

**REGULAR MEETING OF THE ANNUITY AND PENSION BOARD
EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE
789 N. WATER ST. (Employees' Retirement System)
TUESDAY, APRIL 25, 2023 – 9:00 A.M.**

Special Notice: Due to the COVID-19 pandemic, 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 March 28, 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 item (A.) 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. Selection of Real Estate Manager.
- IV. Administration & Operations Committee Report.
 - A. Approval of Draft ERS 2024 Budget.
- V. New Business.
 - A. Approval of New Actuarial Tables for Pension Benefits – Presentation by Cavanaugh Macdonald.
 - B. Retirements, Death Claims, and Refunds (March).
 - C. Conference Requests – April 2023 Board Meeting.

VI. Medical Reports.

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

VII. Unfinished Business.

- A. Pending Legal Opinions and Service Requests Report.
- B. Pending Legislation Report.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (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. Executive Director's Report – Inventory of ERS Projects.

VIII. Informational.

- A. Pending Litigation Report.
- B. Conferences.
- C. Class Action Income 2023 YTD.
- D. Minutes of the Administration & Operations Committee Meeting Held March 23, 2023.
- E. Report on Bills.
- F. Deployment of Assets.
- G. Securities Lending Revenue and Budget Report.
- H. Preliminary Performance Report and Asset Allocation.

MEETING REMINDERS

INVESTMENT COMMITTEE MEETING

THURSDAY, MAY 4, 2023 – 9:00 A.M.

789 N. WATER ST.

REGULAR MEETING OF THE ANNUITY AND PENSION BOARD

TUESDAY, MAY 23, 2023 – 9:00 A.M.

789 N. WATER ST.

I.

APPROVAL OF MINUTES

- A. Regular Meeting Held March 28, 2023.

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

Minutes of the Regular Meeting
held March 28, 2023 via teleconference during COVID-19

The meeting was called to order at 9:01 a.m.

Board Members Present: Matthew Bell, Chair
 Deborah Ford
 Timothy Heling
 Molly King
 Tom Klusman
 Rudolph Konrad
 Nik Kovac
 Aycha Sawa

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
 Dave Walters, Senior Pension Investment Analyst
 Thomas Courtright, Pension Investment Analyst
 Mary Turk, Business Operations Analyst
 Jan Wills, Board Stenographer

Others Present: Patrice Beckham, Aaron Chochon, Larry Langer, Cavanaugh Macdonald, LLC; Patrick McClain, City Attorney's Office; Terry Siddiqui, DS Consulting, Inc., seven members of the public called in to the meeting.

Regular Meeting.

Approval of Minutes.

Regular Meeting Held February 27, 2023. It was moved by Ms. Sawa, seconded by Mr. Heling, and unanimously carried, to approve the minutes of the Regular Meeting Held February 27, 2023. Mr. Allen asked if Mr. Bell wanted to ask for an adjustment to the minutes regarding the Funding Policy adopted at the last meeting. Mr. Allen noted on the third motion of Actuarial Methods that the last item was not enumerated which was the 10-year amortization. Mr. Langer added that if the Plan were to close to new actives, there would be an amortization period of 10 years. He noted it was good to have a plan in place. Discussion ensued. Mr. Bell rescinded the original motion from Ms. Sawa and Mr. Heling, with their approval. It was moved by Mr. Konrad to amend the minutes with regard to the actuary's recommendation for "Actuarial Methods", that after "and fresh start (25), if CMERS were closed to new actives, (10), for the five-year experience study," seconded by Mr. Heling, and unanimously carried, to re-approve the Minutes of the Regular Meeting Held February 27, 2023.

Chief Investment Officer Report. As a matter of information, Board members received the March 28, 2023 Performance Update. Mr. Sauer noted the Fund as of February 28, 2023, had a

value of \$5.62 billion. He said the Fund had a return of -1.7% in February, gross of fees, which outperformed the blended benchmark by approximately 17 basis points. Mr. Sauer commented the main drivers of relative performance were Manager Selection in Public Equity with Brandes adding 12 basis points, and Blair adding 6 basis points. He added the Fund had outperformed the benchmark in all time periods shown. Mr. Sauer remarked as of March 27, 2023, the Fund was down -0.7% month-to-date in March, which brought the year-to-date return up 1.6%, and the Fund value to \$5.59 billion. He noted 12 out of the Fund's 16 active mandates are outperforming, year-to-date. Mr. Sauer stated the Fixed Income asset class is outperforming its benchmark year-to-date. He said year-to-date the Fund has seen a gain in the value of investments of \$92.6 million, paid benefits and expenses of \$82.2 million, and received contributions of \$109.4 million. Mr. Sauer concluded that the monthly withdrawals are \$12.5 million from Brandes, \$9 million from Blair, \$7 million from Reams, \$5.1 million from Loomis, and \$4 million from Polen. Discussion ensued.

Mr. Sauer then provided a couple updates and reminded the Board that in June 2022 the Board was notified that the ERS was to receive an in-kind distribution of Albertson's stock, a publicly-traded grocer, from one of the real estate managers. He noted the timeline was uncertain so Staff asked the Board for authority to work with Northern Trust to liquidate the shares as soon as they were received. Mr. Sauer said it took longer as Albertson's agreed to merge with Kroger and because of the lock-up period, the manager was required to wait longer to distribute the stock to the ERS. He noted when the lock-up expired, the ERS received the shares on February 28, 2023. Mr. Sauer said the proceeds from the sale were \$6.4 million dollars and the ERS, as part of the investment, also received a \$2.2 million dollar special dividend from Albertson's in January 2023. He commented that it was a successful investment for the real estate manager, and complemented Northern Trust on the stock liquidation, who acted on a fiduciary basis. Mr. Sauer commented that the stock liquidated at a good price, since the stock went below the price the next day. He said it was the last remaining investment for that real estate manager and it was one of the non-core Funds CMERS was able to wind down. Mr. Sauer then reminded the Board of the April 20 Investment Committee Meeting and said they would be interviewing Real Estate Managers who were approved as part of the Real Estate search. He concluded they would also provide a preliminary report on first quarter performance and present some routine due diligence reports.

Administration & Operations Committee Report. Ms. Sawa said the Committee met on March 23. She said there are a number of items for approval, but first discussed other previous meeting items and commented that the internal auditors CliftonLarsonAllen presented their completed IT audits. She noted that the external auditors Baker Tilly presented their 2022 audit. Ms. Sawa said their external financial statements would be provided later in the summer when they are completed.

Approval of Wells Fargo Extension Amendment. Ms. Sawa said this was just an extension to June 30 to allow more time to complete the contract renewal. It was moved by Mr. Bell, seconded by Ms. King, and unanimously carried, to approve the Approval of Wells Fargo Extension Amendment.

Approval of Close out of 2022 Budget. As a matter of information, Board members received the Final 2022 Payment to the City and 2022 Budget to Actual Expenditures Memorandum. Mr. Gopalan stated that the City processes the invoices for the ERS and the ERS, reimburses the City on a monthly basis for those expenses. Mr. Gopalan noted the actual expenses for 2022 were \$17,297,096.20 and of that, \$461,041.14 relates to non-trust activities. He noted those non-trust activities relate to the Group Life program, Retiree Health, Administrative Expenses, and the legacy pension plans of PABF and FABF. He said that leaves \$16,836,055.06

funded by the Trust for 2022. He added that they previously reimbursed the City \$15,426,000.00 for paying those costs in 2022, leaving a balance owed of \$1,410.055.06. He concluded that this final amount payable to the City is comprised of costs incurred since the middle of December, the last time the Trust reimbursed the City for expenses and for amounts accrued to close out the fiscal year. Mr. Gopalan said the motion is to approve the payment of \$1,410.055.06 to the City.

It was moved by Mr. Heling, seconded by Ms. King, and unanimously carried, to approve the Approval of Close out of 2022 Budget.

Approval of Eide Bailly Contract. Ms. Sawa noted the attorneys are still working on this and the contract is on hold and no motion is needed now. She said the contract will be approved later this Summer.

Approval of DS Consulting Contract. It was moved by Mr. Bell, seconded by Ms. Ford, and unanimously carried, to approve the Approval of DS Consulting Contract.

New Business.

Presentation by Cavanaugh Macdonald LLC Regarding Reset of the Stable Contribution Policy Percentage of Pensionable Earnings for 2023-2027. As a matter of information, Board members received the “City of Milwaukee Employees’ Retirement System Stable Contribution Policy for Calendar Years 2023 through 2027” presentation booklet. Mr. Langer’s main topics included Preliminary Valuation Results, Stable Employer Contribution Policy, and Final Valuation Results. He stated Cavanaugh Macdonald has the preliminary assets as of January 1, 2023 and the preliminary results are needed to provide Callan with the information necessary to set the investment policy. Mr. Langer stated the Stable Employer Contribution Policy was established with the January 1, 2013-2017 valuation at 8.48% for General City, 22.63% for Police, and 24.83% for Fire. He said it was reset for the January 1, 2018 valuation for 2018-2022 at 7.48% for General City, 25.22% for Police, and 26.83% for Fire. Mr. Langer said the purpose of today’s meeting is to reset for calendar years 2023-2027 and the final valuation results will be presented at the June Board meeting.

Mr. Langer further discussed the topics of the Purpose of the Actuarial Valuation, Actuarial Valuation Process, Events During 2022 Which Impacted the January 1, 2023 Actuarial Valuation Results, Summary of Liabilities and Assets Based on DRAFT Assets, ADEC for Combined Fund as of January 1, 2023 based on DRAFT Assets, Stable Contribution Policy Process, Projected Funded Ratio for Combined Fund based on DRAFT Assets and 7.50% Returns, Projected ADEC for Combined Fund based on DRAFT Assets and 7.50% Returns, Stable Contribution Policy, History of Stable Contribution Policy vs ADEC, CMERS Annual Portfolio Net Returns from Callan, CMERS Geometric Average Net Returns from Callan, Projected Employer Contributions Under ADEC, Projected Funded Ratio Under ADEC, Stable Employer Contribution Rates at Select Percentiles, 50th Percentile Projected Dollar Contributions (\$ in Thousands), and Comparison of 50th Percentile versus ADEC Funded Ratio.

Mr. Langer discussed Key Takeaways and noted four points: He said as noted in Cavanaugh Macdonald’s actuarial valuation reports since 2019, they anticipated significant increases in the Stable Employer Contribution Rates primarily due to the reduction in the assumed rate of return of 7.50%; returns in 2022 for CMERS, like many Funds, were much lower than expected which puts upward pressure on future contributions; the process used to develop the Stable Employer Contribution Policy frontloads the 2022 return and expected returns that are less

than expected, and the Stable Employer Contribution Rates can be revisited if expectations in assumptions or changes in plan provisions are needed. He concluded they will continue to monitor the policy as in the past. Discussion ensued.

Chairman Bell called for a break at 11:00 a.m.

Chairman Bell resumed the meeting at 11:11 a.m.

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

| | |
|--|--------------|
| Active Death Benefits reported | \$0.00 |
| Deferred Death | \$41,666.06 |
| Deferred Death-Member Only Refund | \$0.00 |
| Ordinary Death Benefits reported | \$0.00 |
| Retired Death Benefits reported | \$16,179.97 |
| Survivor Death – Termination Benefits reported | \$15,313.85 |
| Refund of Member Contributions paid | \$290,149.22 |

It was moved by Mr. Konrad, seconded by Mr. Heling, and unanimously carried, to approve the Retirements, Death Claims, and Refunds (February 2023).

Conference Requests – March 2023 Board Meeting. Staff presented the Conference Requests this month.

| | |
|-----------------|-----------------------------|
| Erich Sauer | DFA Institutional Symposium |
| Sponsor: | Dimensional Fund Advisors |
| Location: | Austin, TX |
| Date(s): | May 2-4, 2023 |
| Estimated Cost: | \$1,500.00 |

| | |
|-----------------|---|
| Molly King | NCPERS Annual Conference & Exhibition |
| | NCPERS Accredited Fiduciary (NAF) Program - |
| | Modules 3&4 |
| Sponsor: | NCPERS |
| Location: | New Orleans, LA |
| Date(s): | May 21-24, 2023 |
| Estimated Cost: | \$2,050.00 |

Messrs Heling and Kovac also requested to attend the NCPERS Annual Conference in New Orleans on May 21-24, 2023 at \$2,050.00 per person.

Mr. Allen requested to attend the NCPERS 2023 Chief Officers Summit in Denver, Colorado on June 18 – 21, 2023 at \$1,500.00

It was moved by Mr. Klusman, seconded by Ms. Ford, and unanimously carried, to approve Conference Requests – March 2023 Board Meeting for the five persons requesting to attend conferences.

Medical Reports.

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

| <u>Police – Applications – Duty</u> | <u>Recommendation</u> |
|--|-----------------------|
| Joshua Boyenga | Denial |
| <u>Fire – Re-examinations – Duty</u> | <u>Recommendation</u> |
| John Elliott | Approval |
| Teresa MacGuire | Approval |
| <u>GC – Re-examinations –Duty</u> | <u>Recommendation</u> |
| Quedell Braylock | Approval |
| <u>GC – Applications –Ordinary</u> | <u>Recommendation</u> |
| Douglas Gall | Approval |
| <u>GC – Re-examinations – Ordinary</u> | <u>Recommendation</u> |
| Sasha Gulley | Approval |
| James Mc Nichol | Approval |

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

Unfinished Business.

Pending Legal Opinions and Service Requests Report. Mr. McClain commented that there were no new items on this report.

Pending Legislation Report. Mr. McClain said the City received an unfavorable decision from the Wisconsin Supreme Court related to the 5.8% pension offset payment. He noted the City's favorable opinion from the Court of Appeals was reversed. The Supreme Court ruled that the 5.8% salary increase be included in the calculation of duty disability retirement benefits. He commented that the decision came in too late for the Board packet, but he will provide additional explanation at the next meeting. He said the decision will result in a 5.8% increase moving forward, as well as retroactively, for affected members. Mr. McClain said each Trustee, will get a copy of the opinion as well as a memo from him at the next meeting.

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.

- 1) Pending Litigation Report.
- 2) Conferences.
- 3) Class Action Income 2023 YTD.
- 4) Adjusted Quarterly Cost Basis of Equity.

