

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Retirement Board Regular Meeting – 3/21/2024

A regular meeting of the Retirement Board will convene at 9:00 a.m. on Thursday, March 21, 2024. This meeting will be conducted in person with all Retirement Board members physically present in the Administration Training Resource Center, 375 Eleventh Street, Oakland, California, which shall serve as the physical location for members of the public who wish to attend the meeting in person. Please note, however, that members of the public will also be provided the opportunity to participate via video and teleconference. Public participation will also be available by live audio stream at <https://www.ebmud.com/about-us/board-directors/board-meetings/retirement-board-meetings/>; however, listeners will not be able to provide public comment via live audio stream. To participate in the meeting or provide public comment, please see the Appendix of the Agenda for instructions on joining the Zoom meeting online or by phone.

Some Staff and Presenters will be attending via Zoom which will be broadcast at the meeting.

Enclosed are the agenda items for the March 21, 2024 meeting, and the minutes for the January 18, 2024 regular meeting and the February 6, 2024 special meeting. The package also includes the following: **(1) CONSENT items:** Approval of Minutes of the Retirement Board – Regular Meeting of January 18, 2024, Approval of Minutes of the Retirement Board – special meeting of February 6, 2024, Ratifying and Approving Investment Transactions by Retirement Fund Managers for December 2023 and January 2024, Ratifying and Approving the corrected Short-Term Investment Transactions for December 2023 and January 2024, Approving Treasurer’s Statement of Receipts and Disbursements for December 2023 and January 2024; **(2) ACTION items:** Adopt Cost of Living Adjustment effective July 1, 2024, Authorize Extending Glass Lewis Contract, Select Retirement System Actuary; **(3) INFORMATION items:** Update on the PensionGold (LRS) Implementation Project, Performance Report and Economic Review (Meketa Investment Group), Asset Allocation Modeling Kickoff, 2023 Disability Retiree Earnings Income Verification, Annual Retirement Board Training Report, HIB Study Update, HIB Study: Historical HIB as Percent of Health Plan Premiums, Amending the Retirement Ordinance to Modify Accrual of Service Credit by Board Members ; **(4) REPORTS FROM THE RETIREMENT BOARD:** none.

CC:ls

Enclosure

AGENDA

EBMUD EMPLOYEES' RETIREMENT SYSTEM

March 21, 2024

A regular meeting of the Retirement Board will convene at 9:00 a.m. on Thursday, March 21, 2024. This meeting will be conducted with Retirement Board Members physically present in the Administration **Training Resource Center**, 375 Eleventh Street, Oakland, California. This location shall serve as the physical location for members of the public who wish to attend the meeting in person. Please note, however, that members of the public will also be provided the opportunity to participate via video and teleconference. Public participation will also be available by live audio stream <https://www.ebmud.com/about-us/board-directors/board-meetings/retirement-board-meetings/>; however, listeners will not be able to provide public comment via live audio stream. To participate in the meeting or provide public comment, please see the Appendix of the Agenda for instructions on joining the Zoom meeting online or by phone. Some Presenters may be attending via Zoom.

Retirement Board Members: Clifford Chan, Marguerite Young, April Chan, Tim McGowan, Jae Park and Elizabeth Grassetti

Staff to the Retirement Board: Sophia Skoda, Lourdes Matthew, Cindy Charan, Robert Hannay, Lisa Sorani, Steven Goodman-Leibof, Valerie Weekly and Mae Shepherd

Consultants & Presenters: Meketa - Colin Bebee, Sarah Bernstein, Eric Larsen, and Jonathan Camp

****Public Participation****

Please see Appendix at end of Agenda for Public Participation Details

ROLL CALL:

PUBLIC COMMENT: The Retirement Board is limited by State Law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

REGULAR BUSINESS MEETING

CONSENT CALENDAR:

1. Approval of Minutes of the Retirement Board – Regular Meeting of January 18, 2024
2. Approval of the Minutes of the Special Retirement Board Meeting of February 6, 2024
3. Ratifying and Approving Investment Transactions by Retirement Fund Managers for December 2023 and January 2024
4. Ratifying and Approving Short-Term Investment Transactions for December 2023 and January 2024
5. Approving Treasurer's Statement of Receipts and Disbursements for December 2023 and January 2024

ACTION:

6. Adopt Cost of Living Adjustment effective July 1, 2024 – C. Charan
7. Authorize Extending Glass Lewis Contract – S. Skoda
8. Select Retirement System Actuary – S. Skoda
 - a. Accept Ad Hoc Committee Recommendation of Finalists: Segal and Cheiron
 - b. Select Actuary

INFORMATION:

9. PensionGold (LRS) Implementation Project Update – C. Charan
10. Performance Report and Economic Review (Meketa Investment Group) – S. Skoda
11. Asset Allocation Modeling Kickoff – S. Skoda
12. 2023 Disability Retiree Earnings Income Verification – C. Charan
13. Annual Retirement Board Training Report – C. Charan
14. HIB Study Update – C. Charan
15. HIB Study: Historical HIB as Percent of Health Plan Premiums – C. Charan
16. Amending the Retirement Ordinance to Modify Accrual of Service Credit by Board Members – L. Matthew

REPORTS FROM THE RETIREMENT BOARD:

ITEMS TO BE CALENDARED:

1. Funded Ratio and PEPRA Normal Cost Comparison
2. Present Value of Historical HIB Amounts

MEETING ADJOURNMENT:

The next meeting of the Retirement Board is a Special Meeting that will be held at 9:00 a.m. Tuesday, April 16, 2024. The next regular meeting of the Retirement Board will be held on Thursday, May 23, 2023.

Retirement Board Meetings

- April 16, 2024 (Special)
- May 23, 2024
- June 4, 2024 (Special)
- July 18, 2024
- September 19, 2024
- November 21, 2024

APPENDIX

Retirement Board Meeting
Thursday, March 21, 2024
9:00 a.m.

This meeting will be conducted with Retirement Board Members physically present in the Administration Training Resource Center, 375 Eleventh Street, Oakland, California. Members of the public are welcome to attend in person or virtually as described below.

Please note that Retirement Board meetings are recorded and live-streamed.

To **view the livestream of the Retirement Board Meeting**, without making public comment, please visit: <https://www.ebmud.com/about-us/board-directors/board-meetings/retirement-board-meetings/>

If you wish to join the meeting, or to make public comment, please visit this page beforehand to familiarize yourself with Zoom. <http://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

Zoom Webinar Information

When: Mar 21, 2024 09:00 AM Pacific Time (US and Canada)

Topic: March 21, 2024 EBMUD Retirement Board Meeting

Please click the link below to join the webinar:

<https://ebmud.zoom.us/j/81622946630>

Or One tap mobile :

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+16699006833,,81622946630# US (San Jose)

Webinar ID: 816 2294 6630

International numbers available: <https://ebmud.zoom.us/j/81622946630>

Providing Public Comment

The EBMUD Retirement Board is limited by State Law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

If you wish to provide public comment, please:

- Use the raise hand feature in Zoom to indicate you wish to make a public comment
<https://support.zoom.us/hc/en-us/articles/20055661-Raising-your-hand-in-a-webinar>
 - If you participate by phone, press *9 to raise your hand
- When prompted by the Asst. Secretary, please state your name, affiliation if applicable, and topic
- The Assistant Secretary will call each speaker in the order received
- Comments on non-agenda items will be heard at the beginning of the meeting
- Comments on agenda items will be heard when the item is up for consideration
- Each Speaker is allotted 3 minutes to speak; The Retirement Board President has the discretion to amend this time based on the number of speakers
- The Assistant Secretary will keep track of time and inform each speaker when time is up

MINUTES OF THE RETIREMENT BOARD
January 18, 2024

A regular meeting of the Retirement Board convened on Thursday, January 18, 2024 at 8:33 a.m.

The meeting was called to order by Retirement Board President Tim McGowan. This meeting was conducted with Retirement Board Members physically present in the Administration Building **Training Resource Center**, 375 Eleventh Street, Oakland, California. This location served as the physical location for members of the public who wish to attend the meeting in person. Please note, however, that members of the public were also provided the opportunity to participate via video and teleconference.

Roll Call – The following Retirement Board Members were present: Clifford Chan, Marguerite Young, Tim McGowan, Jae Park, and Elizabeth Grasseti. April Chan joined the meeting at 8:41 a.m.

The following staff members were present: Cindy Charan, Sophia Skoda, Lisa Sorani, Lourdes Matthew, Robert Hannay, Steven Goodman-Leibof, and Valerie Weekly.

The following consultants were present: Meketa-Colin Bebee, Sarah Berstein, Jonathan Camp, Eric Larsen. Segal-Andy Yeung and Dirk Adamsen. Alliant-Billie Brown and Tom Sher.

PUBLIC COMMENT: The Retirement Board is limited by State Law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

Diane Eggering – Spoke on behalf of Local 2019 in support of increasing HIB. The current amount does not show the true cost. Conveyed appreciation to Lisa, Valerie, and Joey for their openness to discuss her recommendations. She would like HR contacts to be added in Splashpad.

There was a written public comment related to HIB. That comment is included at the end of these minutes.

REGULAR BUSINESS MEETING

CONSENT CALENDAR:

A motion was made to approve items 1-5 of the consent calendar by Clifford Chan and seconded by Marguerite Young. The motion carried (4-0) by the following vote: AYES (C. Chan, T. McGowan, J. Park, M. Young), NOES (none), ABSTAIN (none), ABSENT (A. Chan).

ACTION:

6. Approve Resolution honoring the 10+ years of service provided by Eric White of Meketa to the Retirement Board – S. Skoda

Action Item #6 Commending Eric White’s 10+ service to Retirement System, Eric formerly of Meketa Investments LLC. The plan assets when Eric took over at the start of 2011 until November 2022 increased from 910.4 million to 2.27 billion. Colin Bebee of Meketa thanked the Retirement Board on behalf of Eric White.

Tim McGowan provided some history of Eric White's support to the District. He began analyst work with PCA in 2009 and in 2011 took over lead consultant for the District.

Moved by M. Young; seconded by J. Park. Motion passed 5-0 by the following vote: AYES (McGowan, C. Chan, Park, Young, A. Chan), NOES (none), ABSTAIN (none), ABSENT (none).

7. **Adopt the Actuarial Valuations of the Retirement System as of June 30, 2022, and Recommend the Fiscal Year 2025 Employer Contribution Rates for the Pension and the Health Insurance Benefit Plans – S. Skoda**

Andy Yeung from Segal reported an increase in both active and retired participants in the plan with an aim to eliminate unfunded liability. Despite outperforming assumption rates, market value isn't used to control volatility. The current funding level is at 75.0%, or 73.6% combined with HIB, triggering an increase in employer contribution rates due to higher-than-estimated salary bases and COLA. A new actuary disclosure suggests an increase in liability to approximately 4.515 billion dollars from the Actuarial Accrued Liability (AAL) of 2.994 billion.

Tim McGowan emphasized the importance of understanding other funds' actuarial assumptions. Sophia Skoda recommended adopting rates based on evaluation, with discussion about potential changes to HIB percentages and implications on employer contributions.

Andy Yeung highlighted the importance of considering unfunded liability rather than the funded ratio as a measure of pension plan health. The meeting also discussed discrepancies in contribution rates compared to peer agencies and the complexity of different plan structures.

Regarding Health Insurance Benefits (HIB), it was noted that an increase in COBRA would cause a percentage decrease and HIB funding wasn't initiated until 2002 or 2003.

Moved by M. Young; seconded by C. Chan. Motion passed 5-0 by the following vote: AYES (McGowan, C. Chan, Park, Young, A. Chan), NOES (none), ABSTAIN (none), ABSENT (none).

8. **Approve Resolution Amending Retirement Board Meeting Schedule – C. Charan**

Marguerite Young questioned the necessity of holding two advance meetings to decide on the schedule change and suggested starting meetings at 9 am. Lourdes Matthews clarified that while not legally required, it's beneficial for notification and participation. Lourdes proposed regular meetings at 9 am and including the 3rd Thursday of odd-numbered months as an alternative date when needed.

Clifford Chan agreed with the proposal but suggested eliminating the need for two advance meetings. Elizabeth Grassetti preferred an 8:30 am start. Tim summarized the discussion, noting the proposed changes.

Marguerite Young noted that changing meetings may inconvenience some members. Lisa Sorani mentioned the ongoing nature of this item and the possibility of requiring a special meeting for approving changes. The motion was amended to accept the second half of the memo. Marguerite motioned to adopt regular meetings at 9 am on, and including the 3rd Thursday of odd-numbered months as an alternative meeting date. The motion was amended to eliminate the memo's second half regarding the need for two advance meetings. Marguerite Young indicated there was no need for so much notice as long as the Brown Act was followed. Clifford Chan agreed.

Moved by M. Young; seconded by C. Chan. Motion passed 5-0 by the following vote: AYES (McGowan, C. Chan, Park, Young, A. Chan), NOES (none), ABSTAIN (none), ABSENT (none).

10 MIN break here 10:11am -10:26am

9. Confirm Retirement Board Meeting Date for May 2024 – C. Charan

Item to move the May 9th meeting to May 23rd, presented by Lisa Sorani. Board agreed to change March meeting date to May 23, 2024. HIB meetings are February, April and June. Moved by C. Chan; seconded by A. Chan. Motion passed 5-0 by the following vote: AYES (McGowan, C. Chan, Park, Young, A. Chan), NOES (none), ABSTAIN (none), ABSENT (none).

10. Approve Additional Asset Allocation Training – S. Skoda

Director A. Chan asked to pull this item. April Chan wants staff to know that she is always available to call and discuss if the item was a request from her. No vote taken.

INFORMATION:

11. Performance Report and Economic Review (Meketa Investment Group) – S. Skoda

The Q3 report was discussed noting its "stale" nature. It ended with a total value of approximately 2.2 billion with Q3 being the only rough spot of the year. Colin Bebee of Meketa highlighted factors driving good performance in US equities, including the "magnificent 7" in the US and strong performance in Japan, along with a decline in the dollar. Key points included a big rebound across markets in 2023, projected interest rate cuts, and expectations of economic slowdown translating into lower rates. Colin expressed confidence in consumer debt due to full employment. Discussion touched on inflation, wage growth, and the impact of COVID-related supply chain issues on cost pressures. Eric Larsen of Meketa provided insights on asset allocation with domestic and equities overperforming benchmarks while real estate struggled in a rising interest rate environment. Further analysis will be conducted on underperforming sectors such as Federated, with commentary provided in a follow-up. Despite challenges, the portfolio showed strong performance, outperforming benchmarks and achieving a year-end increase of about 15%.

12. Introduction to Capital Market Assumptions (training) – S. Skoda

Colin Bebee of Meketa introduced Capital Market Assumptions which form the basis of asset liability studies, projecting future asset performance and volatility over different timeframes. Return expectations are based on recent market trends and historical data with private markets relying on historical data, economic theory, and current measures. Colin clarified that the Horizon Survey includes diverse clientele, both public and private. Factors affecting each asset class and return models were discussed, including credit risk for bonds and return drivers for covered calls. Discussion highlighted higher yields and market volatility in real estate in 2023. Colin emphasized focusing on straightforward investments in private credit rather than high-risk special situations. The discussion provided insights into Capital Market Assumptions, emphasizing the importance of historical data and current measures in projecting future asset performance across various asset classes.

Break was taken at 11:40 and the meeting started again at noon.

13. HIB Study: Retiree Demographics and HIB Utilization – C. Charan

Lisa Sorani outlined the study schedule, focusing on off-month sessions in February, April, and June, with sample costing from Segal presented at the May meeting. Final proposals will be developed in June and presented to the Board of Directors thereafter. Marguerite Young raised a query about costing both Option A and Option B if they are similarly attractive. Lisa clarified the importance of presenting multiple options to the Board for consideration. Tom Sher from Alliant Consultants was introduced, emphasizing his extensive experience as a benefit consultant including work with joint powers authority. Discussion centered on the data related to retirees, eligibility, and enrollment in district health plans. Analysis revealed that 65% of eligible retirees are enrolled in district-sponsored health plans, with a majority over 65 years old.

Marguerite emphasized the importance of considering future benefits for PEPRAs retirees in the next 10-15 years especially as retirees make decisions about their plans. Tom Sher addressed premium projections, noting historical trends and the impact of recent increases particularly in Medicare premiums. He highlighted the self-selection process and the attractiveness of richer plans despite higher premiums. Discussion extended to the design of the plan and its target audience, considering the implications for retirees and beneficiaries.

Public Comments: Questions were raised about the cost of providing similar benefits to PEPRAs employees as in Contra Costa, with considerations for reduced benefits and retirement age.

Tim McGowan emphasized the need to understand the demographics of those not using the benefit with further analysis planned after June. The discussion highlighted the complexity of designing healthcare plans for retirees with considerations for costs, demographics, and benefit structures. Further analysis and discussions will continue after June to address these concerns.

14. Announce Timelines for Employee and Retiree Retirement Board Seat Elections – C. Charan

Valerie Weekly presented. There will be two elections this year: Tim McGowan's seat expires June 24, 2024; Elizabeth Grassetti's retiree seat expires September 23, 2024. The timelines for both elections were provided.

15. Update on the Pension Gold (LRS) Implementation Project – C. Charan

This item will carry over to the March Retirement Board meeting.

REPORTS FROM THE RETIREMENT BOARD:

McGowan would like to attend a training in March and mentioned value of CALAPRS trainings.

ITEMS TO BE CALENDARED:

No new items to be calendared.

MEETING ADJOURNMENT: Meeting adjourned at 1:25pm Moved by M. Young; seconded by J. Park. Motion passed 5-0 by the following vote: AYES (McGowan, C. Chan, Park, Young, A. Chan), NOES (none), ABSTAIN (none), ABSENT (none).

The next meeting of the Retirement Board is a Special Meeting that will be held at 9:00 a.m. Tuesday, February 6, 2024. The next regular meeting of the Retirement Board will be held on Thursday, March 21, 2024.

Retirement Board Meetings

- February 6, 2024 (Special)
- March 21, 2024
- April 16, 2024 (Special)
- May 9, 2024
- June 4, 2024 (Special)
- July 18, 2024
- September 19, 2024
- November 21, 2024

APPENDIX

Retirement Board Meeting
Thursday, January 18, 2024
8:30 a.m.

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Zoom Webinar

When: Jan 18, 2024 08:30 AM Pacific Time (US and Canada)
Topic: January 18, 2024 EBMUD Retirement Board Meeting

Please click the link below to join the webinar:

<https://ebmud.zoom.us/j/83057548782>

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+16699006833,,83057548782# US (San Jose)

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

+1 669 444 9171 US

+1 669 900 6833 US (San Jose)

Webinar ID: 830 5754 8782

International numbers available: <https://ebmud.zoom.us/u/kV8ZTfHsS>

Providing Public Comment

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- The Assistant Secretary will keep track of time and inform each speaker when time is up

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EBMUD Retirement Board

As a current retiree (#14620 – Retirement Date 02/01/2011) I offer my suggestions for the Board’s future consideration of changes to the Health Insurance Benefit (HIB).

I support the current scheme of a health insurance benefit for retirees vesting over their working life. This set benefit protects the District and current employees from increased contributions from insurance plan rate hikes or surges in early retirements. Many pension plans put their retirees’ pensions at risk by offering unsustainable medical benefits to their retirees. I point the Board to Retirement Ordinance Section 36(j)(3): “Health Insurance Benefits provided under the Retirement System are subordinate to the retirement benefits provided under the Retirement System.”

I commend the Board’s proactive inclusion of a secondary health benefit for dependent domestic partners (DDP) in 1999 (Ord. 337), more than five years before the passage of AB 205 (Ordinance 339) that mandated all benefits to registered domestic partners (RDP) as well as spouses.

Need for Board Action

The increases in health care costs and changes to retiree families over the thirty-five-years (see below) the District has offered a HIB calls for review of the District’s Health Insurance Benefit for the first time in almost twenty-years including considering an increased primary benefit and an increase in and expansion of the HIB’s secondary benefit to ease the burden of health care costs on retirees with responsibility for younger and older dependents rather than solely for their spouse or RDP.

Inclusion of dependent(s) in addition to HIB benefit for spouse or RDP

I urge the Board to consider changes to the HIB’s secondary benefit recognizing changes in family composition and responsibilities and increased health care costs since District first offered its HIB.

In 1999 and 2004 the District changed the HIB to accommodate domestic partners (DP, later RDP) as well as legally married spouses but has yet to recognize that retirees may find themselves with responsibilities for both younger and older family members irrespective of marital status. The District’s retiree health plans recognize the complexity of American families by setting rates for ‘Families’ or ‘Dependents’, but the HIB still sets primary eligibility to a “single” retiree with a small (\$100) benefit increase for a retiree with a legally married spouse or Registered Domestic Partner (Ord. 348, 2004).

I urge the District to expand eligibility for its secondary benefits to a total of two secondary benefits; continuing to offer a secondary benefit to a spouse or RDP, but also to offer secondary benefit(s) to families with person(s) younger than 26-years old with coverage under the District health plans or persons declared as dependents on their Federal income taxes (<https://www.irs.gov/publications/p501>).

Documentation required for HIB benefits either upon retirement or under the annual HIB audit would expand to require submission of the latest year’s income tax return in addition to already filed birth and marriage certificates if benefits are requested for dependent persons. Termination of secondary benefits would occur once the qualifying relationship ended, as it is today after a divorce.

Consider long overdue increases in the District's HIB benefit

Along with the issue of increasing family responsibilities that many retirees face is the fact that the HIB level has not changed in twenty years since 2004 (Ord.348). While a Single retiree qualifying for 100% of their HIB has most or all of their Kaiser and Medicare Part B covered, the attached spreadsheet illustrates the situation many other retiree families face, best seen in the columns showing percentage of family insurance costs covered by the current HIB and even an increased HIB level.

I urge the Board to consider a modest \$50 increase to the primary HIB benefit and allow up to two \$250 secondary benefits for a spouse/RDP and/or financially dependent persons. How many retirees would find themselves in a situation where they could or would claim more than one of the two possible additional benefits is unknown, but undoubtedly some retiree families have children under 26-years of age or parents in care. Staff and the District's consultants can, at the direction of the Board, offer their comments about the cost and feasibility of expanding secondary benefits to dependents.

The attached spreadsheet presents the current situation after twenty years of a static HIB given increased health plan premiums and Medicare Part B rates. The table further demonstrates the result of the above proposed increase in both the single HIB and an increased single secondary benefit. The addition of a second secondary benefit is not modeled, as how the District's retiree health plans structure and price these varies from plan to plan, thus how much of a retiree's health care cost cover two secondary benefit recipients cannot be captured in simple spreadsheet.

s/ Stephen Henning Wollmer

Attachments:

Spreadsheet showing HIB benefit and health insurance costs both today and with above increases.
PDF of Ordinance Section 36 (HIB), and Section 39 (incorporating changes required by AB 205).

*Amendments to the Retirement Ordinance that changed the HIB:

#309, July 1989	Establishes Health Insurance Benefit at \$50
#313, January 1991	Benefit increase to \$100
#325 June 1986	Amends Section 36
#331 July 1998	Amends Section 36 to ensure HIB is tax exempt.
#335 January 1999	Amends Section 36 extends HIB to separated members.
#337, July 1999	Benefit increase to \$200, adds spouse and Domestic Partners (DP)
#339, November 2000	Benefit increase to \$250
#344, July 2002	Benefit increase to \$400, changes vesting schedule.
#345, July 2003	Benefit increase to \$450
#348, January 2004	Benefit increase to \$550 for members with spouses or DPs.
#349, November 2004	Adds Section 39 to comply with AB 205 in defining domestic partnerships.
#360-13 September 2013	Contributions to 401H for HIB only, affirms primacy of retirement,

2024 Retiree Health Plan and 2024 Medicare Part B Premiums Versus 20-Year-Static HIB.

Proposed HIB Increase

Kaiser Senior Advantage HIGH (<65 Kaiser Permanete HMO)	2024 Insurance Premium	Medicare Part B	Total Premiums	Current HIB	Net after HIB	HIB Covers
Single - Medicare Eligible	\$304.56	\$174.70	\$479.26	\$450	\$29.26	94%
Single - Pre-Medicare	\$931.22	\$0.00	\$931.22	\$450	\$481.22	48%
Couple (1 Senior Advantage +1 < 65)	\$1,235.78	\$174.70	\$1,410.48	\$550	\$860.48	39%
Couple (both Senior Advantage)	\$609.12	\$349.40	\$958.52	\$550	\$408.52	57%
Couple (Both Pre-Medicare)	\$1,862.44	\$0.00	\$1,862.44	\$550	\$1,312.44	30%

Proposed HIB	Net after New HIB	New HIB Covers
\$500	(\$20.74)	104%
\$500	\$431.22	54%
\$750	\$660.48	53%
\$750	\$208.52	78%
\$750	\$1,112.44	40%

Kaiser Senior Advantage LOW (<65 Kaiser Permanete HMO)	2024 Insurance Premium	Medicare Part B	Total Premiums	Current HIB	Net after HIB	HIB Covers
Single - Medicare Eligible	\$245.71	\$174.70	\$420.41	\$450	(\$29.59)	107%
Single - Pre-Medicare	\$931.22	\$0.00	\$931.22	\$450	\$481.22	48%
Couple (1 Senior Advantage + 1 < 65)	\$1,176.93	\$174.70	\$1,351.63	\$550	\$801.63	41%
Couple (both Senior Advantage)	\$491.42	\$349.40	\$840.82	\$550	\$290.82	65%
Couple (Both Pre-Medicare)	\$1,862.44	\$0.00	\$1,862.44	\$550	\$1,312.44	30%

Proposed HIB	Net after New HIB	New HIB Covers
\$500	(\$79.59)	119%
\$500	\$431.22	54%
\$750	\$601.63	55%
\$750	\$90.82	89%
\$750	\$1,112.44	40%

UnitedHealthcare Medicare PPO (<65 Anthem BlueCross)	2024 Insurance Premium	Medicare Part B	Total Premiums	Current HIB	Net after HIB	HIB Covers
Single - Medicare Eligible	\$412.45	\$174.70	\$587.15	\$450	\$137.15	77%
Single - Pre-Medicare	\$981.81	\$0.00	\$981.81	\$450	\$531.81	46%
Couple (1-Medicare PPO, 1<65)	\$1,050.63	\$174.70	\$1,225.33	\$550	\$675.33	45%
Couple (both Medicare eligible)	\$824.90	\$349.40	\$1,174.30	\$550	\$624.30	47%
Couple (Both Pre-Medicare)	\$1,963.62	\$0.00	\$1,963.62	\$550	\$1,413.62	28%

Proposed HIB	Net after New HIB	New HIB Covers
\$500	\$87.15	85%
\$500	\$481.81	51%
\$750	\$475.33	61%
\$750	\$424.30	64%
\$750	\$1,213.62	38%

Section 36
HEALTH INSURANCE BENEFIT

a) The Retirement Board is authorized to administer a Health Insurance Benefit through the account described in Subsection (j) of this section.

b) The Health Insurance Benefit may be used for the payment of sickness, accident, hospitalization, and medical expense to the extent permitted under the Internal Revenue Code ("Code") and as authorized by the Retirement Board.

c) The following individuals are eligible to receive a Health Insurance Benefit in an amount determined pursuant to Subsection (c)(1), (c)(2), or (c)(3), as applicable:

1. A Member is eligible to receive a Health Insurance Benefit of \$550.00 per month if the Member: (i) became a Member on or before June 30, 1996, (ii) has at least five (5) full years of Continuous Service with the District or its equivalent, (iii) retires for service or for disability from the District, (iv) did not make an election to remain a Member pursuant to Section 12(b)(2), and (v) has a spouse, or a registered domestic partner, who is not otherwise eligible to receive a Health Insurance Benefit under Section 36.

2. A surviving spouse of a Member described in Subsection (c)(1) is eligible to receive a Health Insurance Benefit of \$450 per month, provided that the spouse is eligible for benefits under Section 20.

3. A Member is eligible to receive a Health Insurance Benefit of \$450.00 per month if the Member: (i) became a Member on or before June 30, 1996, (ii) has at least five (5) full years of Continuous Service with the District or its equivalent, (iii) retires for service or for disability from the District, (iv) did not make an election to remain a Member pursuant to Section 12(b)(2), and (v) is either (I) unmarried without a registered domestic partner, or (II) has a spouse, or a registered domestic partner, who is a Member eligible to receive a Health Insurance Benefit under Section 36.

(d) A Health Insurance Benefit shall be payable in an amount determined under Subsections (d)(1), (d)(2) and (d)(3) with respect to a Member who either (i) became a Member on or after July 1, 1996 and retires for service or for disability, (ii) made an election to remain a Member pursuant to Section 12(b)(2) and who retired on or before January 1, 1999; or (iii) made an election to remain a Member pursuant to Section 12(b)(2) and who retires after January 1, 1999:

1. If such Member has a spouse, or a registered domestic partner, who is not otherwise eligible to receive a Health Insurance Benefit under Section 36:
 - i. the Member is eligible to receive a Health Insurance Benefit equal to a percentage (specified in Subsection (d)(3)) of \$550.00; and
 - ii. the Member's surviving spouse is eligible to receive a Health Insurance Benefit equal to a percentage (specified in Subsection (d)(3)) of \$450.00, provided that the spouse is eligible for benefits under Section 20.
2. Such Member is eligible to receive a Health Insurance Benefit equal to a percentage (specified in Subsection (d)(3)) of \$450.00, if the Member is either (I) unmarried without a registered domestic partner, or (II) has a spouse, or a registered domestic partner, who is a Member eligible to receive a Health Insurance Benefit under Section 36.

3. The individuals described in Subsections (d)(1) and (d)(2) shall receive the corresponding Health Insurance Benefit specified in those Subsections, multiplied by the applicable percentage below based upon the number of years of the Member's Continuous Service with the District:

<u>Number of Years of Continuous Service</u>	<u>Percent of Health Insurance Benefit</u>
Less than five (5) years	No benefit (0%)
Five (5) years to less than ten (10) years	No more than twenty-five percent (25%)
Ten (10) years to less than fifteen (15) years	No more than fifty percent (50%)
Fifteen (15) years to less than twenty (20) years	No more than seventy-five percent (75%)
Twenty (20) years or more	No more than one hundred percent (100%)

(e) As of July 1, 1999, eligible Retired Members (but not Surviving Spouses) may use the Health Insurance Benefit for the payment of health insurance premiums or similar coverage costs incurred by the Retired Member's current spouse or current registered domestic partner during the Retired Member's lifetime, provided that the provision of such benefits is permitted under the Code and is pursuant to regulations promulgated by the Retirement Board.

(f) Individuals shall receive a Health Insurance Benefit only to the extent that they incur expenses described in Subsection (b) or, in the case of eligible Retired Members, as described in Subsection (e), and only if they provide substantiation in a form satisfactory to the Retirement Board.

(g) Amounts payable as Health Insurance Benefits shall not be included in the calculation of benefits payable under Section 20 or Section 21(b) or Section 33(a), but shall be included in "total gross income" used in determining eligibility for low-income adjustments provided by Section 35.

(h) The Retirement Board shall adopt rules governing administration of the Health Insurance Benefit, including provisions for the schedule and methods of payment of the Health Insurance Benefit. The Retirement Board shall annually review the costs, funding, and administration of the Health Insurance Benefit.

(i) All Health Insurance Benefit payments shall comply with all applicable federal laws, including Section 401(h) of the Code. To the extent there is any conflict between this section and Section 401(h) of the Code or regulations issued thereunder, the Code & Regulations shall govern.

(j) The Health Insurance Benefit shall be paid solely from a Section 401(h) account hereby established pursuant to Code Section 401(h) and any regulations issued under that section.

1. No health benefits provided under the 401(h) account shall discriminate in favor of highly compensated employees.

2. The 401(h) account shall be a separate account to be used solely for providing the Health Insurance Benefit and shall be established and maintained by the Board to reflect the amounts contributed for the payment of the Health Insurance Benefit. The 401(h) account shall

be for record keeping purposes only. Amounts credited to the 401(h) account may be invested with other Retirement System funds set aside for retirement purposes, without identification of which investments are allocable to each account. Earnings on each account, however, shall be allocated to each in a reasonable manner.

3. Contributions to the 401(h) account shall be made by the District solely to pay to or reimburse Retired Members or Surviving Spouses for health insurance premiums or similar coverage costs. Contributions shall be reasonable, ascertainable, necessary, and appropriate. Health Insurance Benefits provided under the Retirement System are subordinate to the retirement benefits provided under the Retirement System. The aggregate actual contributions for retiree Health Insurance Benefits, when added to the actual contributions for any life insurance provided under the Retirement System, are limited to twenty-five percent of the total actual contributions made to the Retirement System (other than contributions to fund past service credit) after the later of the adoption or effective date of the amendment first adding Health Insurance Benefits to the Retirement System in accordance with Section 401(h) of the Internal Revenue Code.

4. The District must, at the time it makes a contribution to the 401(h) account, designate that portion of the contribution allocable to the 401(h) account to be used solely for the Health Insurance Benefit.

5. Prior to the satisfaction of all liabilities under the Retirement System to provide for health benefits, no part of the 401(h) account shall be used for or diverted to any purpose other than providing health benefits, except that amounts credited to the 401(h) account may be used to pay for necessary and appropriate administrative expenses related to the Health Insurance Benefit.

6. Any amounts contributed to the 401(h) account and which remain in the 401(h) account after the satisfaction of all liabilities for health benefits (including but not limited to benefits payable in the future for existing members) shall be returned to the District.

7. This section does not require separate accounts for key employees because no member of the Retirement System is a key employee under the applicable definitions in the Code.

8. Assets attributable to any forfeiture of benefits payable under the 401(h) account shall be used to reduce the District's contributions to pay for health benefits provided under the 401(h) account.

(k) The maximum Health Insurance Benefit provided by this section shall not be less than: (i) in the case of individuals described in Subsection (c)(1), \$550.00 per month, (ii) in the case of (k) The maximum Health Insurance Benefit provided by this section shall not be less than: (i) in the case of individuals described in Subsection (c)(1), \$550.00 per month, (ii) in the case of individuals described in Subsections (c)(2) and (c)(3), \$450.00 per month, or (iii) in the case of individuals to whom Subsection (d) applies, the applicable amount under that Subsection. The Board of Directors of the District, however, may in the exercise of its sole discretion increase or decrease the amount of the Health Insurance Benefit, provided that any decrease may not reduce the Health Insurance Benefit below the amounts set forth in the first sentence of this subsection. Other than as provided in the first sentence of this subsection, no individual, including a Member, Retired Member, spouse, domestic partner, or dependent, shall possess any vested right, contract right, or other right to the Health Insurance Benefit.

(l) The Board of Directors of the District expressly reserves its rights under Section 6(d) to adjust the rates of Retirement Contributions for those Members described in Section 6(d) to fund the Health Insurance Benefit

Section 39

DOMESTIC PARTNER BENEFITS

a) Effective January 1, 2005, and in compliance with AB 205, the "California Domestic Partner Rights and Responsibilities Act" (hereafter "AB 205"), domestic partner benefits shall be provided pursuant to this Ordinance according to the definitions set forth below as required by AB 205 to the extent that compliance with AB 205 does not expose the Retirement System to risk of losing its tax qualified status under federal law and subject to the continuing legal validity of AB 205. No individual, including a Member, Retired Member, domestic partner, beneficiary or dependent, shall possess any vested right, contract right, or other right to the benefits set forth in this Section 39 if the District amends or deletes this Section 39 because (a) any part of AB 205 is invalidated by a court of law or (b) compliance with any part of AB 205 exposes the Retirement System to risk of losing its tax qualified status under federal law.

b) Where ever the terms "spouse," "surviving spouse" and "married" appear in Section 20, entitled "Survivorship Benefits and Contributions," and in Section 35(a), entitled "Low-Income Adjustment," the terms "domestic partner," "surviving domestic partner" and "domestic partnership" shall be added, with the understanding that the terms "domestic partner" and "domestic partnership" for purposes of Sections 20 and 35 shall refer to a domestic partnership that has been established solely in accordance with the requirements of section 297 of the California Family Code, as amended.

(c) Where ever the terms "spouse," and "surviving spouse" appear in subsections (c)(2), (d)(1)(ii), and j(3) of Section 36, entitled "Health Insurance Benefit," the terms "dependent domestic partner," and "surviving dependent domestic partner" shall be added, with the understanding that the terms "dependent domestic partner" and "surviving dependent domestic partner" for purposes of these subsections shall refer to a domestic partnership that has been established solely in accordance with the requirements of section 297 of the California Family Code, as amended, and where the domestic partner is also the Retired Member's dependent within the meaning of Section 152 of the Internal Revenue Code.

(d) Where ever the term "registered domestic partner" appears in subsections (c)(1), (c)(3), (d)(1), (d)(2) and (e) of Section 36, entitled "Health Insurance Benefit," the term "EBMUD domestic partner" shall be substituted for and replace the term "registered domestic partnership," with the understanding that the term "EBMUD domestic partner" for purposes of these subsections shall refer to a domestic partnership that has been established either in accordance with an affidavit provided by EBMUD that is filed by the Retired Member with EBMUD or in accordance with the requirements of section 297 of the California Family Code, as amended, and where the domestic partner is also the Retired Member's dependent within the meaning of Section 152 of the Internal Revenue Code. Accordingly, it is understood that as of January 1, 2005, Section 36(e) of the Ordinance shall be interpreted and applied as follows:

(i) As of July 1, 1999, eligible Retired Members (but not surviving spouses or surviving domestic partners) may use the Health Insurance Benefit for the payment of health insurance premiums or similar coverage costs incurred by the Retired Member's current spouse or current EBMUD domestic partner during the Retired Member's lifetime, provided that the provision of such benefits is permitted under the Code and is pursuant to regulations promulgated by the Retirement Board.

(e) Where ever the term "domestic partner" appears in subsection (k) of Section 36, the term "domestic partner" shall refer to "domestic partner," "dependent domestic partner," and "EBMUD domestic partner" as these terms are defined in this Section 39.

MINUTES OF THE RETIREMENT BOARD
February 6, 2024

A special meeting of the Retirement Board convened on Tuesday, February 6, 2024, at 9:05 a.m.

The meeting was called to order by Retirement Board President Tim McGowan. This meeting was conducted with Retirement Board Members physically present in the Administration Building **Training Resource Center**, 375 Eleventh Street, Oakland, California. This location served as the physical location for members of the public who wished to attend the meeting in person. Please note, however, that members of the public were also provided the opportunity to participate via video and teleconference.

Roll Call – The following Retirement Board Members were present: Clifford Chan, Tim McGowan, Jae Park, and Elizabeth Grasseti. April Chan was absent at roll call and arrived at 11:10 am.

The following staff members were present: Cindy Charan, Sophia Skoda, Lisa Sorani, Lourdes Matthew, Steven Goodman-Leibof, and Valerie Weekly.

The following consultants were present: Billy Brown and Tom Sher from Alliant Insurance Services, Inc.

PUBLIC COMMENT

Addressing the Retirement Board were the following: 1) Diane Eggering, at the start of the meeting, made a request that the Retirement Board propose an increase to the retiree Health Insurance Benefit (HIB) and stated that she did not feel this was a union negotiation item. 2) Max Fefer, during Item 4, asked who we are focusing this benefit for and stated that he would like to see outreach to current District staff to get a broader view of what people want. 3) Eddie Cheung, during the discussion on the retiree HIB survey, asked for clarification about Lisa Sorani's statement about not being able to return to a District medical plan once you drop District medical coverage. He initially thought she was referring to the HIB.

INFORMATION

1. HIB Study Update and Retiree HIB Utilization Correction – Cindy Charan introduced this item and Lisa Sorani presented. Lisa Sorani noted that there were two corrections to the demographic data provided at the January Retirement Board meeting. First, the number of retirees eligible for, but not utilizing, the HIB is not 391, but 78. The second correction was on several slides from the original presentation where the 50% HIB maximum benefit was shown as \$125 instead of \$225. Neither error impacted other calculations or data in the slides. These corrections were made to the slides, and the corrected demographic slides are included as an addendum to the Trend presentation from Alliant. Lisa also reported that staff will request the Board of Directors' guidance prior to the April 16, 2024 Special Meeting. Discussion related to the retiree survey was tabled for later in the meeting.

2. **HIB Study: Medicare Overview** – Cindy Charan introduced this item and for Tom Sher and Billie Brown from Alliant to discuss. Tom Sher presented. Medicare is a really big deal. One out of every eight dollars in the federal budget goes to Medicare. 70 million people are covered. For the District, 78% of retirees are already on Medicare. Tom gave a history of Medicare since 2004 including eligibility, payment amounts, access, compliance, Medicare prescription drug coverage, and Medicare Supplement and Medicare Advantage plans. Managing the Medicare programs for retirees is complicated. Retirees look to staff to help them understand compliance and penalties for not enrolling in Part B within the required timeframe.

3. **HIB Study: Staff Administration Related to Medicare** – Cindy Charan passed this item to Lisa Sorani. Lisa presented on staff administration and the complexities of Medicare coordination. Medicare contacts District employees who are turning 65, while the District does not. Active employees over age 65 do not have to sign up for Part B and pay the Part B premium while they are working and covered by District employee health insurance. Staff suggest that employees sign up at least one month ahead of their retirement date to ensure they are immediately eligible for the Medicare health plan with no penalty. Marguerite Young asked about retirees under age 65. Lisa explained that they are eligible for HIB, although they are on a regular under 65 health plan and pay the higher premiums until they are Medicare eligible. Jae Park commented that there is an extra tier for married retirees when only one is over age 65. Lisa noted that there are many “mixed Medicare” tiers, and staff make sure everyone gets enrolled in the right plan. Lisa further discussed the short trainings and one-on-one consultations that staff provide each year, as well as the biannual Saturday sessions for employees and spouses that both Social Security and Fidelity Investments attend and present at. Staff conducted 15 retirement seminars in 2023. The seminars review core pension benefits, the HIB, and health insurance benefits.

4. **HIB Study: Healthcare Cost Trend** - Cindy Charan introduced this item. Lisa Sorani introduced Billie Brown and Tom Sher for the presentation. For a majority of health insurance plans, average increases over last ten years are low. The average increase for the employee health plans was 2.4% and the average increase for the Medicare health plans was 0.95%. Tim McGowan commented that premium increases and decreases seemed to occur during COVID. Tom Sher noted there was a COVID two-step; people were not going to the doctor. There was a big decline countrywide during 2021 and into early 2022. Tom next discussed forward looking trends in healthcare premiums. Alliant used Segal’s trend assumptions from the June 20, 2023 HIB valuation which uses a declining trend over ten years. The forward trend was much higher than we saw across the last ten years, but there is no crystal ball. Overall, you can see that cost of care is increasing. Kaiser is its own entity, but they just gave 21,000 nurses wage increases over the next four years. More broadly, there are the costs of new gene therapy and expensive weight loss drugs, and overall inflation runs through healthcare and increases the costs of all the products associated with healthcare. Jae Park asked what is causing the difference between Medicare and non-Medicare increases. Tom discussed the role of government in the Medicare plans and that the non-Medicare plans are costed differently, they look at the usage by District employees, along with the overall cost of care. Marguerite Young asked if staff had run the

Minutes
Retirement Board Meeting
February 6, 2024

forward trend data by Segal for review. Lisa stated that we did not take it to Segal. Elizabeth Grasseti also asked if this was the correct way to use the Segal data. Staff confirmed they would go back to Segal and review how the data was used and report back to the Retirement Board. Marguerite Young asked what we are trying to accomplish and who we are trying to accomplish it for. We need to understand what our interests are for. A public comment from Max Fefer asked who we are focusing this benefit for. He would like to see current staff reached out to on this topic. Clifford Chan also stated that he would like to see what is important to active employees, not just regarding this one benefit, and wants to know what we as a Retirement Board get out of all of this. Tim McGowan stated that he believes retirees would value focusing on the HIB benefit instead of all benefits.

The final slide showed the history of HIB increases. Marguerite Young asked if we could have the information based on today's dollars. Clifford Chan asked to see the healthcare premium rates at each date when the HIB was increased.

The Retirement Board took a break from 11:10 a.m – 11:20 a.m.

April Chan arrived at the meeting at 11:10 a.m.

5. Re-Open Item 1. HIB Study Update and Retiree HIB Utilization Correction -


Retirement Board President Tim McGowan re-opened discussions under item number one to review the draft retiree survey. Marguerite Young was concerned that the current draft looked overly complex and not in the best order. Clifford Chan said it doesn't get at whether the cost of healthcare is actually a problem for retirees. Other comments were to consider using a survey agency (Probalski) to build the questions and to maybe ask cost data as a percent of monthly income and ask their income tier but offer "decline to state" as an optional response. Board members suggested that if it is otherwise anonymous, be sure to gather enough other indicative data to bucket the responses into appropriate groups including current age, age at retirement, years of service at the District, and retirement year. Elizabeth Grasseti and Marguerite Young will work with staff on final review before the survey goes live.

ITEMS TO BE CALENDERED:

- Segal review of Alliant Healthcare Premium trend

MEETING ADJOURNMENT – Marguerite Young moved to adjourn the meeting at 11:48 a.m. April Chan seconded the motion. The motion carried (5-0) by the following voice vote: AYES (McGowan, Young, C. Chan, A. Chan, Park), NOES (none), ABSTAIN (none), ABSENT (A. Chan).

Minutes
Retirement Board Meeting
February 6, 2024



President

ATTEST:



Secretary

3/21/2024

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Investment Transactions by Retirement Fund Managers for December 2023 and January 2024

The attached Investment Transactions by Retirement Fund Managers report for the months of December 2023 and January 2024 is hereby submitted for Retirement Board approval.

SDS:RLH:SGL

Attachment: Investment Transactions by Retirement Fund Managers

R.B. RESOLUTION NO. 7002

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY FUND MANAGERS
FOR DECEMBER 2023 AND JANUARY 2024

Introduced by: Clifford Chan ; Seconded by: Jae Park

WHEREAS, Retirement Board Rule No. B-5 provides for investment transactions without prior specific approval by the Retirement Board; and

WHEREAS, investment transactions have been consummated during December 2023 and January 2024, in accordance with the provisions of said rule and in securities designated as acceptable by Retirement Board Resolution No. 4975, as amended;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions appearing on the following Exhibit A are hereby ratified and approved.



