milwaukee Cash Account	17,447	80,926	44,668	55,372	44,788	51,099	26,178	91,206	40,998	53,916	51,098	
Total Cash Available	22,883	80,926	44,668	55,372	44,788	51,099	26,178	91,206	40,998	53,916	51,098	
Less: Estimated Cash Needs for non-Investment Outflows	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	
Cash Available for Other Outflows	(16,617)	41,426	5,168	15,872	5,288	11,599	(13,322)	51,706	1,498	14,416	11,598	
<u>For Monthly Cash Outflows of:</u>												
Retiree Payroll Expense	(39,141)	(39,561)	(39,102)	(38,290)	(39,016)	(38,553)	(39,619)	(39,285)	(39,477)	(39,452)	(40,073)	(40,170)
Normal Retirement Payroll	(38,011)	(38,140)	(38,215)	(38,049)	(38,308)	(38,271)	(38,890)	(38,598)	(38,823)	(38,877)	(38,974)	(39,071)
Retiree Lump Sum Payments	(1,130)	(1,421)	(886)	(241)	(708)	(283)	(729)	(687)	(654)	(575)	(1,099)	(1,099)
Real Estate Capital Calls	-	-	-	(43)	-	-	-	-	-	-	-	-
Private Equity Capital Calls	(826)	(1,620)	(11,248)	(3,017)	(13,730)	(25,576)	(300)	(2,244)	(9,632)	(807)	(5,915)	-
Expenses Paid through City	(1,949)	(1,554)	(1,410)	(566)	(2,112)	(835)	(1,588)	(2,526)	(822)	(1,031)	(917)	(1,949)
PABF Payroll	(2)	(12)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Sub-Total Monthly Cash Outflows	(41,917)	(42,747)	(51,761)	(41,917)	(54,859)	(64,965)	(41,508)	(44,056)	(49,932)	(41,291)	(46,906)	(42,120)
<u>For Monthly Cash Inflows:</u>												
Sponsoring Agency and Employee Contribution	2,514	2,483	3,470	2,779	2,530	2,438	2,263	3,242	2,847	2,636	2,643	2,650
Real Estate Distributions	2,400	42	11,651	345	251	3,330	0	-	248	344	91	-
Private Equity Distributions	235	3,647	9,453	2,389	3,376	11,468	314	7,456	10,616	5,235	994	-
Miscellaneous Income	164	315	277	218	213	269	296	213	238	257	288	80
Security Lending Transfer	792	-	-	-	-	-	-	-	-	-	-	-
City and Agency Required Contribution	101,853	-	-	-	-	-	19,560	5,217	1,319	-	-	-
PABF Inflow	2	2	14	1	-	-	2	1	1	1	1	1
Sub-Total Monthly Cash Inflows	107,961	6,489	24,865	5,733	6,370	17,506	22,437	16,129	15,269	8,472	4,017	2,730
Net Monthly Cash Inflows/(Outflows) Before Withdrawals	66,043	(36,258)	(26,896)	(36,184)	(48,489)	(47,460)	(19,071)	(27,927)	(34,663)	(32,818)	(42,888)	(39,390)
Net Monthly Cash Surplus (Need)	49,426	5,168	(21,728)	(20,312)	(43,201)	(35,860)	(32,394)	23,779	(33,165)	(18,402)	(31,290)	(39,390)
<u>Monthly Cash Withdrawals (Additions)</u>												
AQR												
BlackRock Global Alpha Tilts				9,900		39,600	11,500	5,300				
BlackRock Russell 1000 Value Index					3,000	17,600	9,000	6,300				
BlackRock US Government Bond Index				(50,000)	(44,000)	(15,000)	(59,000)	(8,000)				
Brandes			12,500	12,900	14,300	20,800	19,800	14,500	14,100			
CastleArk						5,300	4,500	1,400				
Dimensional Fund Advisors US Large Cap					4,500	9,100	5,000	6,500	4,800			
Dimensional Fund Advisors International				6,800	7,500	19,700	7,600	5,500				
Dimensional Fund Advisors US Small Cap						11,700	10,500	8,200	6,000			
Earnest						6,700	6,400	3,500	3,400			
Loomis Sayles			5,100			(35,000)	(41,000)	(18,000)				
MFS	(36,000)			8,200	8,900	13,300	12,800	9,100	6,800			
Northern Trust S&P 500 Index				6,000	15,600	22,100	8,900	4,000	3,200			
Polen			4,000	4,600	5,000	7,700	7,500	5,500	5,300			
Principal												
Reams			7,000	(47,000)		(94,000)		(66,000)				
UBS A&Q	28,000			75,000	20,000		50,000		30,000			
Goldman/Aptitude						(6,262)						
William Blair			9,000	9,100	10,100	14,800	13,500	5,400				
Sub-Total Monthly Cash Withdrawals	(8,000)	-	37,600	35,500	44,900	38,138	67,000	(16,800)	43,600	30,000	-	
<u>Estimated Month-End Cash Balance</u>												
Cash Available	41,426	5,168	15,872	15,188	1,699	2,278	34,606	6,979	10,435	11,598	(31,290)	
Estimated Cash Needs for non-Investment Outflows	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	39,500	
Total Cash Estimated on Hand For Next Month	80,926	44,668	55,372	54,688	41,199	41,778	74,106	46,479	49,935	51,098	8,210	