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.

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

Mr. Bell adjourned the meeting at 11:28 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 - April 25, 2023

Fund as of March 31, 2023

*Fund value of \$5.64b.

*Fund return of 1.0% in March, net of fees, underperformed by approximately 1.0%.

*Primary Relative Perf. Drivers:

Public Equity Style Bias -64bp

Primarily Value & Small Cap

Manager Selection

Private Equity -97bp

Real Estate 42bp

Overweight Private Equity 15bp

*Fund has outperformed the benchmark in 1-, 5-, 10-, 15- and 20-year periods.

April Update (as of 4/18/23)

*Fund return 0.5% MTD

*Fund return 3.9% YTD

*Fund value \$5.68b

*11 out of 16 active mandates outperforming YTD.

*Fixed Income asset class

outperforming its benchmark YTD.

*Investment Change: \$217.7m

*Benefits & Expenses: 122.7m

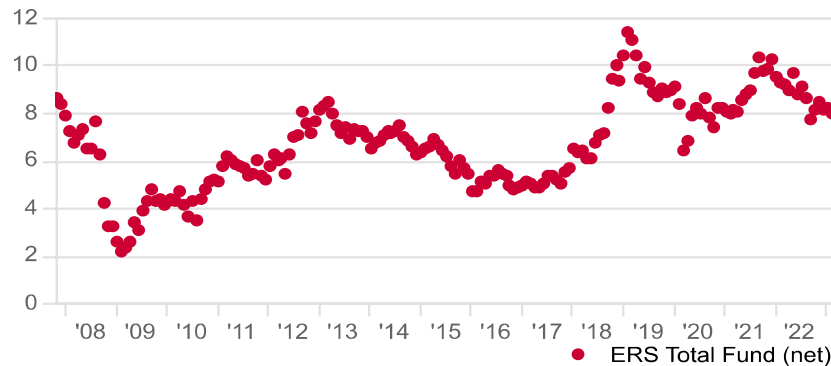
*Contributions: 111.9m

Monthly Withdrawals:

To be discussed at meeting

Total Fund - 10-Year Rolling Returns

11/28/1997 to 03/31/2023



Return Data

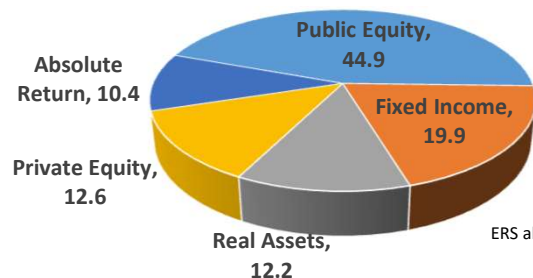
Source Data: Monthly Return

| | 1 Month | YTD | 1 Year | 5 Year | 10 Year | 15 Year | 20 Year |
|------------------|---------|-----|--------|--------|---------|---------|---------|
| Total Fund (net) | 1.0 | 3.3 | -2.9 | 7.1 | 7.9 | 6.6 | 8.1 |
| ERS Benchmark | 2.0 | 4.3 | -5.1 | 5.9 | 7.1 | 6.2 | 7.6 |

Total Fund - 20-Year Risk & Return Data

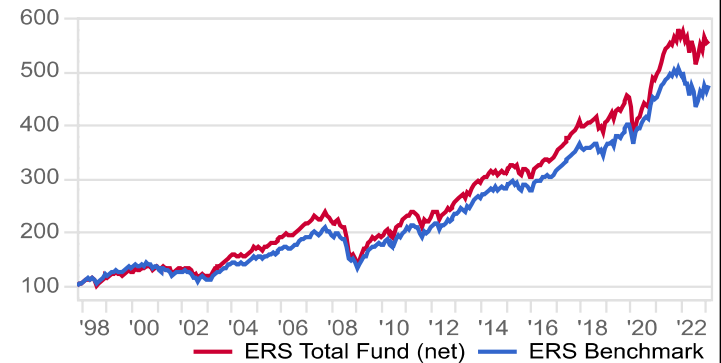
| | Return | Std Dev | Tracking Error | Info Ratio (arith) | Sharpe Ratio | Alpha | Beta |
|------------------|--------|---------|----------------|--------------------|--------------|-------|------|
| Total Fund (net) | 8.1 | 10.3 | 2.5 | 0.2 | 0.7 | -0.1 | 1.1 |
| ERS Benchmark | 7.6 | 9.2 | -- | -- | 0.7 | 0.0 | 1.0 |

ERS Allocation as of March 31, 2023



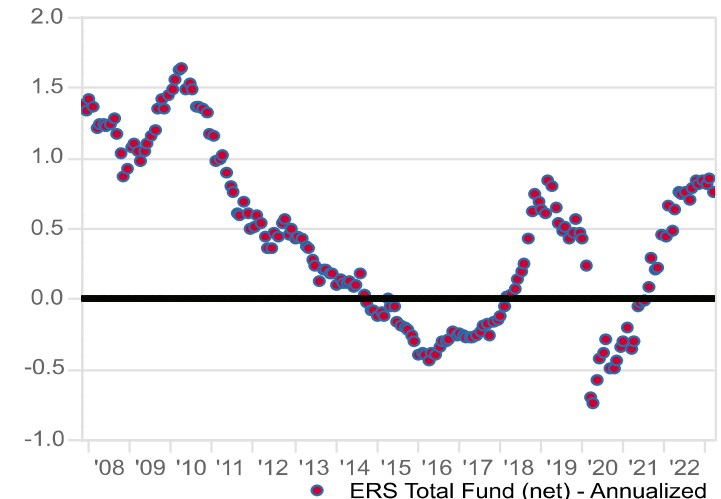
Growth of \$100 - Total Fund & ERS Benchmark

11/28/1997 to 03/31/2023

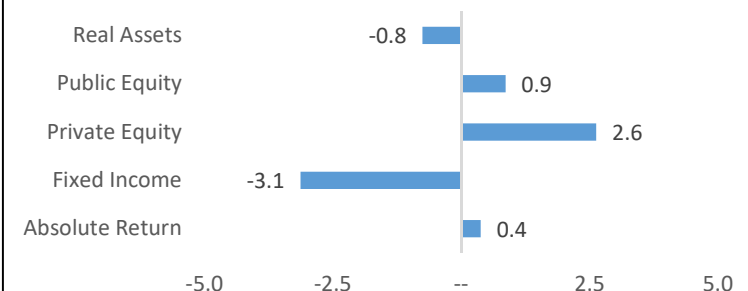


Total Fund - 10-Year Rolling Excess Returns

11/28/1997 to 03/31/2023



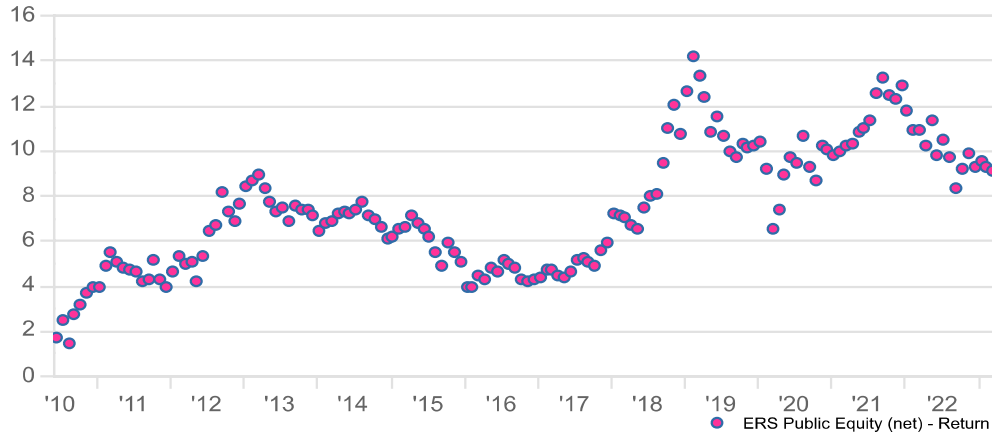
Asset Allocation vs Policy as of March 31, 2023



Milwaukee Employees' Retirement System - April 25, 2023

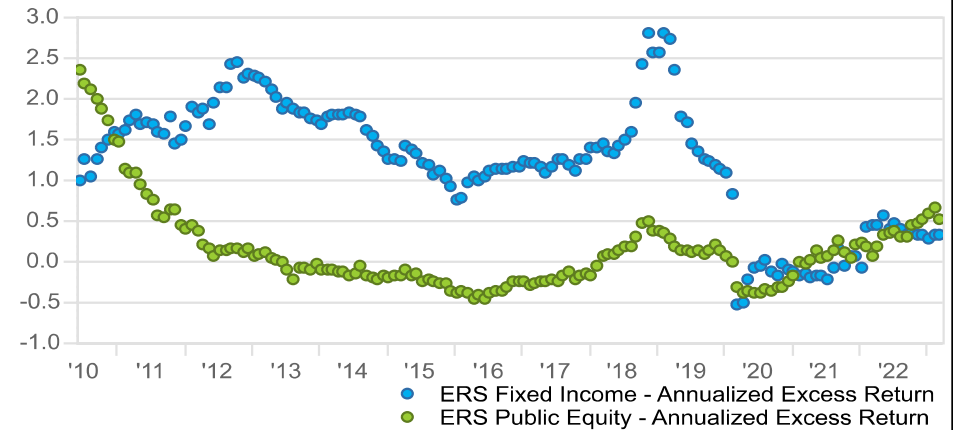
Public Equity - 10-Year Rolling Returns

06/30/2000 to 03/31/2023



Asset Class - 10-Year Rolling Excess Returns

06/30/2000 to 03/31/2023

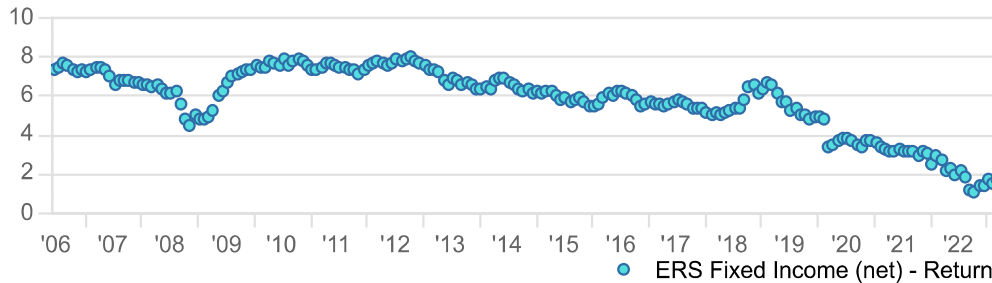


Return Data

| | 1 Month | YTD | 1 Year | 5 Year | 10 Year | 15 Year | 20 Year |
|-------------------------|---------|-----|--------|--------|---------|---------|---------|
| Public Equity | 1.3 | 6.7 | -4.7 | 7.5 | 9.5 | 7.4 | 9.4 |
| Public Equity (net) | 1.2 | 6.6 | -5.0 | 7.2 | 9.1 | 7.1 | 9.0 |
| Public Equity Benchmark | 2.5 | 6.9 | -7.7 | 6.6 | 8.5 | 6.9 | 8.7 |
| MSCI ACWI IMI NR USD | 2.5 | 6.9 | -7.7 | 6.6 | 7.9 | 6.1 | 8.9 |

Fixed Income - 10-Year Rolling Returns

06/28/1996 to 03/31/2023

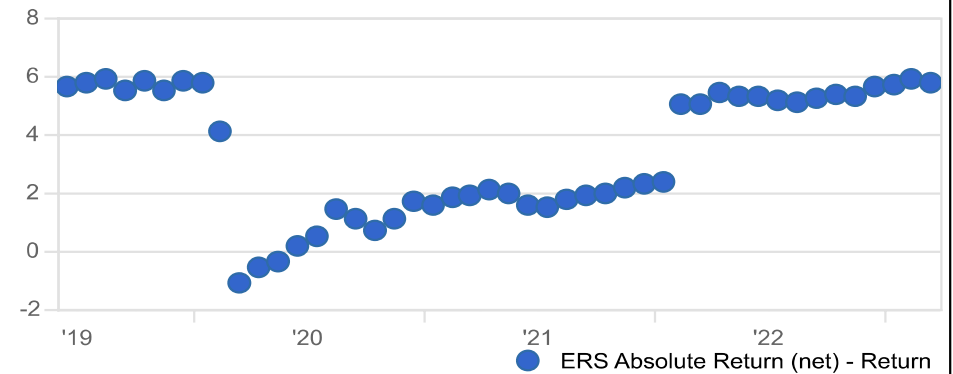


Risk Adjusted Returns (6/30/14 - 03/31/23)

| | Return | Std Dev | Sharpe Ratio | Max Drawdown |
|-----------------------|--------|---------|--------------|--------------|
| Public Equity (net) | 7.5 | 15.7 | 0.4 | -25.3 |
| Fixed Income (net) | 1.5 | 6.5 | 0.1 | -13.6 |
| Absolute Return (net) | 5.5 | 9.9 | 0.5 | -27.1 |

Absolute Return - 5-Year Rolling Returns

06/30/2014 to 03/31/2023



Return Data

| | 1 Month | YTD | 1 Year | 5 Year | 10 Year | 15 Year | 20 Year |
|------------------------|---------|-----|--------|--------|---------|---------|---------|
| Fixed Income | 2.6 | 3.6 | -3.3 | 1.3 | 1.8 | 3.9 | 4.6 |
| Fixed Income (net) | 2.6 | 3.6 | -3.4 | 1.1 | 1.7 | 3.8 | 4.5 |
| Bbg US Agg Bond TR USD | 2.5 | 3.0 | -4.8 | 0.9 | 1.4 | 2.7 | 3.2 |

Return Data

| | 1 Month | YTD | 1 Year | 3 Year | 5 Year | 7 Year |
|-----------------------|---------|-----|--------|--------|--------|--------|
| Absolute Return (net) | -0.1 | 0.5 | 7.8 | 16.5 | 5.8 | 5.6 |
| 90-Day T-Bill + 3% | 0.6 | 1.9 | 6.2 | 4.1 | 4.5 | 4.3 |

III.