President

ATTEST:



Secretary

3/21/2024

INVESTMENT TRANSACTIONS BY RETIREMENT FUND MANAGERS			
December 2023			
	PURCHASES	SALES	PORTFOLIO VALUE
<u>FIXED INCOME</u>			
C.S. McKee	\$20,019,429	\$19,770,995	\$217,018,747
Federated Bank Loans	\$283,381	\$118,918	\$55,802,973
Garcia Hamilton Associates	\$5,393,628	\$4,197,416	\$213,782,428
Mackay Shields - HY	\$1,921,278	\$116,530	\$59,479,539
TOTAL	\$27,617,716	\$24,203,859	\$546,083,686
<u>DOMESTIC EQUITY</u>			
Russell 3000 Index Fund	\$0	\$0	\$636,378,648
Total Domestic Equity	\$0	\$0	\$636,378,648
<u>COVERED CALLS</u>			
Parametric (BXM)	\$9,593,625	\$9,282,086	\$157,293,472
Parametric (Delta-Shift)	\$2,495,387	\$2,240,705	\$163,660,893
Van Hulzen	\$3,236,146	\$2,375,122	\$154,596,632
Total Covered Calls	\$15,325,158	\$13,897,914	\$475,550,997
<u>INTERNATIONAL EQUITY</u>			
ACWI Index fund	\$0	\$0	\$576,089,495
Global Transition	\$0	\$0	\$886,141
Total International Equity	\$0	\$0	\$576,975,636
<u>REAL ESTATE EQUITY</u>			
RREEF America II	\$0	\$0	\$58,937,302
CenterSquare	\$2,876,484	\$2,694,067	\$64,035,513
Total Real Estate	\$2,876,484	\$2,694,067	\$122,972,815
TOTAL ALL FUND MANAGERS	\$45,819,358	\$40,795,840	\$2,357,961,782
January 2024			
	PURCHASES	SALES	PORTFOLIO VALUE
<u>FIXED INCOME</u>			
C.S. McKee	\$51,424,994	\$49,572,747	\$216,543,597
Federated Bank Loans	\$3,632,046	\$1,003,853	\$56,012,321
Garcia Hamilton Associates	\$667,137	\$0	\$212,913,218
Mackay Shields - HY	\$2,444,615	\$146,938	\$59,785,960
TOTAL	\$58,168,792	\$50,723,538	\$545,255,097
<u>DOMESTIC EQUITY</u>			
Russell 3000 Index Fund	\$0	\$6,796,000	\$636,678,168
Total Domestic Equity	\$0	\$6,796,000	\$636,678,168
<u>COVERED CALLS</u>			
Parametric (BXM)	\$2,557,702	\$2,113,649	\$159,630,828
Parametric (Delta-Shift)	\$1,921,832	\$1,695,239	\$165,855,261
Van Hulzen	\$7,191,712	\$6,795,851	\$157,175,999
Total Covered Calls	\$11,671,245	\$10,604,738	\$482,662,088
<u>INTERNATIONAL EQUITY</u>			
ACWI Index fund	\$0	\$0	\$569,642,807
Global Transition	\$0	\$0	\$872,578
Total International Equity	\$0	\$0	\$570,515,385
<u>REAL ESTATE EQUITY</u>			
RREEF America II	\$0	\$0	\$58,937,376
CenterSquare	\$2,614,851	\$2,416,915	\$61,508,945
Total Real Estate	\$2,614,851	\$2,416,915	\$120,446,321
TOTAL ALL FUND MANAGERS	\$72,454,888	\$70,541,191	\$2,355,557,059

Prepared By: Aaron Cinco
 Aaron Cinco, Accounting Technician

Date: 2/26/2024

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Short Term Investment Transactions for December 2023 and January 2024

The attached Short Term Investment Transactions reports for the months of December 2023 and January 2024 are hereby submitted for Retirement Board approval.

SDS:RLH:SGL

Attachments: Short Term Investment Transactions December 2023
Short Term Investment Transactions January 2024

R.B. RESOLUTION NO. 7003

RATIFYING AND APPROVING SHORT TERM INVESTMENT TRANSACTIONS BY THE
TREASURER FOR DECEMBER 2023 AND JANUARY 2024

Introduced by: Clifford Chan ; Seconded by: Jae Park

WHEREAS, Retirement Board Rule No. B-7 provides for the temporary investment of retirement system funds by the Treasurer or Assistant Treasurer in securities authorized by Sections 1350 through 1366 of the Financial Code or holding funds in inactive time deposits in accordance with Section 12364 of the Municipal Utility District Act; and

WHEREAS, investment transactions during December 2023 and January 2024, have been made in accordance with the provisions of the said rule;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions consummated by the Treasurer and included on the attached reports for December 2023 and January 2024 are hereby ratified and approved.



President

ATTEST:



Secretary

3/21/2024

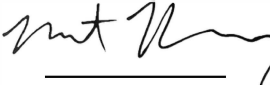
**EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF DECEMBER 2023**


<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 5,269,000.00	Local Agency Investment Fund	8-Dec-23		3.929
\$ 5,220,000.00	Local Agency Investment Fund	22-Dec-23		3.929
\$ (13,647,000.00)	Local Agency Investment Fund		29-Dec-23	3.929
<u>\$ (3,158,000.00)</u>	Net Activity for Month			
\$ 5,211,597.88	Beginning Balance			
<u>(3,158,000.00)</u>	Net Activity for Month			
<u>\$ 2,053,597.88</u>	Ending Balance			

SUBMITTED BY David Glasser

 David Glasser
 Controller

DATE Feb 26, 2024


 Robert L. Hannay
 Treasury Mgr.


 Kevin Ma
 Acctg. Systems Supvr.
 prepared by Acinco


**EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF JANUARY 2024**


<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 5,357,000.00	Local Agency Investment Fund	5-Jan-24		4.012
\$ 105,479.26	Local Agency Investment Fund	12-Jan-24		4.012
\$ 5,347,000.00	Local Agency Investment Fund	19-Jan-24		4.012
6,796,000.00	Local Agency Investment Fund	25-Jan-24		4.012
(13,690,000.00)	Local Agency Investment Fund		31-Jan-24	4.012
\$ 3,915,479.26	Net Activity for Month			
\$ 2,053,597.88	Beginning Balance			
<u>3,915,479.26</u>	Net Activity for Month			
\$ 5,969,077.14	Ending Balance			

David Glasser

SUBMITTED BY David Glasser
David Glasser
Controller

DATE Feb 26, 2024


Robert L. Hannay
 Treasury Mgr.


Kevin Ma
 Acctg. Systems Supvr.
 prepared by Acinco

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024
MEMO TO: Members of the Retirement Board
THROUGH: Sophia D. Skoda, Director of Finance *SDS*
FROM: David Glasser, Controller *DG*
SUBJECT: Statement of Receipts and Disbursements for December 2023

The attached Statement of Receipts and Disbursements report for the month of December 2023 is hereby submitted for Retirement Board approval.

Attachment

SDS:DG:AC

**STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF DECEMBER 2023**

CASH BALANCE at November 30, 2023		\$	3,330,793.98
<u>Receipts</u>			
Employees' Contributions	\$	1,642,189.89	
District Contributions		8,941,873.23	
LAIF Redemptions		13,647,000.00	
Northern Trust Redemptions			
Refunds and Commission Recapture		<u>21,956.90</u>	
TOTAL Receipts			24,253,020.02
<u>Disbursements</u>			
Checks/Wires Issued:			
Service Retirement Allowances	\$	11,985,063.20	
Disability Retirement Allowances		161,749.00	
Health Insurance Benefit		357,569.00	
Payments to Retiree's Resigned/Deceased		75,374.60	
LAIF Deposits		10,489,000.00	
Administrative Cost		<u>516,409.02</u>	
TOTAL Disbursements			<u>(23,585,164.82)</u>
CASH BALANCE at December 31, 2023		\$	<u>3,998,649.18</u>
LAIF			<u>2,053,597.88</u>
LAIF and CASH BALANCE at December 31, 2023		\$	<u>6,052,247.06</u>
<u>Domestic Equity</u>			
Russell 3000 Index Fund	\$	<u>636,378,647.96</u>	
Subtotal Domestic Equity		636,378,647.96	
<u>Covered Calls</u>			
Parametric (BXM)	\$	157,293,471.71	
Parametric (Delta-Shift)		163,660,893.48	
Van Hulzen		<u>154,596,631.64</u>	
Subtotal Covered Calls		475,550,996.83	
<u>International Equity</u>			
ACWI Index fund	\$	576,089,495.07	
Global Transition		<u>886,141.36</u>	
Subtotal International Equity		576,975,636.43	
<u>Real Estate</u>			
RREEF America REIT II	\$	58,937,302.14	
Center Square		<u>64,035,512.52</u>	
Subtotal Real Estate		122,972,814.66	
<u>Fixed Income</u>			
CS Mckee	\$	217,018,746.87	
Federated Bank Loans		55,802,972.70	
Garcia Hamilton Associates		213,782,427.68	
Mackay Shields-High Yield		<u>59,479,538.98</u>	
Subtotal Fixed Income		546,083,686.23	
Total for Domestic and International Equities			<u>2,357,961,782.11</u>
MARKET VALUE of ASSETS at December 31, 2023		\$	<u>2,364,014,029.17</u>

Respectfully submitted,

David Glasser
David Glasser

David Glasser
Controller

Robert L. Hannay

Robert L. Hannay
Treasury Mgr.

Kevin Ma

Kevin Ma
Acctg Sys Supvr.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024
MEMO TO: Members of the Retirement Board
THROUGH: Sophia D. Skoda, Director of Finance *SDS*
FROM: David Glasser, Controller *DG*
SUBJECT: Statement of Receipts and Disbursements for January 2024

The attached Statement of Receipts and Disbursements report for the month of January 2024 is hereby submitted for Retirement Board approval.

Attachment

SDS:DG:AC

**STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF JANUARY 2024**

CASH BALANCE at December 31, 2023	\$	3,998,649.18
<u>Receipts</u>		
Employees' Contributions	\$	1,854,135.90
District Contributions		8,953,574.37
LAIF Redemptions		13,690,000.00
Northern Trust Redemptions		6,796,000.00
Refunds and Commission Recapture		<u>20,249.66</u>
TOTAL Receipts		31,313,959.93
<u>Disbursements</u>		
Checks/Wires Issued:		
Service Retirement Allowances	\$	12,011,815.79
Disability Retirement Allowances		161,749.00
Health Insurance Benefit		895,247.86
Payments to Retiree's Resigned/Deceased		0.00
LAIF Deposits		17,500,000.00
Administrative Cost		<u>280,995.13</u>
TOTAL Disbursements		<u>(30,849,807.78)</u>
CASH BALANCE at January 31, 2024	\$	<u>4,462,801.33</u>
LAIF		<u>5,969,077.14</u>
LAIF and CASH BALANCE at January 31, 2024	\$	<u>10,431,878.47</u>
<u>Domestic Equity</u>		
Russell 3000 Index Fund	\$	636,678,168.42
Subtotal Domestic Equity		636,678,168.42
<u>Covered Calls</u>		
Parametric (BXM)	\$	159,630,827.94
Parametric (Delta-Shift)		165,855,261.46
Van Hulzen		<u>157,175,998.73</u>
Subtotal Covered Calls		482,662,088.13
<u>International Equity</u>		
ACWI Index fund	\$	569,642,806.76
Global Transition		<u>872,578.43</u>
Subtotal International Equity		570,515,385.19
<u>Real Estate</u>		
RREEF America REIT II	\$	58,937,376.19
Center Square		<u>61,508,944.64</u>
Subtotal Real Estate		120,446,320.83
<u>Fixed Income</u>		
CS Mckee	\$	216,543,596.97
Federated Bank Loans		56,012,321.24
Garcia Hamilton Associates		212,913,218.01
Mackay Shields-High Yield		<u>59,785,960.37</u>
Subtotal Fixed Income		545,255,096.59
Total for Domestic and International Equities		<u>2,355,557,059.16</u>
MARKET VALUE of ASSETS at January 31, 2024	\$	<u>2,365,988,937.63</u>

Respectfully submitted,
David Glasser
David Glasser

David Glasser
Controller

Robert L. Hannay

Robert L. Hannay
Treasury Mgr.

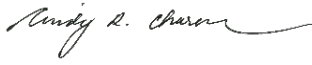
Kevin Ma

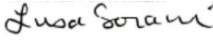
Kevin Ma
Acctg Sys Supvr.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Determination of Retiree Cost of Living Adjustment

ACTION: Adopt Cost of Living Adjustment effective July 1, 2024

RECOMMENDATION

Adopt Resolution authorizing a 3.0% Cost of Living Adjustment (COLA) for retirees, effective July 1, 2024, with 0.7% available to be added to eligible retiree COLA banks.

DISCUSSION

In accordance with Retirement Board Rule C-24, the Retirement System actuary, Segal, has confirmed the annual average Consumer Price Index for All Urban Consumers for the San Francisco-Oakland-Hayward Area (CPI-U) for each of the two immediately preceding calendar years, and has determined the current year COLA as the percentage by which such index for the most recent full calendar year shall have increased or decreased over or below such index for the full calendar year immediately prior to the most recent calendar year. In addition, the Treasury Manager and the Manager of Employee Services have both reviewed and confirmed Segal's calculations.

Pursuant to Section 33 of the Retirement Ordinance, the annual retiree COLA is limited to 3%, unless the Retirement System is funded on a Projected Benefit Obligation (PBO) basis at or above 85%, in which case the maximum COLA is 5%. Effective October 1, 2000 in years when the Retirement System is more than 85% funded on a PBO basis (which allows for up to 5% COLA) and the change in the CPI is less than 4%, withdrawals from the banks can be made to allow COLAs up to 4%.

The ratio of the past two annual average CPI-U as a percentage change is 3.7%. Based on the June 30, 2023 actuarial valuations, the PBO funding ratio of the Retirement System is 75.0%. This ratio does not exceed the 85% threshold. Therefore, the COLA is calculated to be 3.0 % for retirees effective July 1, 2024. Since the change in CPI was 3.7%, eligible retirees will have 0.7% added to their COLA banks.

Adopt Cost of Living Adjustment effective July 1, 2024
Retirement Board Meeting
March 21, 2024

Upon approval of the attached Resolution, the COLA shall be applied to Retirement Allowances effective on July 1, 2024.

Attachments: 1. Resolution - Declaring the Cost of Living Adjustment to be
Effective as of July 1, 2024
2. Segal Letter on July 2024 EBMUDERS COLA

LS:vw

R. B. RESOLUTION NO. 7004

DECLARING THE COST OF LIVING ADJUSTMENT
TO BE EFFECTIVE AS OF JULY 1, 2024

Introduced by: Marguerite Young ; seconded by: Clifford Chan

Whereas, pursuant to Section 33 of the Ordinance, the annual retiree Cost of Living Adjustment (COLA) is limited to 3% unless the Retirement System is funded on a Projected Benefit Obligation (PBO) basis at or above 85%, in which case the maximum COLA is 5%; and

Whereas, based on the June 30, 2023 actuarial valuations, the PBO funding ratio of the Retirement System was 75.0%; and

Whereas, the COLA to be applied effective July 1, 2024 is calculated to be 3.0%, including a 0.7% increase to eligible retiree's COLA banks.

NOW THEREFORE BE IT RESOLVED BY THE RETIREMENT BOARD that Members who retired on or before July 1, 2023 shall receive a 3.0% increase, and their COLA bank, where available, will be increased by up to 0.7%.

BE IT FURTHER RESOLVED that employees who retired after July 1, 2023 will receive a proration of 3.0%, or 1/12 of the full COLA for each full month retired since July 1, 2023.

Any other resolution or parts of resolution in conflict herewith are hereby rescinded and cancelled.



President

ATTEST:



Secretary

3/21/2024



Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary
T 415.263.8283
ayeung@segalco.com

180 Howard Street
Suite 1100
San Francisco, CA 94105-6147
segalco.com

Via Email

January 22, 2024

Ms. Sophia Skoda
Director of Finance
East Bay Municipal Utility District
375 11th Street
Oakland, CA 94607-4240

**Re: East Bay Municipal Utility District Employees' Retirement System (EBMUDERS)
Cost-of-Living Adjustments (COLA) as of July 1, 2024**

Dear Sophia:

We have determined the cost of living adjustment for retirees effective July 1, 2024 in accordance with Section 33 of the Employees' Retirement System Ordinance.

Pursuant to our understanding of the Ordinance, the cost of living adjustment to be used by the System each July 1 is determined by the change in the Consumer Price Index for All Urban Consumers (CPI-U) for the San Francisco-Oakland-Hayward Area¹ as published by the Bureau of Labor Statistics, for each of the two immediately preceding calendar years (i.e., the annual average CPI). The ratio of the past two annual average CPI, 339.050 in 2023 and 327.060 in 2022,² is 1.037 and the resulting percentage change (rounded to the nearest one-tenth of one percent) is 3.7%.

Under Section 33 of the Ordinance, the annual retiree COLA is limited to 3%, unless the Retirement System is funded on a Projected Benefit Obligation (PBO) basis at or above 85%, in which case the maximum COLA is 5%. This funding measure is defined as the ratio of the market value of assets to the PBO. Any excess of the change in the CPI above the maximum COLA is accumulated in individual retiree COLA banks. Withdrawals from the COLA banks can be made in years when the change in the CPI is less than 3%. We further understand that, effective October 1, 2000, in years when the Retirement System is more than 85% funded on a PBO basis (which allows for up to 5% COLA) and the change in the CPI is less than 4%, withdrawals from the banks can be made to allow COLAs up to 4% (not up to 5%).

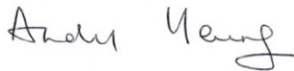
¹ We note that reference was made to the change in the Consumer Price Index in the San Francisco-Oakland Metropolitan Area in the Ordinance, but such Index is now only available for the San Francisco-Oakland-Hayward Area from the Bureau of Labor Statistics.

² Source: <https://data.bls.gov/timeseries/CUURS49BSA0>

Based on the June 30, 2023 actuarial valuations, the PBO funding ratio of the Retirement System as a whole (including both the Pension and Health Plans) was 73.6%, while the PBO funding ratios for each of the Pension and Health Plans were 75.0% and 44.2%, respectively. Accordingly, the maximum COLA payable effective July 1, 2024 is 3.0%. Since the change in the CPI mentioned above was 3.7%, this means that 0.7% is available to be added to each eligible retiree's COLA bank as of July 1, 2024. For retirees who retired (or Members who died, leaving an eligible beneficiary) less than one full year before July 1, 2024, the 3.0% maximum COLA is to be prorated by one-twelfth of 3.0% for each full calendar month between the date of retirement (or date of death) and July 1, 2024.

Please give us a call if you have any questions.

Sincerely,



Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary

bts/hy

cc: Steven Goodman-Leibof
Robert Hannay
Lisa Sorani

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Extend Proxy Voting Agreement with Glass Lewis

RECOMMENDATION

Extend the Proxy Voting Agreement with Glass Lewis for three years through December 31, 2027.

BACKGROUND

Since 2017, Glass Lewis has provided proxy voting services to the Retirement System under a Proxy Voting Agreement. The Agreement, as amended, has an expiration date of December 31, 2021, with three one-year options to extend. The Retirement System has exercised its final one-year option, extending the agreement through December 31, 2024. Glass Lewis has offered to renew the Agreement with the Retirement System for three years, through December 31, 2027. Under the renewal offer, Glass Lewis’ annual fee would increase, bringing it in line with current market rates as confirmed by Meketa.

The original Agreement established in 2017 had an annual fee of \$19,856. In 2019, the fee was lowered to \$17,430 to incorporate a lower level of voting after portions of the Retirement System portfolio were transitioned to passive investments. The new annual fee proposed for 2025 is \$22,938, represents a 16 percent increase over the original fee and a 32 percent increase over the 2019 reduced fee. While this is a significant increase, it represents a 2.1 percent annual growth rate since executing the agreement in 2017 and a 5.6 percent annual growth rate since the fee was lowered in 2019.

The renewal proposal includes a 5 percent increase in the annual fee for 2026 and 2027. The table below summarizes the fee proposal.

Year	Annual Fee
2025	\$22,938
2026	\$24,084
2027	\$25,289

Extend Proxy Voting Agreement with Glass Lewis

March 21, 2024

Page 2

Glass Lewis has provided a high level of service to the Retirement System since 2017. In addition to conducting proxy voting services, Glass Lewis has made senior staff available to present to the Retirement Board on an annual basis. Staff recommends continuing its engagement with Glass Lewis by extending the Agreement for three years.

SDS:RLH

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Select Retirement System Actuary

RECOMMENDATION

This item will cover two actions related to the RFP for actuarial services:

- A. Accept recommendation from the Ad Hoc Committee on the selection of two finalists from the request for proposals (RFP) for actuarial services for further interviewing and selection; and
- B. Select the Retirement System's actuary from the two finalists.

BACKGROUND

The Retirement System's actuarial consulting agreement with Segal Group, expires on April 7, 2024. In anticipation of this expiration, staff initiated an RFP for actuarial services which was released on January 8, 2024 and closed on February 5, 2024. Four proposals were received under the RFP. The Ad Hoc Committee established by the Retirement Board has selected two finalists: The Segal Group (Segal) and Cheiron Inc. (Cheiron). The finalists have been invited to the March 21, 2024 Retirement System meeting and should the Retirement Board accept the recommendations, the finalists will present to the Board at the meeting. After the presentations, the Retirement Board will select the Retirement System's actuary.

Ad Hoc Committee Recommendation

At its June 20, 2023 meeting, the Retirement Board took action to create an Ad Hoc Committee consisting of two Retirement Board members to work with staff on actuarial proposal reviews and to make a recommendation of finalists to the Retirement Board to interview. The Ad Hoc Committee is recommending two finalists for further interview, Segal and Cheiron. The firms have been invited to present at the March 21, 2024 Retirement Board meeting upon Board acceptance of staff's recommendation.

The Ad Hoc Committee discussed and evaluated each proposal based on the RFP criteria. Staff reached out to references to assess each firm's relationship with its clients and the quality of work provided. While all four of the proposals were strong, Segal and Cheiron were selected due to their ability to demonstrate an understanding of the needs and general approach and philosophy of the Retirement System, strong external references, considerable experience with

similar systems and the experience and strength of the proposed team. Below are the evaluation criteria that were used to select the finalists:

	Evaluation Criteria
A.	Experience and Professionalism of the Proposer and the Proposer’s Lead Actuarial Team. (20%) Strength of experience in providing actuarial services for public pension systems; Demonstration of expertise in/knowledge of the proposed team in providing the scope of services and value-add;
B.	Understanding of Public Pensions and EBMUDERS Approach and Needs. (20%) Understanding of the Retirement System and its needs and deliverables. Communication skills including clarity, completeness and organization. Demonstration of the ability to deliver actuarial concepts in understandable terms.
C.	Cost (20%) Evaluation of the relative cost and value indicated in the proposed fee as well as reasonableness of fees. Proposals should include details of costs associated with the scope of service contained in this RFP
D.	References from Similar Agencies (10%)
E.	Contract Equity Program (10%)
F.	Minimum Qualifications and Mandatory Elements (20%) The proposer meets the minimum qualifications stated in the RFP and has no conflict of interest with regard to any other work performed for any other clients.

Actuary Finalist Interviews and Selection

Upon acceptance of the Ad Hoc Committee’s recommendation, finalists, Segal and Cheiron, will give brief presentations to the Retirement Board and will each field questions that arise. Once each of the firms has had a chance to present, the Retirement Board will discuss and vote for one of the firms to be selected as the Retirement System’s actuary for the next several years. Staff will then work on a contract with the selected team.

Segal

Segal currently serves as the Retirement System’s actuary under a consulting agreement for actuarial services originally executed in 2007. Segal is a benefits, compensation and human resources consulting firm founded in 1939 with 1,099 employees throughout the US and Canada. Segal has worked with pension and other post-employment benefits (OPEB) plans across the country and Canada for more than 70 years and has extensive experience in California working with 12 1937 act counties throughout the state, City of Los Angeles Retirement System and the Los Angeles Department of Water and Power retirement system. Segal has experience with plans in and around the Bay Area with similar demographics and wage demands which provides a good background for working with the Retirement System. Segal has a detailed process that involves several steps of review before the client receives their reports to ensure the accuracy of the work before client review. Segal’s sample reports are logical and easy to read and explain complex information in a simple manner, while the graphs related to the unfunded actuarial liability balances and payments are very helpful to visualize the amortization period. Segal’s general philosophy is well suited to the careful and deliberate approach of the Retirement Board.

Cheiron

Cheiron is an independent employee-owned firm founded in 2002 as solely an actuarial consulting firm with 104 employees nationwide. The firm was founded with the directive to help its clients manage and mitigate risks. Cheiron works with pension and OPEB plans across the country, and has extensive experience in California working with San Francisco, San Jose, San Diego, Modesto Irrigation District and Metropolitan Water District of Southern California. Cheiron has experience working with several systems in and around the Bay Area that have similar demographics, wage demands and healthcare costs that should provide good context for working with the Retirement system. Additionally, Cheiron has had a history of working creatively with plans to develop assumptions and funding models to achieve specific goals. Cheiron’s reports are well thought out and easy to read with helpful graphics. Cheiron has worked with previous clients to develop interactive presentations that can help boards, employees, unions and other interested parties understand actuarial concepts and how they relate to the plan.

Cost Comparison (Based on Proposals)

Work Product	Segal	Cheiron
Valuation Reports (Pension and HIB)	\$105,000	\$65,000
Quadrennial Experience	\$44,000	\$40,000
Quadrennial Economic	\$22,000	\$8,000
GASB 67	\$8,050	\$15,000
GASB 68	\$13,750	\$10,000
GASB 74	GASB 74 & 75 are combined in this proposal	\$15,000
GASB 75		\$10,000
Total:	\$207,300	\$163,000

Hourly Rates:

Segal	
Senior Consultant	\$555
Junior Consultant	\$367

Cheiron	
Principal Consulting Actuary	\$415-\$530
Consulting Actuary	\$300-\$509
Associate Actuary	\$218-\$333
Senior Actuarial Analyst	\$199-\$256
Actuarial Analyst	\$165-\$218
Administrative Assistant	\$124-\$164

SDS:RLH:SGL

Attachments: Segal Presentation
 Cheiron Presentation



East Bay Municipal Utility District Employees' Retirement System

Actuarial Services

March 21, 2024

Andy Yeung, ASA, MAAA, FCA, EA | Deanna Van Valer, ASA, MAAA, FCA, EA
Dirk Adamsen | Mehdi Riazzi, FSA, MAAA, FCA, EA

Segal and Your Team



Consulting team



Andy Yeung, ASA, MAAA, FCA, EA
Vice President,
Actuary



Deanna Van Valer, ASA, MAAA, FCA, EA
Vice President,
Actuary



Dirk Adamsen
Associate Actuarial
Consultant



John Calcagno, ASA, MAAA
Associate Actuarial
Consultant



Benjamin Schmidt
Senior Actuarial
Associate



Mehdi Riazi, FSA, MAAA, FCA, EA
Vice President and
Consulting Actuary



Mary P. Kirby, FSA, FCA, MAAA
Senior Vice President
and Consulting Actuary



Myrna Francisco, ASA, MAAA, EA
Actuary



Vivian Caruso
Associate Consultant



Thien Tran
Actuarial Associate



Melanie Beth Walker, JD
Senior Vice President,
National Compliance
Practice

“Having the right partner...who is committed to creating something outstanding makes all the difference.”

Segal at a Glance

National, private, employee-owned consulting firm

2,500+

clients count on Segal

98%

client retention rate

1939

year founded

Some
relationships span
60+ years

Support over
15+ million
lives globally

Consulting for over nearly 500
public sector plans including
**120+ retirement
clients**

Our History with EBMUDERS



- In 2012, Segal assisted EBMUDERS in drafting Statement of Actuarial Funding Policy, tightening 30-year amortization period for recognizing gains/losses (to 20 years) and assumption changes (to 25 years). In 2022, amortization period for assumption changes further tightened to 20 years.
- During our tenure, Segal assisted EBMUDERS in adopting investment return and other assumptions to better reflect System's experience even though contribution rate requirements were increased.

Segal is the architect of responsive and cost-effective solutions and is prepared to meet EBMUDERS' evolving needs.

Why Segal



Segal and EBMUDERS



Knowledge about EBMUDERS

Your actuarial team has a 16-year track record of being accessible, dependable, innovative, and responsive.



Top Actuarial Service Provider in California

Segal serves more California public retirement plan clients compared to our competitors



National perspective

Our extensive client experience enables us to address the unique characteristics of your plans and membership and draw from our broad national public pension and OPEB experience.



Pragmatic Approach to Actuarial Consulting

Segal will continue to recommend improvements of parameters and assumptions used in funding while managing cost impact.

The Premier California Pension Firm

100% Pension Client Retention Rate

EBMUDERS' actuary since 2007

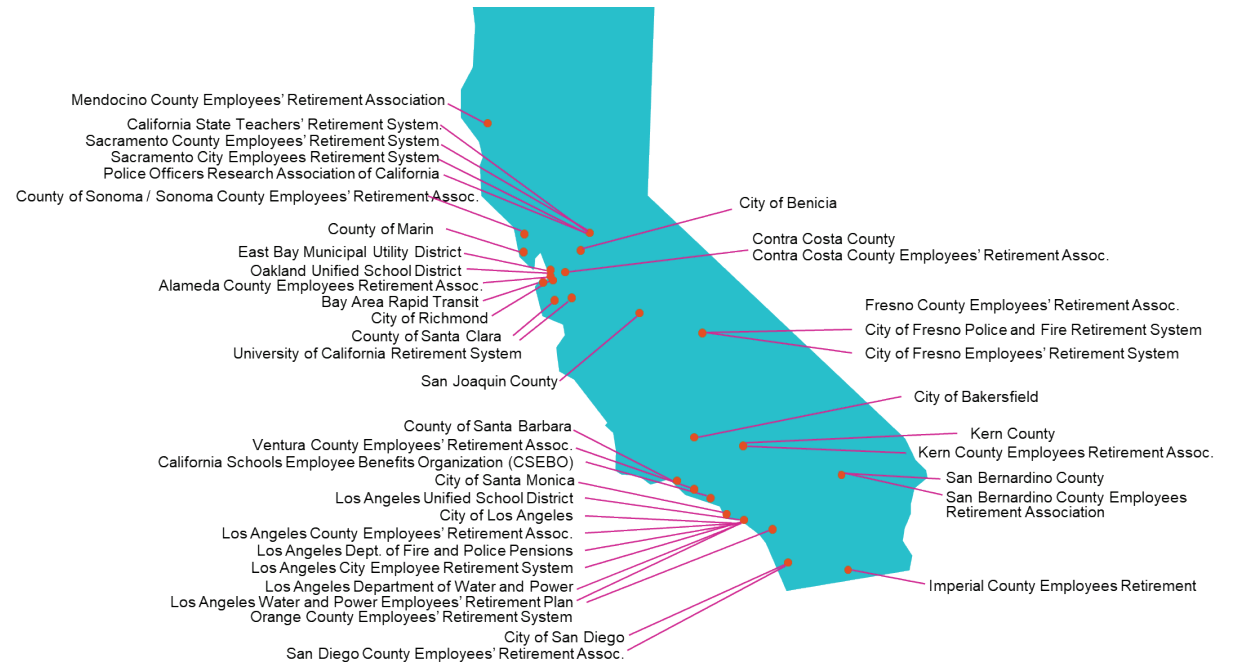
12 1937 Act County Plans – Including Alameda and Contra Costa

Los Angeles Department of Water & Power

City of Los Angeles (2 plans) and City of Fresno (2 plans)

County of Santa Clara – OPEB and University of California

Segal and the California Public Sector



Quality Control



Fee Structure and Additional Considerations



Fee Structure

Projects and Proposed Fee Schedule

Retirement System Consulting

		5-Year Agreement					5-Year Total
		2024 / 2025	2025 / 2026	2026 / 2027	2027 / 2028	2028 / 2029	
C1	Consulting and Advisory Services (as needed on hourly rates basis, assuming 30 to 40 hours each year)	\$15,000	\$15,500	\$16,000	\$16,500	17,000	\$80,000
C2a, C2b	Pension & HIB Funding Valuations	\$105,000	\$108,000	\$111,000	\$114,000	\$117,000	\$555,000
C2f	Financial Reporting Information: GASB 67 Valuation	\$8,050	\$8,200	\$8,350	\$8,500	\$8,650	\$41,750
C2f	Financial Reporting Information: GASB 68 Valuation	\$13,750	\$14,000	\$14,250	\$14,500	\$14,750	\$71,250
C2f	Financial Reporting Information: GASB 74 Valuation (Incl. in 2 nd item)	\$0	\$0	\$0	\$0	\$0	\$0
C2f	Financial Reporting Information: GASB 75 Valuation	\$14,500	\$14,750	\$15,000	\$15,250	\$15,500	\$75,000
C2c	Quadrennial Experience Analysis Study	\$44,000				\$49,000	\$93,000
C2d	Quadrennial Economic Assumptions Study			\$22,000			\$22,000
C2e	415b Benefit Calculations (as needed on hourly rates basis, assuming 40 to 50 hours each year)	\$19,000	\$19,500	\$20,000	\$20,500	\$21,000	\$100,000
C2g	Annual Comprehensive Financial Report	\$5,000	\$5,250	\$5,500	\$5,750	\$6,000	\$27,500
C2h	Annual Cost of Living Determination	\$1,000	\$1,000	\$1,050	\$1,050	\$1,100	\$5,200
C2i	As needed studies (on hourly rates basis)						
Total Annual		\$225,300	\$186,200	\$213,150	\$196,050	\$250,000	\$1,070,700

Fee Structure

Projects and Proposed Fee Schedule

Retirement System Consulting

5 Optional One-Year Extensions

		2029 / 2030	2030 / 2031	2031 / 2032	2032 / 2033	2033 / 2034	Total
C1	Consulting and Advisory Services (as needed on hourly rates basis, assuming 30 to 40 hours each year)	\$17,500	\$18,000	\$18,500	\$19,000	\$19,500	\$92,500
C2a, C2b	Pension & HIB Funding Valuations	\$120,000	\$123,000	\$126,000	\$129,000	\$132,000	\$630,000
C2f	Financial Reporting Information: GASB 67 Valuation	\$8,800	\$8,950	\$9,100	\$9,250	\$9,400	\$45,500
C2f	Financial Reporting Information: GASB 68 Valuation	\$15,000	\$15,250	\$15,500	\$15,750	\$16,000	\$77,500
C2f	Financial Reporting Information: GASB 74 Valuation (Incl. in 2 nd item)	\$0	\$0	\$0	\$0	\$0	\$0
C2f	Financial Reporting Information: GASB 75 Valuation	\$15,750	\$16,000	\$16,250	\$16,500	\$16,750	\$81,250
C2c	Quadrennial Experience Analysis Study				\$54,000		\$54,000
C2d	Quadrennial Economic Assumptions Study		\$24,000				\$24,000
C2e	415b Benefit Calculations (as needed on hourly rates basis, assuming 40 to 50 hours each year)	\$21,500	\$22,000	\$22,500	\$23,000	\$23,500	\$112,500
C2g	Annual Comprehensive Financial Report	\$6,250	\$6,500	\$6,750	\$7,000	\$7,250	\$33,750
C2h	Annual Cost of Living Determination	\$1,100	\$1,150	\$1,150	\$1,200	\$1,200	\$5,800
C2i	As needed studies (on hourly rates basis)						
Total Annual		\$205,900	\$234,850	\$215,750	\$274,700	\$225,600	\$1,156,800

Additional Consideration for Projects not Covered by RFP

- Consider separate risk analysis report
- Consider out-of-cycle economic assumptions review between quadrennial experience study on as-needed basis
- Consider assistance with new pension administration system

Questions?

Andy Yeung, ASA, MAAA, FCA, EA

Vice President, Actuary

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**East Bay Municipal Utility District
Employees' Retirement System**

**Cheiron Presentation for
Actuarial Services**

March 21, 2024

Cheiron was incorporated as a C-corporation in the **State of Delaware** in **September 2002** and began providing actuarial consulting services to institutional clients in **November 2002**. Our founding partners **2/15** worked at one of the nation's largest actuarial consulting firms and vigorously objected to the push to require plans to accept liability limits for their work. Rather than compromise their principles, our founders quit their jobs and established Cheiron as an employee-owned firm.



Cheiron has more than 110 employees, with approximately 2/3 being credentialed actuaries.

■ Pension ■ Health ■ Pension-Health ■ Non-Actuarial Staff



The senior actuarial staff members assigned to EBMUD are shown below. Graham Schmidt and Anne Harper are both members of the [California Actuarial Advisory Panel](#). Click on each individual's card to open their full bio in a new browser tab. **4/15**

EBMUD Team

Role ■ Co-Lead Consultant ■ Project Manager ■ Co-Lead Health Consultant ■ Project Manager (Health) ■ Lead Analyst

Graham Schmidt
Principal Consulting Actuary



Years of Experience: 25
Years with Cheiron: 11
Office Location: Lafayette, CA
Credentials: FSA (Society of Actuaries), FCA (Conference of Consulting Actuaries), EA (Joint Board for Enrolled Actuaries), MAAA (Academy of Actuaries)

Anne Harper
Principal Consulting Actuary



Years of Experience: 28
Years with Cheiron: 17
Office Location: San Diego, CA
Credentials: FSA (Society of Actuaries), EA (Joint Board for Enrolled Actuaries), MAAA (Academy of Actuaries)

Heather Fantz
Consulting Actuary




Years of Experience: 14
Years with Cheiron: 10
Office Location: Portland, OR
Credentials: FSA (Society of Actuaries), EA (Joint Board for Enrolled Actuaries), MAAA (Academy of Actuaries)

Margaret Tempkin
Principal Consulting Actuary




Years of Experience: 25
Years with Cheiron: 21
Office Location: Washington, DC
Credentials: FSA (Society of Actuaries), EA (Joint Board for Enrolled Actuaries), MAAA (Academy of Actuaries)

Elisabeth Mercer
Consulting Actuary



Years of Experience: 17
Years with Cheiron: 16
Office Location: Mount Laurel, NJ
Credentials: FSA (Society of Actuaries), EA (Joint Board for Enrolled Actuaries), MAAA (Academy of Actuaries)

Stephen Giordano
Associate Actuary



Years of Experience: 15
Years with Cheiron: 0.5
Office Location: Mount Laurel, NJ
Credentials: FSA (Society of Actuaries), FCA (Conference of Consulting Actuaries), MAAA (Academy of Actuaries)

Sarah Lavoie
Senior Actuarial Analyst



Our experience in working with California public plans is a key strength for this proposal. We have provided actuarial services to over a dozen independent pension and OPEB systems in California, most of which are members of CALAPRS, similar to EBMUD. Click on each of the systems below for some information on each plan.

Other California Public System (Click Circle for Details)

- AC Transit
- Golden Gate Transit
- Metropolitan Water District
- Modesto Irrigation District
- Oakland Police and Fire
- Sacramento Regional Transit
- San Jose Police and Fire
- San Jose Federated
- San Diego CERS
- San Diego Transit
- San Francisco
- San Luis Obispo County
- Valley Transit Authority



We are either currently providing or have provided actuarial services to all 20 of the State Association of County Retirement System (SACRS) plans, either as the auditing actuary, system actuary or employer actuary. **6/15**
actuary. Hover over each of the counties below for a description and history of the services performed.

1937 Act County System Client Relationships

All Clients Auditing Actuary Employer Actuary System Actuary

System Actuary Auditing Actuary Employer Actuary



Below is a database of current public sector clients for whom we serve as the valuation actuary, including the date of hire, asset size, and membership. The buttons below can be used to select between **all public sector clients**, or filter on the **single** and **multi-employer** plans. Plan types (state, county, city, etc.) can be selected and deselected by clicking on entries in the legend.

Public Sector Clients

All

Multi Employer

Single

Type ■ State ■ County ■ City ■ Transit ■ Agency ■ Federal



State Teachers Retirement System of Ohio
5/29/2018

Asset Size:
\$74,916,301,830
Participants:
515,960
Type: State



State of New Jersey Division of Pensions and Benefits
8/1/2018

Asset Size:
\$76,924,788,947
Participants:
456,000
Type: State



Maine Public Employees Retirement System
3/1/2005

Asset Size:
\$15,075,604,606
Participants:
155,822
Type: State



Delaware Public Employees Retirement System
6/1/2006

Asset Size:
\$9,696,899,100
Participants: 72,767
Type: State



City and County of San Francisco Employees Retirement System
7/1/2008

Asset Size:
\$22,410,000,000
Participants: 70,004

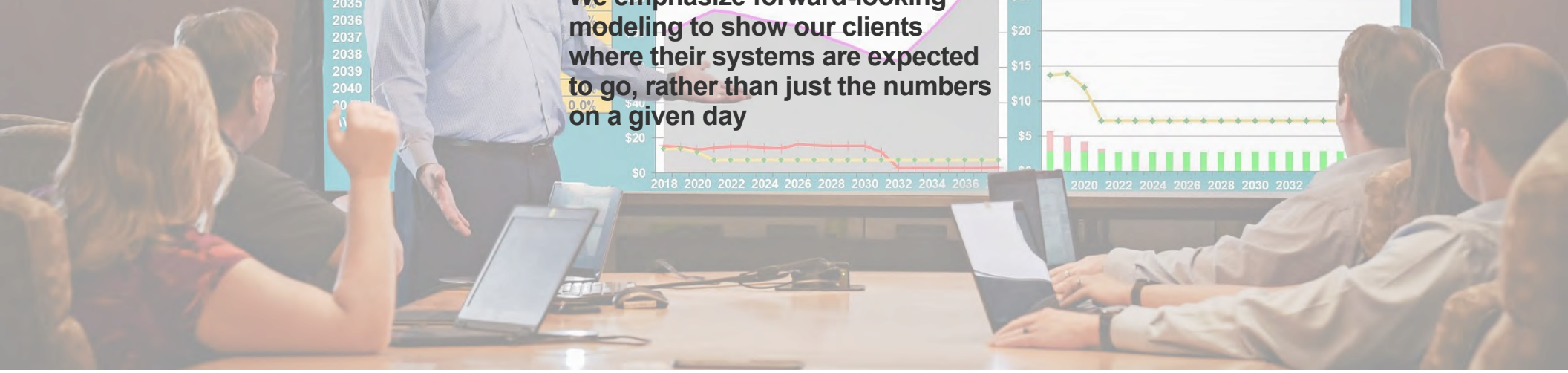


City of Philadelphia Municipal Retirement System
8/7/2007

Asset Size:
\$4,872,977,000
Participants: 66,321
Type: City

Fairfax County Retirement Systems
7/1/2003

Asset Size:
\$7,399,044,443
Participants: 32,797
Type: County

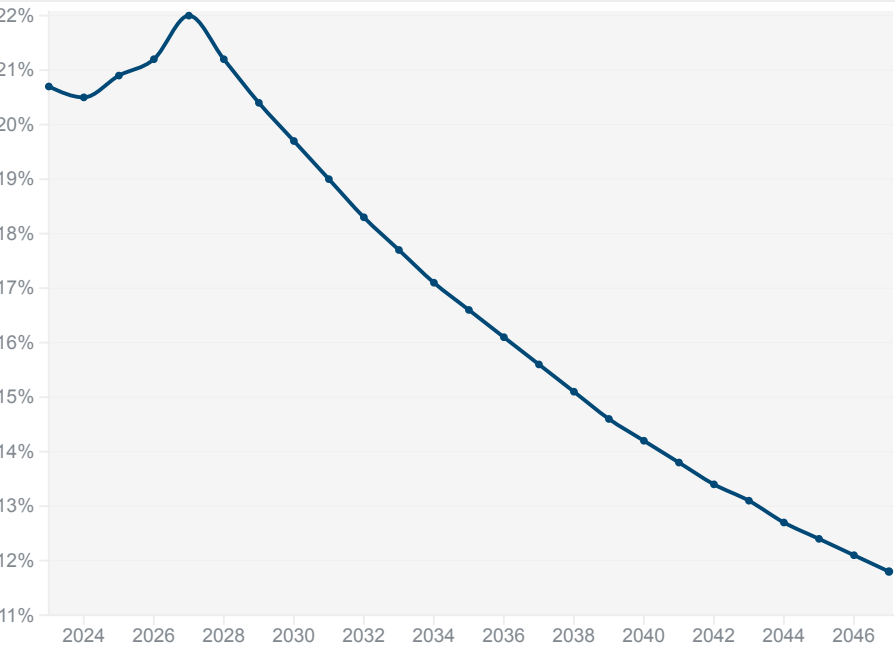


To achieve this, we include projections of cost and funded status in our actuarial valuations at no additional charge. We also use a live modeling tool based on the same platform (R-Scan), which can be used **9/15** to modify the baseline scenarios and instantly review the expected impact on funding and contributions, as can be seen by clicking on the grayed-out selections within the legend. We can also provide clients with online access to these tools.