INVESTMENT COMMITTEE REPORT

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (A.) 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. Selection of Real Estate Manager.

IV.

SPECIAL ADMINISTRATION & OPERATIONS COMMITTEE REPORT

A. Approval of Draft ERS 2024 Budget.

Employees' Retirement System - City of Milwaukee

Summary of 2024 Draft Budget Request as compared to 2023 Adopted Budget and 2022 Actual Expenditures

| 2022 Actuals | | 2023 Adopted Budget | 2024 Requested Draft | Variance with Current Authority | Primary Details Resulting in Variance to the 2023 Adopted Budget |
|-------------------------------|-------------------------------------|----------------------|----------------------|---------------------------------|--|
| \$ 3,492,461 | Total Salaries | \$ 3,987,479 | \$ 4,869,302 | \$ 881,823 | The increase is due to Market Studies completed by DER in 2022 and 2023 |
| 1,522,165 | Fringe Benefits (Budget Rate) | 1,874,115 | 2,191,186 | 317,071 | This line item is dependent on the Salaries Expense. The Budgeted Fringe rate is calculated by the Comptroller's Office. |
| Operating Expenditures | | | | | |
| 198,411 | General Office Expense | 211,000 | 216,000 | 5,000 | Increase in projected postage costs |
| 2,044 | Other Operating Supplies | 5,000 | 5,000 | - | |
| 543,299 | Facility Rent & Property Services | 655,000 | 662,000 | 7,000 | Increase projected due to new lease for 789 Building |
| 22,874 | Non-vehicle Equipment Rental | 25,000 | 25,000 | - | |
| 9,250,027 | Professional Services | 12,120,000 | 12,361,000 | 241,000 | Increase in Invmt Manager fees due to larger Invmt asset size and more invmt fees being paid out of budgeted funds |
| 803,390 | Information Technology Services | 1,531,000 | 1,533,000 | 2,000 | Increase is attributable to IT infrastructure maintenance and software renewal cycle. |
| 694,901 | Other Operating Services | 1,363,400 | 1,503,400 | 140,000 | Increase in Fiduciary insurance premiums and indirect costs charged for salaries |
| \$ 11,514,944 | Total Operating Expenditures | \$ 15,910,400 | \$ 16,305,400 | \$ 395,000 | |
| Equipment Purchases | | | | | |
| 767,526 | Equipment | 2,036,000 | 713,000 | (1,323,000) | Reduction due to IT finishing hardware replacement cycle in 2023 |
| \$ 767,526 | Total Equipment Purchases | \$ 2,036,000 | \$ 713,000 | \$ (1,323,000) | |
| \$ 17,297,096 | Total Regular O&M | \$ 23,807,994 | \$ 24,078,888 | \$ 270,894 | |
| Total All ERS | | \$ 23,807,994 | \$ 24,078,888 | \$ 270,894 | |

Employees' Retirement System

Analysis of 2024 Operating Expenditure and Equipment Draft Budget Request as compared to 2023 Authority and 2022 Actual Expenditures

| 2022 Actuals | | 2023 Adopted Budget | 2024 Draft Request | Variance with Current Authority | Primary Details Resulting in Variance to the 2023 Adopted Budget |
|--|--|---------------------|--------------------|---------------------------------|--|
| General Office Expense | | | | | |
| 162,694 | Postage & Mailing | 165,000 | 170,000 | 5,000 | Slight increase based upon 2022 costs |
| 10,570 | Subscriptions, Publications | 16,000 | 16,000 | - | |
| 15,996 | Supplies-Forms | 15,000 | 15,000 | - | |
| 9,150 | Supplies-Office | 15,000 | 15,000 | - | |
| 198,411 | Total General Office Expense | 211,000 | 216,000 | 5,000 | |
| Other Operating Supplies | | | | | |
| 2,044 | Computer Parts | 5,000 | 5,000 | - | |
| 2,044 | Total Other Operating Supplies | 5,000 | 5,000 | - | |
| Facility Rent & Property Services | | | | | |
| 409,134 | Office Space | 470,000 | 487,000 | 17,000 | Increase is due to new lease for 789 N Water |
| 88,712 | Telephone | 120,000 | 110,000 | (10,000) | Reduced due to prior years utilization trend |
| 23,115 | Electricity | 32,000 | 32,000 | - | |
| 12,724 | Property & Liability Insurance | 15,000 | 15,000 | - | |
| 9,613 | Building Machinery Maintenance | 18,000 | 18,000 | - | |
| 543,299 | Total Facility Rental & Property Serv | 655,000 | 662,000 | 7,000 | |
| Non-vehicle Equipment Rental | | | | | |
| 22,874 | Copier-Lease & Repair | 25,000 | 25,000 | - | |
| 22,874 | Total Non-vehicle Equipment Rental | 25,000 | 25,000 | - | |
| Professional Services | | | | | |
| 70,767 | Actuary Services | 125,000 | 125,000 | - | |
| 392,917 | Asset Management | 484,000 | 491,000 | 7,000 | Increase due to annual increase per contracts |
| 190,269 | Audit | 250,000 | 250,000 | - | |
| 300,000 | Custody | 300,000 | 300,000 | - | |
| 13,056 | Memberships | 15,000 | 15,000 | - | |
| 53,793 | City Attorney | 200,000 | 200,000 | - | |
| 7,713,470 | Investment Manager Fees | 10,033,000 | 10,335,000 | 302,000 | Increase due to more invmt managers invoicing fees and larger asset size |
| 86,314 | Legal Services | 115,000 | 115,000 | - | |
| 111,913 | Medical-Council | 145,000 | 145,000 | - | |
| 143,142 | Medical-Exams And Reviews | 275,000 | 200,000 | (75,000) | Reduced due to prior years utilization trend |
| 53,656 | Other Professional Services | 50,000 | 55,000 | 5,000 | Slight increase based upon 2022 costs |
| 120,730 | Reporting Services | 128,000 | 130,000 | 2,000 | Slight increase based upon 2022 costs |
| 9,250,027 | Total Professional Services | 12,120,000 | 12,361,000 | 241,000 | |
| Information Technology Services | | | | | |
| 745,368 | Systems Support | 1,140,000 | 1,188,000 | 48,000 | Increase due to Filenet upgrade |
| 26,096 | Software Upgrades & Maintenance | 274,000 | 268,000 | (6,000) | Slight decrease based on upon software licensing costs |

Employees' Retirement System

Analysis of 2024 Operating Expenditure and Equipment Draft Budget Request as compared to 2023 Authority and 2022 Actual Expenditures

| 2022 Actuals | | 2023 Adopted Budget | 2024 Draft Request | Variance with Current Authority | Primary Details Resulting in Variance to the 2023 Adopted Budget |
|-------------------|--|---------------------|--------------------|---------------------------------|---|
| 31,925 | Hardware Upgrades & Maintenance | 117,000 | 77,000 | (40,000) | Decrease due to Infrastructure maint. & where we are in the replacement cycle |
| 803,390 | Total Information Technology Services | 1,531,000 | 1,533,000 | 2,000 | |
| | Other Operating Services | | | | |
| 998 | Meeting Expenses | 2,000 | 2,000 | - | |
| 15,543 | Board Training | 50,000 | 50,000 | - | |
| 10,508 | Due Diligence | 20,000 | 20,000 | - | |
| 613 | Office Repairs | 5,000 | 5,000 | - | |
| 497,647 | Fiduciary Insurance | 955,000 | 1,023,000 | 68,000 | Increase based upon 2022 costs plus \$500k deductible |
| 10,155 | Printing Services (MPR) | 18,000 | 18,000 | - | |
| 46 | Pool Autos | 400 | 400 | - | |
| 23,979 | Miscellaneous Services | 29,000 | 30,000 | 1,000 | Slight increase based upon 2022 costs |
| 11,811 | Staff Training | 90,000 | 90,000 | - | |
| 6,501 | Temporary Services | 60,000 | 60,000 | - | |
| 117,100 | Indirect Cost | 134,000 | 205,000 | 71,000 | This line item is based upon Salaries amount (4.2% of total salaries) |
| 694,901 | Total Other Operating Services | 1,363,400 | 1,503,400 | 140,000 | |
| | Equipment | | | | |
| 767,526 | Equipment | 2,036,000 | 713,000 | (1,323,000) | Reduction due to IT hardware purchase cycle being completed in 2023 |
| 767,526 | Total Equipment | 2,036,000 | 713,000 | (1,323,000) | |
| 12,282,470 | Grand Total | 17,946,400 | 17,018,400 | (928,000) | |

Employees' Retirement System - City of Milwaukee
2024 Non-Trust Recommendations for City Budget

| 2022 Actuals | | 2023 Adopted Budget | 2024 Draft Budget Request | Recommendation Over (Under) Current Authority | |
|---------------------------------------|------------|---|---------------------------|---|-----------------|
| Non Trust Line Items Estimated by ERS | | | | | |
| \$ | 42,291 | PABF Payroll | \$ 49,000 | \$ 43,000 | \$ (6,000) |
| | 10,000 | PABF Lump-Sum Supplement Contribution | 10,000 | 10,000 | - |
| | 71,000,000 | Employers' Retirement Fund - Employer's Pension Contribution* | 100,000,000 | | (100,000,000) * |
| | 4,513,393 | Group Life Insurance Premium | 4,200,000 | 4,200,000 | - # |
| | 24,739 | Retirees' Benefit Adjustment Fund | 32,000 | 25,000 | (7,000) |
| \$ | 75,590,423 | Total Non ERS Estimates | \$ 104,291,000 | \$ | (100,013,000) |

* Pending Actuarial Valuation

Upcoming RFP for Group Life in May 2022 will determine 2023 rates

V.

NEW BUSINESS

- A. Approval of New Actuarial Tables for Pension Benefits – Presentation by Cavanaugh Macdonald.
- B. Retirements, Death Claims, and Refunds (March).
- C. Conference Requests – April 2023 Board Meeting.



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 be '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 - March 2023

Retirements

| Retirement Type | Retirement SubType | Last Name | First Name | Retirement Date | Option | Department |
|-----------------|------------------------|--------------|------------|-----------------|--------|-------------------------------|
| Regular | Deferred | SMITH | SANDRA | 12/21/2016 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | WARE | ARCHIE | 8/22/2020 | MAX | INTERN PROGRAM |
| Regular | Deferred | COLLINS | DIANE | 3/3/2021 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Involuntary Separation | BEZJAK | RANDALL | 12/3/2022 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | PLEIER | CHARLES | 2/2/2023 | 50 | CITY OF MILWAUKEE |
| Regular | Deferred | NASH | DWAYNE | 2/4/2023 | MAX | MPD - ADMINISTRATION |
| Regular | Service | JEFFREY | KAREN | 2/4/2023 | 50 | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | KUEHNER | VANESSA | 2/4/2023 | 100 | DEPT OF NEIGHBORHOOD SRVCS |
| Regular | Service | PERRY-WRIGHT | PATRICIA | 2/4/2023 | 100 | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Deferred | KING | ROBERT | 2/5/2023 | 100 | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Deferred | COONS | MARJORIE | 2/14/2023 | 50 | HEALTH DEPARTMENT |
| Regular | Early | DAIS | IBRAHIM | 2/18/2023 | MAX | CITY OF MILWAUKEE |
| Regular | Early | SITZBERGER | JAMES | 2/18/2023 | 100 | CITY OF MILWAUKEE |
| Regular | Service | ARANDA | ALFREDO | 2/18/2023 | 100 | DPW-INFRASTRUCTURE-ELECTRICAL |
| Regular | Service | KOESTERING | TIMOTHY | 2/18/2023 | MAX | MILWAUKEE POLICE DEPARTMENT |
| Regular | Service | MONTGOMERY | KIMBERLY | 2/18/2023 | MAX | DOA-INTERGOVERNMENTAL RELATNS |
| Regular | Deferred | LASTRILLA | RAMON | 2/19/2023 | MAX | MILWAUKEE POLICE DEPARTMENT |
| Regular | Involuntary Separation | GENETT | MARISOL | 2/20/2023 | MAX | DPW-OPS-ADMINISTRATION |
| Regular | Service | HAMANN | MICHAEL | 2/22/2023 | 100 | MILWAUKEE POLICE DEPARTMENT |
| Regular | Deferred | RENO | JENNIFER | 2/23/2023 | MAX | DPW - INFRASTRUCTURE |
| Regular | Deferred | MCLEE | BRIAN | 2/25/2023 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | DOBIZL | JOHN | 2/25/2023 | 50 | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | TORRES | DAVID | 2/25/2023 | 50 | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Deferred | ACOSTA | MARTHA | 2/26/2023 | 100 | MILWAUKEE POLICE DEPARTMENT |
| Regular | Deferred | HELM | DAVID | 2/26/2023 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Service | WARDLAW | TUWANDA | 2/28/2023 | MAX | MILWAUKEE PUBLIC SCHOOLS |
| Regular | Deferred | ZABKOWICZ | MARTIN | 3/1/2023 | 100 | HEALTH DEPARTMENT |
| Regular | Service | BALISTRERI | AIMEE | 3/1/2023 | MAX | DPW-OPS-FORESTRY |
| Regular | Service | GILBERT | WILLIAM | 3/1/2023 | MAX | DPW-INFRASTRUCTURE-ELECTRICAL |

Board Report - March 2023

Deaths

| Type | Last Name | First Name | Death Date | Payment Date | Amount |
|---------------------------|-------------|------------|------------|--------------|---------------------|
| Deferred Death | STONE | DONALD | 2/3/2022 | 3/31/2023 | \$ 41,666.06 |
| Ordinary Death | LEWIS | ANITA | 12/3/2018 | 3/31/2023 | \$ 36,777.91 |
| Retiree Death-Termination | ANDRYSCZYK | RAYMOND | 1/17/2023 | 3/31/2023 | \$ 2,533.89 |
| Retiree Death-Termination | BAKER | ROBIN | 12/5/2022 | 3/31/2023 | \$ 431.90 |
| Retiree Death-Termination | CASTRO | NANCY | 2/8/2023 | 3/31/2023 | \$ 581.55 |
| Retiree Death-Termination | DECKER | LAURA | 1/23/2023 | 3/31/2023 | \$ 1,516.87 |
| Retiree Death-Termination | DZIOBA | LAWRENCE | 11/11/2022 | 3/31/2023 | \$ 763.62 |
| Retiree Death-Termination | FUDALY | PAUL | 2/15/2023 | 3/31/2023 | \$ 1,066.77 |
| Retiree Death-Termination | KOBES | GLORIA | 2/16/2023 | 3/31/2023 | \$ 105.96 |
| Retiree Death-Termination | NAPIERALA | LORI | 2/6/2023 | 3/31/2023 | \$ 3,264.89 |
| Retiree Death-Termination | PLEWA | RUTH | 1/18/2023 | 3/31/2023 | \$ 71.47 |
| Retiree Death-Termination | SCONIERS | TIMOTHY | 12/18/2022 | 3/31/2023 | \$ 1,141.11 |
| Retiree Death-Termination | SEEFELDT | LEON | 11/26/2022 | 3/31/2023 | \$ 3,278.92 |
| Retiree Death-Termination | TALAKOWSKI | CAROL | 2/16/2023 | 3/31/2023 | \$ 656.76 |
| Surv Death-Termination | BALLENGER | HOLLY | 2/14/2023 | 3/31/2023 | \$ 1,678.76 |
| Surv Death-Termination | BRADLEY | JEANETTE | 1/9/2023 | 3/31/2023 | \$ 1,156.02 |
| Surv Death-Termination | CAHOON | MARY ANN | 12/8/2022 | 3/31/2023 | \$ 352.74 |
| Surv Death-Termination | DIMMICK | JOAN | 11/20/2022 | 3/31/2023 | \$ 693.24 |
| Surv Death-Termination | KIECHLER | MARGARET | 12/7/2022 | 3/31/2023 | \$ 333.33 |
| Surv Death-Termination | KONEK | GERALDINE | 11/26/2022 | 3/31/2023 | \$ 669.30 |
| Surv Death-Termination | KUNDA | ALBIN | 1/13/2023 | 3/31/2023 | \$ 254.58 |
| Surv Death-Termination | PLEWA | RUTH | 1/18/2023 | 3/31/2023 | \$ 270.56 |
| TOTAL | | | | | \$ 99,266.21 |
| Retiree Death-Cont Opt | COMP | RICHARD | 3/16/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | ETHERLY | DERRICK | 3/14/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | GUNDERSON | HARRY | 2/7/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | HANDRICH JR | RUDOLPH | 3/1/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | KAUTZ | ROGER | 3/7/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | LUICK | DUANE | 3/16/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | MANTES | ALEXANDER | 3/19/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | MAY | STEVEN | 3/10/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | SINCLAIR | BOBBY | 2/27/2023 | 3/1/2023 | |
| Retiree Death-Cont Opt | WOODEN | KENYATTE | 2/2/2021 | 3/1/2023 | |

Board Report - March 2023
Withdrawals

| Type | Last Name | First Name | Payment Date | Amount |
|---------------------------|---------------|------------|--------------|--------------|
| Administrative Withdrawal | BROWN | STEPHANIE | 3/31/2023 | \$ 746.81 |
| Administrative Withdrawal | CISNEROS | BIANCA | 3/31/2023 | \$ 580.13 |
| Administrative Withdrawal | CISSE | DONNA | 3/31/2023 | \$ 828.01 |
| Administrative Withdrawal | DE JESUS-DIAZ | FRANCISCO | 3/31/2023 | \$ 2,217.86 |
| Administrative Withdrawal | LOPEZ | BRITTNI | 3/31/2023 | \$ 182.70 |
| Administrative Withdrawal | MALONE | VERNON | 3/31/2023 | \$ 1,257.97 |
| Administrative Withdrawal | SCHOCKO | LANA | 3/31/2023 | \$ 2,942.04 |
| Full Refund | ARMSTRONG | ANIKA | 3/31/2023 | \$ 5,505.66 |
| Full Refund | BATEMON | TAJIA | 3/31/2023 | \$ 4,132.37 |
| Full Refund | BATTLE | AQUILLA | 3/31/2023 | \$ 3,621.86 |
| Full Refund | BEHLING | KELLY | 3/31/2023 | \$ 10,438.88 |
| Full Refund | BLEVINS | ADRIAN | 3/31/2023 | \$ 10,898.60 |
| Full Refund | CRAWFORD | MICHAEL | 3/31/2023 | \$ 1,895.66 |
| Full Refund | FERGUSON | AMOS | 3/31/2023 | \$ 29,308.24 |
| Full Refund | FORD | LATONIA | 3/31/2023 | \$ 11,727.47 |
| Full Refund | HARRIS | JATAMIA | 3/31/2023 | \$ 9,286.83 |
| Full Refund | HENDERSON | DAVID | 3/31/2023 | \$ 4,484.68 |
| Full Refund | KOCEJA | KIM | 3/31/2023 | \$ 16,037.12 |
| Full Refund | LA FAVE | NICHOLAS | 3/31/2023 | \$ 12,889.38 |
| Full Refund | LANIER | JNELL | 3/31/2023 | \$ 5,488.10 |
| Full Refund | MC GHEE | VANESSA | 3/31/2023 | \$ 4,409.02 |
| Full Refund | MORRIS | JENNIFER | 3/31/2023 | \$ 6,083.59 |
| Full Refund | PLEVAK | JULIE | 3/31/2023 | \$ 24,994.26 |
| Full Refund | POWELL | JAMARO | 3/31/2023 | \$ 11,336.57 |
| Full Refund | SMITH | SANDRA | 3/31/2023 | \$ 8,462.56 |
| Full Refund | TOVAR | MARY | 3/31/2023 | \$ 3,819.35 |
| Full Refund | WILDER | BRIAN | 3/31/2023 | \$ 1,135.65 |
| Full Refund | ZAPATA | KIMBERLY | 3/31/2023 | \$ 25,154.76 |
| Member Only Refund | AGUILAR | YESENIA | 3/31/2023 | \$ 1,222.18 |

| Type | Last Name | First Name | Payment Date | Amount |
|--------------------|------------|------------|--------------|-------------------|
| Member Only Refund | BAEZ | LUZ | 3/31/2023 \$ | 2,383.44 |
| Member Only Refund | CEASAR | DYNASTY | 3/31/2023 \$ | 3,205.33 |
| Member Only Refund | CHATMAN | ALYSSA | 3/31/2023 \$ | 592.48 |
| Member Only Refund | DALTON | TINA | 3/31/2023 \$ | 406.89 |
| Member Only Refund | EVANS | SCOTT | 3/31/2023 \$ | 1,466.07 |
| Member Only Refund | FLYNN | MICHAEL | 3/31/2023 \$ | 4,279.91 |
| Member Only Refund | FORBES | HERBERT | 3/31/2023 \$ | 5,466.36 |
| Member Only Refund | FRITSCHLER | NOAH | 3/31/2023 \$ | 4,572.55 |
| Member Only Refund | JONES | DAWON | 3/31/2023 \$ | 3,057.78 |
| Member Only Refund | JONES | VASHEKA | 3/31/2023 \$ | 1,601.99 |
| Member Only Refund | KIMBER | BRIEANA | 3/31/2023 \$ | 2,402.70 |
| Member Only Refund | LANDRY | BRITTANY | 3/31/2023 \$ | 3,448.39 |
| Member Only Refund | MALDONADO | TERA | 3/31/2023 \$ | 3,948.05 |
| Member Only Refund | MARTINEZ | CELINA | 3/31/2023 \$ | 1,480.06 |
| Member Only Refund | MARTINEZ | FERNANDO | 3/31/2023 \$ | 2,893.19 |
| Member Only Refund | NELSON | THOMAS | 3/31/2023 \$ | 1,614.50 |
| Member Only Refund | PADLEY | BROCK | 3/31/2023 \$ | 6,683.46 |
| Member Only Refund | REEVES | YVETTE | 3/31/2023 \$ | 2,196.43 |
| Member Only Refund | RETALLICK | DANIEL | 3/31/2023 \$ | 2,984.14 |
| Member Only Refund | RIEK | BRANDYN | 3/31/2023 \$ | 10,006.44 |
| Member Only Refund | RODRIGUEZ | MARIA | 3/31/2023 \$ | 640.07 |
| Member Only Refund | SIGALA | RICHARD | 3/31/2023 \$ | 1,732.93 |
| Member Only Refund | SPIVEY | CANDACE | 3/31/2023 \$ | 1,530.29 |
| Member Only Refund | TAYLOR | JERRY | 3/31/2023 \$ | 524.46 |
| Member Only Refund | TOLIVER | VICTOR | 3/31/2023 \$ | 1,053.76 |
| Member Only Refund | YOUNG | HOPE | 3/31/2023 \$ | 2,382.17 |
| TOTAL \$ | | | | 293,642.15 |

Conference Requests – April 2023 Board Meeting

| | |
|-------------------|------------------------------------|
| Thomas Courtright | 2023 Madison Investment Conference |
| Sponsor: | CFA Society |
| Location: | Madison, WI |
| Date: | May 31, 2023 |
| Estimated Cost: | \$300.00 |

| | |
|-----------------|--|
| Erich Sauer, | Abbott Due Diligence; Neuberger Berman Due Diligence |
| David Walters | and Annual LP Meeting |
| Sponsor: | Abbott and Neuberger Berman |
| Location: | New York, NY |
| Date(s): | June 20-22, 2023 |
| Estimated Cost: | \$1,750 per person |

VI.

MEDICAL REPORTS

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

| | | | |
|--------------------------------|--|--------------|------------|
| MERITS | CITY OF MILWAUKEE EMPLOYEES' RETIREMENT SYSTEM | Page Number: | 1 OF 1 |
| | Medical Panel Approvals Report | DATE RAN : | 04/13/2023 |
| Approved by Executive Director | Pension Board Meeting Date 04/25/2023 | TIME RAN : | 10:27 |

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> |
|--------------------|------------------------|-----------------|-----------------|------------------|----------------------|-------------|--------------|--------------|------------------------|-----------------|
| 484 | GALLAGHER, PIETER | FIRE FIGHTER | FIRE | DD 75% | Re-Examination | Approved | Approved | | 08/01/2019 | |
| 832 | UNDERWOOD, CHRISTOPHER | FIRE LIEUTENANT | FIRE | DD 75% | Re-Examination | Approved | Approved | | 10/26/2010 | |
| 1176 | HUERTA, WILLIE | DETECTIVE | POLICE | DD 75% | Re-Examination | Approved | Approved | | 05/01/2014 | |
| 1410 | LACINA, KURT | POLICE OFFICER | POLICE | DD 90% | Re-Examination | Approved | Approved | | 11/24/2018 | |

Number of Cases: 4

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

Medical Council Approvals Report

Board Meeting: 04/25/2023

Page Number: 1 OF 1

DATE RAN : 04/14/2023

TIME RAN : 13:43

| <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> |
|-------------------|--------------------------|--------------------------|---------------------|----------------------|------------------------|-------------------------------------|
| BRYANT, YWANDA | SCHOOL SECRETARY | MPS | Ordinary Disability | Re-Examination | 03/18/2016 | 04/14/2023 |
| FINNEGAN, AUDRA | DETECTIVE | MPD | Ordinary Disability | Re-Examination | 11/28/2010 | 04/14/2023 |
| PURDY, BRANDON | SCHOOL ENGINEER III | MILWAUKEE PUBLIC SCHOOLS | Ordinary Disability | Application | 12/10/2022 | 04/14/2023 |
| TYLER, JAMES | BLDG SERVICE HELPER II | MPS | Duty Disability 75% | Application | 11/06/2022 | 04/14/2023 |
| WOLFE, LEANN | BLDG SERV HLPR I | MPS | Ordinary Disability | Re-Examination | 05/31/2014 | 04/14/2023 |
| YOUNGBLOOD, JAMES | HEAVY EQUIPMENT OPERATOR | MFD | Duty Disability 75% | Re-Examination | 11/01/2020 | 04/14/2023 |

Number of Cases: 6

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.

VII.

UNFINISHED BUSINESS

- A. Pending Legal Opinions and Service Requests Report.
- B. Pending Legislation Report.

Please be advised that the Annuity and Pension Board may vote to convene in closed session on the following item (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. Executive Director's Report – Inventory of ERS Projects.



April 25, 2023 Board Meeting

PENDING LEGAL OPINIONS AND SERVICE REQUESTS REPORT

PART 1. LEGAL OPINIONS - OFFICE OF CITY ATTORNEY

None.

PART 2. LEGAL OPINIONS - OUTSIDE LEGAL COUNSEL

None.

PART 3. SERVICE REQUESTS - OFFICE OF CITY ATTORNEY

12/16/21

Contract for Banking Services

ERS staff requests assistance of legal counsel in drafting and negotiating a contract for banking services with vendor.

10/12/22 ERS received proposed Second Amendment to extend current banking services agreement with Wells Fargo Bank.

10/25/22 Contract extension approved by Pension Board. City Attorney's Office continues negotiations with Wells Fargo for a new banking services agreement.

03/14/23 Third Amendment to extend current banking services agreement with Wells Fargo received from City Attorney's Office.

03/28/23 Third Amendment (extension) approved by Pension Board.

01/04/23

Internal Audit Services

City Attorney's Office asked to assist ERS staff with the drafting of a Request for Proposal for internal audit services, and to negotiate a contract for services with selected vendor.

01/31/23 Second request for legal services forwarded to the City Attorney's Office.

02/28/23 Third request to City Attorney's Office for assistance in drafting RFP as well as negotiate contract for internal audit services.

03/01/23 Received edits to RFP from City Attorney's Office.

PART 4. SERVICE REQUESTS - OUTSIDE LEGAL COUNSEL

03/27/23

Mesirow Financial Private Equity Fund

ERS investment staff requests assistance from legal counsel in negotiating contract terms and a Limited Partnership Agreement with Mesirow Financial as it relates to investment Private Equity Fund IX-A.

03/27/23 City Attorney Office approves referral of this matter to outside legal counsel – Reinhart Boerner Van Deuren SC.



April 25, 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.

Employees' Retirement System – Executive Director's Report

April 2023

I. Personnel Update

- A. ERS is working with DER to fill the positions of Lead Pension Specialist and Pension Accounting Specialist.