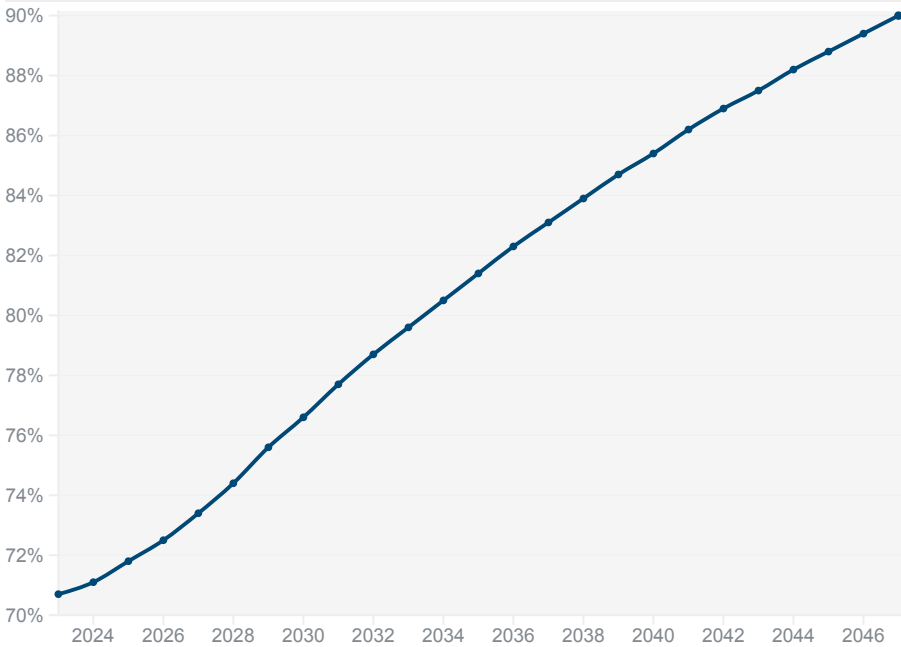
Metric: **Contribution and Funded Status** ▾

■ Baseline 2023 ■ Actual Return for 2023 ■ Actual 2023 Return, Updated Amortization

Employer Contribution Rate



Funded Ratio

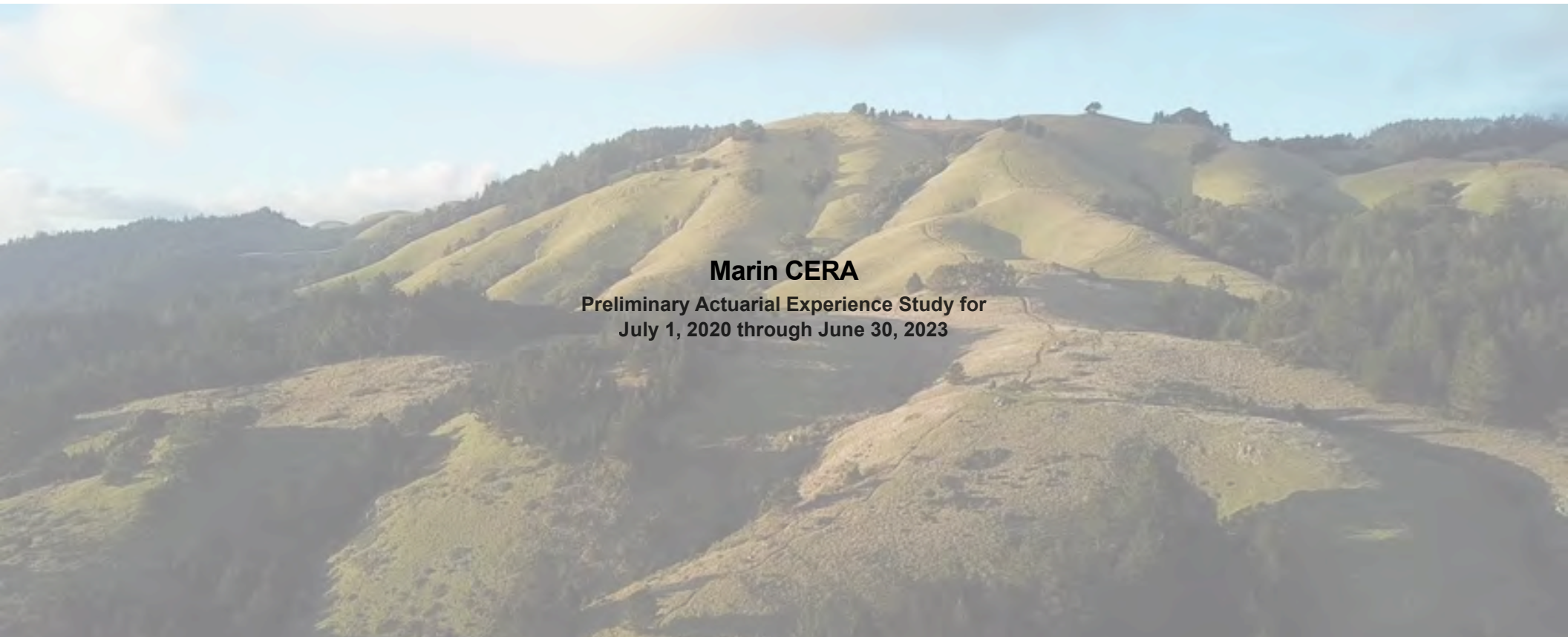


Our written proposal includes a sample of a traditional valuation report prepared by Cheiron. However, we invite you to review this [link](#), which provides a sample of a fully interactive online valuation report. We note that these reports can also be imbedded on your own website, as shown [here](#).



Stanislaus County Employees'
Retirement Association (StanCERA)

Actuarial Valuation as of
June 30, 2023



Marin CERA

**Preliminary Actuarial Experience Study for
July 1, 2020 through June 30, 2023**

We also pride ourselves on our clear communications and our ability to assist Board members in understanding complicated technical issues. Our consultants are frequently asked to provide actuarial education to Boards and other audiences. As an example, we invite you to review [this presentation](#) Graham Schmidt recently made at the SACRS Public Pension Investment Management course at UC Berkeley.



Liabilities, Assumptions and Forecasting

State Association of County
Retirement Systems

Public Pension Investment Management Symposium

July 17, 2023

Graham Schmidt

Gregory La Blanc

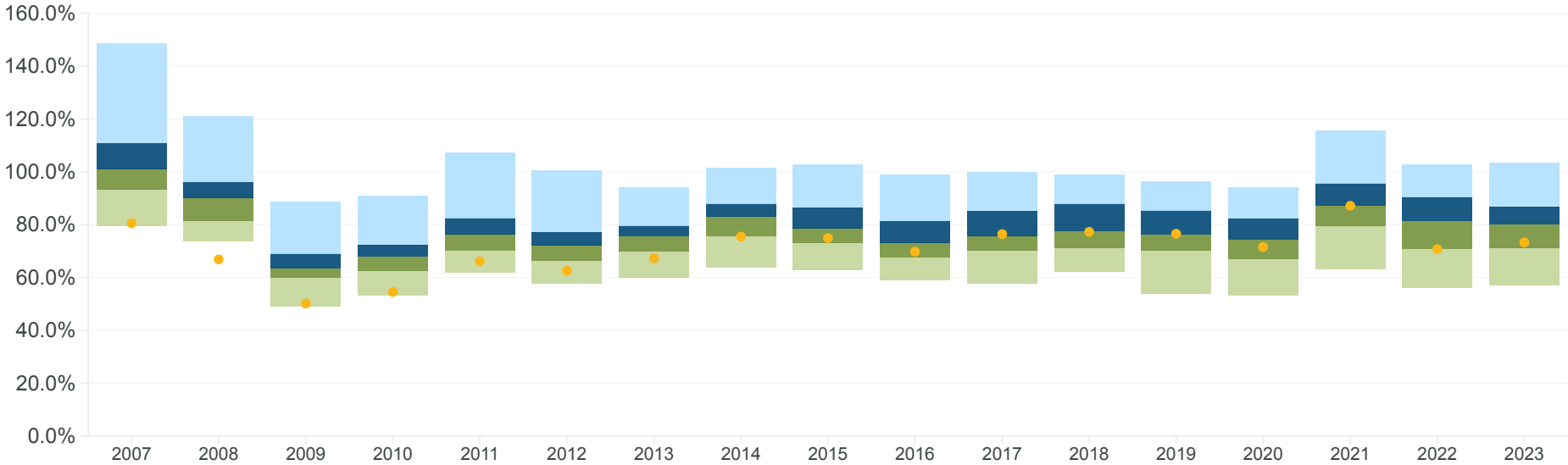
We recognize that it is important to review metrics such as funded status over time, instead of just focusing on a single snapshot in time. To facilitate this process, we have developed a publicly available tool that allows users to review historical measures for a single plan from selected databases of public plans *and* see how they compare to other plans. Below we show a multi-year history of funded status for EBMUD, along with a comparison to other CALAPRS systems. Other plans can be selected from the orange drop-down menu. We also maintain a version of this tool, including numerous other metrics, for the Public Plan Database on our website [here](#).

Distribution of Market Funded Ratios

Market Funded Ratio = Market Value of Assets / Actuarial Liability

Gold dot = **East Bay Municipal Utility District** ▾

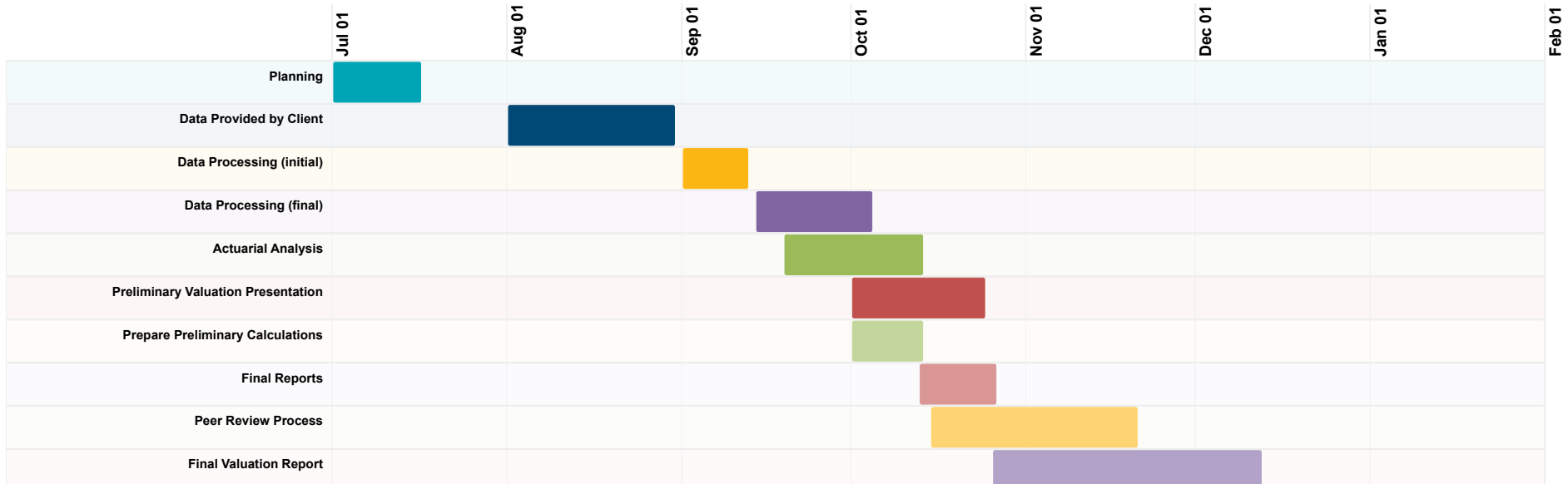
Percentiles of Distribution 5th to 25th 25th to 50th 50th to 75th 75th to 95th



Here is the timeline and methodology we follow for another similar California public plan with a June 30th valuation date served by the same pension team proposed for EBMUD. You can filter by the different work products, or click on each step in the process to view a detailed description of the item and the level of involvement required from the client.

Project Methodology and Timeline

Select Work Product All Annual Actuarial Report GASB 67-68 Reports Annual COLA





EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2023

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources *Cindy S. Charan*

FROM: Valerie Weekly, Principal Management Analyst *Valerie Weekly*

SUBJECT: PensionGold (LRS) Implementation Project Update

SUMMARY

This memo is the regular status update for the PensionGold (LRS) implementation project.

DISCUSSION

The project team continues to make progress. The team is working with the pension vendor to finalize the design documents for Software Deliverable Two: Pension Calculation. The documents are being reviewed promptly and the vendor is incorporating the team's feedback promptly, as well. All eight design documents have been reviewed, with only one awaiting signoff.

The team continues to work through outstanding data conversion issues from Software Deliverable One. We are making updates to PeopleSoft HR data that affect retirement calculations and HRIS has completed a requested data correction. Certain of the requested data corrections require review and confirmation from additional HR, Budget, or Finance team members which requires the Functional SMEs to work with these groups for agreement ahead of making changes. We look forward to working productively with HRIS staff on the remaining and any future data correction issues. We continue to track omissions and needed clarifications to retirement plan ordinance as we progress through the calculation deliverable. Finally, we have begun engaging Finance regarding payroll/AP/GL integration.

CURRENT ACTIVITIES

Pension Phase

- Implementing Classic and PEPRA calculation;
- Creating supporting correspondence for Classic and PEPRA calculation;
- Continuing data conversion and clean-up;
- Continuing work on HR extract file to PensionGold;
- Engaging Finance for future software deliverables.

HCM Phase

- The project team is not performing any HCM-related work unless it impacts the Pension Phase; they are focusing their attention on the Pension phase as directed by the Steering Committee.

STAFFING

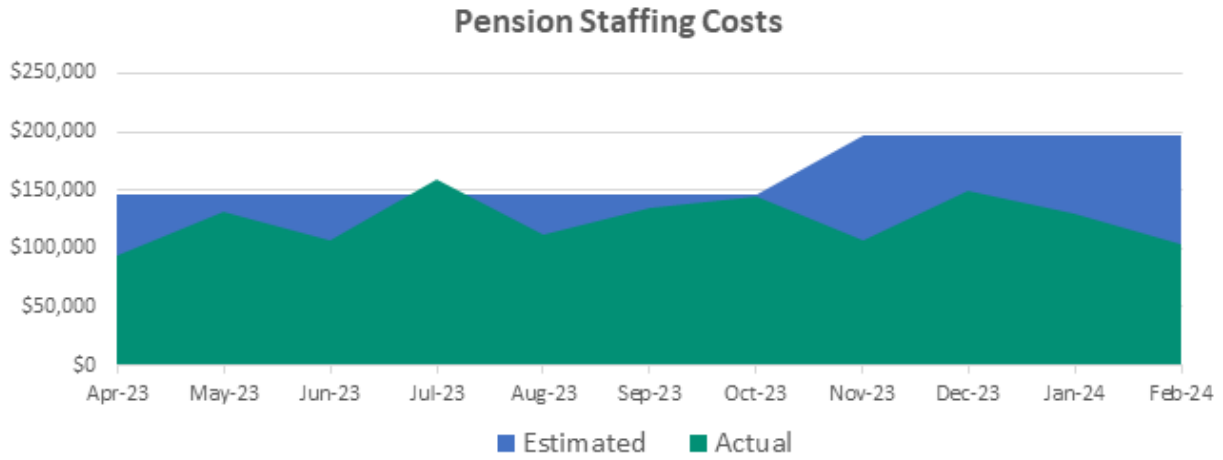
- On-boarded a new full-time technical resource, mitigating the need for borrowed technical resources;
- The recruitment for the Product Owner role is proceeding.

PLANNED ACTIVITIES FOR MARCH

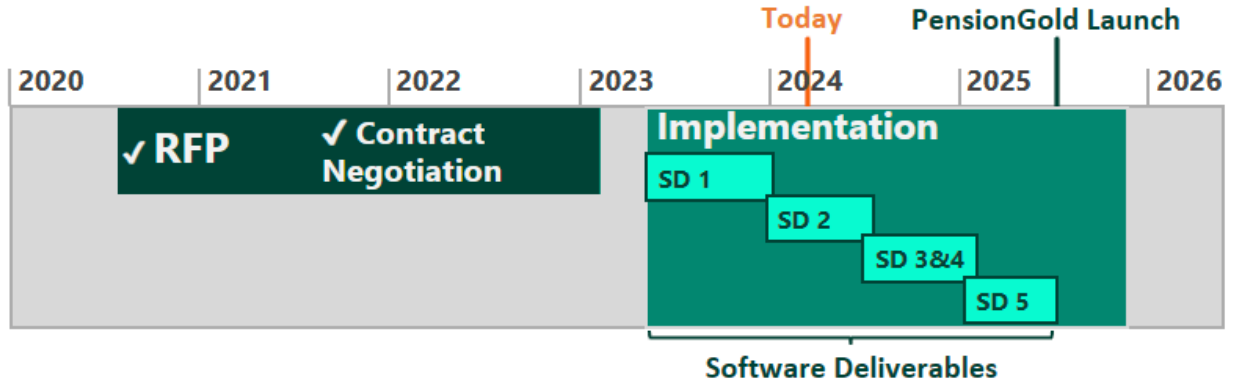
- Complete design document review for Software Deliverable Two.
- Evaluation of potential PensionGold customizations;
- Draft test scripts based on the test cases in our requirements traceability matrix; this activity is constrained by available time and other priorities;
- Continue work on the HR-PensionGold reporting file development;
- Continue work related to pre-1999 service for data conversion;
- Participate in data conversion meetings;
- Continue to identify problematic pension data areas and recommend corrections from functional SMEs;
- Work with the HRIS, Employee Benefits, and Retirement Services staff in operational-level data cleanup tasks;
- Development of future state business processes on the new platform as well as additional cross platform business processes (for example: Plan Transfers). This work is time and resource constrained.

BUDGET UPDATE

Total Funding	February Costs	Balance	
HRIS Capital \$11,575,000	\$ 0	\$5,806,000	No capital budget activity
Retirement \$10,500,000	\$ 104,000 + \$ 95,000 FAAZ adjustment	\$7,440,588	Staffing costs. FAAZ costs were not reported for the for Nov - Jan. This has been corrected.



SCHEDULE UPDATE



NEXT STEPS

Project staff are happy to answer any questions from the Retirement Board.

CC:vw

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: January 18, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources *Cindy S. Charan*

FROM: Valerie Weekly, Principal Management Analyst *Valerie Weekly*

SUBJECT: Update on the PensionGold (LRS) Implementation Project

SUMMARY

This memo provides an update on the project milestones and deliverables for the PensionGold (LRS) Implementation Project. At the September 21, 2023 meeting, the Board requested that additional metrics be included in quarterly reports. The report below has been updated to accommodate that request.

Retirement Administration System Milestones and Updates

This project has six remaining milestones. Five milestones are associated with the delivery of the following five software deliverables. A software deliverable adds specific functionality to the system.

1. Member account, service purchase, and employer reporting
2. Pension benefit calculations and estimates
3. Pension benefit payroll
4. Pension benefit administration
5. Year-end processing, general ledger, security, and web portal

The sixth milestone is the successful delivery of the product.

- The project team and Retirement Services are finishing the last two of twenty requirements confirmation tests for PensionGold Software Deliverable One. The team will then move on to executing internally-developed test cases to ensure that the system meets our needs.
- We are working to introduce the following efficiencies based on our experience with Software Deliverable One (Are deliverables ones and twos phases or milestones?) How many deliverables are there in total, we may want to elaborate this on the front end before we introduce the different level of deliverables so that the Retirement Board understands):
 - The team has begun meeting with the vendor to discuss Software Deliverable Two ahead of schedule.
 - We have asked the vendor to send us Software Deliverable Two design documents to review as they become available, rather than giving them to us all at once.

- We are working with the vendor to combine software deliverables three and four. Software Deliverable Three focuses on pension payroll and Software Deliverable Four focuses on pension administration.
 - We are researching and participating in the data conversion process and assisting the vendor in their analysis of pension data.
 - Working on the integration transmittal file which will regularly update PensionGold with PeopleSoft data.
 - Prioritizing and identifying problematic pension data areas and proposing solutions to functional SMEs for their evaluation and correction.
- The recruitment for the new permanent Product Owner position is still in the initial stages.
- A Senior Software Engineer (PeopleSoft HRIS Developer) (Temporary Construction) position is in the final stages of the recruitment. This will be a dedicated technical resource for the project.

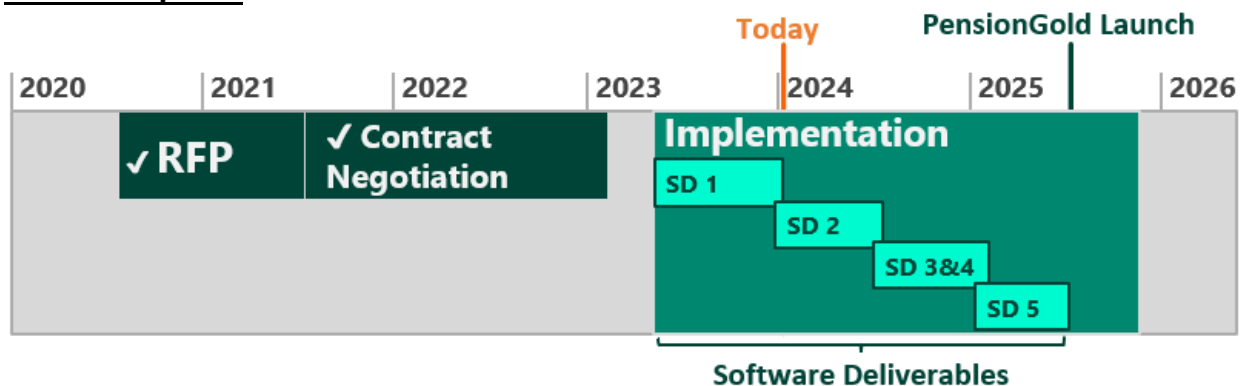
Budget Update:

Costs since January 1, 2023

Project Costs	Actual	Estimate	Variance
Total funding	\$10,500,000		
Staffing costs	\$1,141,000	\$1,236,000	\$95,000
Contracting costs	\$311,000	\$372,000	\$61,000
Vendor costs	\$1,407,000	\$1,407,000	\$0
Balance	\$7,641,000	\$7,485,000	\$156,000

We are currently \$156,000 under budget due to lower-than-expected staffing costs. This is not impacting the project schedule.

Schedule Update:



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Meketa Performance and Economic Review

SUMMARY

Under section III, part D of the Retirement System's Statement of Investment Policy and Procedures (the Investment Policy), the Retirement System's investment consultant is required to present quarterly performance reports to the Board. The attached report from the Retirement System's investment consultant, Meketa, provides information on portfolio performance through December 31, 2023.

DISCUSSION

The Retirement System's portfolio had a market value of \$2.36 billion as of December 31, 2023 – up from \$2.18 billion at the end of the third quarter. The portfolio return was 8.8 percent for the fourth quarter of 2023. Over a one-year period, the portfolio had a return of 15.3 percent, slightly above the total plan benchmark return of 15.1 percent. The portfolio return remains above the plan benchmark by 0.4 percent over a 20-year period.

SDS:SGL

Attachment: Q4 2023 Performance Report



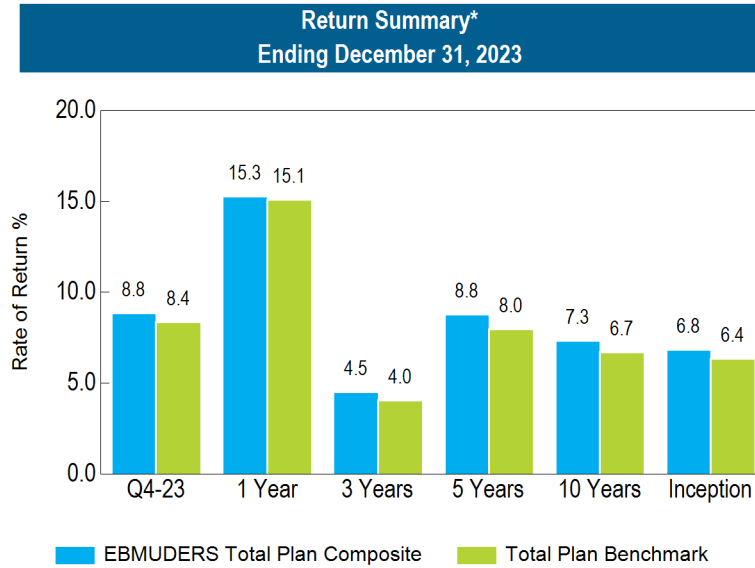
East Bay Municipal Utility District Employees' Retirement System

March 21, 2024

Q4 2023 Performance Report

1. Introduction
2. Economic and Market Update as of January 31, 2024
3. Fourth Quarter Performance Review
4. Gross Performance Update as of January 31, 2024
5. Manager Watch Screens
6. Manager Compliance Certification Responses
7. Appendix

Introduction



* Performance is gross of fees.

	Fourth Quarter	One Year
Beginning Market Value	\$2,177,281,164	\$2,072,510,001
Net Cash Flow	-\$9,080,214	-\$25,027,401
Capital Appreciation	\$191,814,431	\$312,532,781
Ending Market Value	\$2,360,015,381	\$2,360,015,381

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
EBMUDERS Total Plan Composite - Gross	8.8	15.3	4.5	8.8	7.3	7.4
EBMUDERS Total Plan Composite - Net	8.8	15.1	4.4	8.6	7.1	--
<i>Total Plan Benchmark</i>	<i>8.4</i>	<i>15.1</i>	<i>4.0</i>	<i>8.0</i>	<i>6.7</i>	<i>7.0</i>
<i>InvMetrics Public DB > \$1B Gross Median</i>	<i>6.8</i>	<i>11.4</i>	<i>4.4</i>	<i>8.4</i>	<i>6.7</i>	<i>6.9</i>

Historical net returns for the Total Portfolio Aggregate are currently available from 2Q 2011.

InvMetrics Public DB >\$1B Universe includes BNY Mellon Public>\$1B Fund Universe and IM client data.

Performance Summary								
	Market Value (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
EBMUDERS Total Plan Composite	2,360,015,381	100.0	8.8	15.3	4.5	8.8	7.3	7.4
<i>Total Plan Benchmark</i>			<i>8.4</i>	<i>15.1</i>	<i>4.0</i>	<i>8.0</i>	<i>6.7</i>	<i>7.0</i>
US Equity Composite	637,264,789	27.0	12.1	25.9	8.6	15.1	11.7	9.6
<i>Russell 3000 Hybrid</i>			<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>	<i>11.5</i>	<i>9.7</i>
Non-US Equity Composite	576,089,495	24.4	9.8	15.7	2.1	7.5	3.8	6.2
<i>MSCI ACWI xUS (blend)</i>			<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>	<i>4.3</i>	<i>5.9</i>
Covered Calls Composite	475,550,997	20.2	6.5	17.4	7.6	9.9	--	--
<i>CBOE S&P 500 BuyWrite USD</i>			<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>	--	--
Real Estate Composite	122,972,815	5.2	7.0	-0.4	7.5	7.9	9.0	--
<i>Real Estate Composite Benchmark</i>			<i>7.4</i>	<i>2.7</i>	<i>7.3</i>	<i>7.0</i>	<i>8.0</i>	--
Fixed Income Composite	546,083,686	23.1	6.9	6.4	-1.0	2.3	2.4	3.7
<i>Fixed Income Composite Benchmark</i>			<i>6.3</i>	<i>6.1</i>	<i>-1.3</i>	<i>2.0</i>	<i>2.3</i>	<i>3.5</i>
Cash Composite	2,053,598	0.1	1.0	4.8	2.0	2.1	1.4	1.8
<i>FTSE T-Bill 3 Months TR</i>			<i>1.4</i>	<i>5.3</i>	<i>2.2</i>	<i>1.9</i>	<i>1.3</i>	<i>1.4</i>

Benchmark composition and history provided at the end of this report.

Economic and Market Update

Data as of January 31, 2024

Commentary

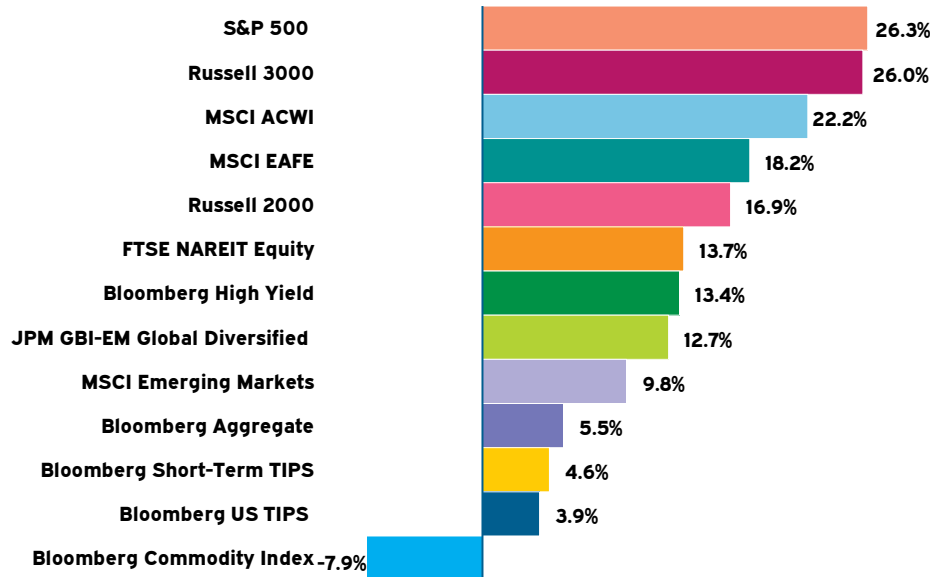
→ Markets were mixed in January after posting strong returns in 2023.

- Major central banks have largely paused interest rate hikes with expectations for many to cut rates this year. During the month there were signs though that many central banks, including the US, might not cut rates as soon as expected given strong economic data.
- In general inflation pressures have receded in most countries, but some uncertainty remains. Headline inflation fell in January in the US, but core inflation remained unchanged and elevated. China moved further into deflationary territory (-0.8%) in January.
- US equity markets (Russell 3000 index) rose 1.1% in January after a very strong 2023 (26.0%). There were mixed results across sectors, but technology continued to do well.
- Non-US developed equity markets gained 0.6% in January but 2.6% in local terms as the US dollar reversed course and strengthened during the month. The appreciation of the dollar was largely driven by strong economic data and related expectations that the Fed may delay policy rate cuts this year.
- Emerging market equity returns were also negatively influenced by the strong US dollar, but the biggest headwind in January was China (-10.6%). Emerging market equities had the weakest results for the month, down 4.6%.
- Bonds experienced selling pressure over the month, but ultimately finished the month nearly unchanged. The broad US bond market (Bloomberg Aggregate) declined (0.3%) in January.

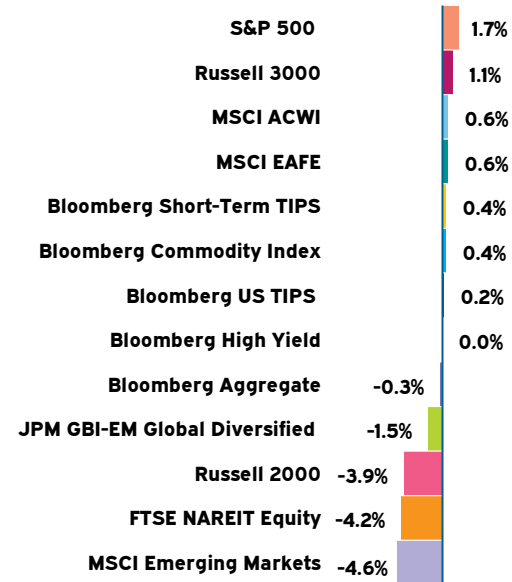
→ Looking to the rest of this year, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, the many looming elections, and the wars in Ukraine and Israel, will be key.

Index Returns¹

2023



January



→ After a strong market performance in 2023, the start of 2024 saw US large cap growth stocks continue their rally causing the S&P 500 to lead the way. Emerging market equity was the worst performer, dragged down by the continued sell-off of Chinese stocks.

→ Better than expected economic news in the US weighed on bond markets for the month with the broad US bond market (Bloomberg Aggregate) down slightly.

¹ Source: Bloomberg. Data is as of January 31, 2024.

Domestic Equity Returns¹

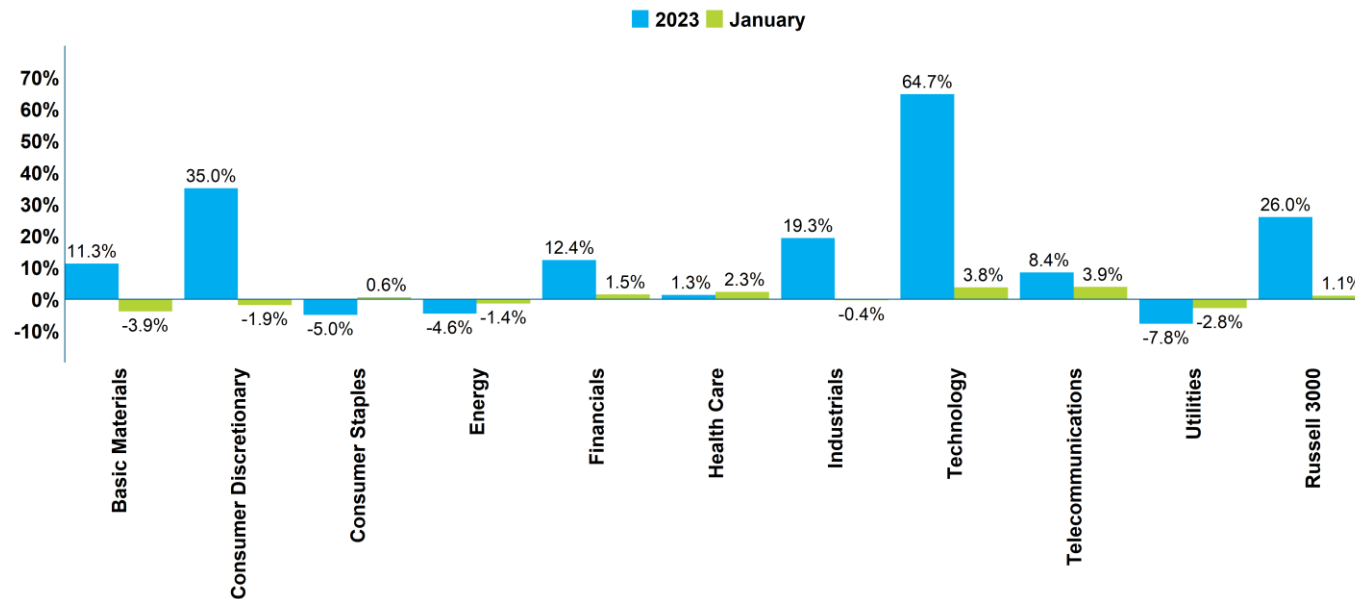
Domestic Equity	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	1.7	11.7	20.8	11.0	14.3	12.6
Russell 3000	1.1	12.1	19.1	9.1	13.5	12.0
Russell 1000	1.4	12.0	20.2	9.8	14.0	12.3
Russell 1000 Growth	2.5	14.2	35.0	10.0	18.0	15.5
Russell 1000 Value	0.1	9.5	6.1	9.2	9.3	8.8
Russell MidCap	-1.4	12.8	6.7	5.5	10.1	9.5
Russell MidCap Growth	-0.5	14.5	15.1	1.2	11.2	10.7
Russell MidCap Value	-1.8	12.1	2.4	7.8	8.6	8.2
Russell 2000	-3.9	14.0	2.4	-0.8	6.8	7.0
Russell 2000 Growth	-3.2	12.7	4.5	-6.0	6.2	7.0
Russell 2000 Value	-4.5	15.3	-0.1	4.5	6.7	6.7

US Equities: The Russell 3000 increased 1.1% in January with a one-year return of 19.1%.

- US equities built on their large gains from last year in January. Strong corporate earnings, economic data suggesting a soft landing might be achievable, and hopes for significant interest rate cuts (for most of the month) all drove results.
- Large cap stocks accounted for all the US equity market gains in January. NVIDIA, Microsoft, and Meta Platforms made up nearly 90% of the increase in the Russell 1000 index. Growth stocks outperformed value stocks across the market cap spectrum.
- While US equities advanced as a group, small and mid-cap stocks both declined in January. Banks contributed to this dynamic after a surprise loss at New York Community Bancorp rekindled fears regarding the banking system.

¹ Source: Bloomberg. Data is as of January 31, 2024.

Russell 3000 Sector Returns¹



→ In January, telecommunications (3.9%), technology stocks (3.8%), and health care (2.3%) outperformed other sectors. Traditionally defensive sector utilities (-2.8%) trailed along with basic materials (-3.9%) and energy stocks (-1.4%).

→ In 2023, technology (64.7%) and consumer discretionary (35.0%) sectors had the best results, helped respectively by artificial intelligence optimism and a healthy US consumer.

¹ Source: Bloomberg. Data is as of January 31, 2024.

Foreign Equity Returns¹

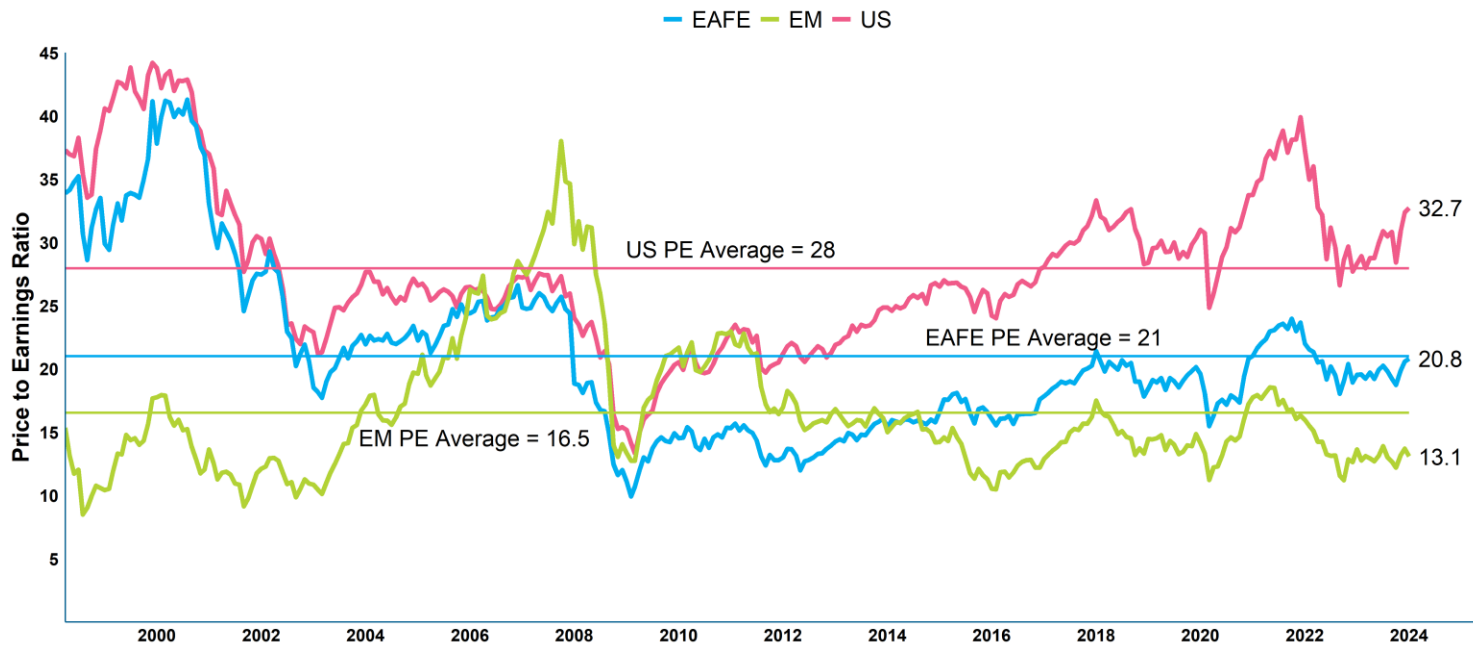
Foreign Equity	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-1.0	9.8	5.9	1.1	5.3	4.2
MSCI EAFE	0.6	10.4	10.0	4.6	6.9	4.8
MSCI EAFE (Local Currency)	2.6	5.0	12.1	9.7	8.9	7.2
MSCI EAFE Small Cap	-1.6	11.1	3.6	-1.1	4.6	4.8
MSCI Emerging Markets	-4.6	7.9	-2.9	-7.5	1.0	2.9
MSCI Emerging Markets (Local Currency)	-3.5	5.6	-0.5	-4.9	3.2	5.3
MSCI China	-10.6	-4.2	-29.0	-23.2	-6.9	0.4

Foreign Equity: Developed international equities (MSCI EAFE) gained 0.6% in January and had a one-year return of 10.0%. Emerging market equities (MSCI EM) fell -4.6% in January, and -2.9% for the trailing year.

- International developed equities saw slight gains for the month, while emerging market equities saw large losses for the same period; both were hampered by the US dollar reversing its sell-off from the end of last year. Outside of emerging markets, growth outperformed value for the month.
- Eurozone equities performed well, benefiting from ECB policy expectations, developments in the tech sector, and promising manufacturing data. U.K. equities stalled, as an unexpected increase in inflation pushed out the expected timing of rate cuts. Japan continues to see the highest returns globally over optimism on structural changes, January being no exception.
- EM equities continue to be bogged down by China (-10.6%) despite news of further stimulus by the PBOC.

¹ Source: Bloomberg. Data is as of January 31, 2024.

Equity Cyclically Adjusted P/E Ratios¹



→ In January, the US equity price-to-earnings ratio increased further above its 21st century average.

→ International market valuations were mixed in January and remain below the US. In the case of developed markets, valuations increased slightly to just below their long-term average, while emerging market valuations declined, remaining well below their average.

¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of January 2023. The average line is the long-term average of the US, EM, and EAFE PE values from April 1998 to the recent month-end respectively.

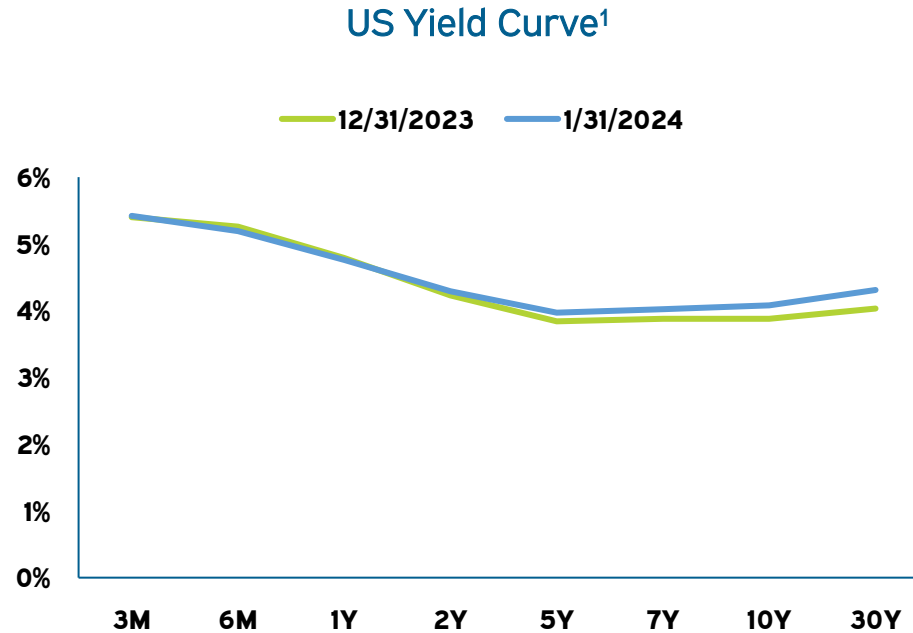
Fixed Income Returns¹

Fixed Income	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-0.2	6.8	2.7	-2.8	1.1	1.9	4.9	6.0
Bloomberg Aggregate	-0.3	6.8	2.1	-3.2	0.8	1.6	4.6	6.2
Bloomberg US TIPS	0.2	4.7	2.2	-1.0	2.9	2.2	4.2	6.9
Bloomberg Short-term TIPS	0.4	2.6	4.3	2.3	3.3	2.0	4.4	2.6
Bloomberg High Yield	0.0	7.2	9.3	1.9	4.4	4.5	7.8	3.7
JPM GBI-EM Global Diversified (USD)	-1.5	8.1	6.4	-3.3	-0.2	0.4	6.3	5.0

Fixed Income: The Bloomberg Universal index fell -0.2% in January but gained 2.7% on a one-year basis.

- Strong economic data in January and comments toward the end of the month by Federal Reserve Chair Jerome Powell hinting that rate cuts were not imminent drove rates up over the month, weighing on bonds.
- The broad US bond market (Bloomberg Aggregate) declined 0.3% for the month. The broader TIPS index rose 0.2%, while the less interest-rate-sensitive short-term TIPS index rose 0.4%.
- High yield bonds ended the month unchanged, while emerging market debt declined by 1.5%. Both asset classes produced double-digit gains last year.

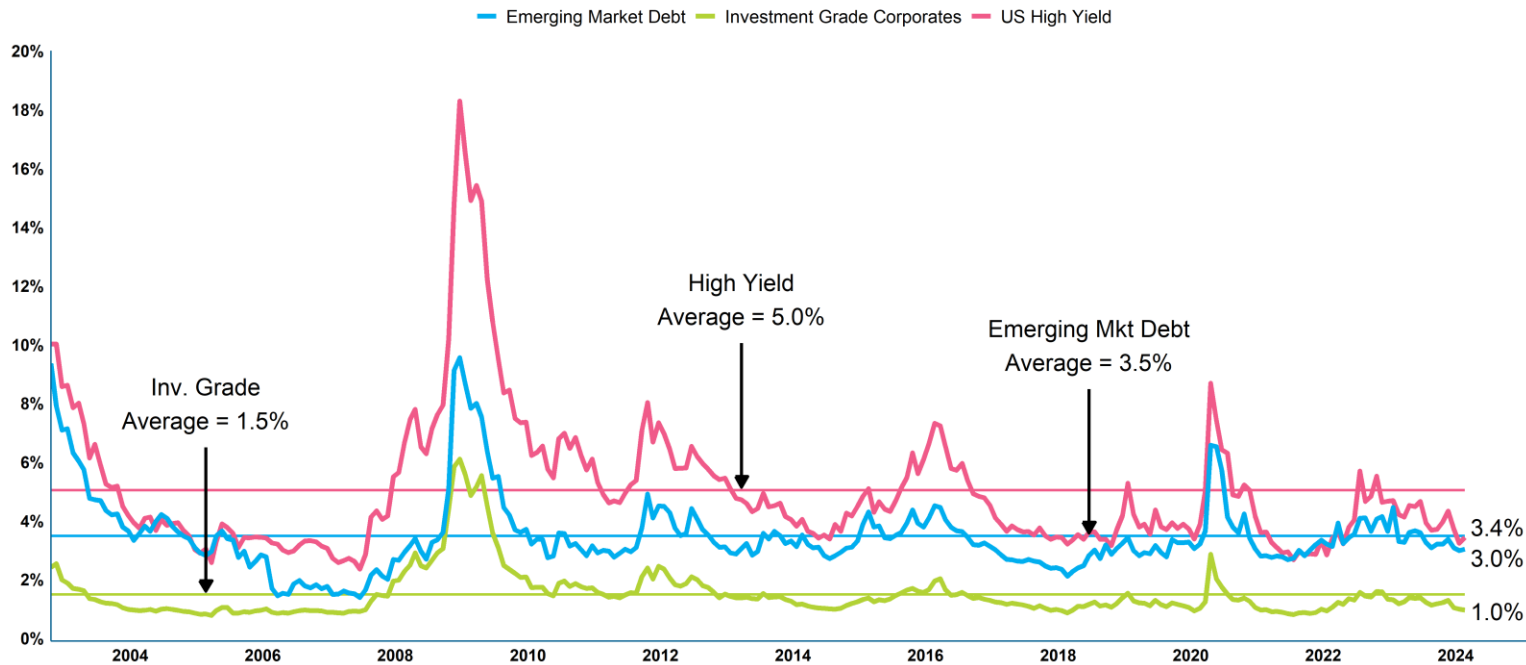
¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of January 31, 2024. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.



- Both short-term and longer-term maturities ended the month largely unchanged, however, yields were volatile over the month on surprisingly strong economic data and shifts in monetary policy expectations.
- For the month, two-year Treasury yields ended at 4.2% (around 1% below the peak from October) while 10-year Treasury yields ended at 3.9%.
- The yield curve remained inverted at month-end despite a recent flattening trend. The yield spread between the two-year and ten-year Treasury was -0.3% at the end of January.

¹ Source: Bloomberg. Data is as of January 31, 2024.

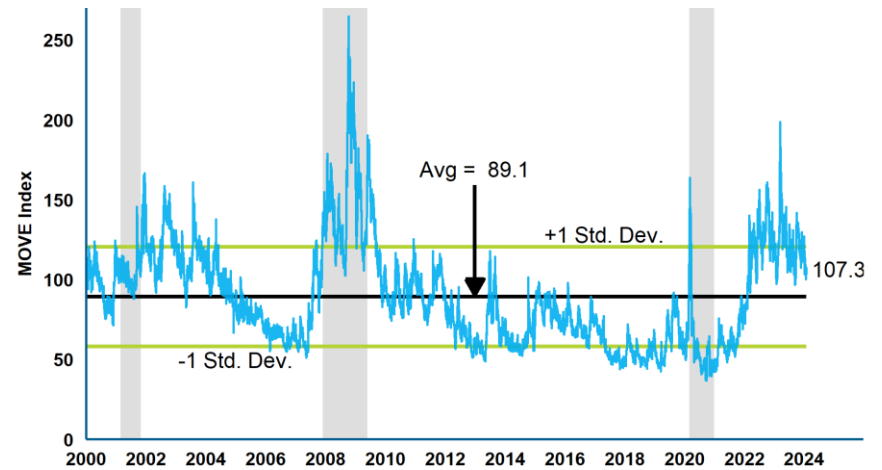
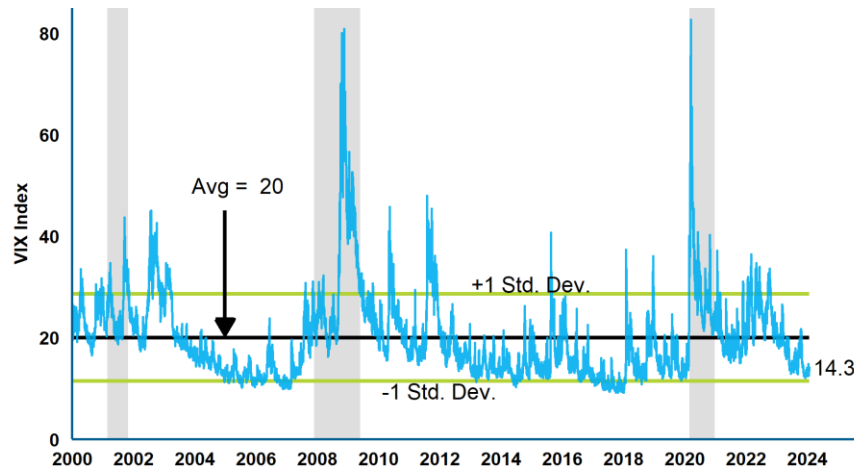
Credit Spreads vs. US Treasury Bonds¹



- Credit spreads widened slightly for high yield in January (3.2% to 3.4%) while spreads for investment grade corporate and emerging market bonds remained the same.
- Expectations of peaking policy rates and the corresponding increase in risk appetite has recently benefited credit, with spreads (the added yield above a comparable maturity Treasury) narrowing.
- All spreads remain below their respective long run averages, particularly within high yield.

¹ Sources: Bloomberg. Data is as of January 31, 2024. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.

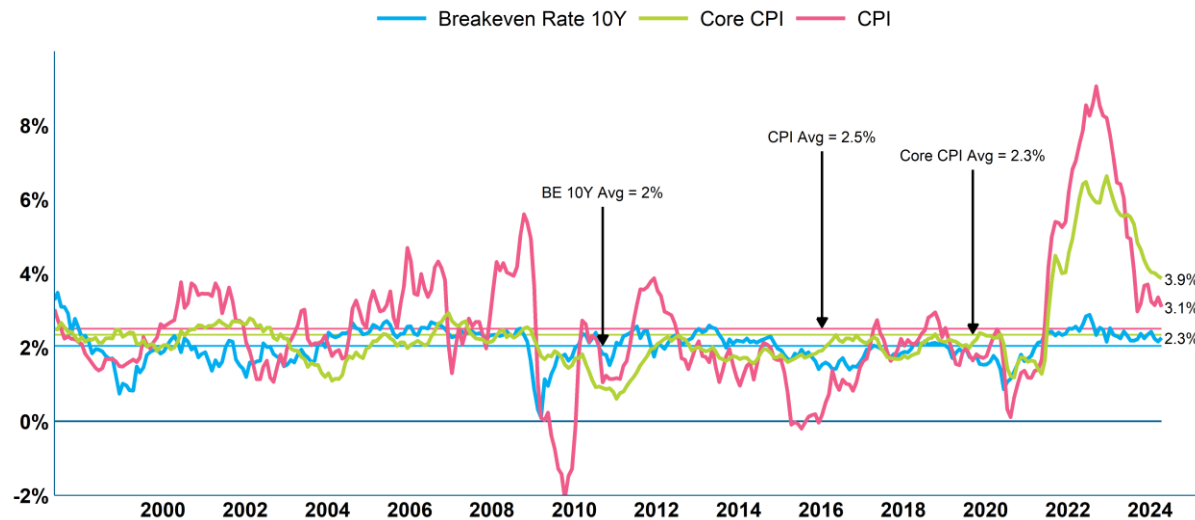
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) remains close to one standard deviation below the long-term average as the focus shifted late last year to peaking policy rates and the potential for a soft landing.
- Volatility in the bond market (MOVE) came down over the month (114.6 to 107.3) but remains elevated and well above its long-run average (89.1). The bond market remained on edge for most of 2023, driven largely by uncertainty about the ultimate path of monetary policy, as well as continued (and surprising) strength in economic data.

¹ Equity Volatility – Source: FRED. Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of January 2024. The average line indicated is the average of the VIX and MOVE values between January 2000 and January 2024.

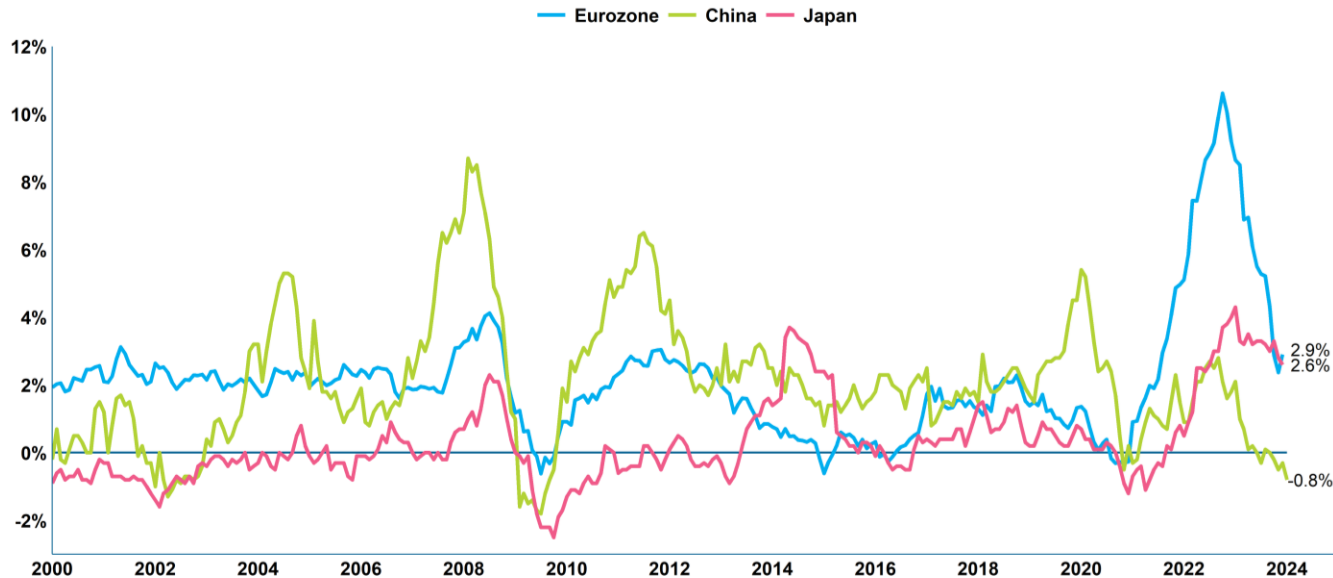
US Ten-Year Breakeven Inflation and CPI¹



- Year-over-year headline inflation declined in January (3.4% to 3.1%) but not by as much as expected (expectations were for a 2.9% reading). Month-over-month inflation came in at 0.3%, the same as last month and slightly above expectations of 0.2%. Shelter continues to keep inflation elevated, increasing 6.0% from a year prior. Food rose 2.6% over the same period, while downward pressure on energy prices continued, falling 4.6%.
- Core inflation - excluding food and energy - remained unchanged at 3.9% year-over-year (expectations were for a decline to 3.7%), with shelter costs again driving the total core index increase.
- Inflation expectations (breakevens) have remained relatively stable despite the recent significant volatility in inflation.

¹ Source: FRED. Data is as January 2024. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

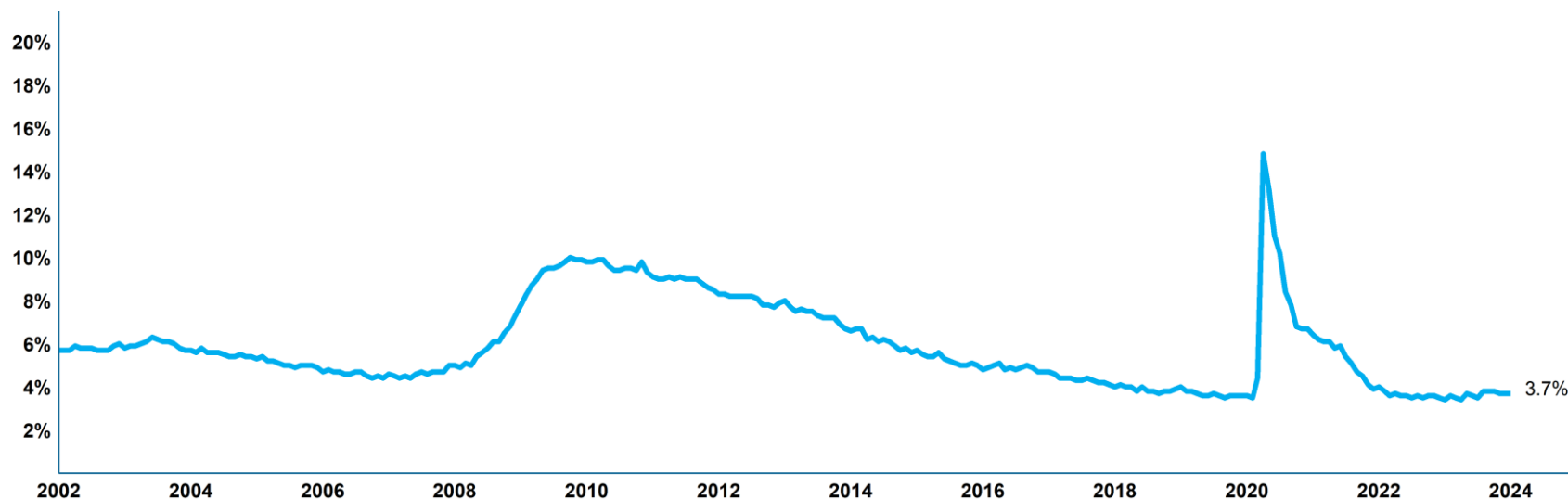
Global Inflation (CPI Trailing Twelve Months)¹



- Outside the US, inflation is also falling across major economies with China slipping further into deflation.
- In the eurozone, inflation experienced a dramatic decline last year. In January inflation rose slightly (2.8% to 2.9%) remaining below the 3.1% year-over-year level in the US.
- Inflation in Japan has slowly declined from the early 2023 peak, but it remains near levels not seen in almost a decade, largely driven by higher food prices.

¹ Source: FRED for United States CPI and Eurozone CPI. Source: Bloomberg for Japan CPI, China CPI, and Eurozone CPI. Data is as January 31, 2024, except Japan which is as of December 31, 2023.

US Unemployment¹

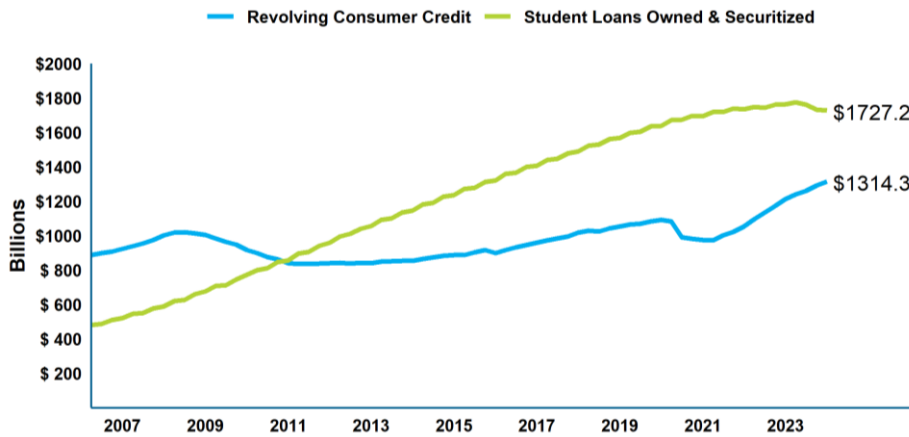


- Overall, the US labor market remains healthy with the unemployment rate relatively low, wage growth now positive in real terms, and initial claims for unemployment staying subdued.
- In January, the number of jobs added in the US were stronger than expected (353,000 versus 185,000) with the unemployment rate remaining at 3.7%. Payrolls from November and December of last year were also revised upward. Business and professional, health care, and retail sales jobs rose the most in January.
- The labor force participation remained relatively stable at 62.5%, well off the lows of the pandemic (60.1%) but not back to pre-pandemic levels (63.3%).
- The pace of hourly wage growth has declined from its peak of close to 6.0% but is above the 3.1% level of inflation. Wage growth rose at 4.5% year-on-year in January, an increase from the 4.1% level in December and above expectations of 4.1%.

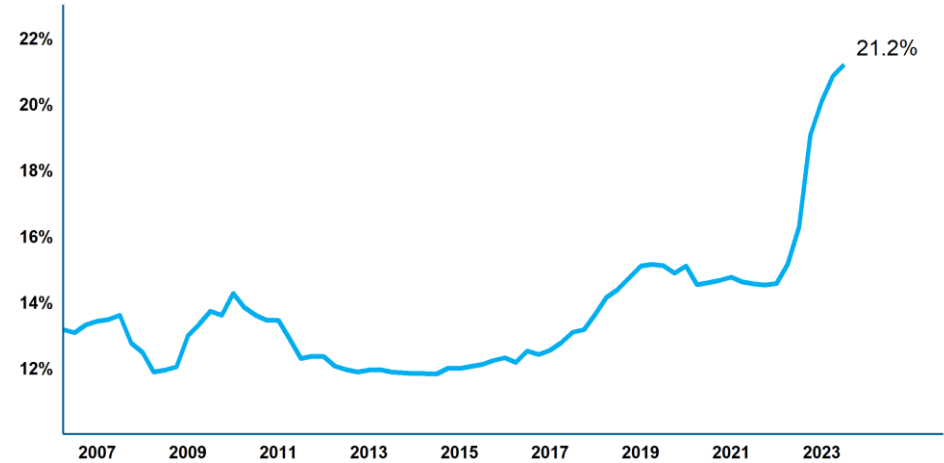
¹ Source: FRED. Data is as January 31, 2024.

US Consumer Under Stress?¹

Revolving Consumer Credit & Student Loans (\$B)



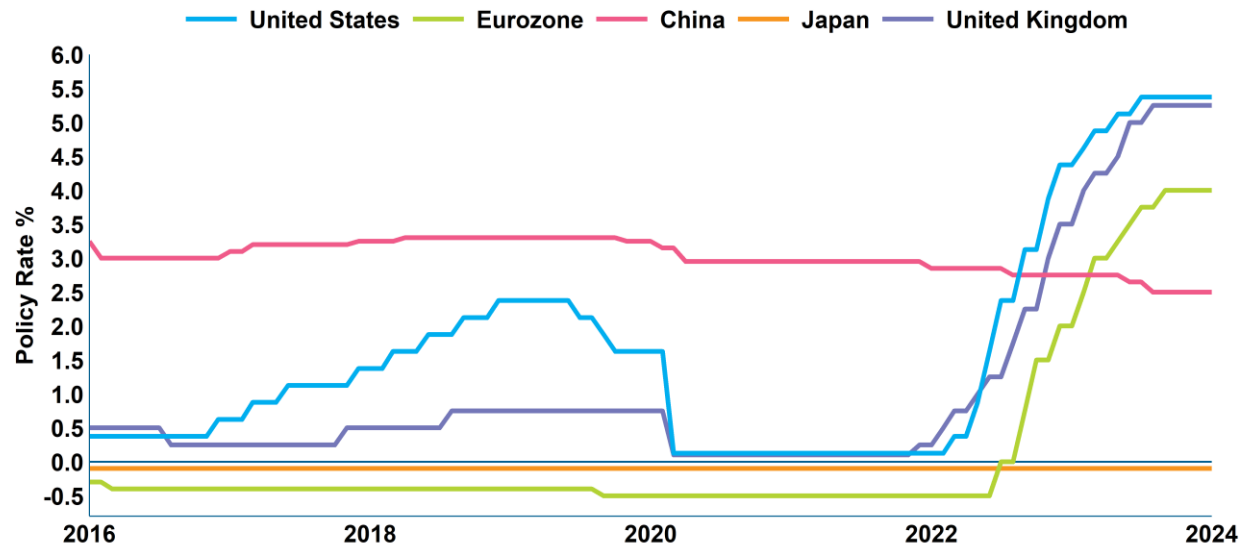
Consumer Credit Card Interest Rates (%)



- Despite the strong labor market and higher wages, pressures have started to build on the US consumer. This is an important consideration as consumer spending has been a key driver of economic growth.
- Revolving consumer credit surged to new highs in 2023 even as credit card interest rates hit levels not seen before (the prior peak was around 19% in the 1980s). Recently we have also seen payment delinquencies on credit cards start to increase.
- The return of student loan repayments after a three-year pandemic-related reprieve could add to pressures on consumers' budgets. This might be partially mitigated by recently initiated repayment and forgiveness programs.
- As we look ahead, the strength of the US consumer will remain key as this sector makes up most of the domestic economy (GDP).

¹ Source: FRED. Data is as of December 31, 2023. Consumer Credit Card Rate data is as of September 30, 2023. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.

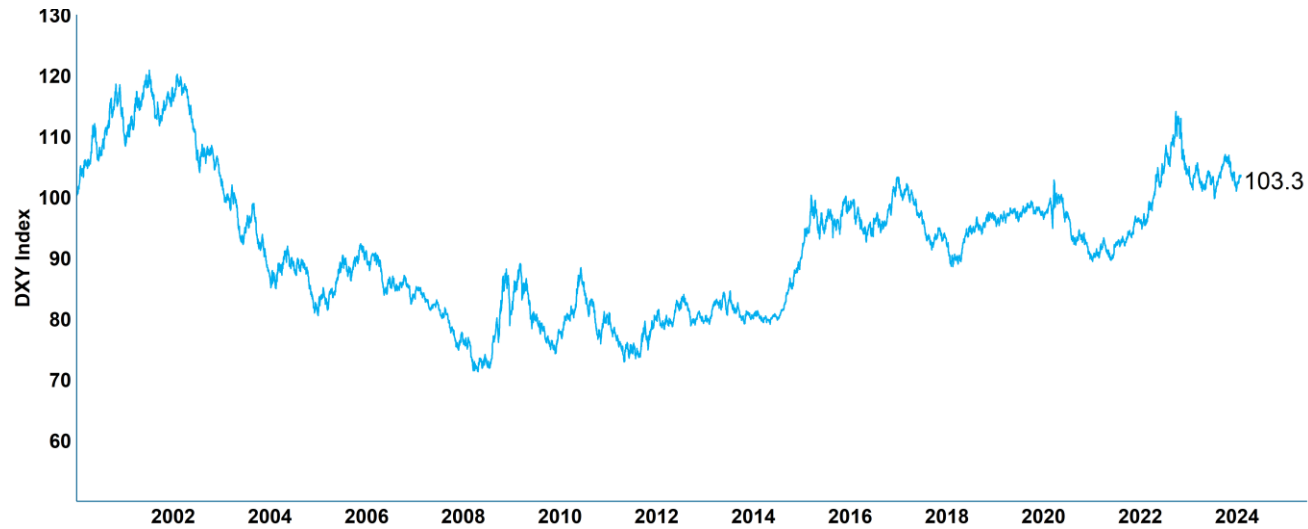
Policy Rates¹



- The Fed has been on hold since July 2023 when it raised rates to a range of 5.25%-5.50%. Markets are now pricing in around four rate cuts this year down from close to seven late last year as economic data has come in above expectations. There remains a gap between the amount of rate cuts the Fed is predicting compared to the market's expectations, but it has significantly narrowed.
- The European and UK central banks also recently paused their rate increases on slowing inflation with cuts likely to follow there too. In Japan, the BoJ has further relaxed its yield curve control on the 10-year bond, and expectations for further policy normalization are rising.
- The central bank in China has maintained interest rates at record low levels and continues to inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.

¹ Source: Bloomberg. Data is as of January 2024.

US Dollar vs. Broad Currencies¹



- Overall, the dollar finished last year only slightly below where it started but it was a volatile year for the US currency as expectations related to monetary policy evolved.
- Strong economic data in the US may delay policy rate cuts this year which could contribute to upward pressure on the dollar as other countries pivot to rate cuts.

¹ Source: Bloomberg. Data as of January 31, 2024.

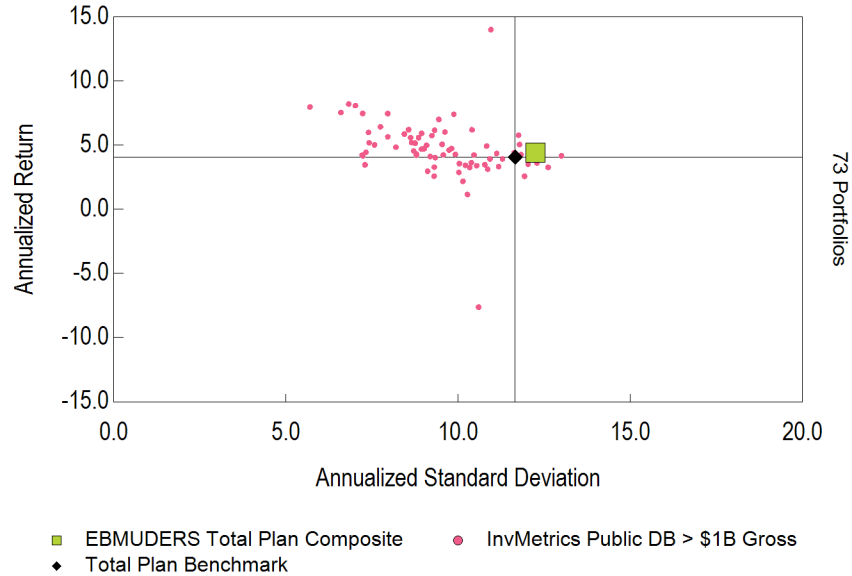
Summary

Key Trends:

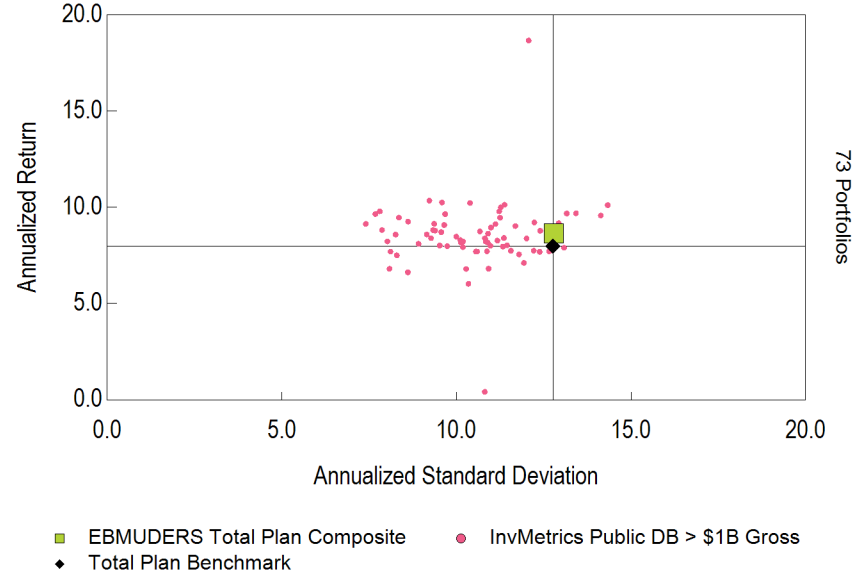
- The impact of inflation still above policy targets will remain important, with bond market volatility likely to stay high.
- Global monetary policies could diverge going forward. The risk of policy errors remains elevated as central banks try to further reduce inflation toward targets while not tipping their economies into recession. In the case of the US the resolution of the disparity between market expectations for the path of interest rates versus the Fed's dot plot will be key.
- Global growth is expected to slow this year, with some economies forecasted to tip into recession. However, optimism has been building that certain economies could experience soft landings. Inflation, monetary policy, and geopolitical issues will remain key in 2024.
- US consumers could feel pressure as certain components of inflation (e.g., shelter), remain high, borrowing costs are elevated, and the job market may weaken.
- A focus for US equities going forward, will be whether earnings can remain resilient if growth continues to slow. Also, the future paths of the large technology companies that have driven market gains will be important.
- Equity valuations remain lower in emerging and developed markets, but risks remain, including China's economic uncertainty and on-going weakness in the real estate sector which could spill over into key trading partners' economies. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.

Fourth Quarter Performance Review

**Annualized Return vs. Annualized Standard Deviation
3 Years Ending December 31, 2023**



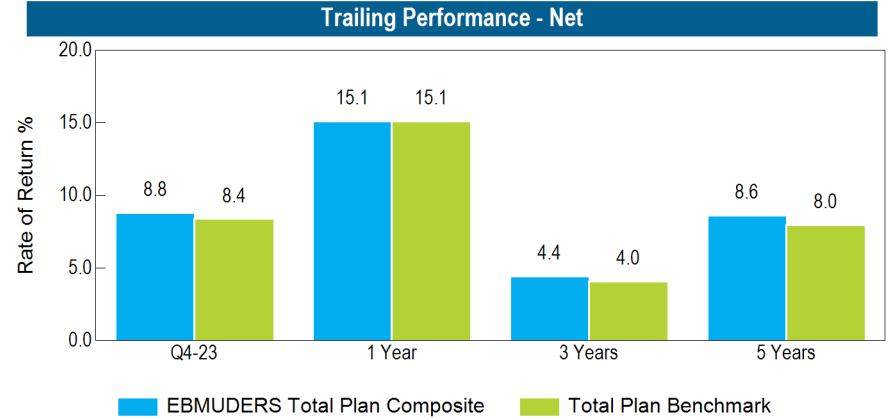
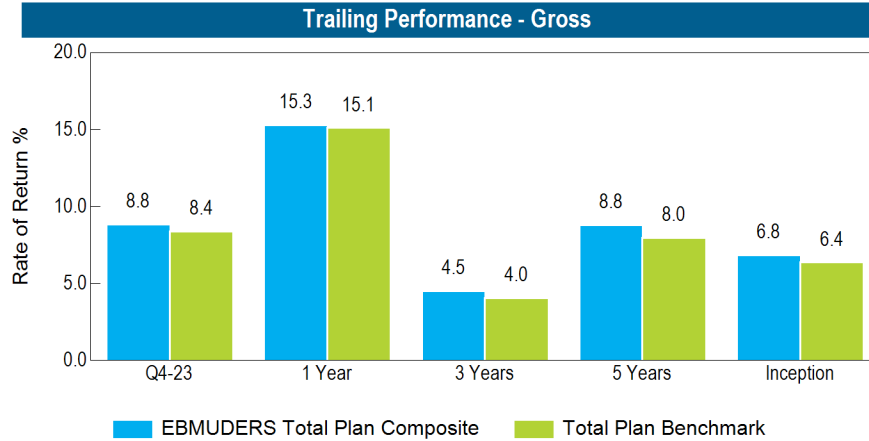
**Annualized Return vs. Annualized Standard Deviation
5 Years Ending December 31, 2023**



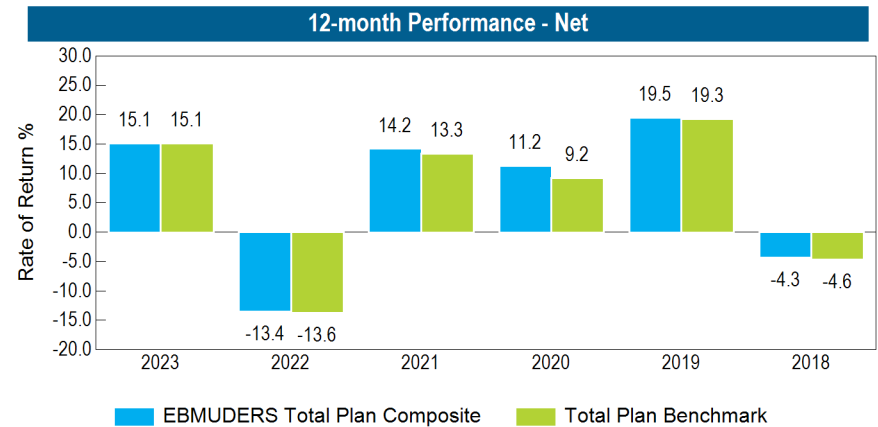
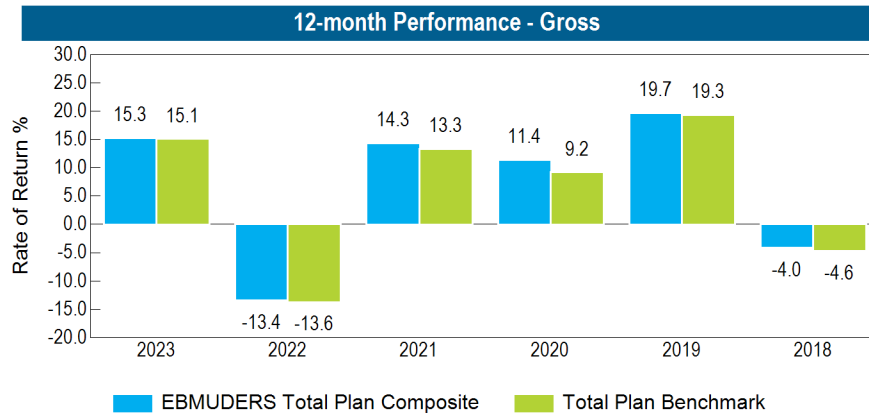
3 Years Ending December 31, 2023			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	4.51%	12.24%	0.19
Total Plan Benchmark	4.05%	11.65%	0.16

5 Years Ending December 31, 2023			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	8.78%	12.78%	0.55
Total Plan Benchmark	7.97%	12.76%	0.48

EBMUDERS Total Plan Composite | As of December 31, 2023



	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2023	2022	2021	2020	2019	2018
EBMUDERS Total Plan Composite - Gross	8.8	15.3	4.5	8.8	7.3	15.3	-13.4	14.3	11.4	19.7	-4.0
EBMUDERS Total Plan Composite - Net	8.8	15.1	4.4	8.6	7.1	15.1	-13.4	14.2	11.2	19.5	-4.3
<i>Total Plan Benchmark</i>	<i>8.4</i>	<i>15.1</i>	<i>4.0</i>	<i>8.0</i>	<i>6.7</i>	<i>15.1</i>	<i>-13.6</i>	<i>13.3</i>	<i>9.2</i>	<i>19.3</i>	<i>-4.6</i>
<i>InvMetrics Public DB > \$1B Gross Median</i>	<i>6.8</i>	<i>11.4</i>	<i>4.4</i>	<i>8.4</i>	<i>6.7</i>	<i>11.4</i>	<i>-11.1</i>	<i>14.9</i>	<i>11.5</i>	<i>16.7</i>	<i>-3.7</i>

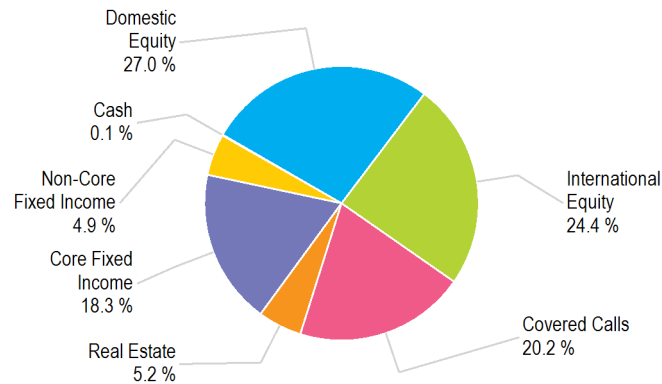


Asset Allocation vs. Target

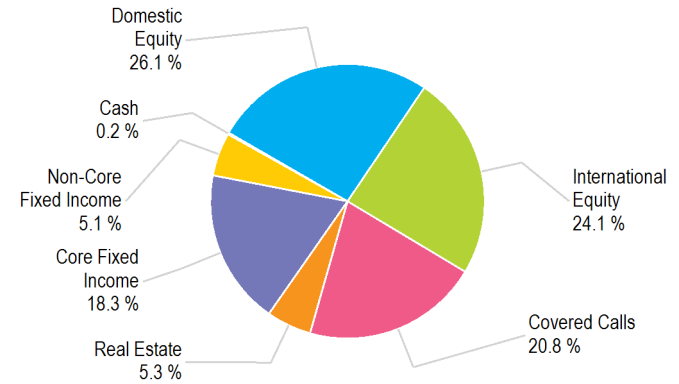
	Current (\$)	Current (%)	Policy (%)	Difference* (%)	Within Range
Domestic Equity	637,264,789	27.0	25.0	2.0	Yes
International Equity	576,089,495	24.4	25.0	-0.6	Yes
Covered Calls	475,550,997	20.2	20.0	0.2	Yes
Real Estate	122,972,815	5.2	5.0	0.2	Yes
Core Fixed Income	430,801,175	18.3	20.0	-1.7	Yes
Non-Core Fixed Income	115,282,512	4.9	5.0	-0.1	Yes
Cash	2,053,599	0.1	0.0	0.1	Yes
Total	2,360,015,381	100.0	100.0		

*Difference between Policy and Current Allocation

December 31, 2023 : \$2,360,015,381



September 30, 2023 : \$2,177,281,164



Policy rebalancing ranges shown are for non-turbulent market periods. The Plan also has established rebalancing ranges to be in effect during turbulent market periods.

Domestic and International Equity						
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs	
US Equity Composite	637,264,789	12.1	25.9	8.6	15.1	
<i>Russell 3000 Hybrid</i>		<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>	
Northern Trust Russell 3000	636,378,648	12.1	26.0	8.6	15.1	
<i>Russell 3000</i>		<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>	
Non-US Equity Composite	576,089,495	9.8	15.7	2.1	7.5	
<i>MSCI ACWI xUS (blend)</i>		<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>	
Northern Trust ACWI ex US	576,089,495	9.8	15.7	1.9	7.2	
<i>MSCI ACWI ex USA Gross</i>		<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>	

	Covered Calls				
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Covered Calls Composite	475,550,997	6.5	17.4	7.6	9.9
<i>CBOE S&P 500 BuyWrite USD</i>		<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Parametric BXM	157,293,472	4.9	15.7	7.7	9.1
<i>CBOE S&P 500 BuyWrite USD</i>		<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Parametric Delta Shift	163,660,893	9.0	23.8	9.6	14.3
<i>CBOE S&P 500 BuyWrite USD</i>		<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Van Hulzen	154,596,632	5.7	12.6	5.5	6.3
<i>CBOE S&P 500 BuyWrite USD</i>		<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>

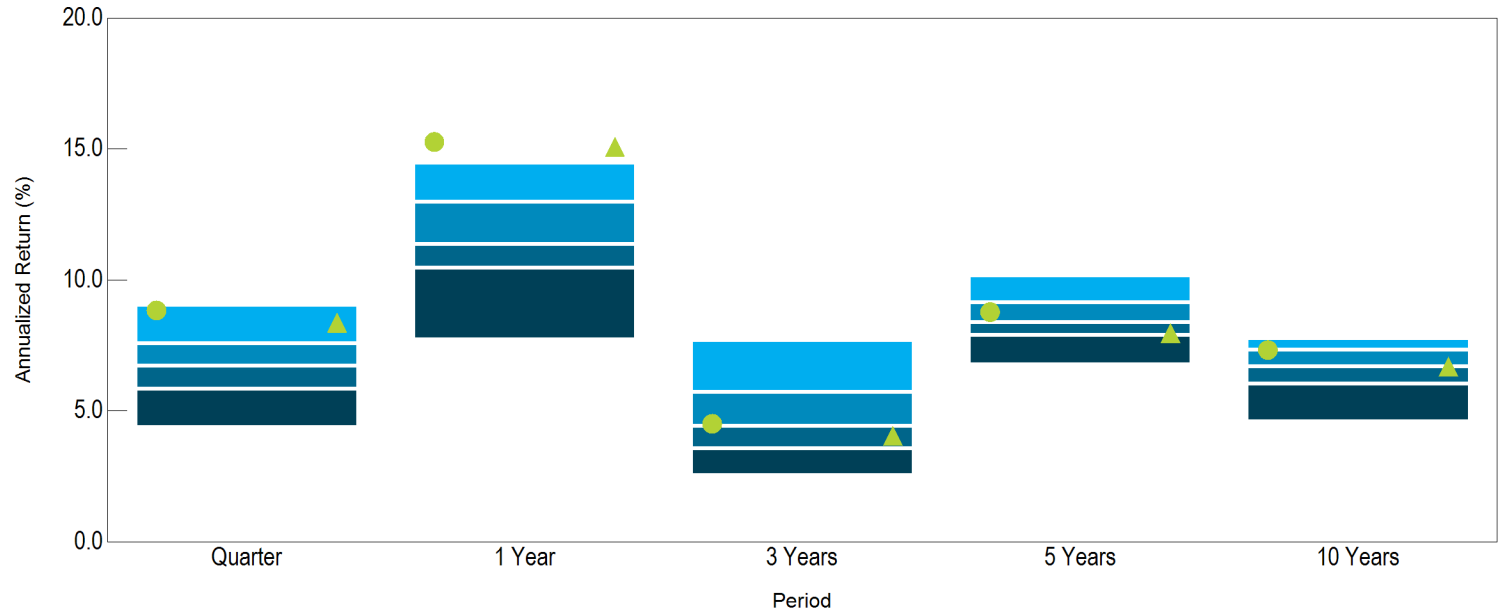
Fixed Income Composite					
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Fixed Income Composite	546,083,686	6.9	6.4	-1.0	2.3
<i>Fixed Income Composite Benchmark</i>		<i>6.3</i>	<i>6.1</i>	<i>-1.3</i>	<i>2.0</i>
CS McKee	217,018,747	7.6	6.5	-3.0	1.5
<i>Bloomberg US Aggregate TR</i>		<i>6.8</i>	<i>5.5</i>	<i>-3.3</i>	<i>1.1</i>
Garcia Hamilton	213,782,428	8.1	4.3	-1.4	--
<i>Garcia Hamilton Custom Benchmark</i>		<i>6.8</i>	<i>4.3</i>	<i>-1.9</i>	<i>--</i>
MacKay Shields (HY)	59,479,539	4.5	10.9	4.6	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>5.6</i>	<i>11.5</i>	<i>3.4</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	55,802,973	2.3	9.5	2.7	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>2.3</i>	<i>9.8</i>	<i>4.2</i>	<i>--</i>

Benchmark composition and history provided at the end of this report.

Real Estate Composite					
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Real Estate Composite	122,972,815	7.0	-0.4	7.5	7.9
<i>Real Estate Composite Benchmark</i>		<i>7.4</i>	<i>2.7</i>	<i>7.3</i>	<i>7.0</i>
RREEF America II Lag	58,937,302	-1.5	-12.7	7.3	6.1
<i>NCREIF NPI Mo 1 Qtr Lag</i>		<i>-1.4</i>	<i>-8.3</i>	<i>6.2</i>	<i>5.4</i>
CenterSquare	64,035,513	16.3	14.6	7.4	8.6
<i>FTSE NAREIT Equity REIT</i>		<i>16.2</i>	<i>13.7</i>	<i>7.2</i>	<i>7.4</i>

RREEF American II Performance results are lagged one quarter.

InvMetrics Public DB > \$1B Gross Return Comparison
Ending December 31, 2023

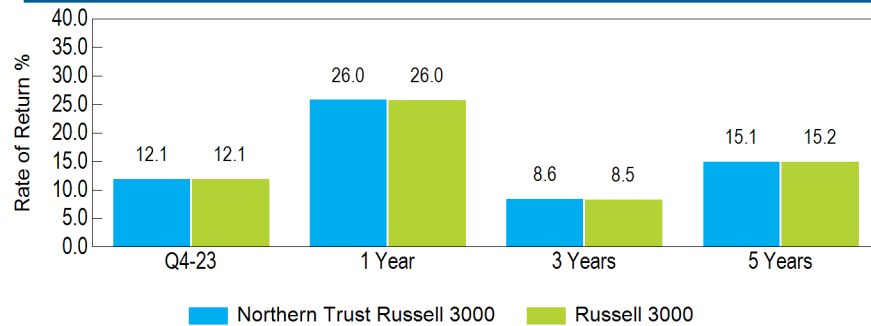


	Return (Rank)									
	Quarter		1 Year		3 Years		5 Years		10 Years	
5th Percentile	9.0		14.5		7.7		10.2		7.8	
25th Percentile	7.6		13.0		5.7		9.2		7.3	
Median	6.8		11.4		4.4		8.4		6.7	
75th Percentile	5.9		10.5		3.6		7.9		6.1	
95th Percentile	4.4		7.7		2.6		6.8		4.6	
# of Portfolios	77		76		73		73		70	
● EBMUDERS Total Plan Composite	8.8	(8)	15.3	(4)	4.5	(49)	8.8	(41)	7.3	(27)
▲ Total Plan Benchmark	8.4	(14)	15.1	(4)	4.0	(68)	8.0	(73)	6.7	(51)

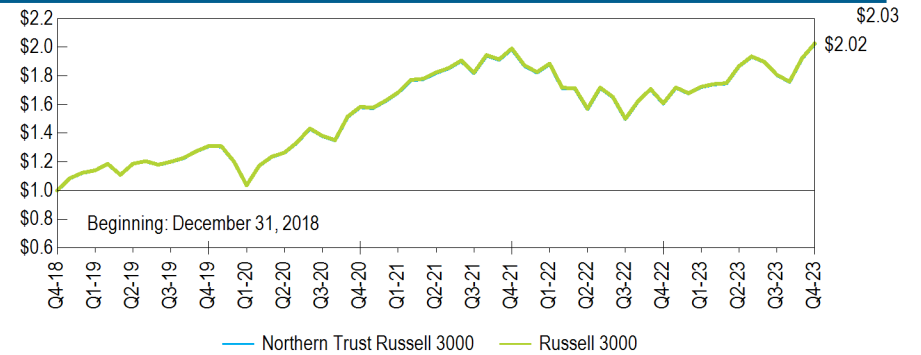
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Northern Trust Russell 3000	0.00%	1.00	-0.45	0.70	0.06%	1.00	99.61%	99.89%
Russell 3000	0.00%	1.00	--	0.70	0.00%	1.00	100.00%	100.00%

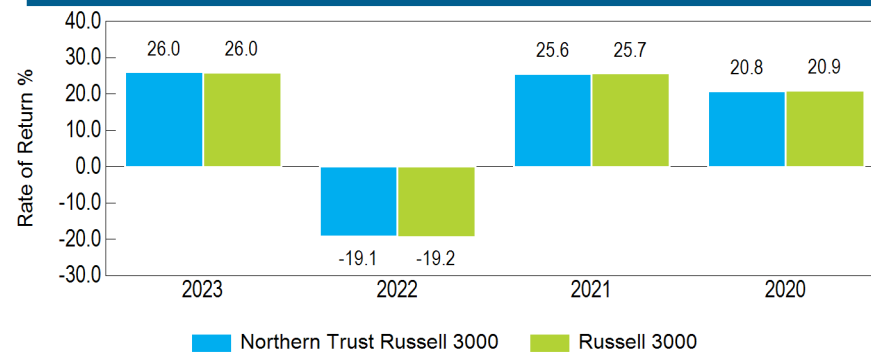
Trailing Period Performance



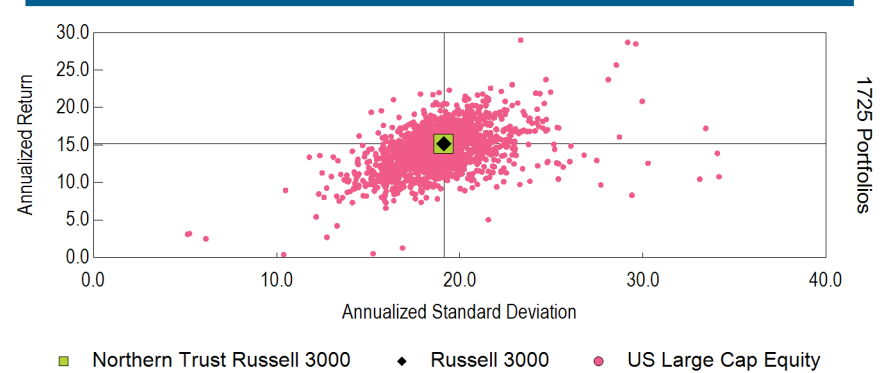
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

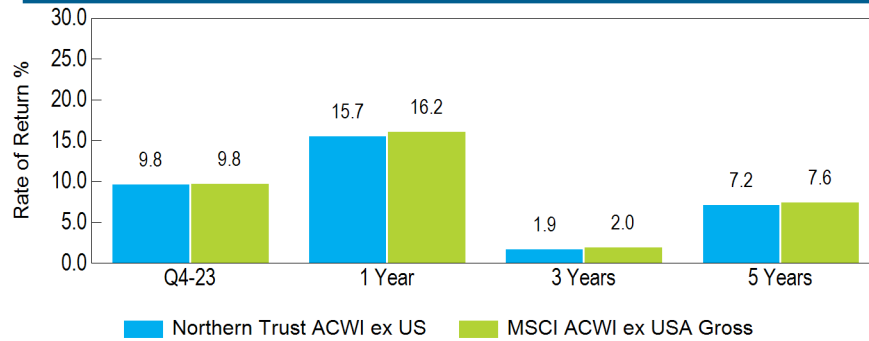


NorthernTrust Russell 3000 has an inception date of June 2018.