II. Member Services

- A. New retirees on payroll in March - 30; 29 are currently anticipated for the April payroll.
- B. Retiree/Employee deaths in January - 29.
- C. There was a General City Retirement Workshop on 2/24/23 and 25 attended, and a session was held with a new Police Recruit Class on 3/31/23 and there were 65 new recruits.
- D. An open Records Technician II position has been filled. Ranking of eligible applicants for the open Lead Pension Specialist position and interviews will begin shortly after.
- E. Below is a breakdown of to-date ERS benefits payouts/active/deferred counts:

| Category | Count |
|-------------------------|---------------|
| Annuitants | |
| Death - Duty | 26 |
| Death - Ordinary | 98 |
| Disability - Duty | 367 |
| Disability - Ordinary | 580 |
| Retirement | 12,742 |
| Separation | 39 |
| Total Annuitants | 13,852 |
| Active | 10,815 |
| Deferred | 3,165 |
| Total Population | 27,832 |

III. Financial Services

- A. The 2024 Budget is before the A&O Committee this month and will be presented to the full Board for approval at the April meeting.
- B. Staff continues to work with the actuary and financial auditor in preparation of the Actuarial Valuation and Annual Comprehensive Financial Report (ACFR).
- C. We are working on implementing the WI Supreme Court decision on the 5.8% pension offset. We expect to have the recalculations and retro payments completed by July 2023.
- D. The second round of Outside Earnings letters will be going out to members later this month. These letters are for members who have not responded to the first letter sent by ERS earlier this year.

IV. Information Services

- A. Struts Upgrade and Modernize MERITS Website in progress.
- B. VMware Host Servers Upgrade in progress.
- C. VMware Workspace ONE Implementation in progress.
- D. Network Infrastructure Firmware/OS Upgrade in progress.
- E. Video Conferencing System Upgrade in progress.
- F. Microsoft Exchange Upgrade in progress.
- G. IT Vulnerability Audit completed.
- H. SQL Server Upgrade – MERITS & FileNet Databases completed.
- I. Tape Libraries and Tape Media Upgrader in progress.
- J. Symantec Endpoint Protection Upgrade completed.

V. Administration

CMERS continues to provide various actuarial reports and other data as requested by both City and State officials in connection with ongoing discussions in Madison regarding pension funding and reform for City and County pension plans. Legislative leaders this morning requested the WRS actuary to work directly with CavMac to reconcile conflicting actuarial analysis reports provided by each firm. The City, of course pays the cost of CavMac's analysis in regards to the ongoing discussion. As of this writing, no draft bill has been introduced in the legislature.

Basic Website Metrics

| | 2022 | | | | | | | | | | 2023 | | |
|------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|---------------|
| | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
| Visits | 5,107 | 4,872 | 4,212 | 4,565 | 4,852 | 5,268 | 3,791 | 5,538 | 8,511 | 4,837 | 5,930 | 4,981 | 5,474 |
| Users | 3,375 | 3,751 | 3,147 | 3,458 | 3,408 | 3,728 | 2,640 | 3,979 | 7,068 | 3,496 | 3,947 | 3,585 | 3,894 |
| Page Views | 13,227 | 12,458 | 11,258 | 10,415 | 11,694 | 13,000 | 9,856 | 13,918 | 20,851 | 11,753 | 14,873 | 11,668 | 12,933 |
| Ave. Visit | 2:10 | 2:14 | 2:29 | 1:13 | 1:09 | 1:07 | 1:29 | 1:12 | :52 | 1:27 | 1:39 | 1:27 | 1:25 |

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

VIII.

INFORMATIONAL

- A. Pending Litigation Report.
- B. Conferences.
- C. Class Action Income 2023 YTD.
- D. Minutes of the Administration & Operations Committee Meeting Held March 23, 2023.
- E. Report on Bills.
- F. Deployment of Assets.
- G. Securities Lending Revenue and Budget Report.
- H. Preliminary Performance Report and Asset Allocation.



April 25, 2023 Board Meeting

PENDING LITIGATION REPORT

Part 1. ERS Litigation through the City Attorney

MPSO/Local 215, et al. v City of Milwaukee, et al; Case Nos. 2019AP001319; 2018CV001274

MPSO and Local 215 have filed suit on behalf of certain duty disability retirees against the City of Milwaukee and the Employees' Retirement System alleging the defendants violated the collective bargaining agreements as it relates to the payment of the 5.8% pension offset.

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

➤ **03/21/23** WI Supreme Court reversed Court of Appeals decision in favor of Petitioners (Local 215). Memorandum from ACA McClain in Board packet.

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****

➤ **02/17/23** Notice of Appeal filed by defendants.

Sandrah Crawford v. City of Milwaukee ERS, et al; Case No. 2022CV007800

Member requests judicial review of Pension Board's denial of duty disability retirement benefits.

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

➤ **01/25/23** Defendants' Notice of Retainer and Answer filed 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 date pending.

Albert Greene Jr; Administrative Case Nos. 1511 and 1512

➤ Appeal hearing requested; pending scheduling.

Benjean Lara; Administrative Case Nos. 1488, 1489 and 1490

See prior Reports for case history

➤ **03/14/23** Hearing Examiner decision recommending reversal of Board's decision.

➤ **04/04/23** Respondent's Brief to Annuity and Pension Board received; Applicant's brief due April 25, 2023. Findings and parties' brief will be presented to the Board at its May 23, 2023 meeting.

Part 3. Notice of Claim filed with ERS

None.

Part 4. ERS Litigation through Outside Legal Counsel

None.

Client Conferences 2023

Board Meeting: April 25, 2023

| DATE(S) | CONFERENCE(S) / LOCATION(S) | SPONSOR(S) |
|---|---|---------------------------|
| April 27, 2023 11:30 am – 12:30 pm | Opportunities in Private Assets Virtual | Callan Associates |
| May 2 – 4, 2023 | DFA Annual Conference Austin, TX | Dimensional Fund Advisors |
| May 23 – 25, 2023 10:30 am – 1:30 pm | “Callan College” Introduction to Investments Virtual | Callan Associates |
| June 21 – 22, 2023 | 2023 Neuberger Berman Private Limited Partners Annual Meeting New York, NY | Neuberger Berman |
| August 23 – 24, 2023 10:30 am – 1:30 pm | “Callan College” on Alternative Investments Virtual | Callan Associates |
| September 26 – 28, 2023 10:30 am – 1:30 pm | “Callan College” Introduction to Investments Virtual | Callan Associates |
| October 25 – 26, 2023 | 2023 USLF Annual Meeting Phoenix, AZ | Prologis |
| October 26, 2023 10:00 am – 12:30pm | 2023 October Regional Workshop Chicago, IL | Callan Associates |
| November 1 – 2, 2023 | The Alternatives Summit New York, NY | Goldman Sachs |

Trustee Conferences 2023-2024

Board Meeting: April 25, 2023

| DATE(S) | | |
|------------------------|---|---|
| April 30 – May 3, 2023 | Global Conference Los Angeles, CA | Milken Institute |
| May 1 – 4, 2023 | Wharton Investment Programs: Portfolio Concepts and Management Philadelphia, PA | International Foundation of Employee Benefit Plans |
| May 9, 2023 | Distinguished Speaker Series: George Walker – Chairman and CEO of Neuberger Berman Chicago, IL | CFA Society Chicago |
| May 20 – 21, 2023 | NCPERS Accredited Fiduciary (NAF) Program & Trustee Education Seminar (TEDS) New Orleans, LA | NCPERS |
| May 21 – 24, 2023 | Annual Conference & Exhibition (ACE) New Orleans, LA | NCPERS |
| May 23, 2023 | 9 th Annual Midwest Institutional Forum Chicago, IL | Markets Group |
| May 23 – 24, 2023 | 9 th Annual Redefining Fixed Income Forum Chicago, IL | Institutional Investor |
| May 31, 2023 | 2023 Madison Investment Conference Madison, WI | CFA Society of Madison, SWIB, Wisconsin School of Business |
| June 6 – 8, 2023 | Visions, Insights, & Perspectives (VIP) Infrastructure Austin, TX | Institutional Real Estate, Inc. |
| July 16 – 18, 2023 | ALTSCHI Chicago, IL | Markets Group |
| July 18 – 20, 2023 | Wharton Investment Programs: Alternative Investment Strategies San Francisco, CA | International Foundation of Employee Benefit Plans |
| July 24 – 25, 2023 | Certificate of Achievement in Public Plan Policy (CAPPP): Pensions Part I Chicago, IL | International Foundation of Employee Benefit Plans |

Trustee Conferences 2023-2024

Board Meeting: April 25, 2023

| DATE(S) | CONFERENCE(S) / LOCATION(S) | SPONSOR(S) |
|--------------------------------|---|--|
| July 25 – 27, 2023 | Institutional Investor Week Newport, RI | Institutional Investor |
| July 26 – 27, 2023 | Certificate of Achievement in Public Plan Policy (CAPPP): Pensions Part II Chicago, IL | International Foundation of Employee Benefit Plans |
| August 20 – 22, 2023 | Public Pension Funding Forum Chicago, IL | NCPERS |
| September 11 – 13, 2023 | CII Fall 2023 Conference Long Beach, CA | Council of Institutional Investors |
| September 12, 2023 | 9 th Annual Great Plains Institutional Forum Minneapolis, MN | Markets Group |
| September 19 – 20, 2023 | 2023 Public Funds Conference Scottsdale, AZ | Pensions & Investments |
| September 20 – 21, 2023 | Investment Basics – Certificate Series Course Las Vegas, NV | International Foundation of Employee Benefit Plans |
| September 30 – October 1, 2023 | Certificate of Achievement in Public Plan Policy (CAPPP): Pensions Part I Boston, MA | International Foundation of Employee Benefit Plans |
| October 3 – 5, 2023 | 2023 Roundtable for Consultants & Institutional Investors Chicago, IL | Institutional Investor |
| October 21 – 22, 2023 | NCPERS Accredited Fiduciary (NAF) Program Las Vegas, NV | NCPERS |
| October 22 – 25, 2023 | Financial, Actuarial, Legislative and Legal Conference (FALL) Las Vegas, NV | NCPERS |
| January 22 – 24, 2024 | Visions, Insights, & Perspectives (VIP) Americas Carlsbad, CA | Institutional Real Estate, Inc. |

Upcoming Due Diligence Meetings

| Date | Manager(s) | Team |
|---------------------------|--------------------------------------|-----------------|
| June 20-21, 2023 | Neuberger and Abbott, (New York, NY) | Erich & Dave W. |
| July or August, 2023 | Reams (Indianapolis, IN) | Erich & Dave W. |
| August or September, 2023 | Apogem (Richmond, VA) | Erich & 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 |
| Total Class Action Income Received in 2023 YTD | | \$ 10,770 |

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

Minutes of the Administration and Operations Committee Meeting
held March 23, 2023 via teleconference during COVID-19

The meeting was called to order at 8:31 a.m.

Committee Members Present: Molly King
Tom Klusman
Aycha Sawa, Chair

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

Others Present: Jason Coyle, Darlene Middleman, Baker Tilly; David Anderson, Ray Emry, Bill Judd, Dan Ludwig, CliftonLarsonAllen; Kathy Block, Travis Grisham, City Attorney's Office; Terry Siddiqui, DS Consulting Partners, Inc., no members of the public called in to the meeting.

Election of Vice Chair. Mr. Klusman nominated Ms. King as Vice Chair of the Administration and Operations Committee. Ms. Sawa seconded the nomination. Ms. Sawa asked three more times for nominations. There being no further nominations, nominations were closed and a unanimous vote was cast for Ms. King as Vice Chair of the Administration and Operations Committee. Ms. King accepted the position again this year.

Approval of Wells Fargo Extension Amendment. As a matter of information, Committee members received the Third Amendment to the Service Agreement Between The Employees' Retirement System of the City of Milwaukee and Wells Fargo Bank, N.A. Ms. Turk noted the old contract needs to be extended another three months to give Ms. Block time to complete the new contract. Ms. Block stated the amendment would be on the same terms as the prior extension which is on the same terms as the prior contract. She spoke with Wells Fargo to see if any of their internal terms need to be amended since the last contract was executed.

It was moved by Ms. King, seconded by Mr. Klusman, and unanimously carried, to approve the Approval of Wells Fargo Extension Amendment.

Ms. Sawa then took the meeting out of order to agenda items VIII. and IX.

Ms. Sawa advised that the Administration & Operations Committee may vote to convene in closed session on the following items 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 Committee may then vote to reconvene in open session following the closed session.

Approval of Eide Bailly Contract. It was moved by Ms. King, seconded by Mr. Klusman, and unanimously carried to convene in closed session by the following roll call vote: AYES: Mses. King and Sawa; Mr. Klusman. NOES: None.

The Committee convened in closed session at 8:37 a.m.

Approval of DS Consulting Contract. It was moved by Ms. Klusman, seconded by Ms. King, and unanimously carried to convene in closed session by the following roll call vote: AYES: Mses. King and Sawa; Mr. Klusman. NOES: None.

The Committee reconvened in open session at 8:54 a.m.

It was moved by Mr. Klusman, seconded by Ms. King, and unanimously carried, to approve the Approval of DS Consulting Contract.

Ms. Sawa returned the meeting to agenda order at item III.

Please be advised that the Administration & Operations Committee may vote to convene in closed session of the following item, as provided in Section 19.85 (1)(c), for considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility and in Section 19.85 (1)(f), when considering financial, medical, social or personal histories or disciplinary data of specific persons, preliminary consideration of specific personnel problems or the investigation of charges against specific persons except where par. (b) applies which, if discussed in public, would be likely to have a substantial adverse effect upon the reputation of any person referred to in such histories or data, or involved in such problems or investigations. The Administration & Operations Committee may then vote to reconvene in open session following the closed session.

Baker Tilly Financial Audit. As a matter of information, Committee members received the Baker Tilly 2022 audit planning document.

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

The Committee convened in closed session at 8:56 a.m.

The Committee reconvened in open session at 9:18 a.m.

CliftonLarsonAllen (CLA) Internal Audit Status Report Presentation – 2022. As a matter of information, Committee members received the CLA Internal Audit Update for the Employees' Retirement System of the City of Milwaukee.