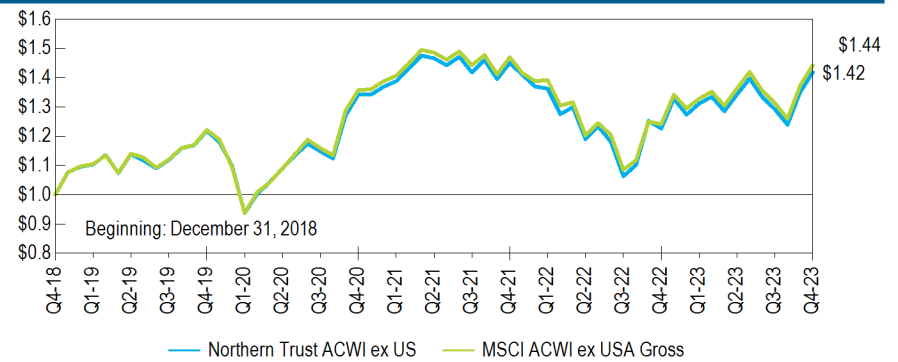
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Northern Trust ACWI ex US	-0.04%	1.01	-0.23	0.30	1.81%	0.99	102.45%	101.98%
MSCI ACWI ex USA Gross	0.00%	1.00	--	0.33	0.00%	1.00	100.00%	100.00%

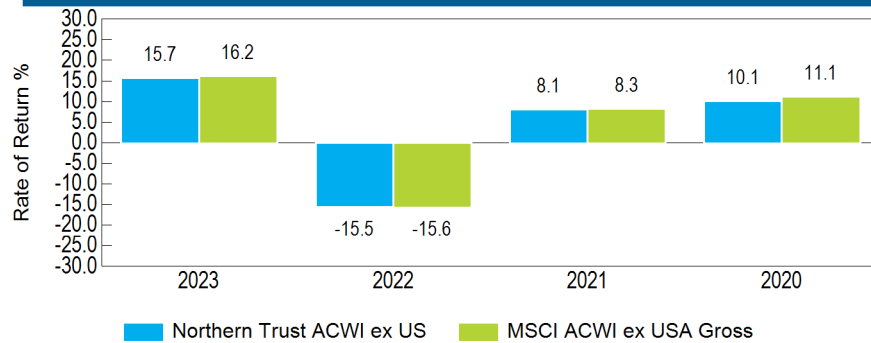
Trailing Period Performance



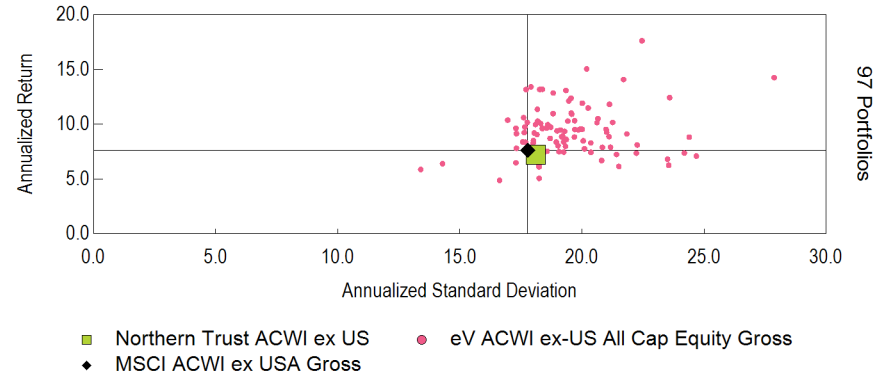
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

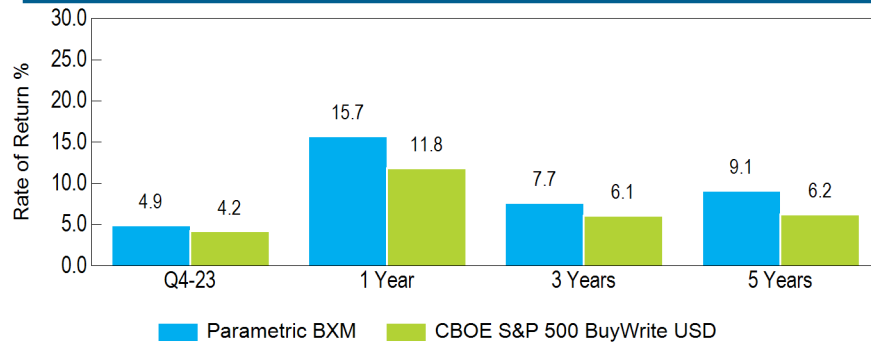


Northern Trust ACWI ex US has an inception date of June 2018.

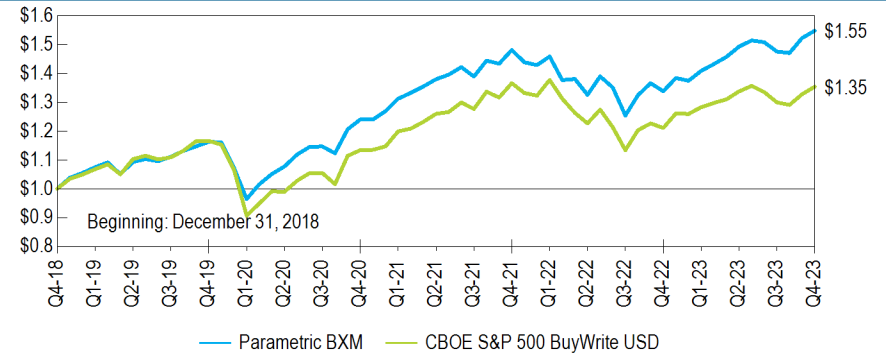
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Parametric BXM	0.29%	0.83	0.65	0.63	4.17%	0.90	97.41%	84.73%
CBOE S&P 500 BuyWrite USD	0.00%	1.00	--	0.34	0.00%	1.00	100.00%	100.00%

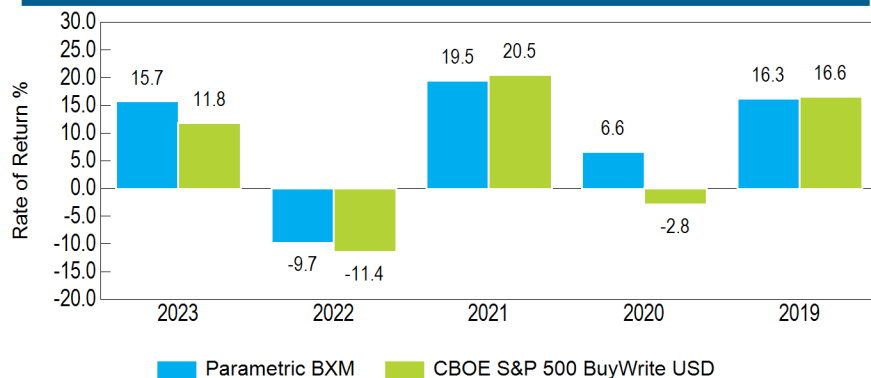
Trailing Period Performance



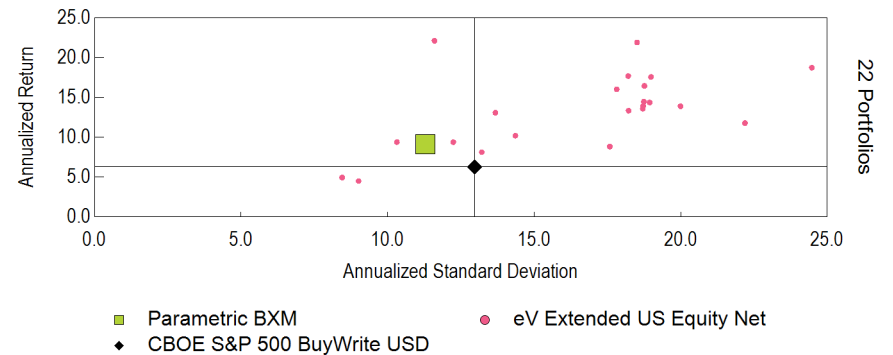
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

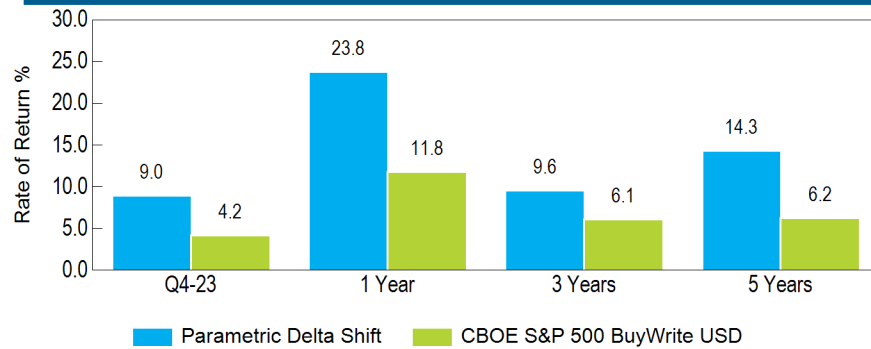


Parametric BXM has an inception date of March 2014.

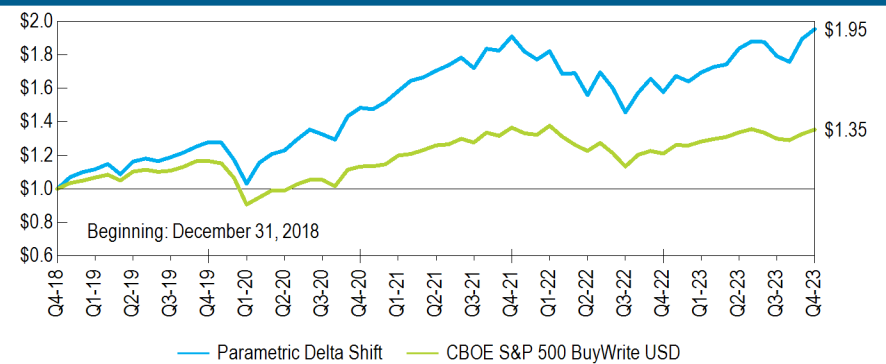
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Parametric Delta Shift	0.53%	1.19	1.02	0.72	7.60%	0.82	211.84%	116.56%
CBOE S&P 500 BuyWrite USD	0.00%	1.00	--	0.34	0.00%	1.00	100.00%	100.00%

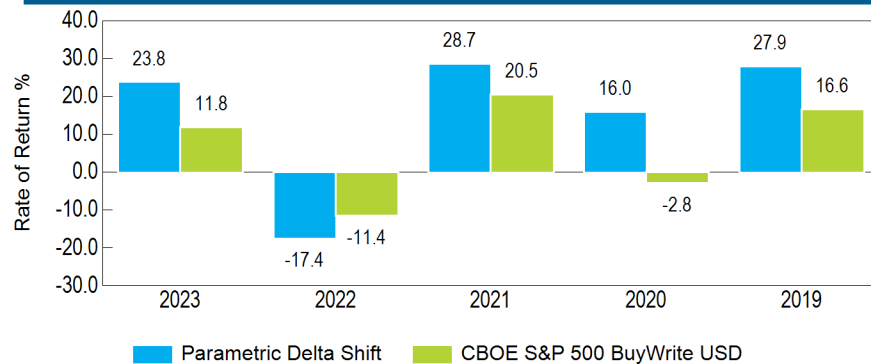
Trailing Period Performance



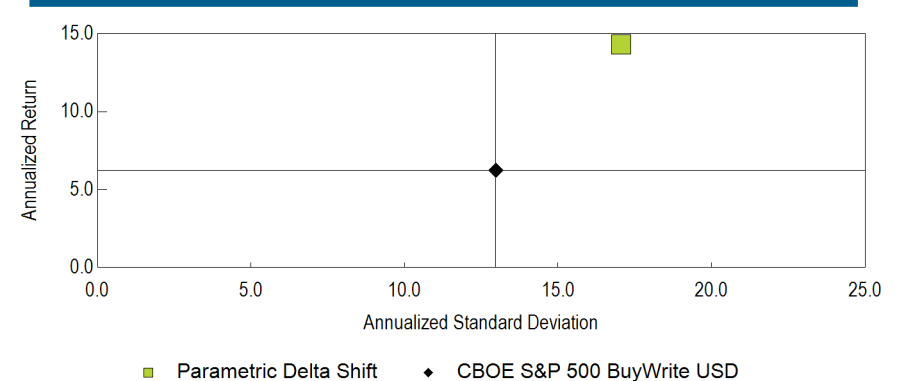
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

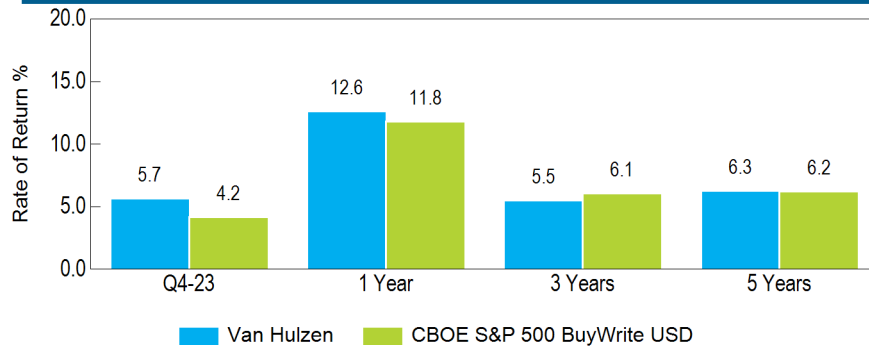


Parametric Delta Shift has an inception date of March 2014.

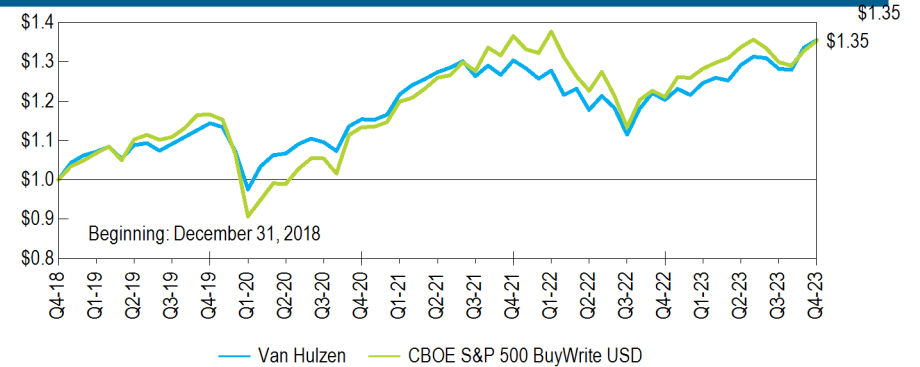
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Van Hulzen	0.12%	0.71	-0.04	0.42	5.51%	0.84	75.46%	83.04%
CBOE S&P 500 BuyWrite USD	0.00%	1.00	--	0.34	0.00%	1.00	100.00%	100.00%

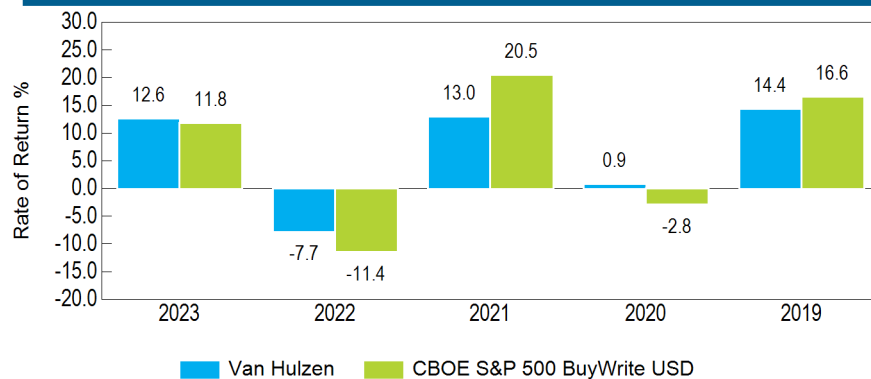
Trailing Period Performance



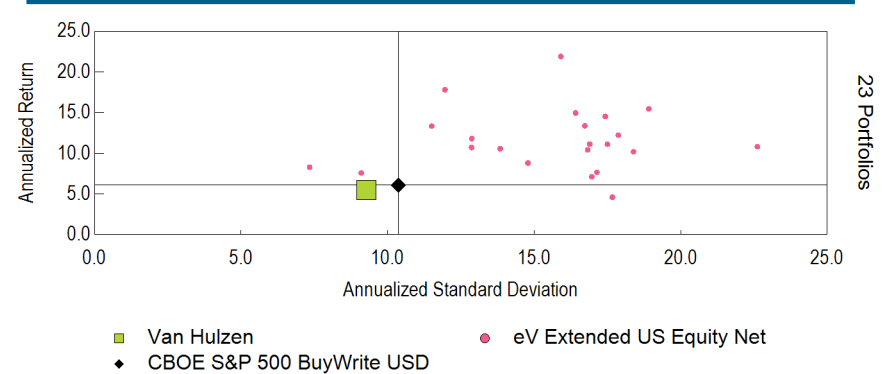
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

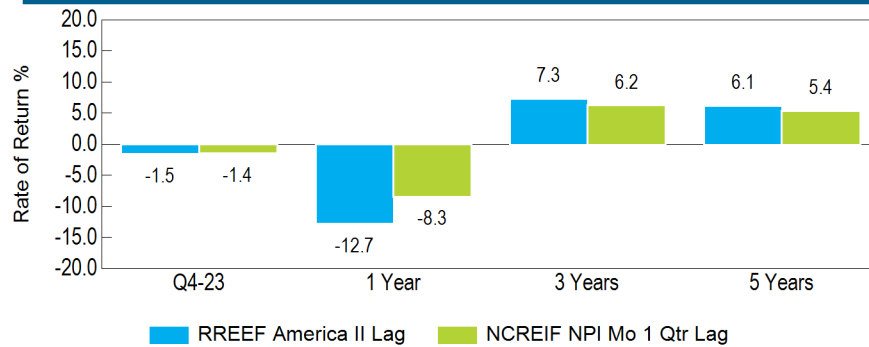


Van Hulzen has an inception date of March 2014.

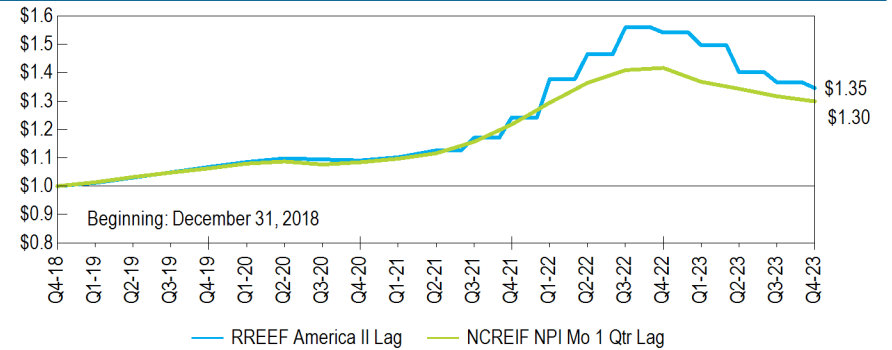
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
RREEF America II Lag	-0.18%	1.42	-0.03	0.44	6.69%	0.28	114.22%	149.60%
NCREIF NPI Mo 1 Qtr Lag	0.00%	1.00	--	1.25	0.00%	1.00	100.00%	100.00%

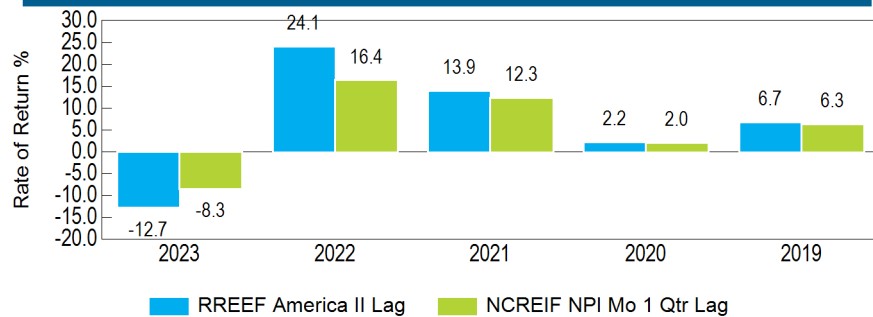
Trailing Period Performance



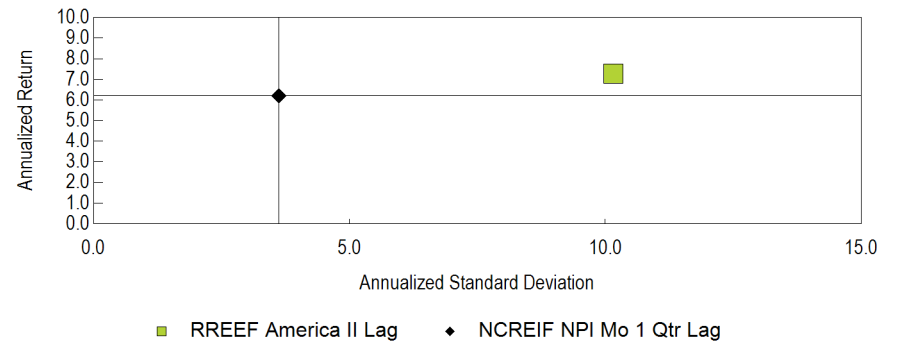
Growth of \$1 - 5 Year



Calendar Year Performance



Risk/Return - 5 Year

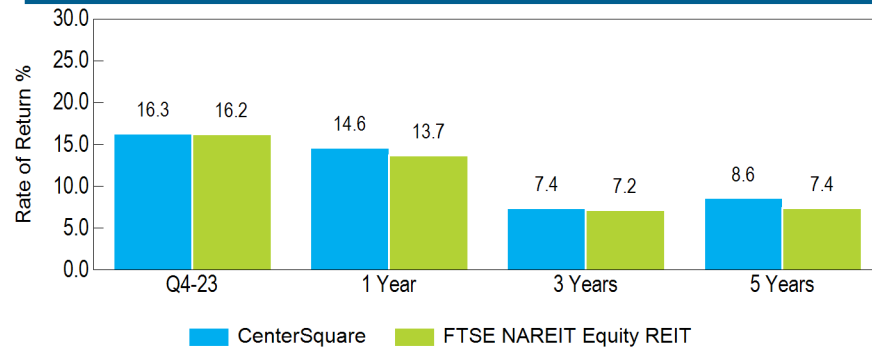


RREEF American II Performance results are lagged one quarter.
RREEF America II Lag has an inception date of January 2007.

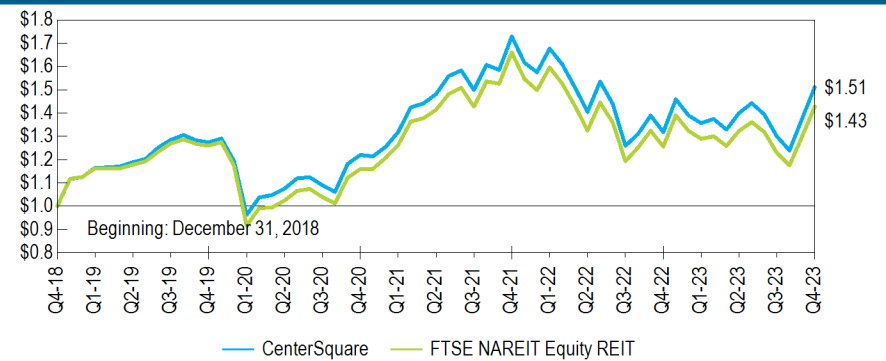
5 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
CenterSquare	0.08%	0.97	0.56	0.31	1.65%	0.99	100.70%	98.49%
FTSE NAREIT Equity REIT	0.00%	1.00	--	0.26	0.00%	1.00	100.00%	100.00%

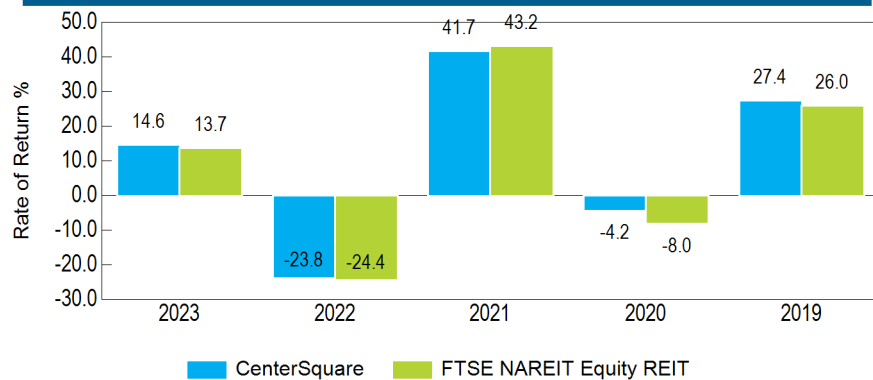
Trailing Period Performance



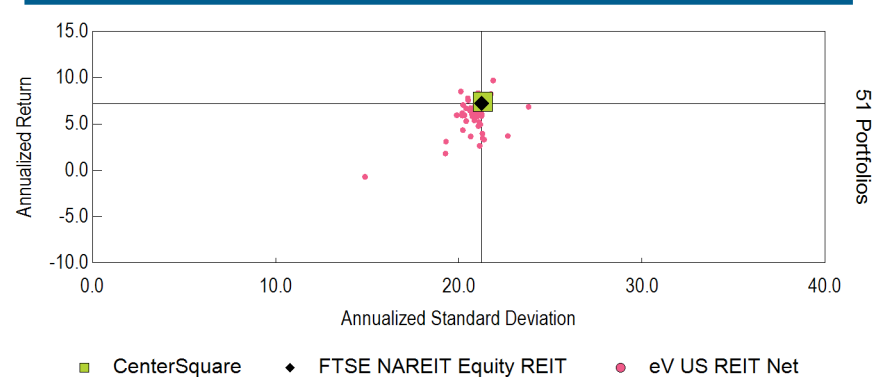
Growth of \$1 - 5 Year



Calendar Year Performance

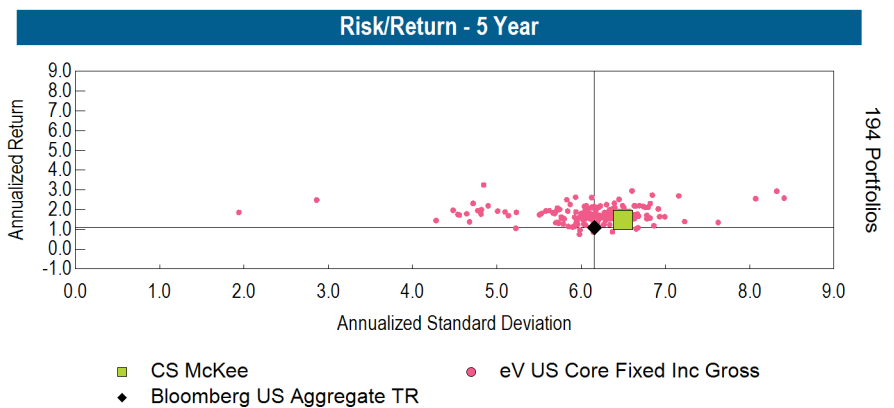
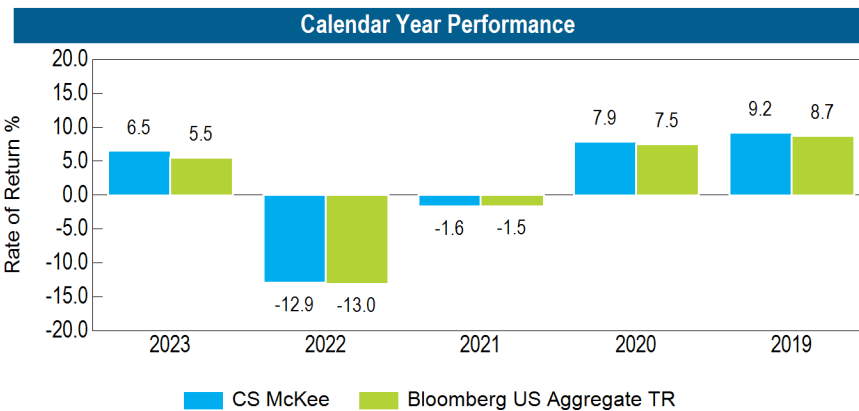
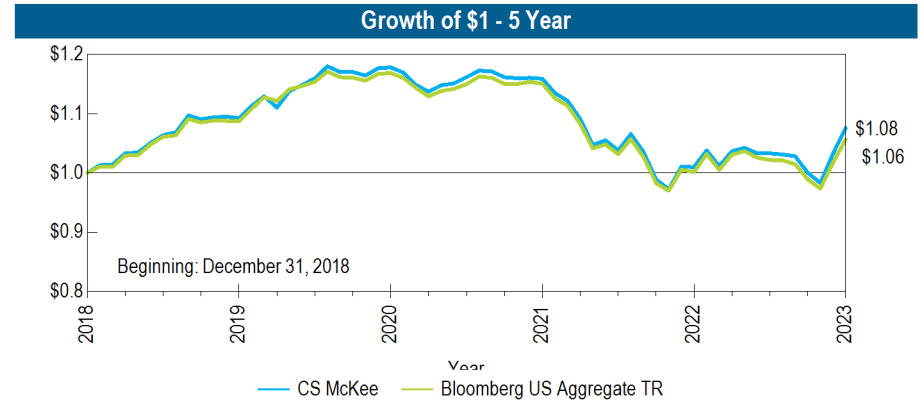
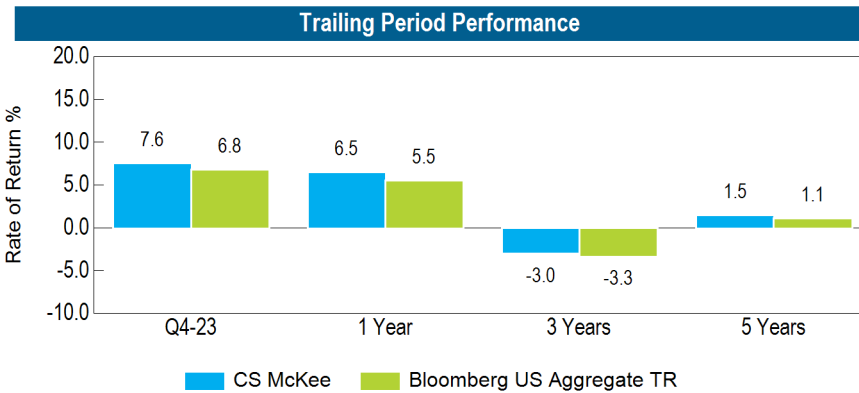


Risk/Return - 5 Year



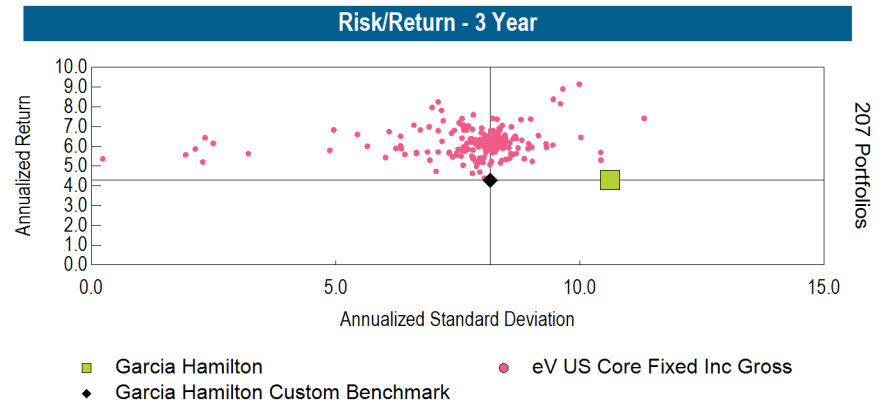
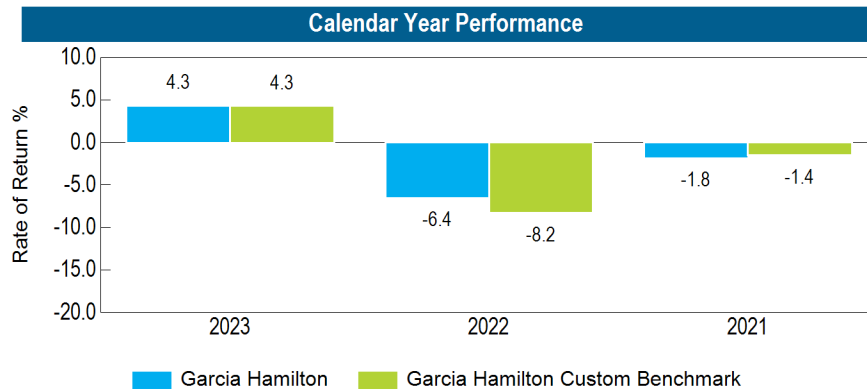
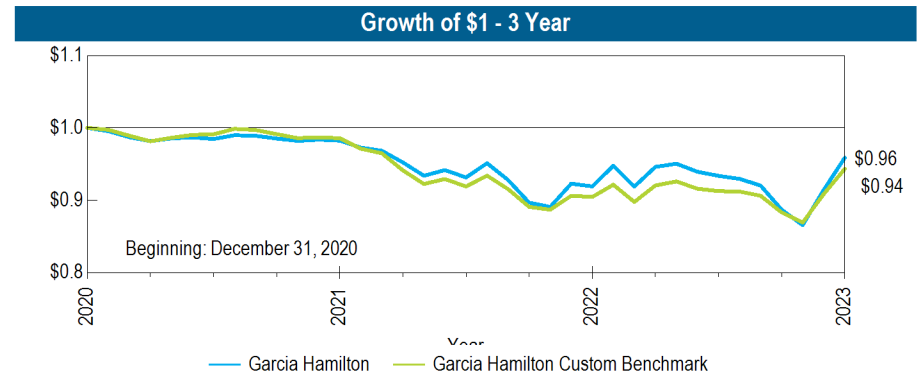
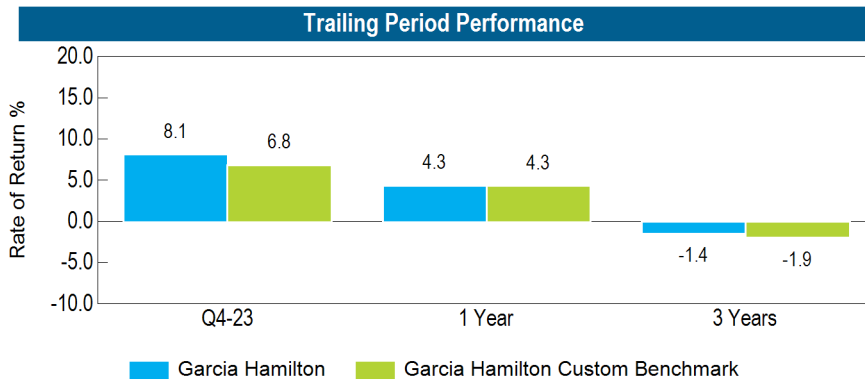
CenterSquare has an inception date of October 2011.

5 Year Statistics Summary									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	
CS McKee	0.02%	1.00	0.32	0.38	0.86%	0.96	103.16%	97.75%	
Bloomberg US Aggregate TR	0.00%	1.00	--	0.32	0.00%	1.00	100.00%	100.00%	



CS McKee has an inception date of April 2010.

3 Year Statistics Summary									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	
Garcia Hamilton	0.08%	1.22	0.28	-0.49	1.92%	0.96	126.81%	110.32%	
Garcia Hamilton Custom Benchmark	0.00%	1.00	--	-0.70	0.00%	1.00	100.00%	100.00%	

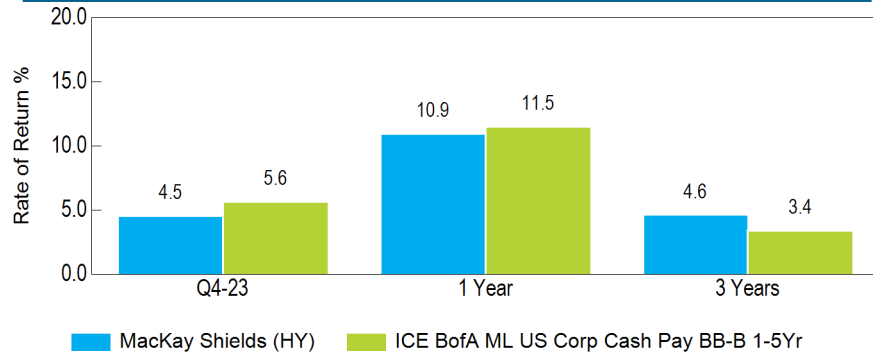


Garcia Hamilton has an inception date of November 2019.
5 Year risk statistics are not available at this time.

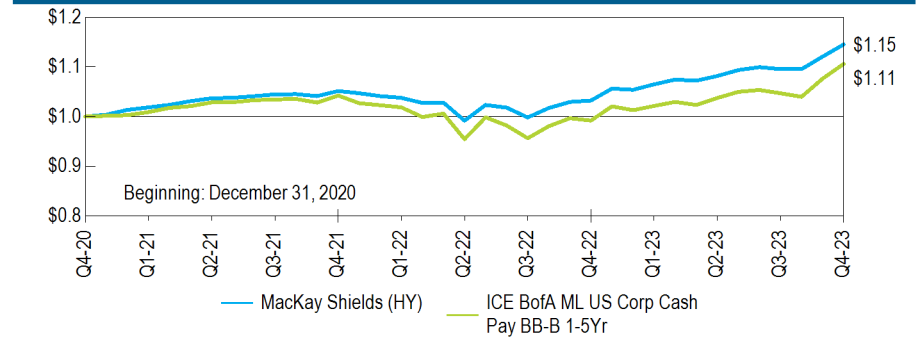
3 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
MacKay Shields (HY)	0.15%	0.67	0.35	0.48	2.22%	0.95	77.18%	57.36%
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	0.00%	1.00	--	0.21	0.00%	1.00	100.00%	100.00%

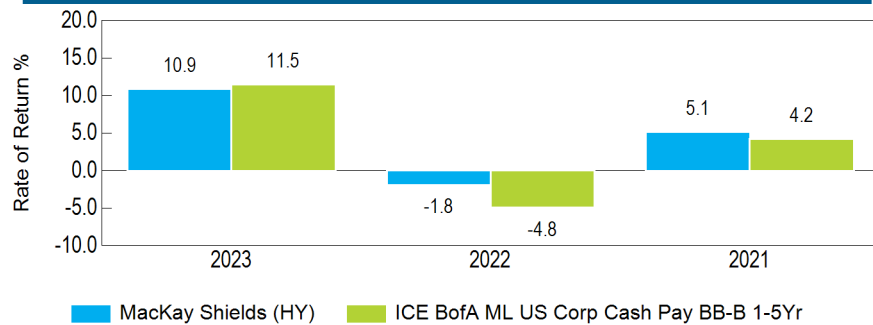
Trailing Period Performance



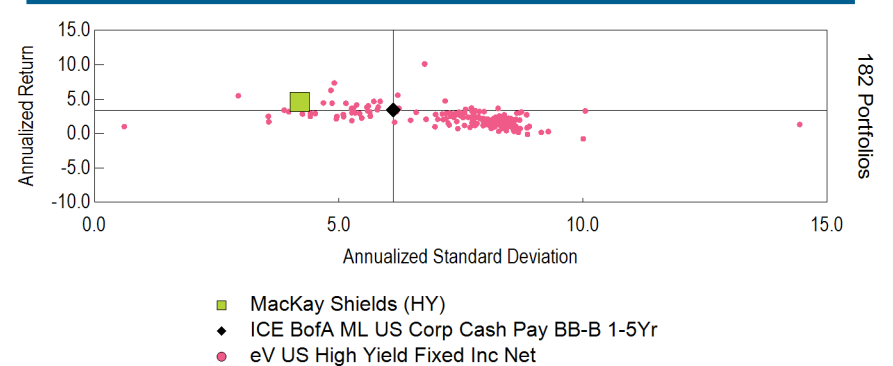
Growth of \$1 - 3 Year



Calendar Year Performance



Risk/Return - 3 Year

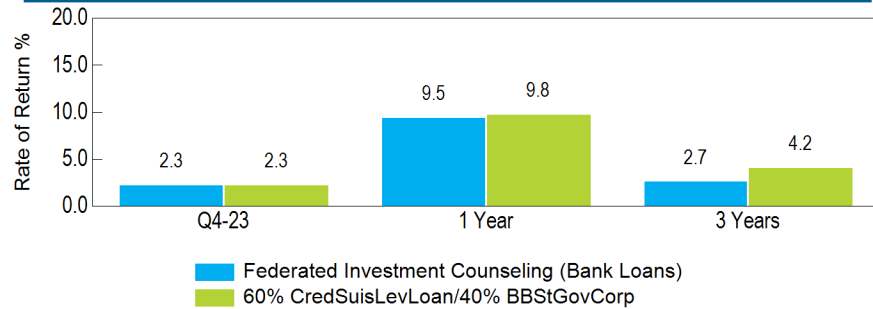


MacKay Shields has an inception date of February 2019.
5 Year Risk statistics are not available at this time.

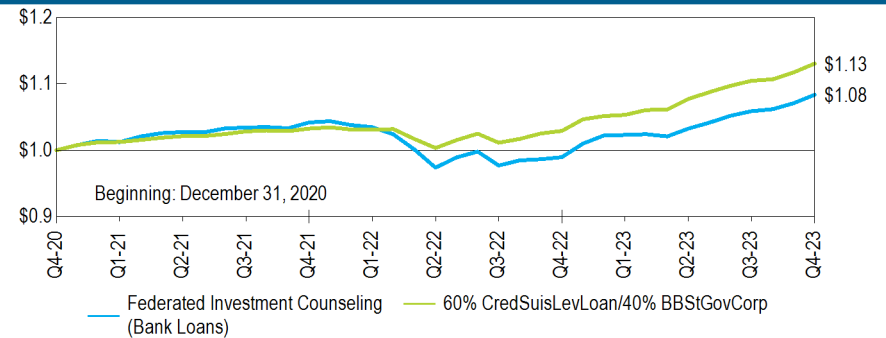
3 Year Statistics Summary

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Federated Investment Counseling (Bank Loans)	-0.28%	1.34	-1.28	0.02	1.54%	0.86	88.03%	180.90%
60% CredSuisLevLoan/40% BBStGovCorp	0.00%	1.00	--	0.84	0.00%	1.00	100.00%	100.00%

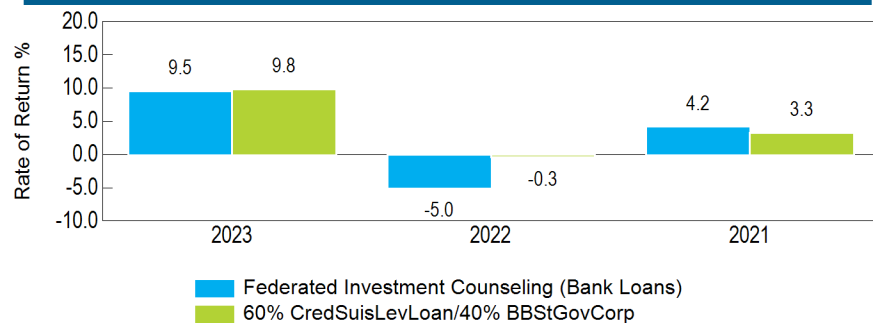
Trailing Period Performance



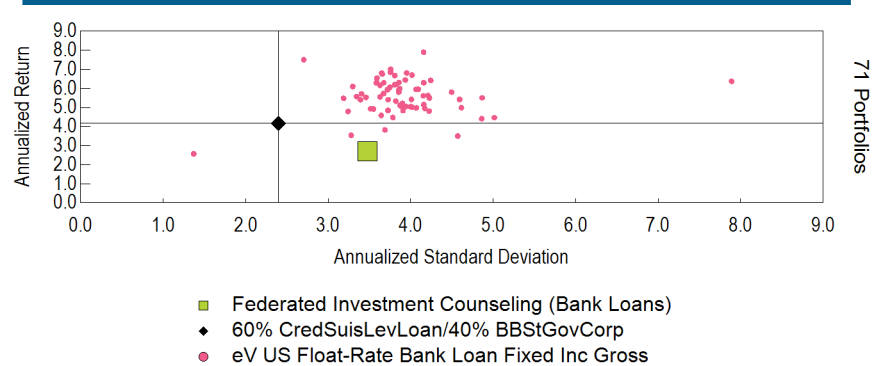
Growth of \$1 - 3 Year



Calendar Year Performance



Risk/Return - 3 Year



Federated Investment Counseling has an inception date of February 2019.
5 Year Risk statistics are not available at this time.

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	8.8	15.1	4.4	8.6
<i>Total Plan Benchmark</i>	<i>8.4</i>	<i>15.1</i>	<i>4.0</i>	<i>8.0</i>
US Equity Composite	12.1	25.9	8.6	15.1
<i>Russell 3000 Hybrid</i>	<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>
Non-US Equity Composite	9.8	15.6	2.1	7.4
<i>MSCI ACWI xUS (blend)</i>	<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>
Covered Calls Composite	6.5	17.1	7.5	9.8
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Real Estate Composite	6.9	-0.9	7.0	7.4
<i>Real Estate Composite Benchmark</i>	<i>7.4</i>	<i>2.7</i>	<i>7.3</i>	<i>7.0</i>
Fixed Income Composite	6.8	6.2	-1.2	2.1
<i>Fixed Income Composite Benchmark</i>	<i>6.3</i>	<i>6.1</i>	<i>-1.3</i>	<i>2.0</i>
Cash Composite	1.0	4.8	2.0	2.1
<i>FTSE T-Bill 3 Months TR</i>	<i>1.4</i>	<i>5.3</i>	<i>2.2</i>	<i>1.9</i>

Benchmark composition and history provided at the end of this report.

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
US Equity Composite	12.1	25.9	8.6	15.1
<i>Russell 3000 Hybrid</i>	<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>
Northern Trust Russell 3000	12.1	26.0	8.6	15.1
<i>Russell 3000</i>	<i>12.1</i>	<i>26.0</i>	<i>8.5</i>	<i>15.2</i>
Non-US Equity Composite	9.8	15.6	2.1	7.4
<i>MSCI ACWI xUS (blend)</i>	<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>
Northern Trust ACWI ex US	9.8	15.6	1.8	7.2
<i>MSCI ACWI ex USA Gross</i>	<i>9.8</i>	<i>16.2</i>	<i>2.0</i>	<i>7.6</i>
Covered Calls Composite	6.5	17.1	7.5	9.8
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Parametric BXM	4.9	15.6	7.5	9.0
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Parametric Delta Shift	8.9	23.5	9.3	14.0
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>
Van Hulzen	5.6	12.4	5.2	6.0
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Real Estate Composite	6.9	-0.9	7.0	7.4
<i>Real Estate Composite Benchmark</i>	<i>7.4</i>	<i>2.7</i>	<i>7.3</i>	<i>7.0</i>
RREEF America II Lag	-1.7	-13.3	6.3	5.2
<i>NCREIF NPI Mo 1 Qtr Lag</i>	<i>-1.4</i>	<i>-8.3</i>	<i>6.2</i>	<i>5.4</i>
CenterSquare	16.2	14.3	7.1	8.3
<i>FTSE NAREIT Equity REIT</i>	<i>16.2</i>	<i>13.7</i>	<i>7.2</i>	<i>7.4</i>
Fixed Income Composite	6.8	6.2	-1.2	2.1
<i>Fixed Income Composite Benchmark</i>	<i>6.3</i>	<i>6.1</i>	<i>-1.3</i>	<i>2.0</i>
Fixed Income Core Fixed Income Composite	7.8	5.2	-2.3	1.6
<i>Fixed Income Core Composite Bench</i>	<i>6.8</i>	<i>4.9</i>	<i>-2.6</i>	<i>--</i>
CS McKee	7.5	6.3	-3.2	1.3
<i>Bloomberg US Aggregate TR</i>	<i>6.8</i>	<i>5.5</i>	<i>-3.3</i>	<i>1.1</i>
Garcia Hamilton	8.1	4.2	-1.5	--
<i>Garcia Hamilton Custom Benchmark</i>	<i>6.8</i>	<i>4.3</i>	<i>-1.9</i>	<i>--</i>
Fixed Income Non-Core Fixed Income Composite	3.3	9.7	3.3	4.4
<i>Fixed Income Non-Core Composite Bench</i>	<i>4.0</i>	<i>10.7</i>	<i>3.8</i>	<i>4.3</i>
MacKay Shields (HY)	4.4	10.5	4.2	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>	<i>5.6</i>	<i>11.5</i>	<i>3.4</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	2.2	9.0	2.2	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>	<i>2.3</i>	<i>9.8</i>	<i>4.2</i>	<i>--</i>

Benchmark History

As of December 31, 2023

EBMUDERS Total Plan Composite

2/1/2023	Present	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 20% Bloomberg US Aggregate TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
12/1/2019	1/31/2023	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% Bloomberg US Intermediate Gov/Cred / 10% Bloomberg US Aggregate TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
3/1/2019	11/30/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
7/1/2018	2/28/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
4/1/2014	6/30/2018	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 10% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
3/1/2014	3/31/2014	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
11/1/2011	2/28/2014	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT
1/1/2008	10/31/2011	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 5% NCREIF NPI Mo 1 Qtr Lag
1/1/2007	12/31/2007	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Aggregate TR / 5% NCREIF Property Index
10/1/2005	12/31/2006	50% Russell 3000 / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag / 20% MSCI EAFE
4/1/2005	9/30/2005	30% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 20% MSCI EAFE / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag

Benchmark History

As of December 31, 2023

Fixed Income Composite

2/1/2023	Present	80% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 10% 60% CredSuisLevLoan/40% BBStGovCorp
12/1/2019	1/31/2023	40% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 40% Bloomberg US Intermediate Gov/Cred / 10% 60% CredSuisLevLoan/40% BBStGovCorp
3/1/2019	11/30/2019	60% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% 60% CredSuisLevLoan/40% BBStGovCorp
7/1/2018	2/28/2019	60% Bloomberg US Aggregate TR / 10% Morningstar LSTA US Performing Loans Index / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% Bloomberg US High Yield 1-5Yr Cash Pay 2%
4/1/2014	6/30/2018	50% Bloomberg US Aggregate TR / 12.5% Morningstar LSTA US Performing Loans Index / 25% Bloomberg US Govt/Credit 1-3 Yr. TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2%
3/1/2014	3/31/2014	75% Bloomberg US Aggregate TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 12.5% Morningstar LSTA US Performing Loans Index
1/1/2008	2/28/2014	Bloomberg US Universal TR
1/1/1976	12/31/2007	Bloomberg US Aggregate TR

Fixed Income Core Fixed Income Composite

2/1/2023	Present	Bloomberg US Aggregate TR
12/1/2019	1/31/2023	50% Bloomberg US Aggregate TR / 50% Bloomberg US Intermediate Gov/Cred

Fixed Income Non-Core Fixed Income Composite

12/1/2019	Present	50% 60% CredSuisLevLoan/40% BBStGovCorp / 50% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
3/1/2019	11/30/2019	25% 60% CredSuisLevLoan/40% BBStGovCorp / 25% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 50% Bloomberg US Govt/Credit 1-3 Yr. TR
3/1/2014	2/28/2019	25% Morningstar LSTA US Performing Loans Index / 25% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 50% Bloomberg US Govt/Credit 1-3 Yr. TR

Benchmark History As of December 31, 2023

Real Estate Composite

11/1/2011	Present	50% FTSE NAREIT Equity REIT / 50% NCREIF NPI Mo 1 Qtr Lag
10/1/1998	10/31/2011	NCREIF NPI Mo 1 Qtr Lag
4/1/1978	9/30/1998	NCREIF Property Index

Garcia Hamilton

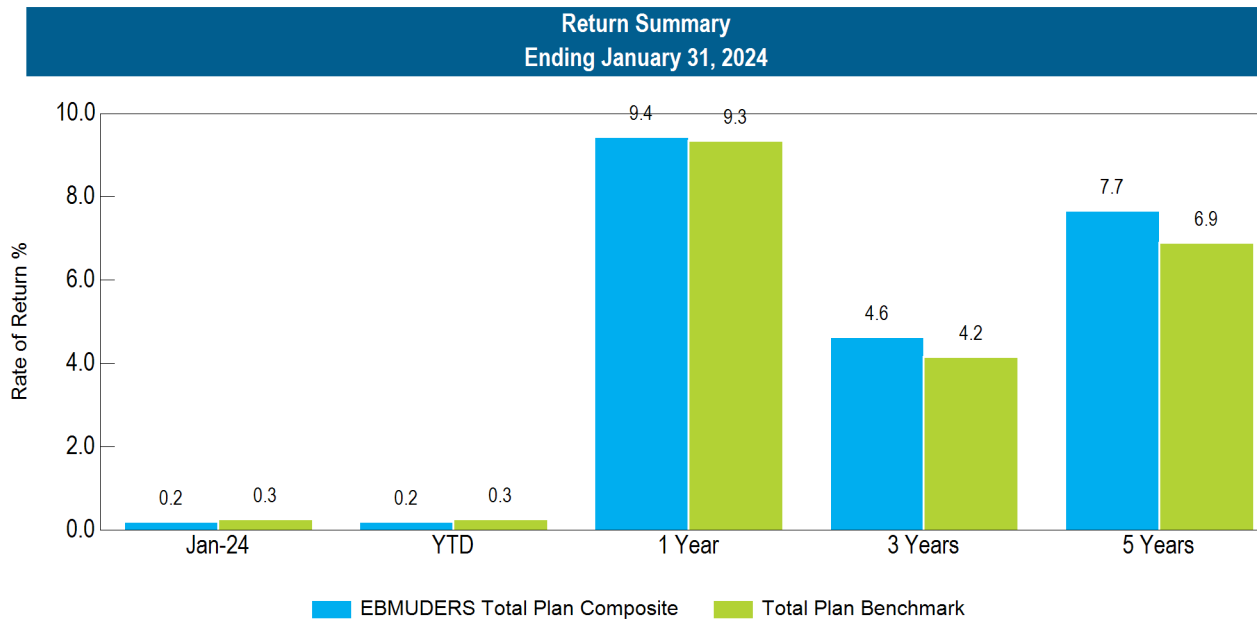
2/1/2023	Present	Bloomberg US Aggregate TR
11/1/2019	1/31/2023	Bloomberg US Govt/Credit Int TR

**Gross Performance Update
As of January 31, 2024**

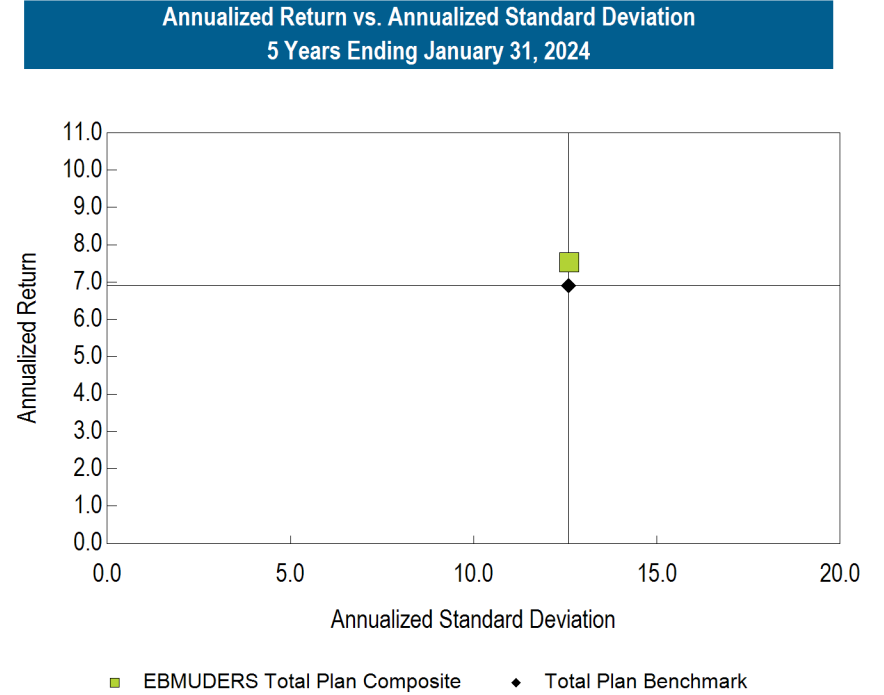
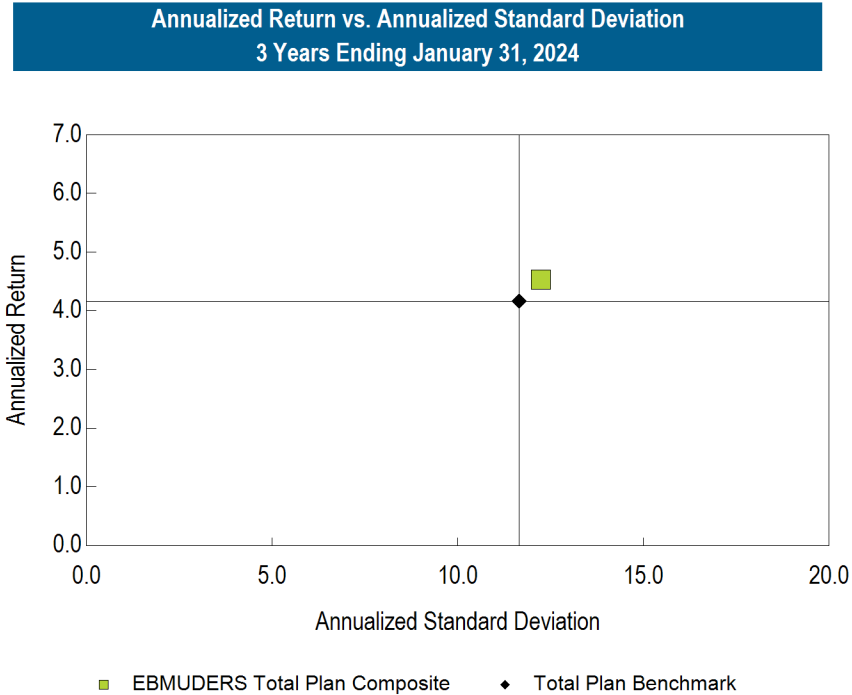
Performance Summary							
	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,361,526,063	100.0	0.2	0.2	9.4	4.6	7.7
<i>Total Plan Benchmark</i>			<i>0.3</i>	<i>0.3</i>	<i>9.3</i>	<i>4.2</i>	<i>6.9</i>
US Equity Composite	637,550,747	27.0	1.1	1.1	19.2	9.1	13.5
<i>Russell 3000 Hybrid</i>			<i>1.1</i>	<i>1.1</i>	<i>19.1</i>	<i>9.1</i>	<i>13.5</i>
Non-US Equity Composite	569,642,807	24.1	-1.1	-1.1	5.5	1.7	5.7
<i>MSCI ACWI xUS (blend)</i>			<i>-1.0</i>	<i>-1.0</i>	<i>6.4</i>	<i>1.6</i>	<i>5.8</i>
Covered Calls Composite	482,662,088	20.4	1.5	1.5	14.6	8.3	9.2
<i>CBOE S&P 500 BuyWrite USD</i>			<i>1.8</i>	<i>1.8</i>	<i>9.2</i>	<i>6.7</i>	<i>5.9</i>
Real Estate Composite	120,446,247	5.1	-2.1	-2.1	-6.9	6.7	6.1
<i>Real Estate Composite Benchmark</i>			<i>-2.6</i>	<i>-2.6</i>	<i>-4.5</i>	<i>6.3</i>	<i>5.2</i>
Fixed Income Composite	545,255,097	23.1	-0.1	-0.1	3.4	-0.9	2.0
<i>Fixed Income Composite Benchmark</i>			<i>-0.1</i>	<i>-0.1</i>	<i>3.4</i>	<i>-1.3</i>	<i>1.7</i>
Cash Composite	5,969,077	0.3	1.0	1.0	4.1	2.3	2.2
<i>FTSE T-Bill 3 Months TR</i>			<i>0.5</i>	<i>0.5</i>	<i>5.4</i>	<i>2.4</i>	<i>2.0</i>

Benchmark composition and history provided at the end of this report.

Summary of Cash Flows		
	Quarter-To-Date	One Year
Beginning Market Value	\$2,360,015,381	\$2,183,503,131
Net Cash Flow	-\$3,045,558	-\$24,912,531
Capital Appreciation	\$4,556,240	\$202,935,463
Ending Market Value	\$2,361,526,063	\$2,361,526,063



Benchmark composition and history provided at the end of this report.



3 Years Ending January 31, 2024

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	4.64%	12.24%	0.19
Total Plan Benchmark	4.16%	11.65%	0.16

5 Years Ending January 31, 2024

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	7.67%	12.61%	0.46
Total Plan Benchmark	6.90%	12.59%	0.40

Asset Allocation vs. Target

	Current (\$)	Current (%)	Policy (%)	Difference* (%)	Policy Range (%)	Within Range
Domestic Equity	637,550,747	27.0	25.0	2.0	20.0 - 30.0	Yes
International Equity	569,642,807	24.1	25.0	-0.9	20.0 - 30.0	Yes
Covered Calls	482,662,088	20.4	20.0	0.4	17.0 - 23.0	Yes
Real Estate	120,446,247	5.1	5.0	0.1	3.0 - 7.0	Yes
Core Fixed Income	429,456,815	18.2	20.0	-1.8	17.0 - 23.0	Yes
Non-Core Fixed Income	115,798,282	4.9	5.0	-0.1	3.0 - 7.0	Yes
Cash	5,969,078	0.3	0.0	0.3	0.0 - 5.0	Yes
Total	2,361,526,063	100.0	100.0			

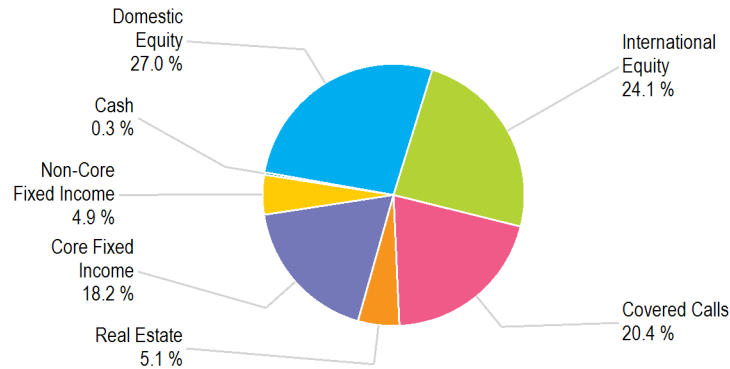
*Difference between Policy and Current Allocation

¹Current policy target allocations elected by the Board in January 2019 took effect March 2019 upon the transition to the new long-term strategic allocation.

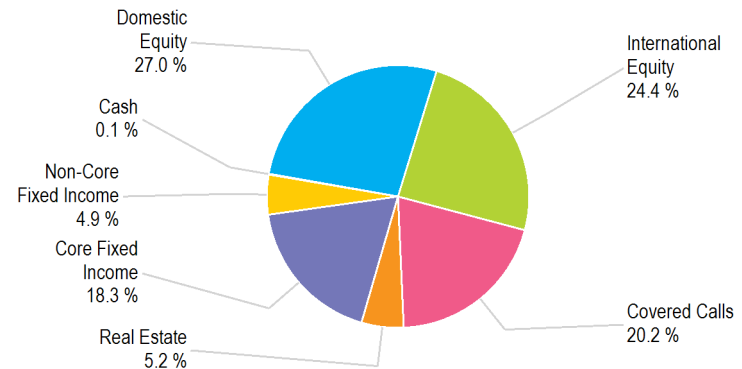
²Policy rebalancing ranges shown are for non-turbulent market periods. The Plan also has established rebalancing ranges to be in effect during turbulent market periods

³RREEF results are lagged 1 quarter

January 31, 2024 : \$2,361,526,063



December 31, 2023 : \$2,360,015,381



	Market Value	1 Mo	YTD	1 Yr	3 Yrs	5 Yrs
Domestic Equity	637,550,747					
Northern Trust Russell 3000	636,678,168	1.1	1.1	19.2	9.1	13.5
<i>Russell 3000</i>		<i>1.1</i>	<i>1.1</i>	<i>19.1</i>	<i>9.1</i>	<i>13.5</i>
International Equity	569,642,807					
Northern Trust ACWI ex US	569,642,807	-1.1	-1.1	5.5	1.5	5.4
<i>MSCI ACWI ex USA Gross</i>		<i>-1.0</i>	<i>-1.0</i>	<i>6.4</i>	<i>1.6</i>	<i>5.8</i>
Covered Calls	482,662,088					
Parametric BXM	159,630,828	1.5	1.5	13.5	8.2	8.6
<i>CBOE S&P 500 BuyWrite USD</i>		<i>1.8</i>	<i>1.8</i>	<i>9.2</i>	<i>6.7</i>	<i>5.9</i>
Parametric Delta Shift	165,855,261	1.3	1.3	18.3	10.3	13.1
<i>CBOE S&P 500 BuyWrite USD</i>		<i>1.8</i>	<i>1.8</i>	<i>9.2</i>	<i>6.7</i>	<i>5.9</i>
Van Hulzen	157,175,999	1.7	1.7	11.9	6.1	5.7
<i>CBOE S&P 500 BuyWrite USD</i>		<i>1.8</i>	<i>1.8</i>	<i>9.2</i>	<i>6.7</i>	<i>5.9</i>
Real Estate	120,446,247					
RREEF America II Lag	58,937,302	0.0	0.0	-12.7	7.1	6.0
<i>NCREIF NPI Mo 1 Qtr Lag</i>		<i>-1.0</i>	<i>-1.0</i>	<i>-8.2</i>	<i>5.7</i>	<i>5.1</i>
CenterSquare	61,508,945	-3.9	-3.9	-0.5	6.1	5.4
<i>FTSE NAREIT Equity REIT</i>		<i>-4.2</i>	<i>-4.2</i>	<i>-1.5</i>	<i>5.7</i>	<i>4.1</i>

¹RREEF results are lagged 1 quarter

	Market Value	1 Mo	YTD	1 Yr	3 Yrs	5 Yrs
Core Fixed Income	429,456,815					
CS McKee	216,543,597	-0.2	-0.2	3.4	-2.8	1.2
<i>Bloomberg US Aggregate TR</i>		<i>-0.3</i>	<i>-0.3</i>	<i>2.1</i>	<i>-3.2</i>	<i>0.8</i>
Garcia Hamilton	212,913,218	-0.4	-0.4	0.8	-1.4	--
<i>Garcia Hamilton Custom Benchmark</i>		<i>-0.3</i>	<i>-0.3</i>	<i>2.1</i>	<i>-1.9</i>	<i>--</i>
Non-Core Fixed Income	115,798,282					
Mackay Shields (HY)	59,785,960	0.6	0.6	9.1	4.7	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>0.1</i>	<i>0.1</i>	<i>8.5</i>	<i>3.4</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	56,012,321	0.4	0.4	7.7	2.6	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>0.6</i>	<i>0.6</i>	<i>8.7</i>	<i>4.1</i>	<i>--</i>
Cash	5,969,078					
Cash LAIF	5,969,077	1.0	1.0	4.1	2.3	2.2
<i>FTSE T-Bill 3 Months TR</i>		<i>0.5</i>	<i>0.5</i>	<i>5.4</i>	<i>2.4</i>	<i>2.0</i>

Benchmark History As of January 31, 2024

EBMUDERS Total Plan Composite

2/1/2023	Present	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 20% Bloomberg US Aggregate TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
12/1/2019	1/31/2023	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% Bloomberg US Intermediate Gov/Cred / 10% Bloomberg US Aggregate TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
3/1/2019	11/30/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
7/1/2018	2/28/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
4/1/2014	6/30/2018	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 10% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
3/1/2014	3/31/2014	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% Morningstar LSTA US Performing Loans Index
11/1/2011	2/28/2014	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT
1/1/2008	10/31/2011	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 5% NCREIF NPI Mo 1 Qtr Lag
1/1/2007	12/31/2007	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Aggregate TR / 5% NCREIF Property Index
10/1/2005	12/31/2006	50% Russell 3000 / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag / 20% MSCI EAFE
4/1/2005	9/30/2005	30% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 20% MSCI EAFE / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag
9/1/1998	3/31/2005	33% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 17% MSCI EAFE / 30% Bloomberg US Aggregate TR
3/31/1996	8/31/1998	30% S&P 500 / 15% Wilshire 5000 / 15% MSCI EAFE / 30% Bloomberg US Aggregate TR / 5% NCREIF Property Index / 5% FTSE T-Bill 3 Months TR

EBMUDERS Total Plan x Securities Lending Composite		
No Benchmark Selected		
Public Equity Composite		
1/1/2007	Present	71.43% Russell 3000 / 28.57% MSCI ACWI ex USA Gross
10/1/2005	12/31/2006	28.57% MSCI EAFE / 71.43% Russell 3000
4/1/2005	9/30/2005	42.86% S&P 500 / 14.285% S&P 400 MidCap / 14.285% Russell 2000 / 28.57% MSCI EAFE
9/1/1998	3/31/2005	47.14% S&P 500 / 14.285% S&P 400 MidCap / 14.285% Russell 2000 / 24.29% MSCI EAFE
1/1/1994	8/31/1998	50% S&P 500 / 25% Wilshire 5000 / 25% MSCI EAFE
US Equity Composite		
10/1/2005	Present	Russell 3000
4/1/2005	9/30/2005	60% S&P 500 / 20% S&P 400 MidCap / 20% Russell 2000
9/1/1998	3/31/2005	62.23% S&P 500 / 18.87% S&P 400 MidCap / 18.87% Russell 2000
4/1/1996	8/31/1998	33.3% Wilshire 5000 / 66.6% S&P 500
US Equity Large Cap Composite		
10/1/2005	Present	Russell 1000 Value
6/1/1994	9/30/2005	S&P 500
Non-US Equity Composite		
1/1/2007	Present	MSCI ACWI ex USA Gross
1/1/1970	12/31/2006	MSCI EAFE
NonUSE Developed Markets Composite		
1/1/2007	Present	MSCI ACWI ex USA Gross
1/1/1970	12/31/2006	MSCI EAFE
Covered Calls Composite		
	Present	CBOE S&P 500 BuyWrite USD

Real Estate Composite		
11/1/2011	Present	50% FTSE NAREIT Equity REIT / 50% NCREIF NPI Mo 1 Qtr Lag
10/1/1998	10/31/2011	NCREIF NPI Mo 1 Qtr Lag
4/1/1978	9/30/1998	NCREIF Property Index
Fixed Income Composite		
2/1/2023	Present	80% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 10% 60% CredSuisLevLoan/40% BBStGovCorp
12/1/2019	1/31/2023	40% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 40% Bloomberg US Intermediate Gov/Cred / 10% 60% CredSuisLevLoan/40% BBStGovCorp
3/1/2019	11/30/2019	60% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% 60% CredSuisLevLoan/40% BBStGovCorp
7/1/2018	2/28/2019	60% Bloomberg US Aggregate TR / 10% Morningstar LSTA US Performing Loans Index / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% Bloomberg US High Yield 1-5Yr Cash Pay 2%
4/1/2014	6/30/2018	50% Bloomberg US Aggregate TR / 12.5% Morningstar LSTA US Performing Loans Index / 25% Bloomberg US Govt/Credit 1-3 Yr. TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2%
3/1/2014	3/31/2014	75% Bloomberg US Aggregate TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 12.5% Morningstar LSTA US Performing Loans Index
1/1/2008	2/28/2014	Bloomberg US Universal TR
1/1/1976	12/31/2007	Bloomberg US Aggregate TR
Fixed Income Core Fixed Income Composite		
2/1/2023	Present	Bloomberg US Aggregate TR
12/1/2019	1/31/2023	50% Bloomberg US Aggregate TR / 50% Bloomberg US Intermediate Gov/Cred
Fixed Income Non-Core Fixed Income Composite		
12/1/2019	Present	50% 60% CredSuisLevLoan/40% BBStGovCorp / 50% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
3/1/2019	11/30/2019	25% 60% CredSuisLevLoan/40% BBStGovCorp / 25% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 50% Bloomberg US Govt/Credit 1-3 Yr. TR
3/1/2014	2/28/2019	25% Morningstar LSTA US Performing Loans Index / 25% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 50% Bloomberg US Govt/Credit 1-3 Yr. TR
Cash Composite		
	Present	FTSE T-Bill 3 Months TR

Manager Watch Screens

Performance Monitoring Summary

Portfolio	Violation Type (Window) ¹	Date of Initial Violation	Correction Action(s)	Current Status			
				Current Status	Est. Beg. Date of Current Status	Months Since Est. Beg. Date	Performance Since Est. Beg. Date ²³
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--	--	--	--	--	--	--	--

→ As of December 31, 2023 there are no managers currently on watch.

¹ Defined as: Short-Term (12 months), Medium-Term (36 months), Long-Term (60 months).

² Annualized for periods greater than 12 months.

³ Performance figures not yet available.

Quantitative Compliance Monitoring per Watch Criteria

Active Management Criteria

- Active investment managers are expected to outperform their respective passive benchmarks related to both their asset class and investment style.
- Relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

Passive Management Criteria

- Passive investment managers are expected to track the performance of their respective passive benchmarks related to both their asset class and their investment style.
- Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked.
- For short- and medium-term performance monitoring, a portfolio with tracking error that is above the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.
- For long-term performance monitoring, relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

Quantitative Monitoring Results - Overall Status Summary

	Prior Qtr Status	Current Qtr Status
Northern Trust – R3000	Acceptable	Acceptable
Northern Trust – ACWixUS	Acceptable	Acceptable
Parametric – BXM	Acceptable	Acceptable
Parametric – Delta Shift	Acceptable	Acceptable
Van Hulzen	Acceptable	Acceptable
CS McKee	Acceptable	Acceptable
Garcia Hamilton	Acceptable	Acceptable
Mackay Shields – Short Term HY	Acceptable	Acceptable
Federated – Bank Loans	Acceptable	Acceptable
CenterSquare	Acceptable	Acceptable

Investment Performance Criteria by Asset Class

Asset Class	Short-term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (60+ months)
Domestic Equity - Passive	Tracking error > 0.30%	Tracking error > 0.25% for 6 consecutive months	Fund annualized return < benchmark annualized return -0.40% for 6 consecutive months
Non-US Equity - Passive	Tracking error > 1.75%	Tracking error > 1.5% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.50% for 6 consecutive months
Covered Calls - Active	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Replication	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.40% for 6 consecutive months
Fixed Income - Core – Active	Fund return < benchmark return - 1.5%	Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
Fixed Income - Core – Passive	Tracking error > 0.25%	Tracking error > 0.20% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.30% for 6 consecutive months
Fixed Income - Non-Core	Fund return < benchmark return - 4.5%	Fund annualized return < benchmark annualized return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months

All criteria are on an annualized basis.

VRR – Value Relative Ratio – is calculated as: manager cumulative return / benchmark cumulative return.

Manager Performance			
	QTD	1 Yr	3 Yrs
Northern Trust Russell 3000	12.1	26.0	8.6
<i>Russell 3000</i>	<i>12.1</i>	<i>26.0</i>	<i>8.5</i>

Short-Term Criteria (rolling 12-month periods)

Tracking error > 0.30% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Tracking error > 0.25% for 6 consecutive months

Current Status: **Acceptable**

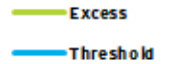
Long-Term Criteria (60+ months)

Fund annualized return < benchmark annualized return -0.40% for 6 consecutive months

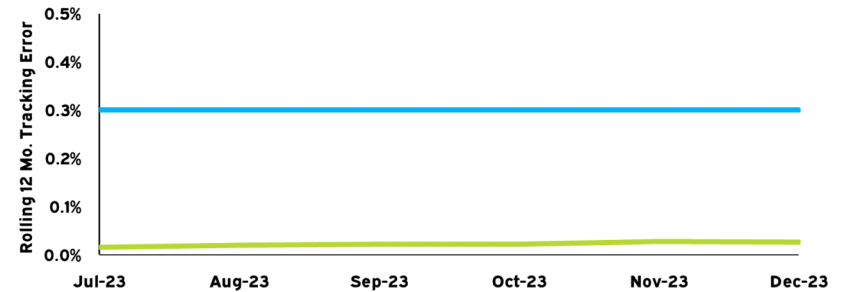
Current Status: Not Applicable

Overall Status:

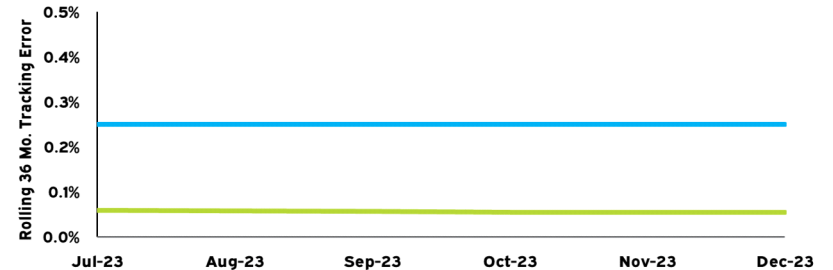
Acceptable



Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Manager Performance			
	QTD	1 Yr	3 Yrs
Northern Trust ACWI ex US	9.8	15.6	1.8
MSCI ACWI ex USA Gross	9.8	16.2	2.0

Short-Term Criteria (rolling 12-month periods)

Tracking error > 1.75% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Tracking error > 1.5% for 6 consecutive months

Current Status: Acceptable

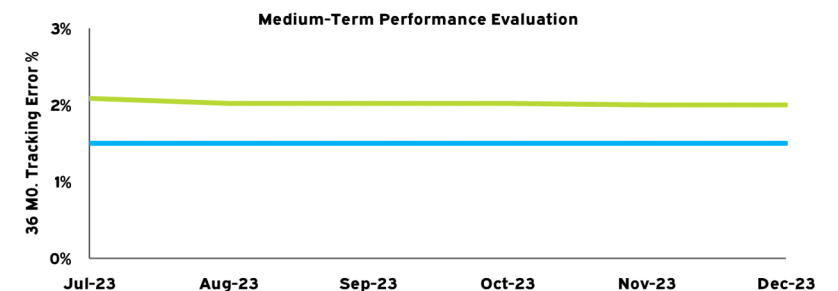
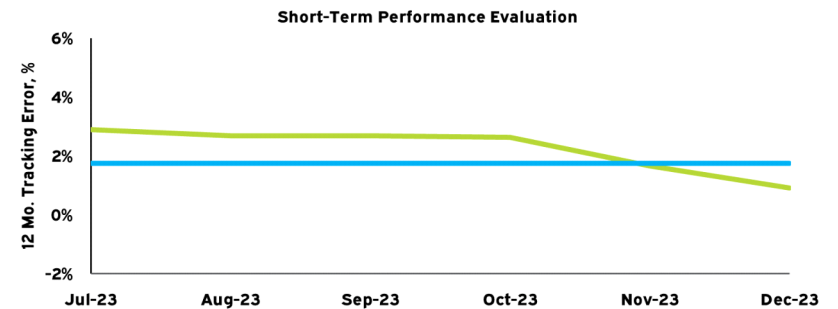
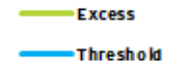
Long-Term Criteria (60+ months)

Fund annualized return < benchmark annualized return -0.50% for 6 consecutive months

Current Status: Not Applicable

Overall Status:

Acceptable



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Parametric BXM	4.9	15.6	7.5	9.0
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: Acceptable

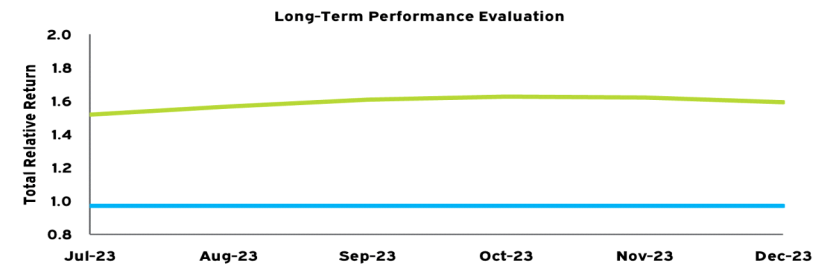
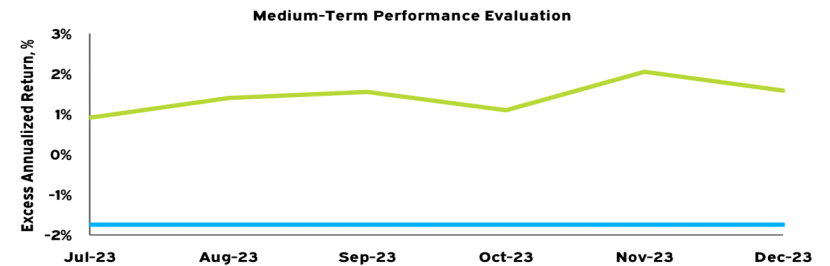
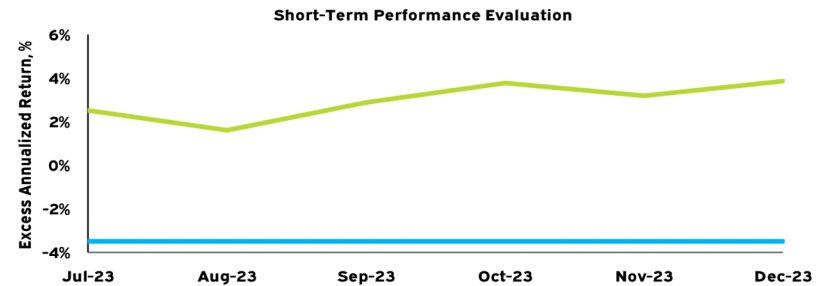
Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: Acceptable

Overall Status:
Acceptable

Excess
Threshold



Parametric is on watch for qualitative reasons.

Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Parametric Delta Shift	8.9	23.5	9.3	14.0
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: Acceptable

Long-Term Criteria (60+ months)

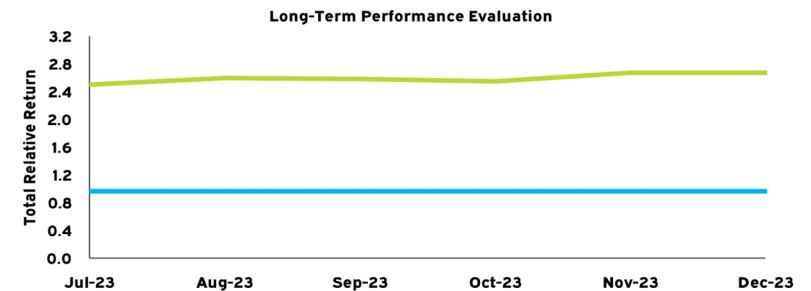
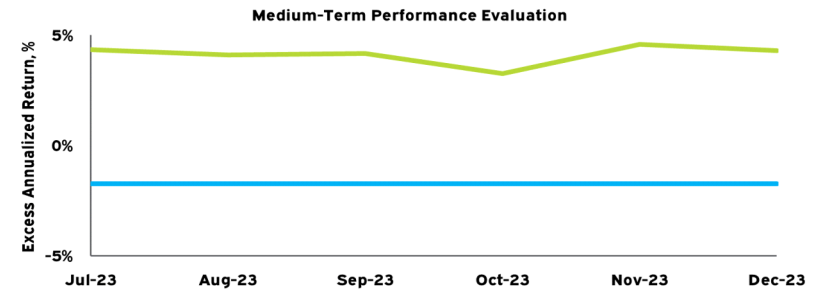
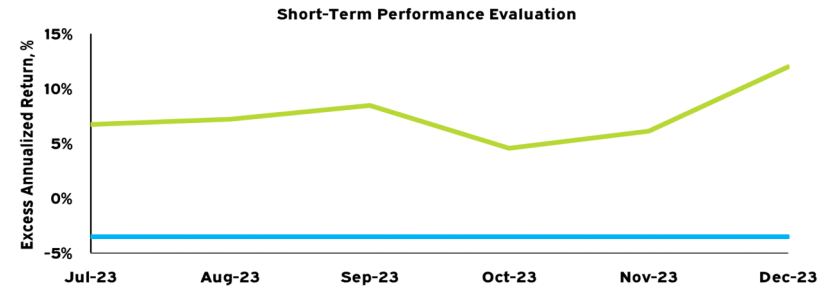
VRR < 0.97 for 6 consecutive months

Current Status: Acceptable

Overall Status:

Acceptable

Excess
Threshold



Parametric is on watch for qualitative reasons.

Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Van Hulzen	5.7	12.6	5.5	6.3
<i>CBOE S&P 500 BuyWrite USD</i>	<i>4.2</i>	<i>11.8</i>	<i>6.1</i>	<i>6.2</i>

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: Acceptable

Long-Term Criteria (60+ months)

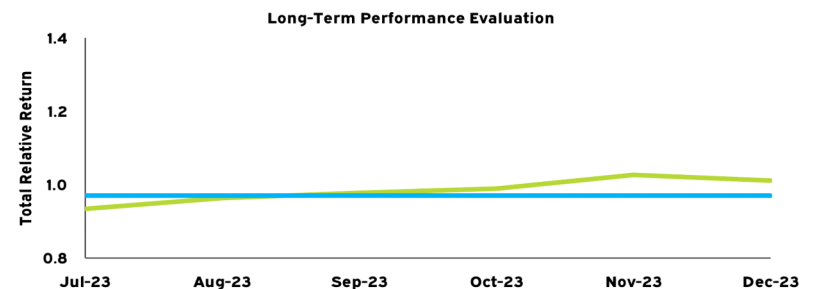
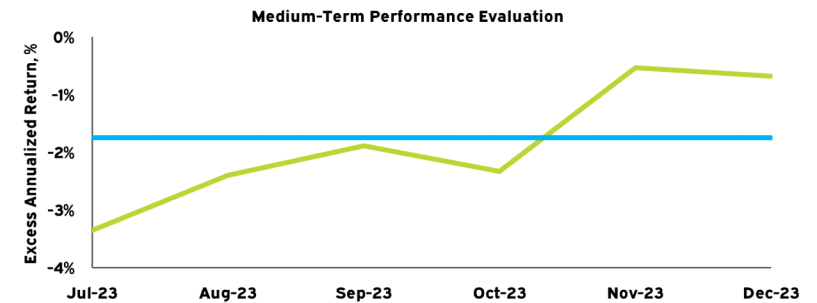
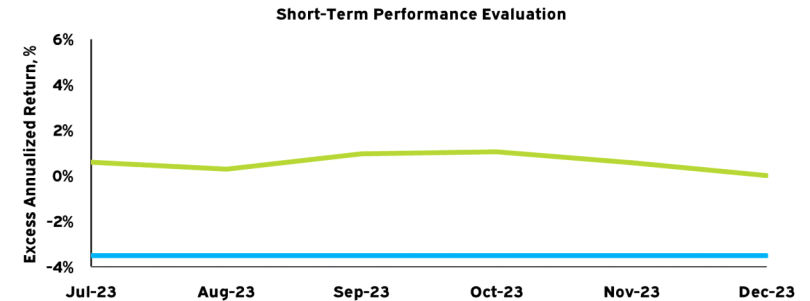
VRR < 0.98 for 6 consecutive months

Current Status: Acceptable

Overall Status:

Acceptable

Excess
Threshold



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
CS McKee	7.5	6.3	-3.2	1.3
<i>Bloomberg US Aggregate TR</i>	<i>6.8</i>	<i>5.5</i>	<i>-3.3</i>	<i>1.1</i>

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -1.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

Current Status: Acceptable

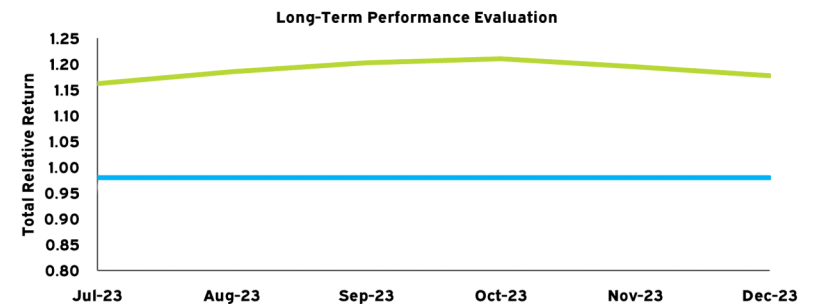
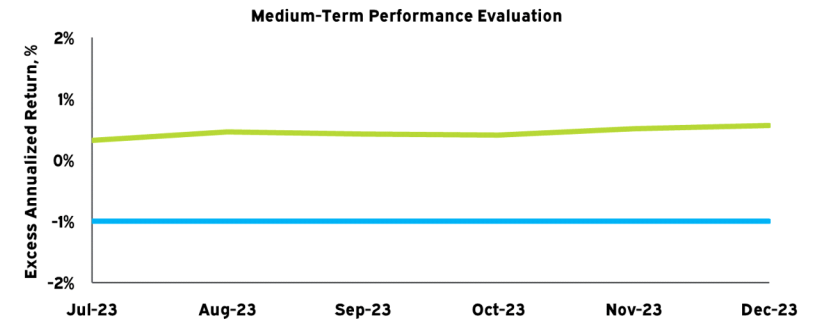
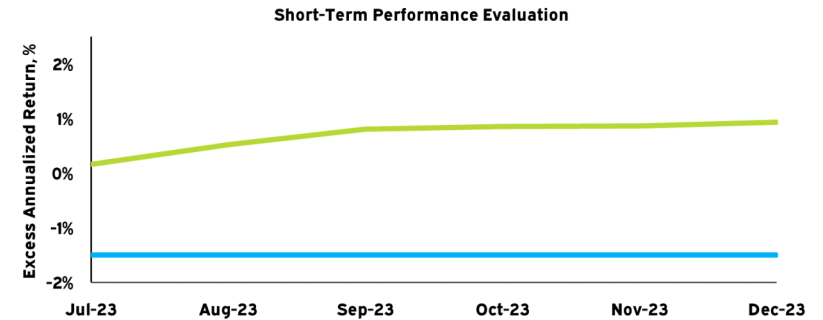
Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

Current Status: Acceptable

Overall Status:
Acceptable

Excess
Threshold



Manager Performance			
	QTD	1 Yr	3 Yrs
Garcia Hamilton	8.1	4.2	-1.5
<i>Garcia Hamilton Custom Benchmark</i>	6.8	4.3	-1.9

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -1.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

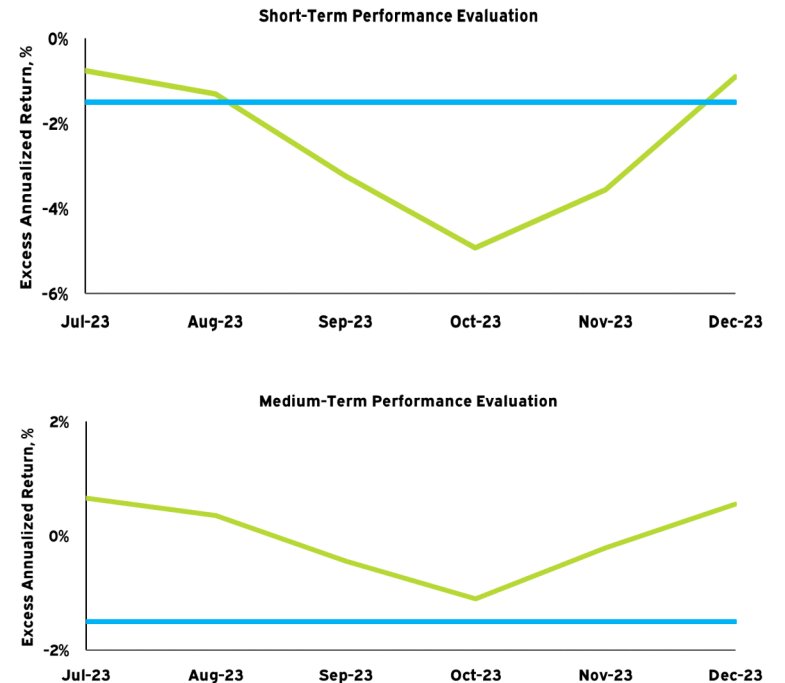
VRR < 0.98 for 6 consecutive months

Current Status: Not Applicable

Overall Status:

Acceptable

Excess
Threshold



Manager Performance			
	QTD	1 Yr	3 Yrs
MacKay Shields (HY)	4.4	10.5	4.2
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	5.6	11.5	3.4

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: Acceptable

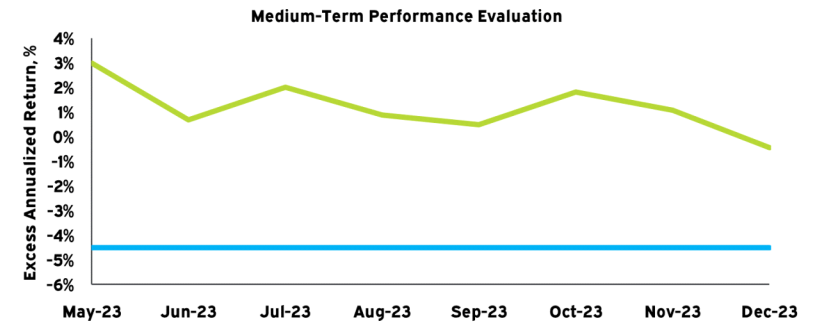
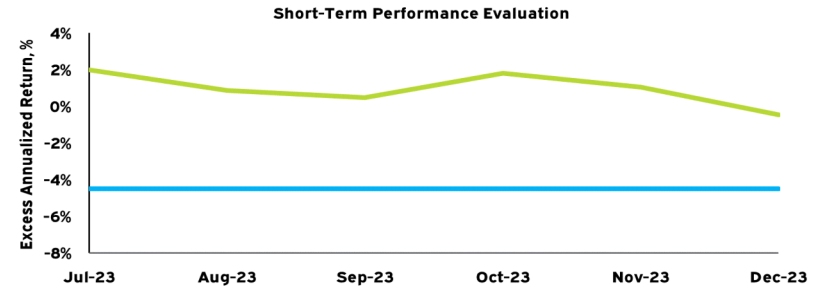
Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: Not Applicable

Overall Status:
Acceptable

— Excess
— Threshold



Manager Performance			
	QTD	1 Yr	3 Yrs
Federated Investment Counseling (Bank Loans)	2.2	9.0	2.2
60% CredSuisLevLoan/40% BBStGovCorp	2.3	9.8	4.2

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: Acceptable

Long-Term Criteria (60+ months)

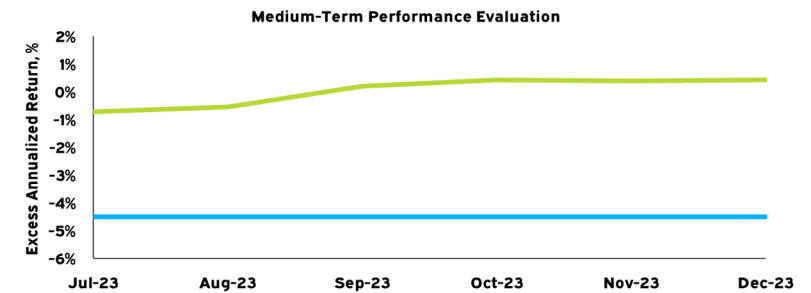
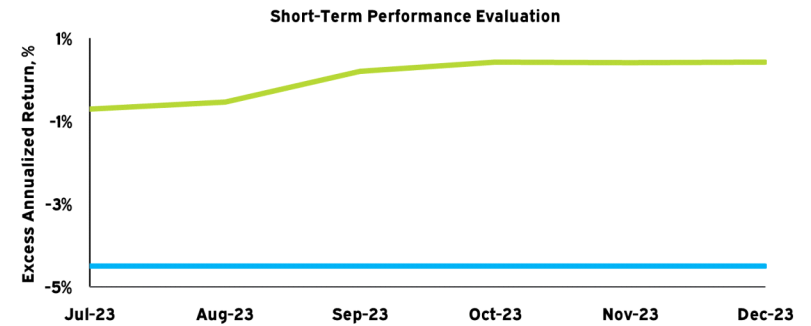
VRR < 0.97 for 6 consecutive months

Current Status: Not Applicable

Overall Status:

Acceptable

— Excess
— Threshold



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
CenterSquare	16.2	14.3	7.1	8.3
<i>FTSE NAREIT Equity REIT</i>	<i>16.2</i>	<i>13.7</i>	<i>7.2</i>	<i>7.4</i>

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: Acceptable

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: Acceptable

Long-Term Criteria (60+ months)

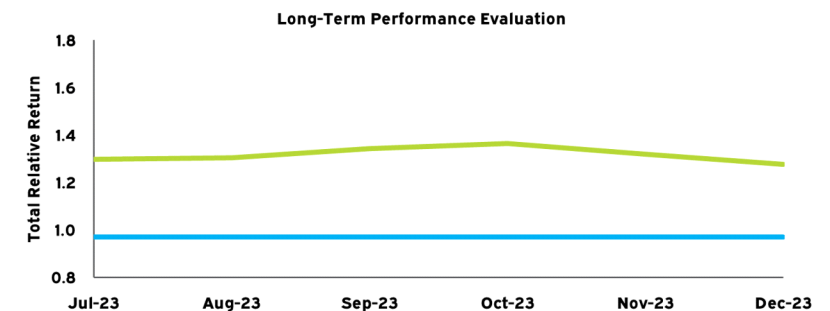
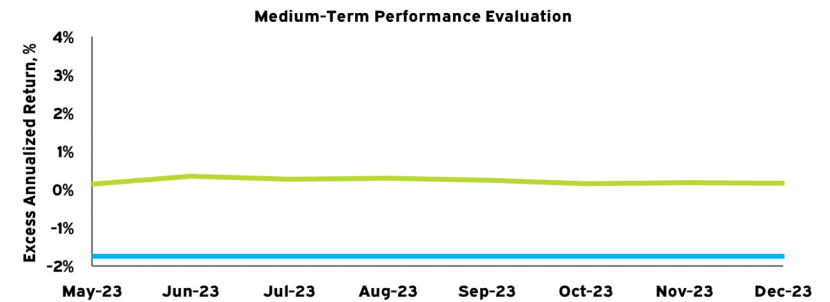
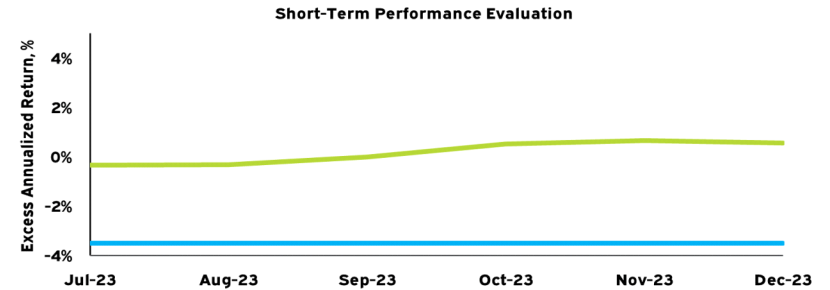
VRR < 0.97 for 6 consecutive months

Current Status: Acceptable

Overall Status:

Acceptable

— Excess
— Threshold



Manager Compliance Certification Responses

Manager Compliance Certification Responses

Qualitative Compliance Monitoring per EBMUDERS Investment Policy

Each of EBMUDERS managers is required to respond to a questionnaire on a quarterly basis to certify their compliance with EBMUDERS Investment Policy Statement and provide an update on specific qualitative indicators to be evaluated.

These indicators include:

- Compliance with the guidelines of 'Eligible Investments' for the manager's specific mandate
- Any litigation or governmental regulatory proceedings involving the firm/manager
- Changes to the manager's investment outlook, investment strategy, and/or portfolio structure
- Personnel changes to the investment team responsible for the EBMUDERS mandate
- Significant personnel changes at the management level of the firm
- Material client terminations
- Compliance with EBMUDERS current Investment Policy Statement

The manager's responses are rated based on the potential effects these factors could pose to the performance and management of the EBMUDERS portfolio.

Reasons for heightened concern triggering Watch status include, but are not limited to:

- Instability of key members of the portfolio management team and organization
- Changes in investment strategy and style
- Failure to comply with investment guidelines

A summary of manager responses as of the latest quarter-end is provided below.

Manager Compliance Certification Responses

Manager	Asset Class	Question 1 Compliance with 'Eligible Investments' for mandate	Question 2 Good standing as Registered Investment Advisor	Question 3 Litigation?	Question 4 Changes in manager's investment outlook, strategy, structure	Question 5 Investment team personnel changes	Question 6 Management level personnel changes	Question 7 Material business changes	Question 8 Compliance with IPS
Northern Trust R3000	Domestic Equity – All Cap	Yes	Yes	No	No	No	Yes*	No	Yes
Northern Trust ACWI ex US	International Equity	Yes	Yes	No	No	No	Yes*	No	Yes
Parametric	Covered Calls	Yes	Yes	No	No	No	Yes*	No	Yes
Van Hulzen	Covered Calls	Yes	Yes	No	No	No	No	No	Yes
CS McKee	Fixed Income – Core	Yes	Yes	No	No	No	No	No	Yes
Garcia Hamilton	Fixed Income – Core	Yes	Yes	No	No	Yes*	No	Yes*	Yes
Mackay Shields	Fixed Income – Short-term HY	Yes	Yes	No	No	No	No	No	Yes
Federated	Fixed Income – Bank Loans	Yes	Yes	No	No	No	No	No	Yes
RREEF	Real Estate	Yes	Yes	No	No	No	No	No	Yes
CenterSquare	Real Estate	Yes	Yes	No	No	No	Yes*	No	Yes

■ no concern
 ■ low concern
 ■ high concern (Watch status)

* see detailed manager response below

Northern Trust – R3000 and ACWI ex US**Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter?**

→ As a result of the constantly changing landscape of asset management, we believe the occasional organizational changes are a natural progression and necessary in order to adapt to new market and regulatory environments. The most recent changes to senior personnel are the following:

- October; Sunitha Thomas, CFA, rejoined NTAM after spending more than 15 years managing client portfolios for Northern Trust Wealth Management. In this newly created role, Sunitha will co-head our Wealth Client Group. She has a BA in Economics from University of Chicago and an MBA from The Wharton School of the University of Pennsylvania. Sunitha will report directly to Daniel Gamba and join NTAM Executive Group.
- November; Guido Baltussen joined NTAM as Head of Quantitative Strategies, International. Previously Head of Equity Factor Investing and Co-head of Quantitative Fixed Income in Robeco, Guido will report to Michael Hunstad, NTAM Deputy CIO and CIO Global Equities. He will be based in the Amsterdam office.
- December; Jane Karpinski, previously Chief Audit Executive, will serve as Global Head of Regulatory Affairs. In this newly created role, Jane will be responsible for overseeing the enhancement of risk management and controls, remediation of regulatory and audit findings and administration of regulatory affairs. Jane will report to Mike O'Grady and become a member of the Corporation's Management Group. Lauren Allnutt, Corporate Controller, replaces Jane as Chief Audit Executive.
- December; After more than 20 years with Northern Trust, Chris Shipley, Chief Investment Strategist for North America and co-portfolio manager for the Northern Funds Global Tactical Asset Allocation Fund (BBALX), is leaving Northern Trust to pursue other interests. As result, Anwiti Bahuguna, Ph.D., and Daniel B. Ballantine, CFA have been added to the fund as portfolio managers.
- December; James Rippey has joined the Asset Management COO leadership team as COO of EMEA region (pending regulatory approval), reporting to Archana Kumar and John McCareins. James will continue to serve as International Chief Risk Officer covering EMEA and APAC during this transition period.

Northern Trust – R3000 and ACWI ex US (cont.)**Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter? (cont.)**

- December; Garrett Cox has been named Chief of Staff for Asset Management, reporting directly to Daniel Gamba. Garrett will be responsible for overseeing all matters as it relates to the Office of the President, including helping drive strategic priorities and initiatives – across the firm – and overseeing engagements with key external and internal stakeholders

Parametric**Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter?**

→ As announced in early May 2023, Brian Langstraat transitioned out of the CEO role on December 31, 2023, and into a Senior Advisor role on January 1, 2024. Brian has worked at Parametric for over 33 years and served as CEO for over 22 years. As Senior Adviser, Brian supports Tom Lee, Co-President and Chief Investment Officer, Ranjit Kapila, Co-President and Chief Operating Officer, and the Parametric team as they expand their leadership roles.

Garcia Hamilton & Associates

Question 5: Have there been any personnel changes to the investment team responsible for the EBMUD portfolio during the quarter?

→ We welcomed Justo Gonzalez, Director of Credit Research/Portfolio Manager in December 2023.

Question 7: Have there been any material changes in your firm's business during the quarter, including but not limited to:

a. any client(s) that terminated its relationship whose terminated portfolio account represents > 1% of the Manager's aggregate portfolio on the day of notice of termination, and/or

b. any client(s) that terminates its relationship when the cumulative terminations for a calendar month is > 1% of the Manager's aggregate portfolio as of the first business day of the month.

→ During 4Q2023, we lost one Aggregate client with an account size of \$967.8 million, which was approximately 7.8% of the Firm's AUM for the Aggregate strategy. Due to the client being under an NDA, we are unable to disclose the reason for the termination. Furthermore, we made the decision to change some of our team members' titles to clarify the organizational structure of the investment team. Gilbert Andrew Garcia will now have the title of CIO, Karen Tass and Jeffrey Detwiler will each take on the title as Co-Deputy CIO, and Don Elsenbrook will take on the title of Chief Risk officer. Additionally, Charlotte Castro was promoted to Deputy Chief Compliance Officer. Charlotte's primary role on the Compliance Team is to work closely with the CCO on the Firm's compliance program as well as with our Chief Risk Officer on the Firm's policies and procedures and signatory reporting. She also led the Firm in a second mock SEC audit last year. Charlotte joined the Firm in June 2022 as a Marketing Associate and later joined the Compliance Team in January 2023.

CenterSquare**Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter?**

→ Scott Crowe, President and Chief Investment Strategist, resigned from the firm on November 13. Scott's primary role was leading the firm's Capital Markets (capital raising) efforts and coordinating thought leadership. Scott Maguire, Head of Investor Relations, will be taking over Capital Markets, a position he held from 2007-2018. Coordination of thought leadership will move to Uma Moriarty who was promoted to Senior Investment Strategist in 2022.

Required California AB 2833 Disclosure – RREEF AMERICA II

Effective January 1, 2017 RREEF America REIT II, Inc. (“alternative investment vehicle”) is required to provide to the East Bay Municipal Utility District (“public investment fund” or “District”) specific information at least annually pursuant to Section 7514.7 of the California Government Code (“Section 7514.7”).

1. The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.
 - EBMUD: includes asset management, intermediate, and partnership fees – January 2023 – December 2023 = \$579,085.91
2. The public investment fund’s pro rata share of fees and expenses not included in paragraph (1) that are paid from the alternative investment vehicle to the fund manager or related parties.

\$0.00
3. The public investment fund’s pro rata share of carried interest distributed to the fund manager or related parties.

N/A
4. The public investment fund’s pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties.
 - EBMUD: includes asset management, intermediate, and partnership fees – January 2023 – December 2023 = \$579,085.91
5. Any additional information described in subdivision (b) of Section 6254.26.

N/A
6. The gross and net rate of return of each alternative investment vehicle since inception.

Gross = 6.0% Net = 5.2% (as of December 31, 2023)¹
7. Any other information required to be collected pursuant to Section 7514.7.

N/A

¹Please note that since inception returns provided represent the client’s time frame in the Fund, and not the returns of the Fund as a whole.

Appendix

Glossary of Terms

Alpha: The premium an investment earns above a set standard. This is usually measured in terms of a common index (i.e., how the stock performs independent of the market). An Alpha is usually generated by regressing a security's excess return on the S&P 500 excess return.

Annualized Performance: The annual rate of return that when compounded t times generates the same t -period holding return as actually occurred from period 1 to period t .

Batting Average: Percentage of periods a portfolio outperforms a given index.

Beta: The measure of an asset's risk in relation to the Market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a security with a Beta of 1.5 will have moved, on average, 1.5 times the market return.

Bottom-up: A management style that de-emphasizes the significance of economic and market cycles, focusing instead on the analysis of individual stocks.

Dividend Discount Model: A method to value the common stock of a company that is based on the present value of the expected future dividends.

Growth Stocks: Common stock of a company that has an opportunity to invest money and earn more than the opportunity cost of capital.

Information Ratio: The ratio of annualized expected residual return to residual risk. A central measurement for active management, value added is proportional to the square of the information ratio.

R-Squared: Square of the correlation coefficient. The proportion of the variability in one series that can be explained by the variability of one or more other series a regression model. A measure of the quality of fit. 100% R-square means perfect predictability.

Standard Deviation: The square root of the variance. A measure of dispersion of a set of data from its mean.

Sharpe Ratio: A measure of a portfolio's excess return relative to the total variability of the portfolio.

Style Analysis: A returns-based analysis using a multi-factor attribution model. The model calculates a product's average exposure to particular investment styles over time (i.e., the product's normal style benchmark).

Top-down: Investment style that begins with an assessment of the overall economic environment and makes a general asset allocation decision regarding various sectors of the financial markets and various industries.

Tracking Error: The standard deviation of the difference between the performance of a portfolio and an appropriate benchmark.

Turnover: For mutual funds, a measure of trading activity during the previous year, expressed as a percentage of the average total assets of the fund. A turnover rate of 25% means that the value of trades represented one-fourth of the assets of the fund.

Value Stocks: Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or P/E ratios) in a variety of countries.

Definition of Benchmarks

BC Aggregate: an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

BC High Yield: covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

BC Multiverse Non-US Hedged: provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

BC US Credit: includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

BC US Government: includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

BC Universal: includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

Citigroup 3-Month Treasury Bills (T-bills): tracks the performance of U.S. Treasury bills with 3-month maturity.

MSCI ACWI x US ND: comprises both developed and emerging markets less the United States. As of August 2008, the index consisted of 23 countries classified as developed markets and 25 classified as emerging markets. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EAFE Free (Europe, Australasia, Far East) ND: is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EM (Emerging Markets) GD: is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals resident in the country of the company, but does not include tax credits.

MSCI Europe is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, this index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

MSCI Pacific is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. As of June 2007, this index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

NAREIT Index: consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

NCREIF Property Index: the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

Russell 1000: measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

Russell 1000 Growth: measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 1000 Value: measures the performance of those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Russell 2000: measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Growth: measures the performance of those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-to-earnings ratios.

Russell 2000 Value: measures the performance of those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-to-earnings ratios.

Russell 3000: represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

Value Relative Ratio (VRR): Performance metric used to evaluate long-term manager performance relative to a benchmark and to highlight compounded over/under performance data over a certain time frame. VRR is calculated by the growth of a dollar invested with the manager divided by the growth of a dollar invested in the benchmark for the same time period.

Risk Metric Description – Rationale for Selection and Calculation Methodology**US Equity Markets**

Metric: P/E ratio = Price / "Normalized" earnings for the S&P 500 Index

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power (E) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <http://www.econ.yale.edu/~shiller/data.htm>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

Developed Equity Markets Excluding the US

Metric: P/E ratio = Price / "Normalized" earnings for the MSCI EAFE Index

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings (E). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

Emerging Market Equity Markets

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

US Private Equity Markets

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

US Private Real Estate Markets

Metrics: US Cap Rates, Cap Rate Spreads, and Transactions as a % of Market Value

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The data, published by NCREIF, describes completed and leased properties (core) on an unleveraged basis. We chose to use current value cap rates. These are capitalization rates from properties that were revalued during the quarter. This data relies on estimates of value and therefore tends to be lagging (estimated prices are slower to rise and slower to fall than transaction prices). The data is published quarterly.

Spreads between the cap rate (described above) and the 10-year nominal Treasury yield, indicate a measure of the cost of properties versus a current measure of the cost of financing.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This quarterly metric is a measure of activity in the market.

Credit Markets Fixed Income

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

Measure of Equity Market Fear / Uncertainty

Metric: VIX – Measure of implied option volatility for US equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

Measure of Monetary Policy

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

Measures of US Inflation Expectations

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPS. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

Measures of US Treasury Bond Interest Rate Risk

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year US Treasury Bond is a measure of valuation risk for US Treasuries. A low real yield means investors will accept a low rate of expected return for the certainty of receiving their nominal cash flows. Meketa estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

Definition of "Extreme" Metric Readings

A metric reading is defined as "extreme" if the metric reading is in the top or bottom decile of its historical readings. These "extreme" reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.

RISK METRICS DESCRIPTION – Meketa Market Sentiment Indicator**What is the Meketa Market Sentiment Indicator (MMSI)?**

The MMSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets, and is the largest risk exposure that most portfolios bear. The MMSI takes into account the momentum¹ (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

¹ Momentum is defined as the persistence of relative performance. There is a significant amount of academic evidence indicating that positive momentum (e.g., strong performing stocks over the recent past continue to post strong performance into the near future) exists over near-to-intermediate holding periods. See, for example, "Understanding Momentum," *Financial Analysts Journal*, Scowcroft, Sefton, March, 2005.

How do I read the Meketa Market Sentiment Indicator (MMSI) graph?

Simply put, the MMSI is a color coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the MMSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the MMSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.

How is the Meketa Market Sentiment Indicator (MMSI) Constructed?

The MMSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

1. Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months)
2. Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration U.S. Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight). The scale of this measure is adjusted to match that of the stock return momentum measure.

The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure. The color reading on the graph is determined as follows:

1. If both stock return momentum and bond spread momentum are positive = GREEN (positive)
2. If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive)
3. If both stock return momentum and bond spread momentum are negative = RED (negative)

What does the Meketa Market Sentiment Indicator (MMSI) mean? Why might it be useful?

There is strong evidence that time series momentum is significant and persistent.¹ In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12 month period. The MMSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

¹ "Time Series Momentum" Moskowitz, Ooi, Pedersen, August 2010 <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

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INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Asset Allocation Study Modeling Kickoff

SUMMARY

The Retirement System's investment consultant, Meketa, will provide a kickoff for the System's Asset Allocation modeling effort covering the model output for the System's existing baseline, the role of capital market assumptions, risk philosophy, the optimization process and how these inform different potential portfolios.

DISCUSSION

The Retirement System is working with Meketa to develop an updated Asset Allocation Study. Under the Retirement System's Statement of Investment Policy and Procedures, the Asset Allocation Study considers investments in a set of asset classes deemed prudent and appropriate by the Retirement Board with the goal of determining a new Asset Allocation for the System. This item seeks to inform Retirement Board members on how capital market assumptions and risk philosophy impact the planned Asset Allocation Study.

SDS:SGL

Attachment: Presentation – Capital Market Assumptions & Asset Liability Study Modeling Kickoff

East Bay Municipal Utility District Employees' Retirement System

March 2024

Capital Market Assumptions &
Asset Liability Study
Modeling Kickoff



East Bay Municipal Utility District Employees' Retirement System

Agenda

Month	Preliminary Asset-Liability Study Timeline
November 2023	<ul style="list-style-type: none">• <i>Introduction to Asset-Liability Studies</i>• <i>Key Risks to the Plan</i>• <i>Actuarial Background and Strategic Considerations</i>
March 2024	<ul style="list-style-type: none">• Capital Market Assumptions• Baseline Model Output and Risk Philosophy Selection• Optimization Process• Sample Portfolio Comparisons
May 2024	<ul style="list-style-type: none">• Finalize Model Output• Stress Testing• Final Portfolio Recommendations



East Bay Municipal Utility District Employees' Retirement System

Intro & Overview

- Final Capital Market Assumptions
- Updated Baseline Model Output & Risk Philosophy Selection
- Sample Portfolio Comparisons

Final Capital Market Assumptions



East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

CMAs Executive Summary

- We update our capital markets assumptions each year in January.
 - Changes are driven by many factors, including interest rates, credit spreads, cap rates, and equity prices.
- 2023 was a volatile year for most investors, but ultimately most asset classes experienced positive returns, including double-digit gains for many risky assets.
- With the notable exception of China's markets, global bond and equity markets rallied at the end of the year, posting strong gains as inflation pressures eased and central banks appeared to be turning away from tightening policies.
 - Despite short-term interest rates climbing, the yield on most Treasury bonds finished the year near where they started it.
 - Credit spreads tightened, especially for lower quality credit such as high yield. The result is lower expected returns for many credit-oriented assets.
 - Most equity markets rallied in 2023, generally at a much faster pace than the gain in earnings. Hence many equity markets were trading at higher valuations at year-end, thus reducing their forward-looking returns



East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

Setting Capital Market Assumptions

- CMAs are the inputs needed to calculate a portfolio's expected return, volatility, and relationships (i.e., correlations) to the broader markets.
 - CMAs are also used in mean-variance optimization, simulation-based optimization, asset-liability modeling, and every other technique for finding "optimal" portfolios.
- Consultants (including Meketa) generally set them once per year.
 - Our results are published in January based on December 31 data.
- This involves setting long-term expectations for a variety of asset class/strategy attributes:
 - Returns
 - Standard Deviations
 - Correlations
- Our process relies on both quantitative and qualitative methodologies.



Developing Expected Returns

- Market practitioners generally make use of three methods for developing long-term expected returns:
 - Historical average returns
 - Financial/economic theory (e.g., higher risk = higher returns, capital structures, etc.)
 - Current measures (e.g., starting valuations relative to history)
- In addition to the above, practitioners also incorporate general projections for macroeconomic metrics such as GDP and inflation, among others.
- Meketa's methods are in-line with industry standards and represent a mixture of the three mechanisms.
 - Historical average returns play the smallest role in our assumptions.



East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

Building Expected Return Forecasts

→ Our primary approach is based on fundamental models.

- Each model is based on the most important factors that drive returns for that asset class:

Asset Class Category	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth
Private Equity	EBITDA Multiple, Debt Multiple, Public VC Valuation
Hedge Funds and Other	Leverage, Alternative Betas

- The common components are income, growth, and valuation.
- Leverage (and cost of debt) is also directly incorporated, where applicable.

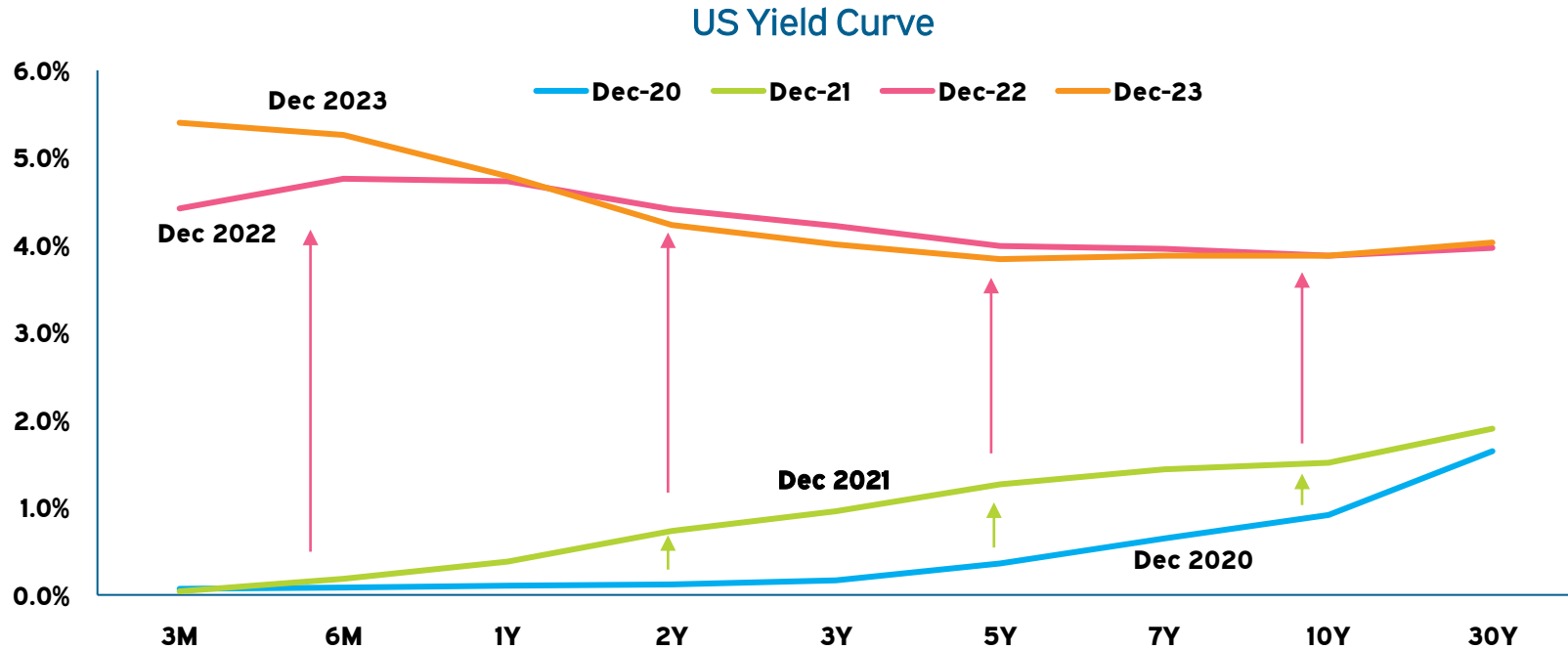


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Capital Market Assumptions

Interest Rate Volatility

- Interest rate changes were a dominant storyline of 2023. While short-term rates increased throughout 2023, intermediate and long-term rates experienced significant volatility but ultimately finished the year at similar yields to where they started.
- Rates remained materially higher as of 12/31/2023 compared to 2020 and 2021.



Source: Bloomberg. Data is as of December 31, 2023.



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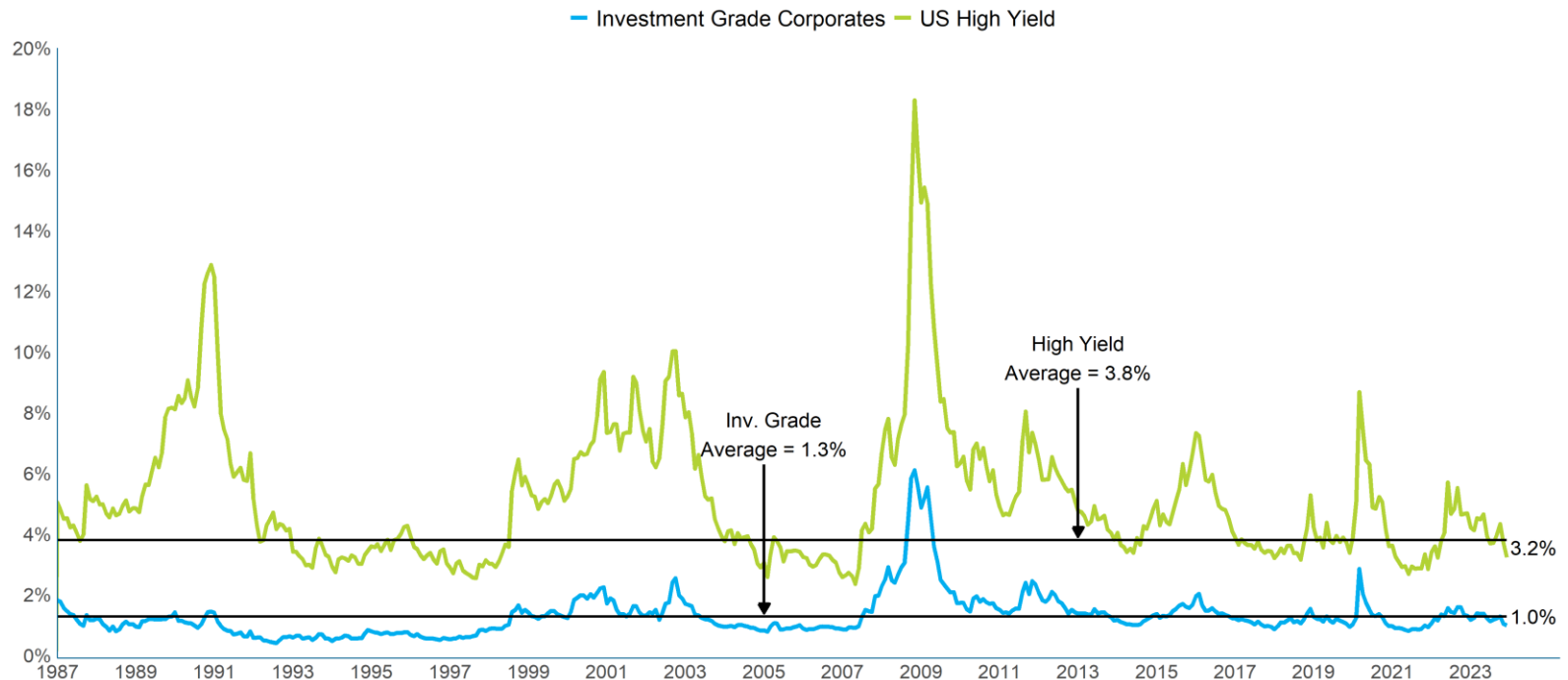
Capital Market Assumptions

Narrower Credit Spreads

→ Credit spreads tightened slightly in 2023, though they remain close to their long-term averages.

- Lower quality credit spreads experienced a more substantial tightening. The spread for high yield bonds declined from 469 bp to 323 bp.

Credit Spreads



Source: Bloomberg. High Yield is proxied by the Bloomberg High Yield Index and Investment Grade Corporates are proxied by the Bloomberg US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield. Data is as of December 31, 2023.



East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

Similar or Lower Yields (12/23 vs. 12/22)

- Short-term interest rates were higher than one year ago, while the 10-year Treasury yield ended the year where it started it.
- Similar levels of interest rates combined with tighter credit spreads results in slightly lower yields for most sectors of the global bond market.

Index	Yield to Worst 12/31/23 (%)	Yield to Worst 12/31/22 (%)	Yield to Worst 12/31/21 (%)	Yield to Worst 12/31/20 (%)
Fed Funds Rate	5.25-5.50	4.25-4.50	0-0.25	0-0.25
10-year Treasury	3.88	3.88	1.52	0.93
Bloomberg Aggregate	4.53	4.68	1.75	1.12
Bloomberg Corporate	5.06	5.42	2.33	1.74
Bloomberg Securitized	4.72	4.75	1.98	1.25
Bloomberg Global Aggregate	3.51	3.73	1.31	0.83
Bloomberg EM Local Currency Government	4.08	4.42	3.83	3.20
Bloomberg EM Hard Currency Aggregate	6.77	7.26	3.96	3.20
Bloomberg US Corporate High Yield	7.59	8.96	4.21	4.18

Source: Bloomberg.

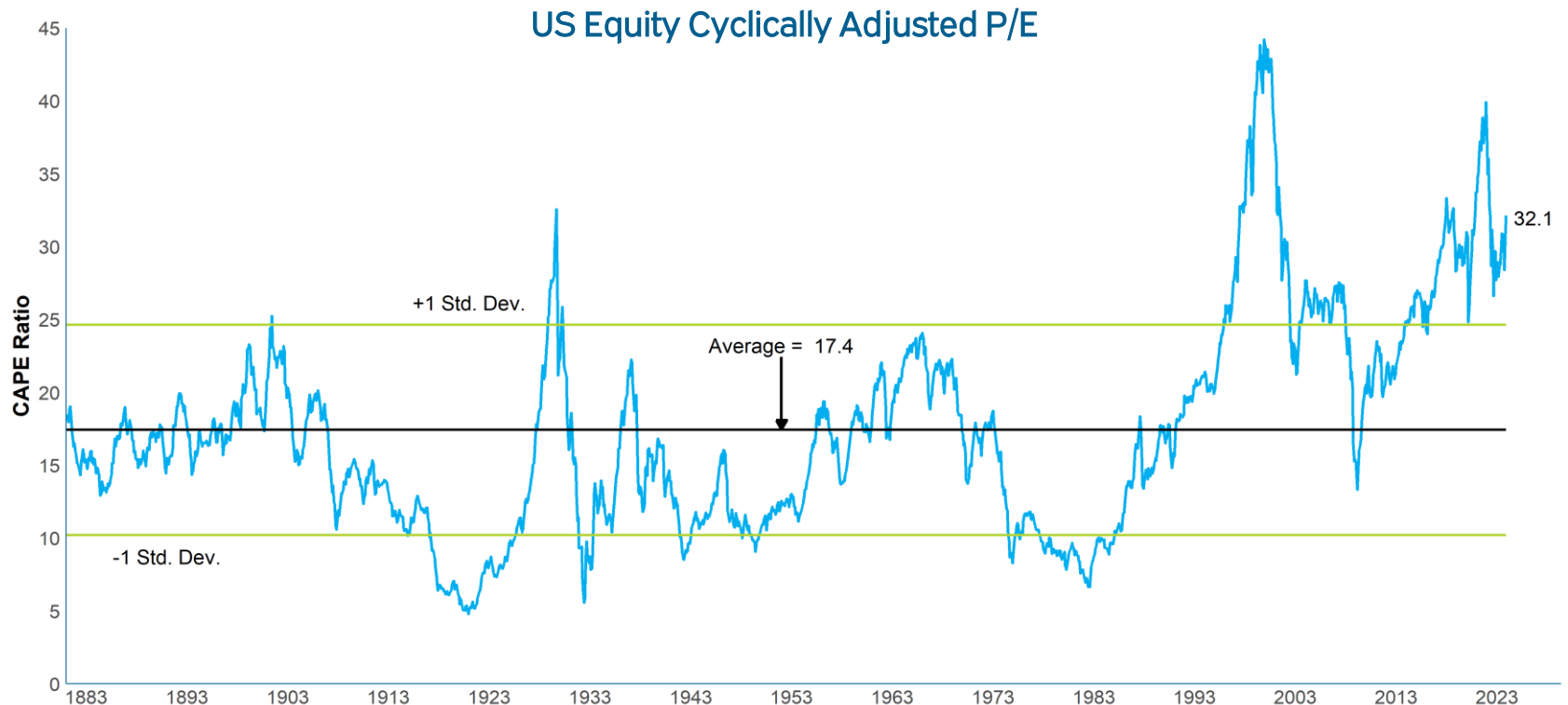


East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

Higher Valuations for US Equities

- US stocks had a very good year, with the S&P 500 index gaining 26.3% in 2023.
- Valuations increased and remain elevated relative to their long-term history, though they are much nearer their average for the past 30 years.



Source: Robert Shiller, Yale University, and Meketa Investment Group. Data is as of December 31, 2023.



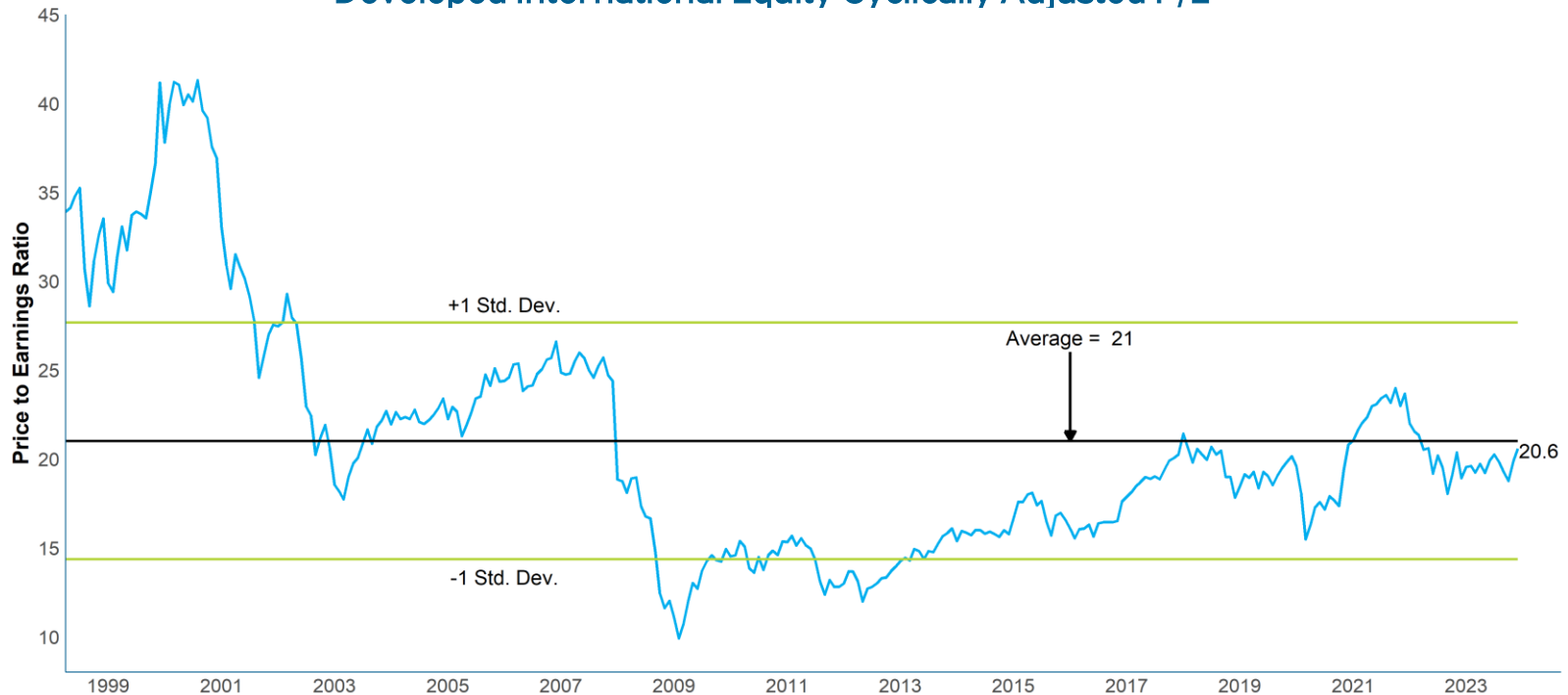
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Capital Market Assumptions

Slightly Higher Prices in Non-US Equities, too

- EAFE equities gained 18.2% in USD terms in 2023, benefiting slightly from a currency tailwind.
- Despite increasing from one year ago, EAFE valuations remain close to their 25-year historical average.

Developed International Equity Cyclically Adjusted P/E



Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2023.



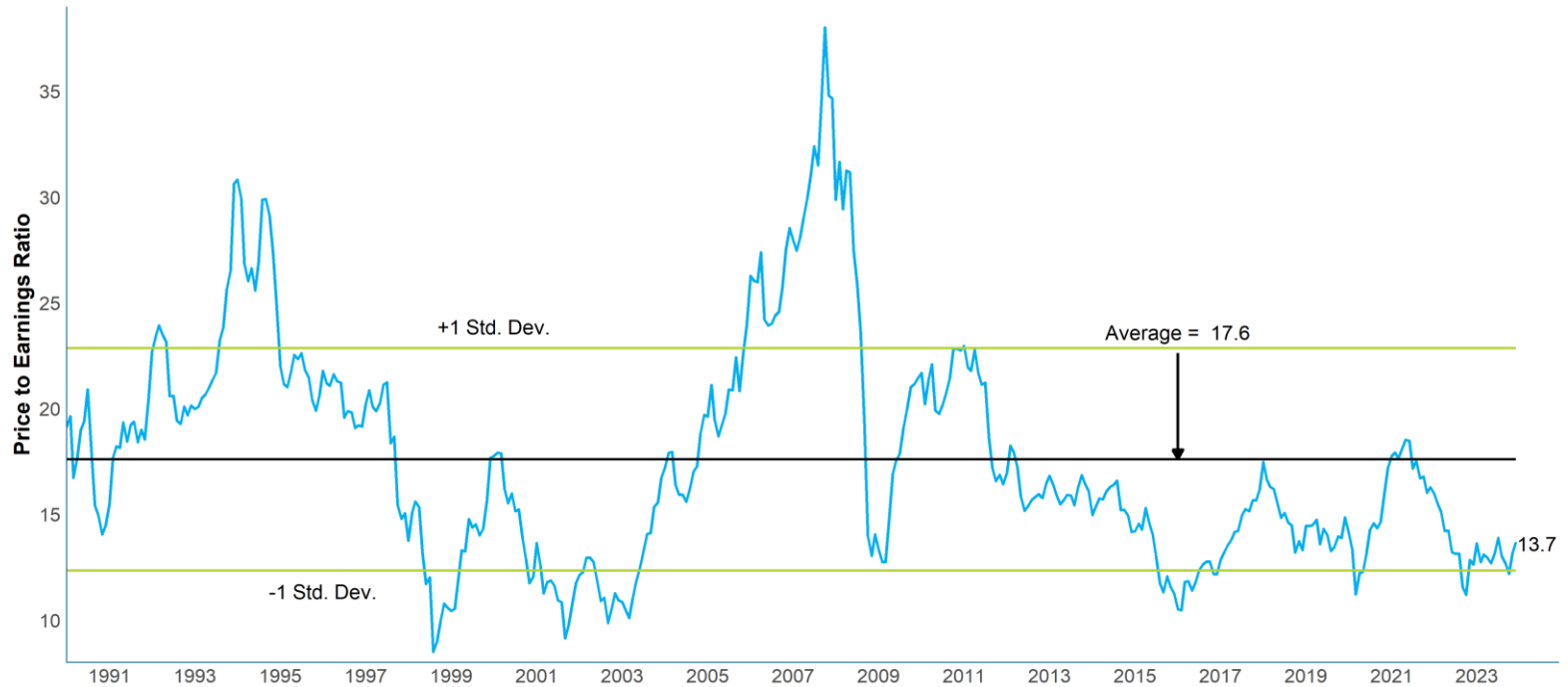
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Capital Market Assumptions

And Slightly Higher Prices in Emerging Market Equities

- Emerging market equities gained 9.8% in 2023, despite Chinese equities declining -11.2%.
- EM equity valuations remain well below their long-term average, though there is a significant difference between EM ex-China and China valuations.