Mr. Emry noted that in 2022, a Benefit Payroll Process Audit was completed as well as five IT audit reports. He noted all the 2022 Audit Plan projects were completed and on budget. Ms. Sawa commented that would move into closed session for the details on the five IT audit reports.

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)(i), Wisconsin State Statutes, for considering all matters related to acts by businesses under s. 560.15 which, if discussed in public could adversely affect the business, its employees or former employees. The Committee may then vote to reconvene in open session following the closed session.

CliftonLarsonAllen (CLA) IT Audit Reports Presentation – 2022. As a matter of information, Committee members received the 2022 Cybersecurity Assessments document.

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

The Committee convened in closed session at 9:22 a.m.

The Committee reconvened in open session at 9:49 a.m.

Ms. Sawa passed the virtual gavel to Ms. King and Ms. Sawa left the meeting at 9:49 a.m.

Approval of Close out of 2022 Budget. As a matter of information, Committee members received the Final 2022 Payment to the City and 2022 Budget to Actual Expenditures Memorandum. Mr. Gopalan stated that the City processes the invoices for the ERS and the ERS, on a monthly basis, reimburses the City for those expenses. Mr. Gopalan noted the actual expenses for 2022 were \$17,297,096.20 and of that, \$461,041.14 relates to non-trust activities. He noted those non-trust activities relate to the Group Life program, Retiree Health, Administrative Expenses, and the legacy pension plan of PABF. He said that leaves \$16,836,055.06 funded by the Trust for 2022. He added that CMERS previously reimbursed the City \$15,426,000.00 toward those costs in 2022, leaving a balance owed of \$1,410.055.06. He concluded that this final amount payable to the City is comprised of costs incurred since the middle of December, the last time the Trust reimbursed the City for expenses and for amounts accrued to close out the fiscal year. Mr. Gopalan said the motion is to approve the payment of \$1,410.055.06 to the City. Discussion ensued.

It was moved by Mr. Klusman and seconded by Ms. King, to approve the Approval of Close out of 2022 Budget.

Review of RFP for Internal Audit. Ms. Turk said the RFP is similar to the previous one and the only changes are to do with background information. Mr. Allen commented they use Bonfire software for the RFP and hope to get a good response.

IT Projects Portfolio. As a matter of information, Committee members received the IT Projects and Ticket Statistics, as well as the IT Portfolio. Mr. Shober discussed individual items on the reports.

Organizational/Personnel Update. Ms. Johnson noted there is a vacancy for a Lead Pension Specialist due to a retirement. She said it was opened up citywide as a transfer promotion and the applicant deadline is March 31. Mr. Allen said the vacancy was approved by the Finance and Personnel Committee. Discussion ensued.

It was moved by Mr. Klusman, seconded by Ms. King, and unanimously carried, to adjourn the meeting.

There being no further business, Ms. King adjourned the meeting at 10:08 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: 2023-04-30

| | Budget | 2023-2 | 2023-3 | 2023-4 | 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 | - | 302,698.93 | 294,899.82 | - | 820,622.77 | - | (820,622.77) |
| Overtime Premium | - | 161.62 | 260.39 | - | 462.63 | - | (462.63) |
| Time Paid Not Worked | - | 25,595.31 | 35,629.66 | - | 175,115.38 | - | (175,115.38) |
| Employee Salaries & Wages | \$ 3,749,620.00 | 328,455.86 | 330,789.87 | - | \$ 996,200.78 | \$ - | \$ 2,753,419.22 |
| Fringe Benefits Applied | 1,687,329.00 | - | - | - | - | - | 1,687,329.00 |
| Fringe Benefits Applied | - | 154,134.30 | 150,162.99 | - | 417,861.13 | - | (417,861.13) |
| Applied Employee Benefits | \$ 1,687,329.00 | 154,134.30 | 150,162.99 | - | \$ 417,861.13 | \$ - | \$ 1,269,467.87 |
| Operating Expenditures | 15,910,400.00 | - | - | - | - | - | 15,910,400.00 |
| Office Supplies | - | 664.73 | 154.42 | 644.45 | 2,989.56 | - | (2,989.56) |
| Magazines,Subscription | - | 282.72 | 287.80 | - | 598.69 | - | (598.69) |
| Postal and Mailing Services | - | 11,148.44 | 11,753.55 | - | 23,016.61 | - | (23,016.61) |
| Electricity | - | 3,342.80 | 3,146.13 | - | 6,488.93 | - | (6,488.93) |
| Films & Other Educational Item | - | - | - | - | 998.00 | - | (998.00) |
| Other Operating Supply | - | - | 5,886.00 | - | 5,886.00 | - | (5,886.00) |
| Building Rental | - | 36,723.29 | 48,647.41 | - | 148,944.64 | - | (148,944.64) |
| Printing & Dupl Machine Rental | - | 1,192.85 | 3,168.96 | - | 4,623.39 | - | (4,623.39) |
| Consulting | - | 1,361.96 | 119,359.59 | - | 113,051.55 | - | (113,051.55) |
| Medical, Surgical & Lab | - | 14,462.52 | 13,149.23 | - | 29,552.54 | - | (29,552.54) |
| Administrative Charges | - | 34,466.86 | 86,048.14 | - | 130,452.50 | - | (130,452.50) |
| Other Professional Services | - | 689,046.82 | 75,000.00 | - | (20,278.73) | - | 20,278.73 |
| Systems Support | - | 28,724.00 | 51,999.50 | - | 103,988.00 | - | (103,988.00) |
| IT Infrastructure | - | 84,576.36 | - | - | 88,883.66 | - | (88,883.66) |
| Infrastructure | - | 604.03 | 583.30 | - | 1,187.33 | - | (1,187.33) |
| Telephone, Communications | - | 1,177.86 | 11,005.14 | - | 17,238.19 | - | (17,238.19) |
| Bldgs-Machinery & Equip Repair | - | 1,975.29 | - | - | 4,209.29 | - | (4,209.29) |
| Travel & Subsistence | - | 1,134.88 | 2,863.62 | 1,755.00 | 7,310.75 | - | (7,310.75) |
| Equipment Repair (Parts & Labor) | - | 218.29 | - | - | 218.29 | - | (218.29) |
| Printing Services | - | 416.18 | 1,879.96 | - | 2,456.18 | - | (2,456.18) |
| Insurance-Non Health | - | - | - | - | 13,800.00 | - | (13,800.00) |
| Other Misc Services | - | 13,414.90 | 315.30 | - | 13,930.20 | - | (13,930.20) |
| Operating Expenditures | \$ 15,910,400.00 | 924,934.78 | 435,248.05 | 2,399.45 | \$ 699,545.57 | \$ - | \$ 15,210,854.43 |
| All Equipment | 2,036,000.00 | - | - | - | - | - | 2,036,000.00 |
| Computer Server & Components | - | 6,328.76 | - | - | 6,328.76 | - | (6,328.76) |
| Total Equipment | \$ 2,036,000.00 | 6,328.76 | - | - | \$ 6,328.76 | \$ - | \$ 2,029,671.24 |
| Total Regular Class | \$ 23,383,349.00 | 1,413,853.70 | 916,200.91 | 2,399.45 | \$ 2,119,936.24 | \$ - | \$ 21,263,412.76 |
| <i>Other Departmental Appropriations:</i> | | | | | | | |
| Pol Pension Lump-Sum Sup Cont | 10,000.00 | 10,000.00 | - | - | 10,000.00 | - | - |
| PABF Payroll | 24,000.00 | 2,000.00 | 1,981.14 | - | 7,533.94 | - | 16,466.06 |
| Group Life Insurance Premium | 4,200,000.00 | 676,437.96 | 325,149.15 | - | 1,001,587.11 | - | 3,198,412.89 |
| Retiree's Benefit Adjustment | 25,000.00 | 329.15 | 1,889.92 | - | 2,548.22 | - | 22,451.78 |
| Other Classes | \$ 4,259,000.00 | 688,767.11 | 329,020.21 | - | \$ 1,021,669.27 | \$ - | \$ 3,237,330.73 |
| Total Dept Appropriations | \$ 27,642,349.00 | 2,102,620.81 | 1,245,221.12 | 2,399.45 | \$ 3,141,605.51 | \$ - | \$ 24,500,743.49 |

Monthly Board Report

31-Mar-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-CASH ACCOUNT 2605491 | 0.00 0.00% | 55,592,779.73 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 55,592,779.73 0.97% |
| MILWAUKEE-THE NORTHERN TRS 2605496 | 0.00 0.00% | 0.00 0.00% | 222,589,967.70 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 222,589,967.70 3.88% |
| MILWAUKEE-ERS EXPENSE FUND 2605504 | 0.00 0.00% | 166,819.99 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 166,819.99 0.00% |
| MILWAUKEE-PABF BENEFIT PAYMENT 2610128 | 0.00 0.00% | 2,510.01 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 2,510.01 0.00% |
| MILWAUKEE-DFA INTERNATIONAL 2619838 | 0.00 0.00% | 0.00 0.00% | 193,389,390.50 100.09% | 0.00 0.00% | 0.00 0.00% | -175,585.31 -0.09% | 193,213,805.20 3.37% |
| MILWAUKEE-EARNEST -SL 2630942 | 0.00 0.00% | 2,319,841.73 2.10% | 108,045,924.60 97.90% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 110,365,766.40 1.93% |
| MILWAUKEE - UBS A&Q 2637239 | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 428,323,486.90 100.00% | 0.00 0.00% | 428,323,486.90 7.47% |
| MILWAUKEE-DFA 2637848 | 0.00 0.00% | 0.00 0.00% | 187,581,822.00 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 187,581,822.00 3.27% |
| MILWAUKEE-BAIRD 2674604 | 0.00 0.00% | 23,773,459.25 29.06% | 0.00 0.00% | 58,033,485.62 70.94% | 0.00 0.00% | 0.00 0.00% | 81,806,944.87 1.43% |
| MILWAUKEE-CASTLEARK 2697782 | 0.00 0.00% | 1,808,895.50 2.10% | 84,720,647.65 98.13% | 0.00 0.00% | 0.00 0.00% | -195,286.54 -0.23% | 86,334,256.61 1.51% |
| MILWAUKEE - BLACKROCK R1000V 4472746 | 0.00 0.00% | 0.00 0.00% | 209,399,266.10 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 209,399,266.10 3.65% |
| MILWAUKEE-LOOMIS SAYLE CME01 | 2,129,245.20 0.63% | 0.00 0.00% | 5,968,412.94 1.76% | 333,399,611.60 98.12% | 0.00 0.00% | -1,692,804.76 -0.50% | 339,804,465.00 5.93% |
| MILWAUKEE-BRANDES INT'L EQUITY CME03 | 3,637,910.50 1.00% | 0.00 0.00% | 358,611,746.60 98.52% | 0.00 0.00% | 1,732,388.78 0.48% | -340.88 0.00% | 363,981,705.00 6.35% |
| MILWAUKEE-REAMS CME04 | 38,641,461.37 7.74% | 0.00 0.00% | 0.00 0.00% | 583,808,047.70 116.88% | 7,832,709.07 1.57% | -130,803,600.60 -26.19% | 499,478,617.60 8.72% |
| MILWAUKEE-BLAIR CME05 | 7,141,729.95 2.74% | 0.00 0.00% | 253,532,758.20 97.13% | 0.00 0.00% | 868,804.44 0.33% | -527,480.30 -0.20% | 261,015,812.30 4.56% |

Monthly Board Report

31-Mar-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 CME12 | 2,841,563.14 1.21% | 0.00 0.00% | 232,021,920.60 98.61% | 0.00 0.00% | 437,992.64 0.19% | 0.00 0.00% | 235,301,476.40 4.11% |
| MILWAUKEE-POLEN 2644553 | 0.00 0.00% | 1,958,917.91 1.48% | 130,799,126.90 98.52% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 132,758,044.80 2.32% |
| MILWAUKEE - PRINCIPAL DRA -SL 2677436 | 0.00 0.00% | 0.00 0.00% | 172,145,600.70 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 172,145,600.70 3.00% |
| MILWAUKEE-BLACKROCK GLOBAL-SL 2683493 | 0.00 0.00% | 0.00 0.00% | 281,270,819.20 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 281,270,819.20 4.91% |
| MILWAUKEE- AQR-SL 4468331 | 0.00 0.00% | 0.00 0.00% | 92,891,836.00 100.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 92,891,836.00 1.62% |
| MILWAUKEE- NEUBERGER SOF V-SL 4479679 | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 19,220,436.00 100.00% | 0.00 0.00% | 19,220,436.00 0.34% |
| MILWAUKEE - ABBOTT 2022-SL 4479680 | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 7,746,068.00 100.00% | 0.00 0.00% | 7,746,068.00 0.14% |
| MILWAUKEE-APTITUDE / 4479682 4479682 | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 158,093,079.60 100.00% | 0.00 0.00% | 158,093,079.60 2.76% |
| MILWAUKEE - DFA US LCV CME15 | 493,118.31 0.32% | 0.00 0.00% | 153,399,201.90 99.68% | 0.00 0.00% | 0.00 0.00% | -31.52 0.00% | 153,892,288.60 2.69% |
| MILWAUKEE - BLACKROCK US G-SL MULTIPLE | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 225,261,284.20 100.00% | 0.00 0.00% | 0.00 0.00% | 225,261,284.20 3.93% |
| MILWAUKEE-PRIVATE EQUITY MULTIPLE | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 685,825,581.00 100.00% | 0.00 0.00% | 685,825,581.00 11.97% |
| MILWAUKEE-REAL ESTATE MULTIPLE | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 0.00 0.00% | 527,804,953.37 100.31% | -1,616,661.41 -0.31% | 526,188,291.97 9.18% |

Monthly Board Report

31-Mar-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 | 54,885,028.47 | 85,623,224.12 | 2,686,368,441.59 | 1,200,502,429.12 | 1,837,885,499.80 | -135,011,791.32 | 5,730,252,831.88 |
| % for consolidation | 0.96% | 1.49% | 46.88% | 20.95% | 32.07% | -2.36% | 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.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law. For more information about this notice, see <http://www.northerntrust.com/circular230>

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

| Date | <u>Amounts Expended</u> | | | Balance |
|-------------------------|-------------------------|--------------------|-----------------------------|---------------------|
| | Income From Lending | Fees | Administrative Transfers | |
| Balance 12-31-22 | | | | \$791,432.47 |
| 01/05/23 | 2,449.48 | - | - | 793,881.95 |
| 01/17/23 | 75,293.89 | 15,052.80 | - | 854,123.04 |
| 01/25/23 | - | - | 792,000.00 | 62,123.04 |
| 02/03/23 | 2,277.18 | - | - | 64,400.22 |
| 02/15/23 | 66,373.30 | 13,268.96 | - | 117,504.56 |
| 03/03/23 | 308.67 | - | - | 117,813.23 |
| 03/15/23 | 60,540.96 | 12,101.93 | | 166,252.26 |
| Current Totals | \$207,243.48 | \$40,423.69 | \$792,000.00 | \$166,252.26 |

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

MERS PERFORMANCE ESTIMATES
March 31, 2023

| Account | 2022 Return | Jan 2023 | Feb 2023 | Mar 2023 | 1st Quarter 2023 |
|---|---------------|--------------|---------------|--------------|---------------------|
| Northern Trust S&P 500 Index | -18.10% | 6.28% | -2.44% | 3.67% | 7.49% |
| S&P 500 | -18.11% | 6.28% | -2.44% | 3.67% | 7.50% |
| Difference | 0.01% | 0.00% | 0.00% | 0.00% | -0.01% |
| BlackRock Russell 1000 Value Index | -7.54% | 5.18% | -3.52% | -0.45% | 1.02% |
| Russell 1000 Value | -7.54% | 5.18% | -3.53% | -0.46% | 1.01% |
| Difference | 0.00% | 0.00% | 0.01% | 0.01% | 0.01% |
| DFA US Large Cap Value | -4.95% | 6.48% | -3.39% | -1.70% | 1.12% |
| Russell 1000 Value | -7.54% | 5.18% | -3.53% | -0.46% | 1.01% |
| Difference | 2.59% | 1.30% | 0.14% | -1.24% | 0.11% |
| Polen | -37.54% | 11.70% | -5.14% | 7.73% | 14.15% |
| S&P 500 | -18.11% | 6.28% | -2.44% | 3.67% | 7.50% |
| Difference | -19.43% | 5.42% | -2.70% | 4.06% | 6.65% |
| Earnest | -15.13% | 9.19% | -1.87% | -2.30% | 4.68% |
| Russell MidCap | -17.32% | 8.30% | -2.43% | -1.53% | 4.06% |
| Difference | 2.18% | 0.89% | 0.56% | -0.77% | 0.62% |
| CastleArk | -27.99% | 6.75% | -0.52% | -0.99% | 5.14% |
| Russell 2000 Growth | -26.36% | 9.95% | -1.08% | -2.47% | 6.07% |
| Difference | -1.63% | -3.20% | 0.56% | 1.48% | -0.93% |
| DFA US Small Cap Value | -1.67% | 9.58% | -1.14% | -6.92% | 0.83% |
| Russell 2000 Value | -14.48% | 9.54% | -2.31% | -7.17% | -0.66% |
| Difference | 12.81% | 0.04% | 1.17% | 0.25% | 1.49% |
| Brandes | -6.88% | 10.47% | -0.25% | 0.95% | 11.24% |
| MSCI EAFE | -14.45% | 8.10% | -2.09% | 2.48% | 8.47% |
| Difference | 7.57% | 2.37% | 1.84% | -1.53% | 2.77% |
| William Blair | -28.99% | 7.41% | -2.23% | 3.39% | 8.57% |
| MSCI ACWI ex US | -15.57% | 8.13% | -3.50% | 2.55% | 7.00% |
| Difference | -13.42% | -0.72% | 1.27% | 0.84% | 1.57% |
| DFA Int'l Small Cap Value | -9.75% | 8.35% | -1.82% | 0.14% | 6.53% |
| MSCI EAFE Small Cap | -21.39% | 7.47% | -2.17% | -0.21% | 4.92% |
| Difference | 11.64% | 0.88% | 0.35% | 0.35% | 1.61% |
| AQR | -20.81% | 8.43% | -5.10% | 2.90% | 5.88% |
| MSCI EM | -20.09% | 7.90% | -6.48% | 3.03% | 3.96% |
| Difference | -0.72% | 0.53% | 1.38% | -0.13% | 1.92% |
| BlackRock Global Alpha Tilts | -16.81% | 6.79% | -2.83% | 3.66% | 7.57% |
| MSCI ACWI | -18.36% | 7.17% | -2.87% | 3.08% | 7.31% |
| Difference | 1.55% | -0.38% | 0.04% | 0.58% | 0.26% |
| MFS | -18.15% | 7.19% | -3.39% | 4.73% | 8.45% |
| MSCI ACWI | -18.36% | 7.17% | -2.87% | 3.08% | 7.31% |
| Difference | 0.22% | 0.02% | -0.52% | 1.65% | 1.14% |
| BlackRock Gov't Bond Index | -12.31% | 2.67% | -2.30% | 2.87% | 3.19% |
| Bloomberg Gov't Bond | -12.32% | 2.48% | -2.31% | 2.87% | 2.98% |
| Difference | 0.01% | 0.19% | 0.01% | 0.00% | 0.21% |
| Reams | -11.39% | 3.62% | -2.44% | 2.91% | 4.03% |
| Bloomberg US Aggregate | -13.01% | 3.08% | -2.59% | 2.54% | 2.96% |
| Difference | 1.62% | 0.54% | 0.15% | 0.37% | 1.07% |
| Loomis Sayles | -12.21% | 3.90% | -2.47% | 1.93% | 3.29% |
| Bloomberg US Aggregate | -13.01% | 3.08% | -2.59% | 2.54% | 2.96% |
| Difference | 0.80% | 0.82% | 0.12% | -0.61% | 0.33% |
| UBS | 8.91% | 1.09% | -0.53% | 0.04% | 0.59% |
| SOFR + 4% | 4.90% | 0.70% | 0.66% | 0.71% | 2.08% |
| Difference | 4.01% | 0.39% | -1.19% | -0.67% | -1.49% |
| Aptitude | | 1.10% | -0.41% | -0.50% | 0.18% |
| SOFR + 4% | | 0.70% | 0.66% | 0.71% | 2.08% |
| Difference | | 0.40% | -1.07% | -1.21% | -1.90% |
| Principal | -5.88% | 4.14% | -3.69% | 0.98% | 1.28% |
| Blended Benchmark | -5.06% | 5.07% | -3.87% | 0.11% | 1.11% |
| Difference | -0.82% | -0.93% | 0.18% | 0.87% | 0.17% |
| Baird | -1.80% | 0.79% | -0.27% | 0.80% | 1.32% |
| Bloomberg Govt/Credit 1-3 Year | -3.69% | 0.80% | -0.74% | 1.45% | 1.51% |
| Difference | 1.89% | -0.01% | 0.47% | -0.65% | -0.19% |
| Total MERS | -6.49% | 4.11% | -1.71% | 0.96% | 3.30% |

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

March 31, 2023

| | | Target | Market Value | Allocation |
|--|--|---------------|-------------------------|-------------------|
| EQUITY | | | | |
| Public Equity | | | | |
| Domestic | | | | |
| Passive Large Cap Equity | Northern Trust (S&P 500) | 3.89% | \$ 222,589,968 | 3.94% |
| | BlackRock (Russell 1000 Value) | 3.89% | \$ 209,399,266 | 3.71% |
| | Sub-Total Passive Large Cap Equity | 7.78% | \$ 431,989,234 | 7.66% |
| Active Large Cap Equity | Polen (S&P 500) | 2.19% | \$ 132,758,045 | 2.35% |
| | DFA (Russell 1000 Value) | 2.78% | \$ 153,892,289 | 2.73% |
| | Sub-Total Active Large Cap Equity | 4.97% | \$ 286,650,333 | 5.08% |
| Active Mid/Small Cap Equity | Earnest Partners (Russell MidCap) | 2.00% | \$ 110,365,766 | 1.96% |
| | CastleArk (Russell 2000 Growth) | 1.61% | \$ 86,334,257 | 1.53% |
| | DFA (Russell 2000 Value) | 3.44% | \$ 187,581,822 | 3.32% |
| | Sub-Total Active Mid/Small Cap Equity | 7.05% | \$ 384,281,845 | 6.81% |
| Total Domestic | | 19.80% | \$ 1,102,921,412 | 19.55% |
| International | | | | |
| Active International Equity | Brandes (MSCI EAFE) | 5.80% | \$ 363,981,705 | 6.45% |
| | William Blair (MSCI ACWI ex US) | 4.41% | \$ 261,015,812 | 4.63% |
| | DFA (MSCI EAFE Small Cap) | 3.20% | \$ 193,213,805 | 3.42% |
| | AQR (MSCI EM) | 1.99% | \$ 95,582,490 | 1.69% |
| Total International | | 15.40% | \$ 913,793,812 | 16.19% |
| Global | | | | |
| Active Global Equity | BlackRock (MSCI ACWI) | 4.84% | \$ 281,270,819 | 4.98% |
| | MFS (MSCI ACWI) | 3.96% | \$ 233,758,449 | 4.14% |
| Total Global | | 8.80% | \$ 515,029,268 | 9.13% |
| Total Public Equity | | 44.00% | \$ 2,531,744,493 | 44.87% |
| Private Equity | | | | |
| | Abbott Capital (Russell 3000 Quarter Lag + 2%) | 3.50% | \$ 315,911,248 | 5.60% |
| | Mesirow (Russell 3000 Quarter Lag + 2%) | 3.50% | \$ 272,848,541 | 4.84% |
| | Neuberger Berman (Russell 3000 Quarter Lag + 2%) | 1.50% | \$ 43,134,686 | 0.76% |
| | Apogem (Russell 3000 Quarter Lag + 2%) | 1.50% | \$ 80,897,610 | 1.43% |
| Total Private Equity | | 10.00% | \$ 712,792,085 | 12.63% |
| TOTAL EQUITY (Public Equity + Private Equity) | | 54.00% | \$ 3,244,536,578 | 57.50% |
| FIXED INCOME & ABSOLUTE RETURN | | | | |
| Fixed Income | | | | |
| Cash | | 1.00% | \$ 55,762,110 | 0.99% |
| Passive Fixed Income | BlackRock (Bloomberg US Government) | 5.50% | \$ 225,261,284 | 3.99% |
| | Reams (Bloomberg US Aggregate) | 9.90% | \$ 500,647,435 | 8.87% |
| | Loomis Sayles (Bloomberg US Aggregate) | 6.60% | \$ 339,800,768 | 6.02% |
| Sub-Total Active Fixed Income | | 16.50% | \$ 840,448,204 | 14.89% |
| Total Fixed Income | | 23.00% | \$ 1,121,471,598 | 19.87% |
| Absolute Return | | | | |
| | Aptitude (SOFR + 4%) | 3.00% | \$ 157,305,473 | 2.79% |
| | UBS (SOFR + 4%) | 7.00% | \$ 428,497,815 | 7.59% |
| Total Absolute Return | | 10.00% | \$ 585,803,288 | 10.38% |
| TOTAL FIXED INCOME & ABSOLUTE RETURN | | 33.00% | \$ 1,707,274,885 | 30.26% |
| REAL ASSETS | | | | |
| Private Real Estate - Core | JP Morgan (NFI-ODCE) | 3.23% | \$ 136,658,727 | 2.42% |
| | Morgan Stanley (NFI-ODCE) | 3.23% | \$ 156,580,219 | 2.77% |
| | LaSalle (NFI-ODCE) | 1.62% | \$ 120,724,227 | 2.14% |
| | Prologis (NFI-ODCE) | 1.62% | \$ 93,112,453 | 1.65% |
| | Sub-Total Private Real Estate - Core | 9.70% | \$ 507,075,626 | 8.99% |
| Private Real Estate - Non-Core | Non-Core Real Estate (NFI-ODCE) | 0.00% | \$ 11,824,706 | 0.21% |
| Public Real Assets | Principal (Blended Benchmark) | 3.30% | \$ 172,145,601 | 3.05% |
| TOTAL REAL ASSETS | | 13.00% | \$ 691,045,933 | 12.25% |
| TOTAL ERS | | | \$ 5,642,857,396 | 100.00% |
| Total City Reserve Fund | | | R. W. Baird | 81,806,945 |

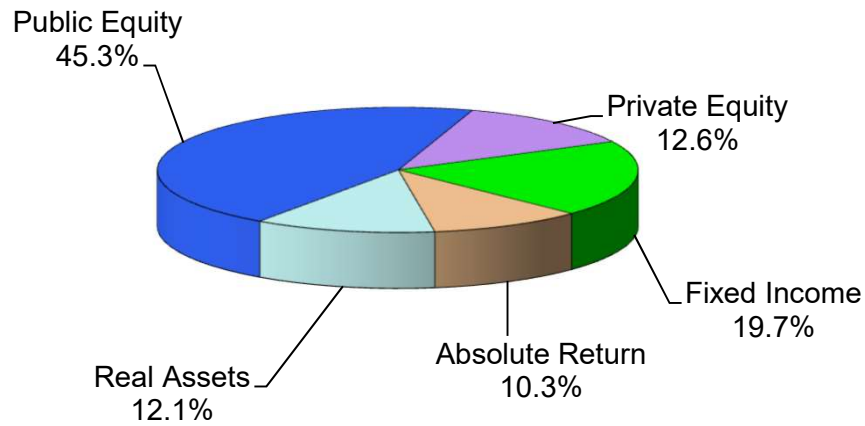
PROJECTED TARGET ALLOCATIONS

Apr 18, 2023

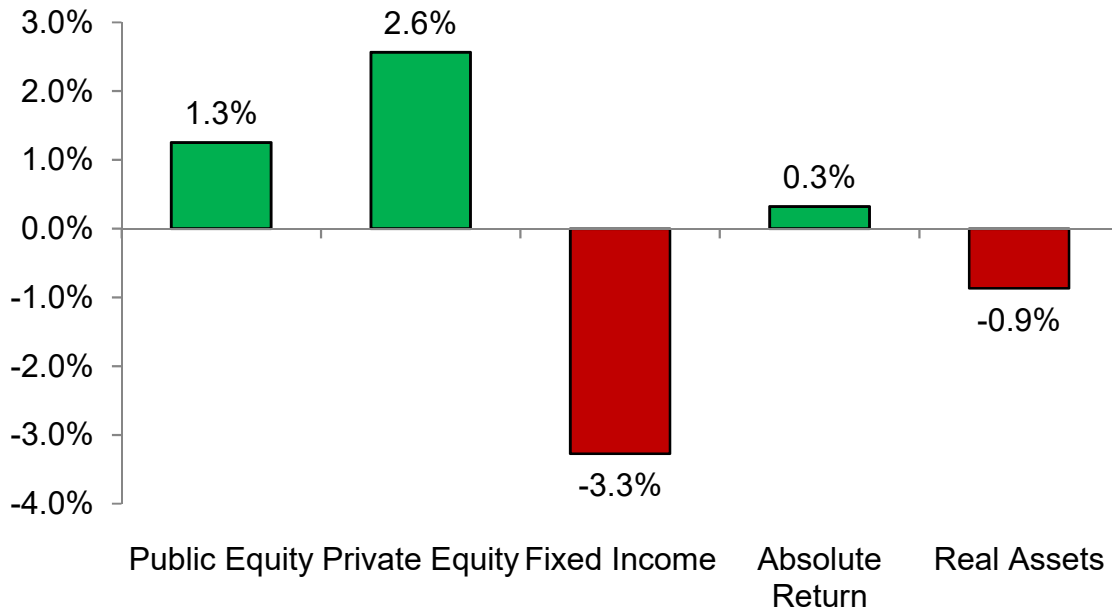
| | | Target | Market Value | Allocation |
|--|--|---------------|-------------------------|----------------|
| EQUITY | | | | |
| Public Equity | | | | |
| Domestic | | | | |
| Passive Large Cap Equity | Northern Trust (S&P 500) | 3.89% | \$ 225,204,955 | 3.97% |
| | BlackRock (Russell 1000 Value) | 3.89% | \$ 213,250,217 | 3.76% |
| | Sub-Total Passive Large Cap Equity | 7.78% | \$ 438,455,172 | 7.73% |
| Active Large Cap Equity | Polen (S&P 500) | 2.19% | \$ 132,788,205 | 2.34% |
| | DFA (Russell 1000 Value) | 2.78% | \$ 156,932,514 | 2.77% |
| | Sub-Total Active Large Cap Equity | 4.97% | \$ 289,720,719 | 5.11% |
| Active Mid/Small Cap Equity | Earnest Partners (Russell MidCap) | 2.00% | \$ 109,298,201 | 1.93% |
| | CastleArk (Russell 2000 Growth) | 1.61% | \$ 85,756,203 | 1.51% |
| | DFA (Russell 2000 Value) | 3.44% | \$ 186,801,922 | 3.29% |
| | Sub-Total Active Mid/Small Cap Equity | 7.05% | \$ 381,856,326 | 6.73% |
| Total Domestic | | 19.80% | \$ 1,110,032,217 | 19.56% |
| International | | | | |
| Active International Equity | Brandes (MSCI EAFE) | 5.80% | \$ 375,788,711 | 6.62% |
| | William Blair (MSCI ACWI ex US) | 4.41% | \$ 265,315,429 | 4.68% |
| | DFA (MSCI EAFE Small Cap) | 3.20% | \$ 199,100,939 | 3.51% |
| | AQR (MSCI EM) | 1.99% | \$ 96,655,612 | 1.70% |
| Total International | | 15.40% | \$ 936,860,691 | 16.51% |
| Global | | | | |
| Active Global Equity | BlackRock (MSCI ACWI) | 4.84% | \$ 285,909,848 | 5.04% |
| | MFS (MSCI ACWI) | 3.96% | \$ 235,232,195 | 4.15% |
| Total Global | | 8.80% | \$ 521,142,043 | 9.18% |
| Total Public Equity | | 44.00% | \$ 2,568,034,951 | 45.25% |
| Private Equity | | | | |
| | Abbott Capital (Russell 3000 Quarter Lag + 2%) | 3.50% | \$ 316,236,248 | 5.57% |
| | Mesirow (Russell 3000 Quarter Lag + 2%) | 3.50% | \$ 272,848,541 | 4.81% |
| | Neuberger Berman (Russell 3000 Quarter Lag + 2%) | 1.50% | \$ 43,134,686 | 0.76% |
| | Apogem (Russell 3000 Quarter Lag + 2%) | 1.50% | \$ 80,897,610 | 1.43% |
| Total Private Equity | | 10.00% | \$ 713,117,085 | 12.57% |
| TOTAL EQUITY (Public Equity + Private Equity) | | 54.00% | \$ 3,281,152,036 | 57.82% |
| FIXED INCOME & ABSOLUTE RETURN | | | | |
| Fixed Income | | | | |
| Cash | | 1.00% | \$ 57,052,279 | 1.01% |
| Passive Fixed Income | BlackRock (Bloomberg US Government) | 5.50% | \$ 224,287,420 | 3.95% |
| Active Fixed Income | Reams (Bloomberg US Aggregate) | 9.90% | \$ 498,633,801 | 8.79% |
| | Loomis Sayles (Bloomberg US Aggregate) | 6.60% | \$ 339,564,017 | 5.98% |
| | Sub-Total Active Fixed Income | 16.50% | \$ 838,197,818 | 14.77% |
| Total Fixed Income | | 23.00% | \$ 1,119,537,517 | 19.73% |
| Absolute Return | | | | |
| | Aptitude (SOFR + 4%) | 3.00% | \$ 157,305,473 | 2.77% |
| | UBS (SOFR + 4%) | 7.00% | \$ 428,497,815 | 7.55% |
| Total Absolute Return | | 10.00% | \$ 585,803,288 | 10.32% |
| TOTAL FIXED INCOME & ABSOLUTE RETURN | | 33.00% | \$ 1,705,340,805 | 30.05% |
| REAL ASSETS | | | | |
| Private Real Estate - Core | JP Morgan (NFI-ODCE) | 3.23% | \$ 136,658,727 | 2.41% |
| | Morgan Stanley (NFI-ODCE) | 3.23% | \$ 156,580,219 | 2.76% |
| | LaSalle (NFI-ODCE) | 1.62% | \$ 116,754,733 | 2.06% |
| | Prologis (NFI-ODCE) | 1.62% | \$ 91,715,766 | 1.62% |
| | Sub-Total Private Real Estate - Core | 9.70% | \$ 501,709,445 | 8.84% |
| Private Real Estate - Non-Core | Non-Core Real Estate (NFI-ODCE) | 0.00% | \$ 11,865,713 | 0.21% |
| Public Real Assets | Principal (Blended Benchmark) | 3.30% | \$ 174,961,365 | 3.08% |
| TOTAL REAL ASSETS | | 13.00% | \$ 688,536,523 | 12.13% |
| TOTAL ERS | | | \$ 5,675,029,364 | 100.00% |
| Total City Reserve Fund | R. W. Baird | | 81,920,096 | |

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>April 18, 2023</u> | | |
| Retiree Payroll Expense | | \$ (114,366,197) | |
| PABF Payroll Expense | | \$ (15,973) | |
| Expenses Paid | | \$ (4,913,055) | |
| GPS Benefit Payments | | \$ (3,436,784) | |
| Sub-Total Monthly Cash Outflows | | | \$ (122,732,008) |
| Monthly Cash Inflows thru | <u>April 18, 2023</u> | | |
| Contributions | | \$ 111,835,404 | |
| PABF Contribution | | \$ 17,966 | |
| Sub-Total Monthly Contributions | | | \$ 111,853,370 |
| Capital Market Gain/(Loss) | | | <u>\$ 217,716,088</u> |
| Value including City Reserve & PABF Accounts as of | <u>April 18, 2023</u> | | <u>\$ 5,756,949,460</u> |
| Less City Reserve Account ¹ | | | \$ 81,920,096 |
| Less PABF Fund ² | | | \$ 2,516 |
| Net Projected ERS Fund Value as of | <u>April 18, 2023</u> | | <u><u>\$ 5,675,026,848</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 4/19/2023

(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> | |
|--|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-----------|
| Beginning Cash Account Balance | | | | | | | | | | | | | |
| Townsend Cash Account | 5,435 | - | - | - | | | | | | | | | |
| Cash Contribution Account | - | - | - | - | | | | | | | | | |
| Milwaukee Cash Account | 17,447 | 80,926 | 44,668 | 55,372 | | | | | | | | | |
| Total Cash Available | 22,883 | 80,926 | 44,668 | 55,372 | | | | | | | | | |
| Less: Estimated Cash Needs for non-Investment Outflows | 39,500 | 39,500 | 39,500 | 39,500 | | | | | | | | | |
| Cash Available for Other Outflows | (16,617) | 41,426 | 5,168 | 15,872 | | | | | | | | | |
| For Monthly Cash Outflows of: | | | | | | | | | | | | | |
| Retiree Payroll Expense | (39,141) | (39,561) | (39,102) | (39,410) | (39,505) | (39,601) | (39,698) | (39,794) | (39,891) | (39,988) | (40,085) | (40,183) | (475,958) |
| Normal Retirement Payroll | (38,011) | (38,140) | (38,215) | (38,311) | (38,406) | (38,502) | (38,599) | (38,695) | (38,792) | (38,889) | (38,986) | (39,084) | (462,631) |
| Retiree Lump Sum Payments | (1,130) | (1,421) | (886) | (1,099) | (1,099) | (1,099) | (1,099) | (1,099) | (1,099) | (1,099) | (1,099) | (1,099) | (13,328) |
| Real Estate Capital Calls | - | - | - | (43) | - | - | - | - | - | - | - | - | (43) |
| Private Equity Capital Calls | (826) | (1,620) | (11,248) | (3,017) | (6,000) | - | - | - | - | - | - | - | (22,710) |
| Expenses Paid through City | (1,949) | (1,554) | (1,410) | (566) | (1,949) | (1,949) | (1,949) | (1,949) | (1,949) | (1,949) | (1,949) | (1,949) | (21,071) |
| PABF Payroll | (2) | (12) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (34) |
| Sub-Total Monthly Cash Outflows | (41,917) | (42,747) | (51,761) | (43,037) | (47,456) | (41,552) | (41,649) | (41,745) | (41,842) | (41,939) | (42,036) | (42,134) | (519,816) |
| For Monthly Cash Inflows: | | | | | | | | | | | | | |
| Sponsoring Agency and Employee Contribution | 2,514 | 2,483 | 3,470 | 2,496 | 2,502 | 2,508 | 2,514 | 3,781 | 2,527 | 2,533 | 2,540 | 2,546 | 32,413 |
| Real Estate Distributions | 2,400 | 42 | 11,651 | - | - | - | - | - | - | - | - | - | 14,094 |
| Private Equity Distributions | 235 | 3,647 | 9,453 | 52 | - | - | - | - | - | - | - | - | 13,387 |
| Miscellaneous Income | 164 | 315 | 277 | 218 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 1,614 |
| Security Lending Transfer | 792 | - | - | - | - | - | - | - | - | - | - | - | 792 |
| City and Agency Required Contribution | 101,853 | - | - | - | - | - | - | - | - | - | - | - | 101,853 |
| PABF Inflow | 2 | 2 | 14 | - | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 34 |
| Sub-Total Monthly Cash Inflows | 107,961 | 6,489 | 24,865 | 2,766 | 2,584 | 2,590 | 2,596 | 3,863 | 2,609 | 2,615 | 2,622 | 2,628 | 164,187 |
| Net Monthly Cash Inflows/(Outflows) Before Withdrawals | 66,043 | (36,258) | (26,896) | (40,272) | (44,873) | (38,962) | (39,052) | (37,882) | (39,233) | (39,324) | (39,415) | (39,506) | (355,629) |
| Net Monthly Cash Surplus (Need) | 49,426 | 5,168 | (21,728) | (24,399) | (44,873) | (38,962) | (39,052) | (37,882) | (39,233) | (39,324) | (39,415) | (39,506) | (309,780) |
| Monthly Cash Withdrawals (Additions) | | | | | | | | | | | | | |
| AQR | | | | | | | | | | | | | |
| BlackRock Global Alpha Tilts | | | | 9,900 | | | | | | | | | |
| BlackRock Russell 1000 Value Index | | | | | | | | | | | | | |
| BlackRock US Government Bond Index | | | | (50,000) | | | | | | | | | |
| Brandes | | | 12,500 | 12,900 | | | | | | | | | |
| CastleArk | | | | | | | | | | | | | |
| Dimensional Fund Advisors US Large Cap | | | | | | | | | | | | | |
| Dimensional Fund Advisors International | | | | 6,800 | | | | | | | | | |
| Dimensional Fund Advisors US Small Cap | | | | | | | | | | | | | |
| Earnest | | | | | | | | | | | | | |
| Loomis Sayles | | | 5,100 | | | | | | | | | | |
| MFS | (36,000) | | | 8,200 | | | | | | | | | |
| Northern Trust S&P 500 Index | | | | 6,000 | | | | | | | | | |
| Polen | | | 4,000 | 4,600 | | | | | | | | | |
| Principal | | | | | | | | | | | | | |
| Reams | | | 7,000 | | | | | | | | | | |
| UBS A&Q | 28,000 | | | 75,000 | | | | | | | | | |
| Goldman/Aptitude | | | | | | | | | | | | | |
| William Blair | | | 9,000 | 9,100 | | | | | | | | | |
| Sub-Total Monthly Cash Withdrawals | (8,000) | - | 37,600 | 82,500 | | | | | | | | | |
| Estimated Month-End Cash Balance | | | | | | | | | | | | | |
| Cash Available | 41,426 | 5,168 | 15,872 | 58,101 | | | | | | | | | |
| Estimated Cash Needs for non-Investment Outflows | 39,500 | 39,500 | 39,500 | 39,500 | | | | | | | | | |
| Total Cash Estimated on Hand For Next Month | 80,926 | 44,668 | 55,372 | 97,601 | | | | | | | | | |