Emerging Market Equity Cyclically Adjusted P/E



Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2023.



East Bay Municipal Utility District Employees' Retirement System

Capital Market Assumptions

→ Compared to our 2023 CMAs, the majority of the below asset classes exhibit lower expected returns as of January 2024.

→ Expected volatilities are generally the same or slightly lower than in 2023.

2024 CMAs – EBMUDERS Asset Classes					
Strategic Class	10-year Return*	20-year Return*	Standard Deviation	2023 CMAs 10-year Return	2023 CMAs 20-year Return
US Equity	6.9%	8.5%	17%	7.8%	8.7%
Non-US Equity	7.7%	8.9%	18%	10.3%	10.0%
Buy Write (Covered Calls)	5.8%	7.0%	13%	6.7%	7.2%
REITs	5.6%	7.8%	24%	6.4%	8.0%
Core Private Real Estate	4.8%	6.9%	12%	4.3%	6.5%
Investment Grade Bonds	4.6%	4.8%	4%	4.8%	4.7%
High Yield Bonds	6.5%	6.8%	11%	8.0%	7.3%
Bank Loans	6.5%	6.6%	10%	7.6%	7.0%
Private Debt	9.2%	9.2%	15%	9.4%	9.0%

* Geometric returns (annual compound returns)

Updated Baseline Model Output
Risk Philosophy Selection

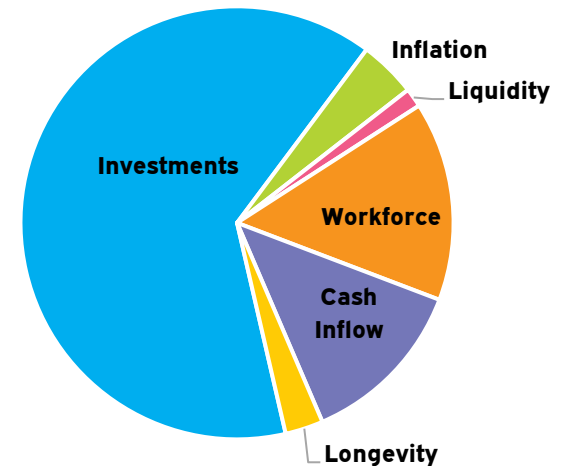


East Bay Municipal Utility District Employees' Retirement System

Recap from November - Summary of the Key Risks

1. **Investments:** Asset return volatility is the biggest risk to the Plan.
2. **Cash Inflow:** While unlikely, the risk of not meeting recommended contribution is important to the Plan due to the underfunded state.

Risks in Aggregate



Recommendation: Optimize the asset return and asset return volatility to ensure all investment risks are compensated appropriately. Secondly, discuss strategies for consideration when the Plan reaches higher funded status levels.



3 key high-level steps to the A/L process:

1.

Develop an understanding of how the financial condition of the EBMUDERS might vary based on outcomes of the investment portfolio.

2.

Set a consensus definition and view of the risk(s) the EBMUDERS should bear.

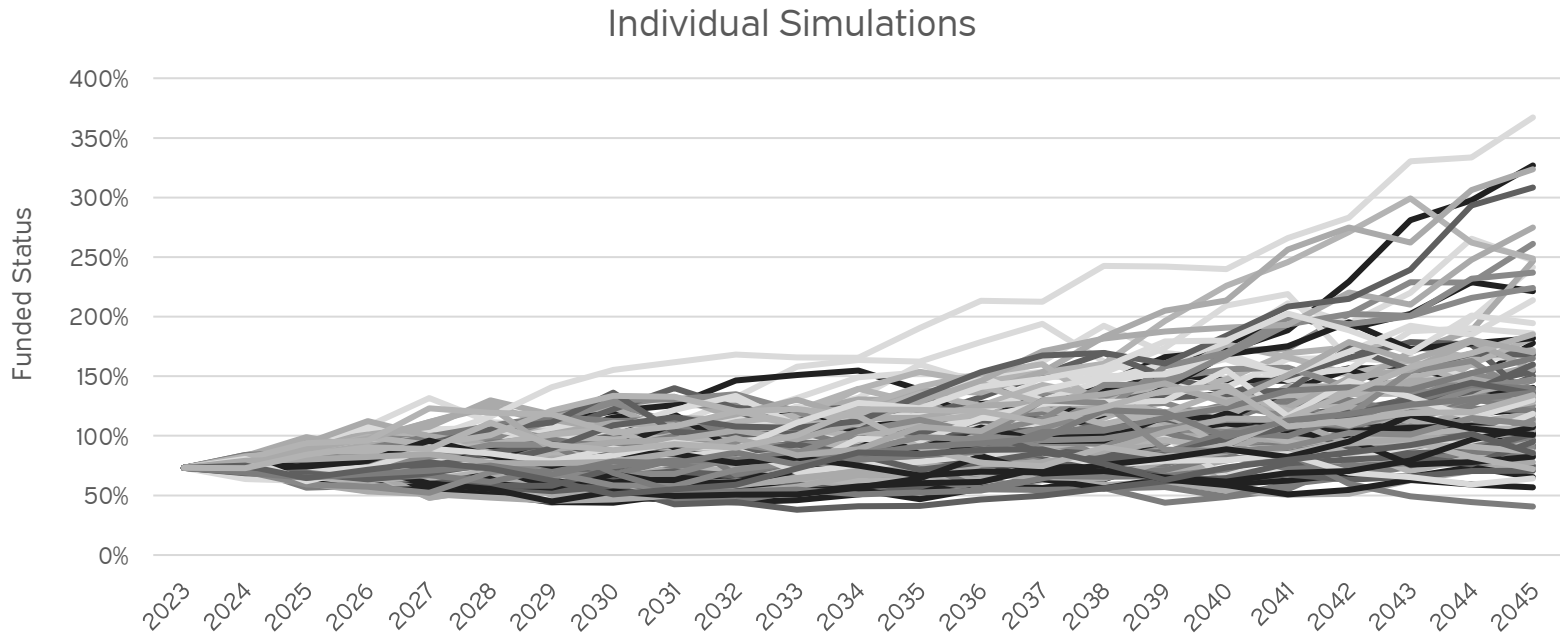
3.

Once a view/tolerance for risk has been established, **select an appropriate long-term investment strategy** (i.e., a policy portfolio / strategic allocation).



East Bay Municipal Utility District Employees' Retirement System

Stochastic Forecast of the Current Policy Allocation

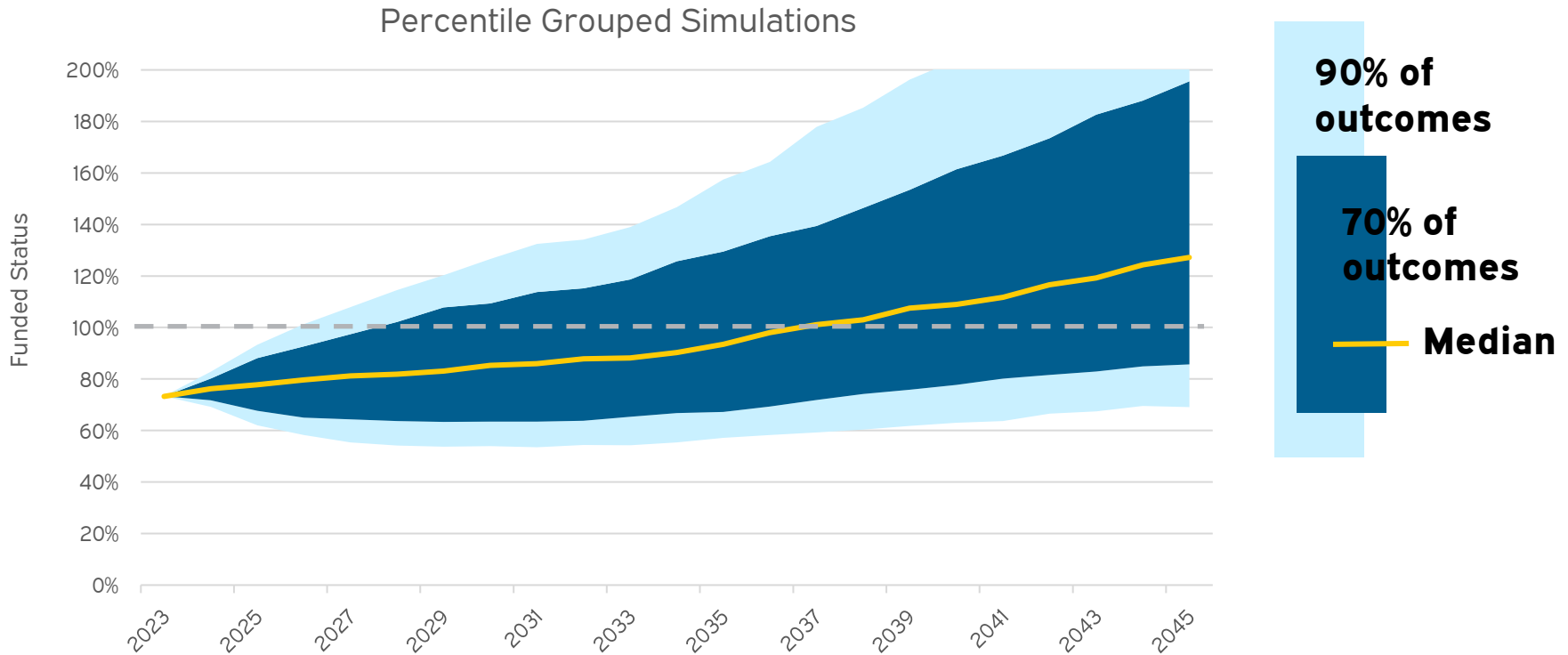


- Funded Status (assets divided by liabilities) are simulated in a variety of market environments
- Analysis reflects the current:
 - Asset allocation
 - Actuarial funded status
 - Projected benefit payments
 - Funding policy
 - Plan provisions
 - Actuarial assumptions
 - Meketa 2024 Capital Market Assumptions



East Bay Municipal Utility District Employees' Retirement System

Stochastic Forecast of the Current Policy Allocation (cont.)



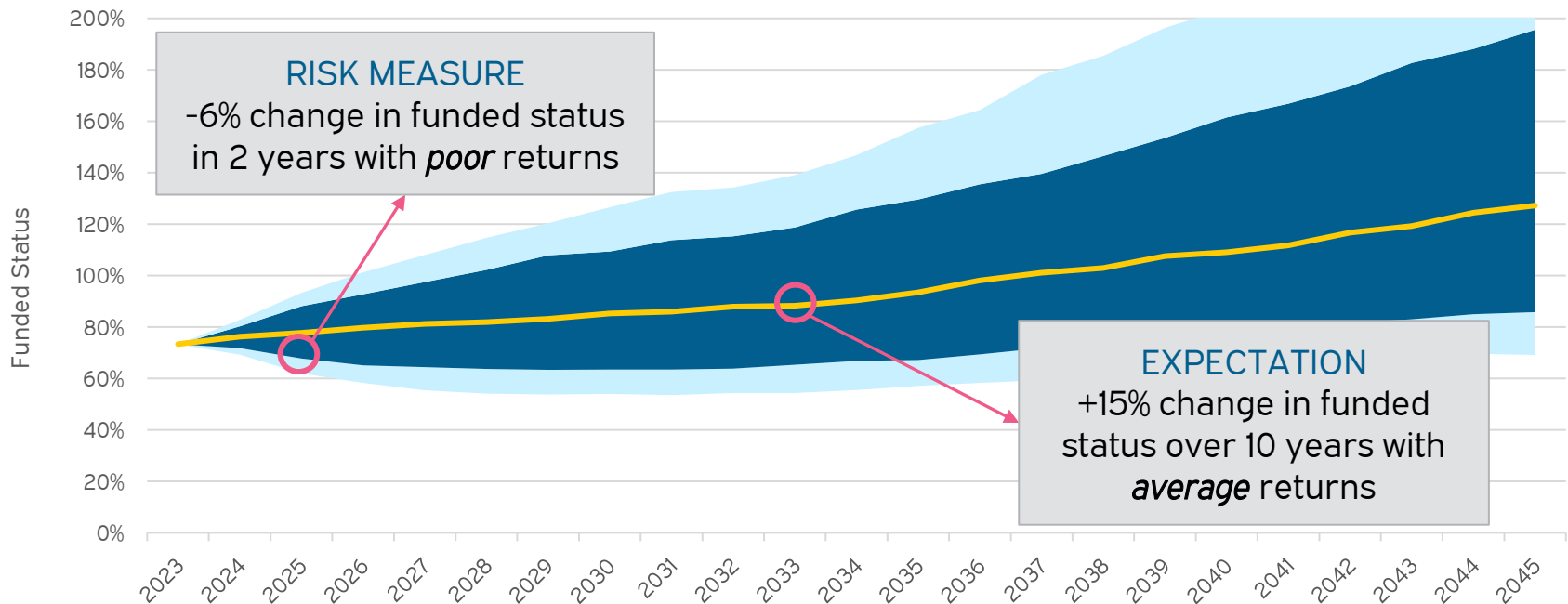
- Simulations are summarized in percentiles, providing an analysis of enterprise risk, given the current asset allocation.
- As an example, the median (50th Percentile) Funded Status in 2037 is 100% -> there is a 50% probability the Funded Status will be greater than 100% and 50% probability it will be less than 100%.



East Bay Municipal Utility District Employees' Retirement System

Record Key Observations

- Key observations are determined during objective setting discussion and analyzed in a “Expectation/Risk Measure” framework.
 - **Expectation** – Outcome where all the underlying assumptions prove to be accurate over the long-term (Example: 50th percentile over a 10-year time horizon).
 - **Risk Measure** – Outcome with a lower probability (Ex: 85th percentile) and detrimental impact, especially when that outcome occurs in the short-term (Ex: 2-year time horizon).





East Bay Municipal Utility District Employees' Retirement System

Risk Philosophy

- The **Risk Philosophy** summarizes the different “lenses” that will be used to evaluate the financial condition of the Plan.
- Most systems will primarily rely on an analysis of:
 - ✓ The **funded status** to evaluate the ongoing health of the Plan; and
 - ✓ The size of the **employer contribution** to evaluate the resources required to achieve the health of the Plan
- *Proposed* risk measures to be analyzed during this asset-liability study:

Risk Lens	Risk Measure	Expectation
Funded Status Volatility	Change in Funded Status by 2025 with Poor Returns (15th Percentile)*	Change in Funded Status by 2033 with Average Returns (50th Percentile)*
Employer Contribution (\$) Volatility	Average actuarial recommended contribution for the next 5 years with Poor Returns (85th Percentile)	Average actuarial recommended contribution for the next 10 years with Average Returns (50th Percentile)

* 6/30/20XX



East Bay Municipal Utility District Employees' Retirement System

Optimization Process Steps

How does Meketa optimize the asset allocation?

1 – Plot the Baseline

Plot the primary expectation and risk measure for the asset allocation in the Investment Policy Statement

2 – Create Constraints

Asset classes are constrained to a minimum and maximum allocation to prevent impractical allocation recommendations

3 – Compare Alternatives

The Board agrees on tolerance for allocation levels for each existing or new asset classes

4 – Produce Samples

Meketa will provide samples of asset allocations that reflect the feedback received from the Board with regards to risk tolerance and return expectations

5 – Analyze Additional Risks

Repeat the process for additional risk measures that are important to the Board's decision making

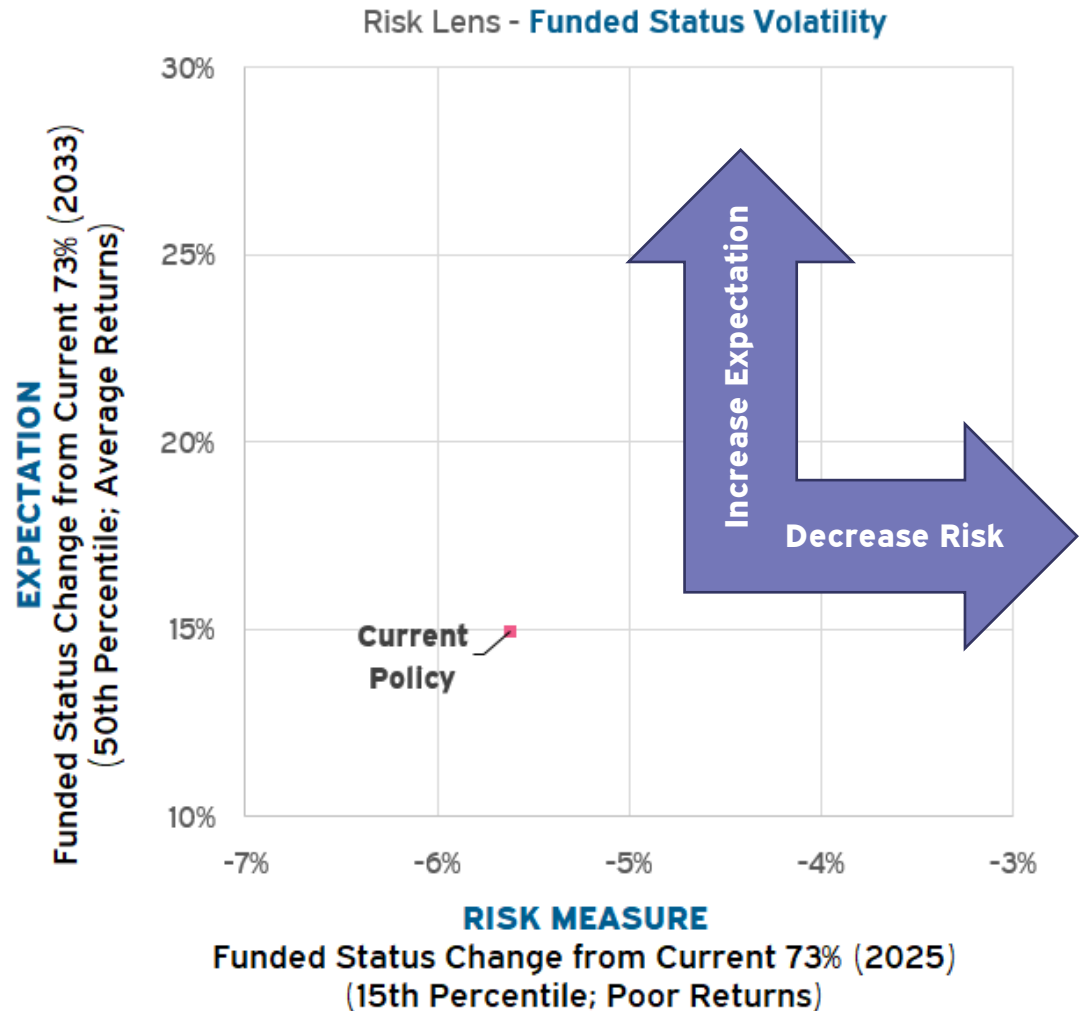


East Bay Municipal Utility District Employees' Retirement System

Optimization Step 1: Plot the Baseline (i.e., Current Policy)

Notes

- The goal of Optimization is to align the projected health of the pension plan to match the objectives and risk tolerance of the Board.
- Market value funded status as of 6/30/2203 = 73%





East Bay Municipal Utility District Employees' Retirement System

Optimization Step 2: Create Asset Class Constraints

- The example constraints below were developed to provide a spectrum of expectation and risk measure profiles.

Strategic Class	Min.	Max.	Current Target	10-year Return*	20-year Return*	Standard Deviation
US Equity	20%	40%	25%	6.9%	8.5%	17%
Non-US Equity	20%	40%	25%	7.7%	8.9%	18%
Buy Write (Covered Calls)	0%	20%	20%	5.8%	7.0%	13%
REITs	0%	7.5%	2.5%	5.6%	7.8%	24%
Core Private Real Estate	0%	7.5%	2.5%	4.8%	6.9%	12%
Investment Grade Bonds	10%	30%	20%	4.6%	4.8%	4%
High Yield Bonds	0%	7.5%	2.5%	6.5%	6.8%	11%
Bank Loans	0%	7.5%	2.5%	6.5%	6.6%	10%
Private Debt	0%	5%	0%	9.2%	9.2%	15%

* Geometric returns (annual compound returns)

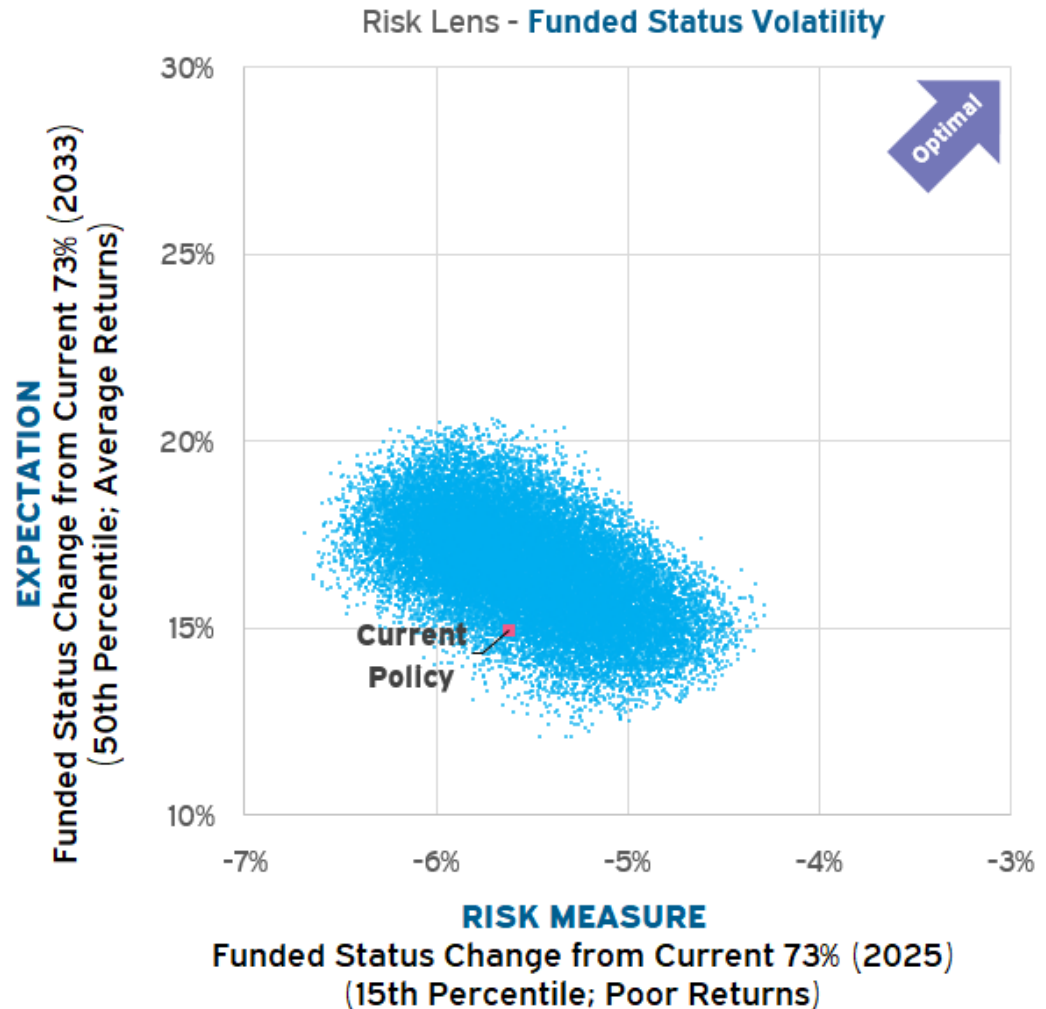


East Bay Municipal Utility District Employees' Retirement System

Optimization Step 3: Compare Current Policy to Alternative Asset Allocations

Notes

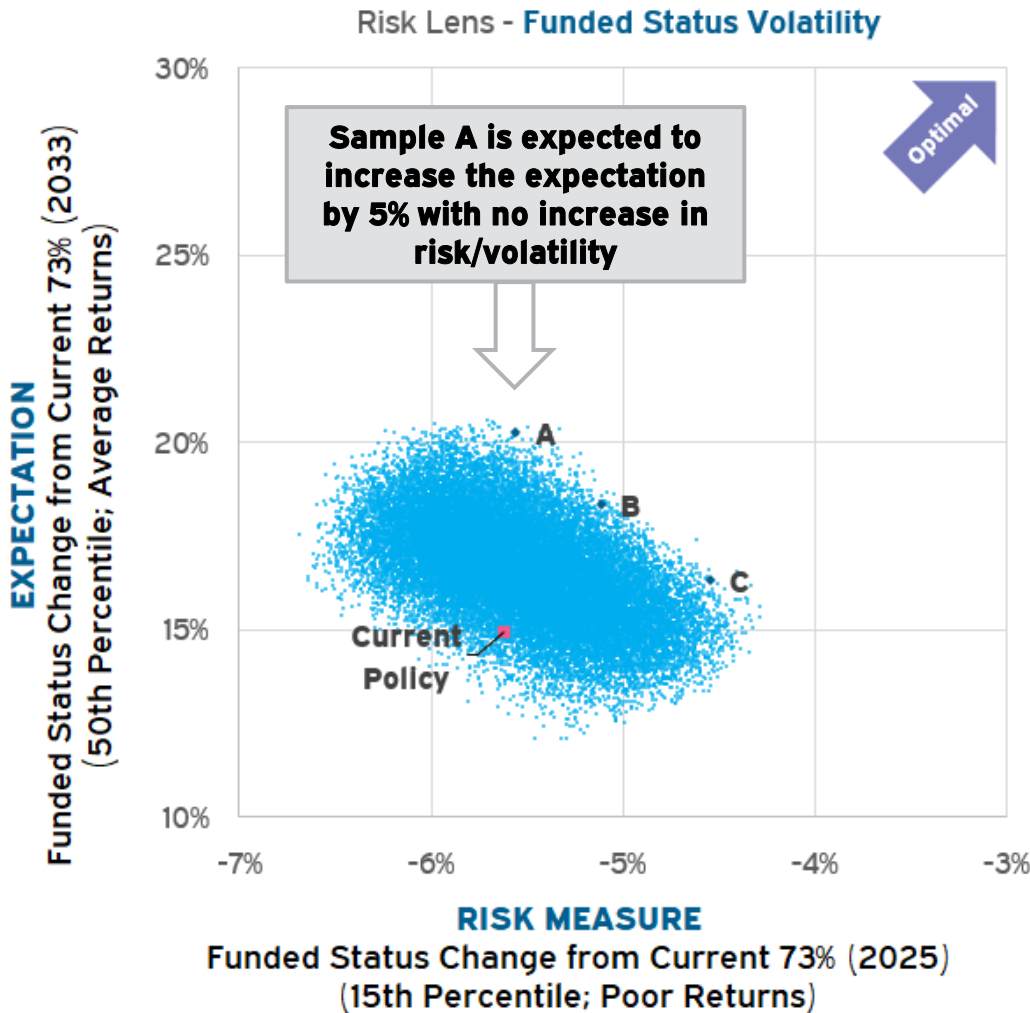
- The constraints are used to create thousands of combinations of asset allocations.
- The Current Policy is compared to these alternative asset allocations to determine if an alternative provides more optimal outcomes.
- Each blue dot represents a unique asset allocation within the asset class constraints shown on the prior slide.
- Market value funded status as of 6/30/2203 = 73%





East Bay Municipal Utility District Employees' Retirement System

Optimization Step 4: Select Samples



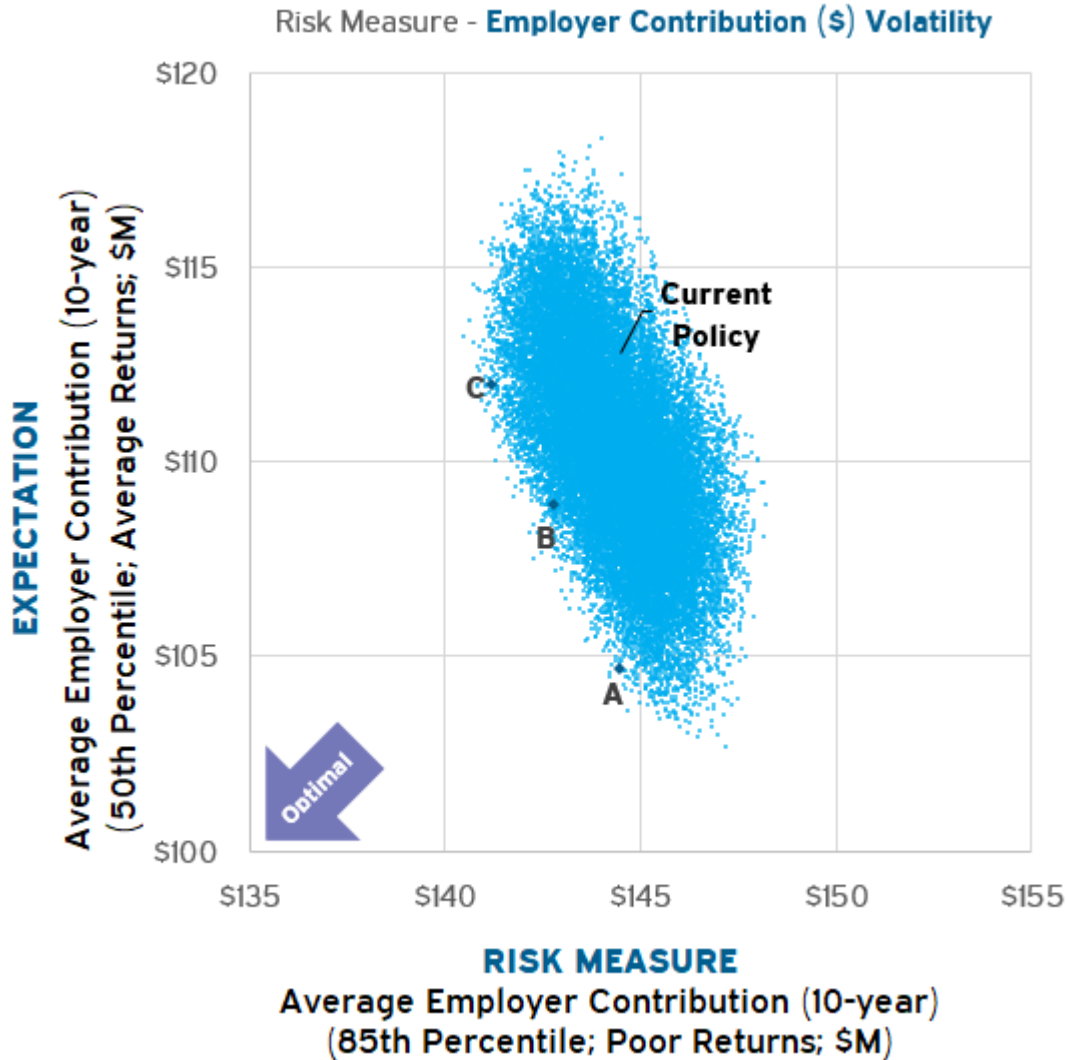
Notes

- Alternative asset allocations (Samples A to C) are identified as having “efficient” funded status outcomes.
- Samples are selected spanning the spectrum of expectation/risk measure.
- Sample A is an example of a higher expectation alternative relative to Policy.
- Sample C is the opposite - lower funded status volatility.
- No outcome is “better” than another given each have beneficial quantitative outcomes.



East Bay Municipal Utility District Employees' Retirement System

Optimization Step 5: Analyze Additional Risk Measures



Notes

- Plan risk is viewed through another lens – Employer Contributions.
- Current Policy is expected to have average recommended contributions of \$113M for 10 years with *average* returns.
- With *poor* returns, the average recommended contribution is expected to be \$144M for 10 years.
- Similar to the funded status optimization, samples A-C attempt to reduce expected and/or risk measure contributions.

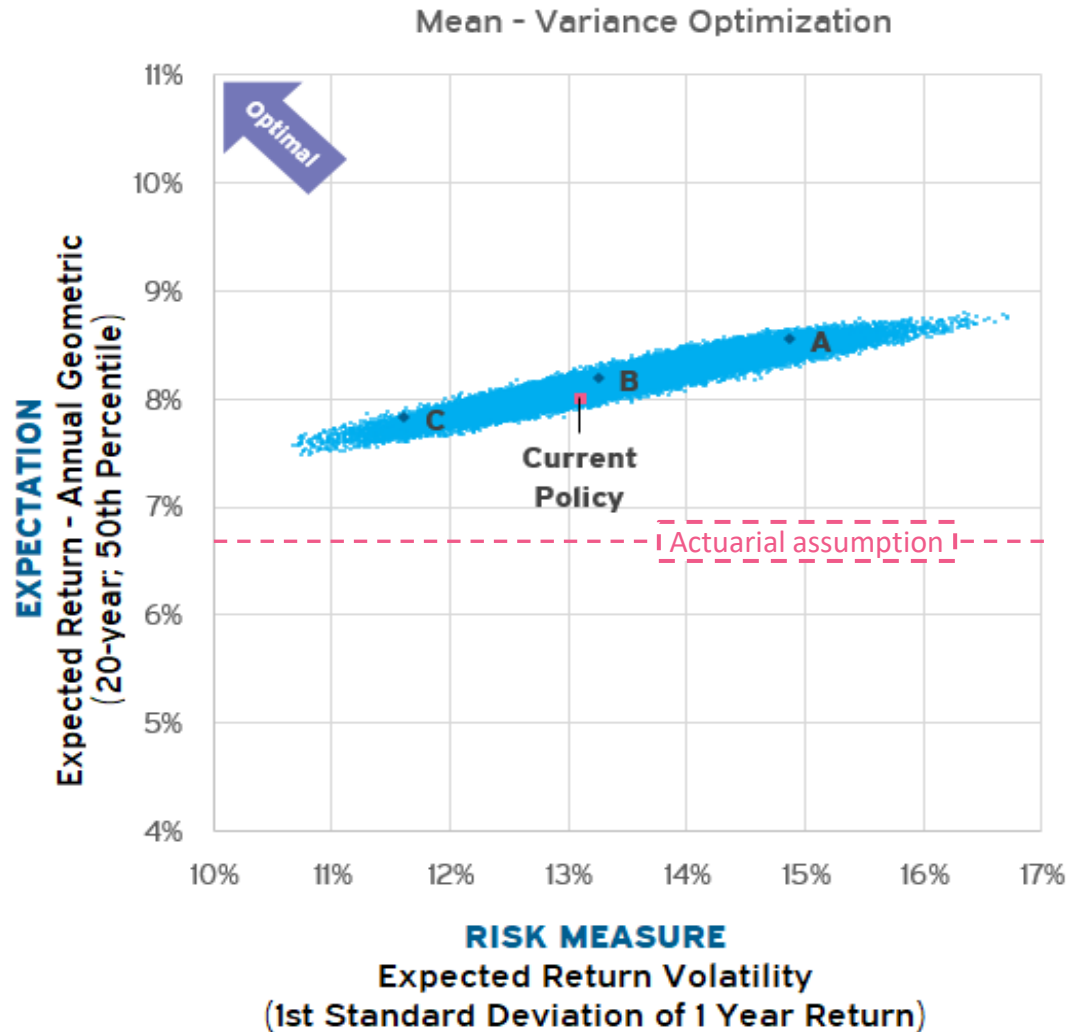


East Bay Municipal Utility District Employees' Retirement System

Mean-Variance Optimization

Notes

- While expected return is not an asset/liability risk measure, it's important to ensure the expected return exceeds the current assumption (6.75%).
- Within the constraints, every asset allocation has an expected return greater than the actuarial assumption (blue dots).





East Bay Municipal Utility District Employees' Retirement System

Next Steps

Month	Preliminary Asset-Liability Study Timeline
<i>November 2023</i>	<ul style="list-style-type: none">• <i>Introduction to Asset-Liability Studies</i>• <i>Key Risks to the Plan</i>• <i>Actuarial Background and Strategic Considerations</i>
<i>March 2024</i>	<ul style="list-style-type: none">• <i>Capital Market Expectations</i>• <i>Baseline Model Output and Risk Philosophy Selection</i>• <i>Optimization Process</i>• <i>Sample Portfolio Comparisons</i>
May 2024	<ul style="list-style-type: none">• Finalize Model Output• Stress Testing• Final Portfolio Recommendations

Appendix



East Bay Municipal Utility District Employees' Retirement System

Appendix – Assumptions and Methods

- Capital Market Assumptions: Meketa 2024 Capital Market Expectations – 10 & 20-year assumptions.
- Assets: Market value of assets of \$2.2B as of June 2023, updated to reflect Q3 and Q4 2023 returns from the performance reports.
- Asset Rebalancing: annual
- Liabilities and normal cost: The liabilities, normal cost and expected benefit payments used in this study were provided by Segal as of June 30, 2023. All liability projections assume a 6.75% long-term rate of return unless the dynamic capital market expectation suggest a discount rate of lower than 6.75%. In that event, the discount rate is set equal to the 20-year geometric capital market expectation. The liabilities and normal cost are then adjusted based on their estimated duration.
- Funding policy: Assumes recommended contributions are made in full as described in the actuarial valuation report.
- Plan Provisions and Additional Assumptions: Additional details regarding provisions and assumptions are documented in the June 30, 2023 actuarial valuation report issued by Segal.



East Bay Municipal Utility District Employees' Retirement System

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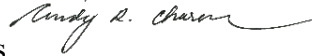
Certain information contained in this document constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events or results or the actual performance of the Funds and investments may differ materially from those reflected or contemplated in such forward-looking statements."

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: May 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources



FROM: Konana Gregory, Human Resources Analyst II



SUBJECT: Disability Earnings Income Verification for 2023

SUMMARY

This memo is brought to the Retirement Board each year to review the status of requirements related to earnings caps for Disability Retirees. Section 18(c) of the Retirement Ordinance and related Board Rule C-21 provide that Members who retire on disability and have not attained Normal Retirement Age, currently age sixty-five, are required to report their outside earnings to the Retirement System that are in excess of their earnings safeguard. Their earnings safeguard is defined as their final monthly salary inflated by wage increases minus their retirement allowance.

DISCUSSION

Rule C-21 provides that Disability Retired Members whose earnings exceed their earnings safeguard in any quarter must notify the Retirement Board Secretary before the end of that quarter so any necessary adjustment to the retirement allowance can be made. In addition, the Rule provides for staff to verify outside earnings through the State Employment Development Department (EDD) Reports for Disability Retired Members based in California.

Under the current process, each calendar year a cover letter is sent to disability retirees who are under age 65 notifying them of their quarterly earnings safeguard. The letter advises them that if they exceeded their earnings safeguard, they are required to submit an "Employee Retirement System Quarterly Earnings Report Form" to the Retirement System by the end of each quarter for which their earnings exceeded the earnings safeguard. A copy of the form is included with the letter.

Twenty-one disability retirees were monitored in 2023, with no Disability Retired Members reporting income greater than their earnings safeguard. For those Disability Retired Members living in California, Member income was verified through the EDD reports, and it was concluded that Members' self-reporting was consistent as no EDD data indicated Member outside earnings greater than the allowed earnings safeguards.

Seven of the 21 monitored Disability Retired Members reside outside of California, so there is no EDD data available to confirm their earnings. The Retirement Board has previously requested staff to look

Disability Earnings Income Verification for 2023
Retirement Board Meeting
March 21, 2024

into whether there is federal access to earnings data that could be used for the out-of-state retirees. Staff have reviewed both the Disclosure of Information to Federal, State, and Local agencies (DIFSLA) program and the Income Verification Express Service (IVES) Program through the Internal Revenue Service (IRS). The DIFSLA does not require authorization from the retiree, but it is not set up to work with a small pension system such as ours. It is used by larger housing, food, and income benefit agencies. The IVES program could provide access to retiree tax data but requires the retiree to authorize the District each time the District request to access their tax records. This process requiring the retiree to authorize the District is not consistent with the way staff access data for California retirees via EDD.

NEXT STEPS

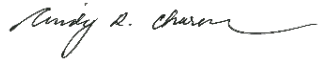
In accordance with the Retirement Board's request that the review process be consistent for all Disability Retired Members under review, staff will continue their review and bring back new suggestions for updating this annual process as defined in Retirement Board Rule C-21.

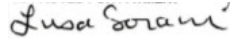
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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Annual Retirement Board Training Report and Ethics Training Update

SUMMARY

The memo below discusses the Retirement Board's training during calendar years 2022 and 2023 and provides a list of upcoming trainings available, as well as many that are available annually.

DISCUSSION

As designed by the Retirement Board, Retirement Board Rule C-23 requires 24 hours of training every two years for Retirement Board members and provides a budget of \$2,500 per year for each Board member for training expenses.

The attached spreadsheets provide the training hours and costs for each Retirement Board member for the two-year period from January 1, 2022, to December 31, 2023. As a reminder, training sessions brought to Retirement Board meetings are included in the training hours and are noted on the attached worksheet.

The one mandated training requirement is the semi-annual AB 1234 Ethics Training. Retirement Board member Ethics Trainings are included on the attached training report, and Board Member Ethics Training anniversary dates are noted.

Several Retirement Board members have asked staff to suggest trainings. Below is a list of trainings for 2024 from the California Association of Public Retirement Systems (CALAPRS) and International Foundation of Employee Benefit plans (IFEBC). The CALAPRS Round Tables are held twice each year, one in-person and one virtual. The Trustee and Investment Officer Round Tables may be of interest to the Retirement Board. They cost \$100 per participant.

The International Federation of Employee Benefits is a U.S. and Canadian agency promoting health and retirement benefit administration. They offer a trustee/administrator level Certificate of Achievement in Public Plan Policy (CAPPP®) that can be earned

Annual Retirement Board Training Report and Ethics Training Update
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March 21, 2024

through two courses (Pensions Part I and Pensions Part II) and an exam. The CAPPP® is designed for public sector benefit plan trustees at all levels of experience. Lastly, the State Association of County Retirement Systems (SACRS) runs a Public Pension Investment Management Program with UC Berkeley each year.

California Association of Public Retirement Systems-CALAPRS

- Virtual Overview Course in Retirement Plan Administration – 4/26/24
- Virtual Trustee Round Table – 5/3/24
- Principles of Pension Governance for Trustees – 8/26/24 to 8/29/24
- In-person Trustee Round Table – 10/11/24
- Virtual Investment Officer’s Round Table – 11/22/24
- General Assembly – March of each year. The location alternates between the Bay Area and Southern California every other year.

International Foundation of Employee Benefit Plans-IFEBP

- Washington Legislative Update (Washington, DC) 5/6/24 – 5/7/24
- Advanced Trustees and Administrators Institute (Las Vegas) 6/24/24 to 6/26/24
- IFEBP Annual Conference (San Diego) – 11/10/24 to 11/13/24
- Advanced Investments Management (San Francisco) – 7/22/24 to 7/24/24. This training takes place every other year.
- Certificate of Achievement in Public Plan Policy: Pension Part I (Boston) – 7/30/24 to 7/31/24
- Certificate of Achievement in Public Plan Policy: Pension Part II (Boston) – 8/1/24 – 8/2/24

State Association of Country Retirement Systems-SACRS

- <https://sacrs.org/Events/SACRS-UC-Berkeley-Program> (Berkeley) – next available in July 2025. Registration has closed for July 2024.

NEXT STEPS

Staff have worked to build a process in Elsie for processing Retirement Board member training authorizations and expense reports. If you are interested in any of these trainings, please send your training request to the Retirement Board president for approval and then contact retirement staff by email to Judy McCree and cc Valerie Weekly.

LS:jm

Attachment: Calendar Years 2022 and 2023 Retirement Board Training Report

Retirement Board Member Training Pursuant to RB Rule C-23

1/1/2022 - 12/31/2023

Goal is 24 hours in two years - we review in 2 year blocks.

Budgeted amount is \$2,500 per a year/per Member.

Clifford Chan	Training Date	Provider/Topic	Hours	Cost
Hours at Ret. Board Meeting 2022			3	\$ -
Hours at Ret. Board Meetings 2023			4	\$ -
Total			7	\$ -
April Chan	Training Date	Provider/Topic	Hours	Cost
<i>Joined Ret Board March 2023</i>				
	3/4 - 3/07/2023	CalaPRS General Assembly 2023 in Monterrey, CA	16	\$ 1,310.06
	8/28 - 8/31/2023	Principles of Pension Governance for Trustees 2023	16	\$ 3,638.03
Hours at Ret. Board Meetings 2023			4	\$ -
Total			20	\$ 4,948.09
Marguerite Young	Training Date	Provider/Topic	Hours	Cost
	12/31/2022	Ethics Training	2	\$ -
Hours at Ret. Board Meeting 2022			2	\$ -
Hours at Ret. Board Meetings 2023			4	\$ -
Total			6	\$ -
Jae Park	Training Date	Provider/Topic	Hours	Cost
	3/29 - 3/31/2023	Advanced Principles of Pension Governance for Trustees 2023	16	\$ 3,250.00
	7/16 - 7/19/2023	SACRS-UC Berkeley 2023 Conference	16	\$ 2,500.00
Hours at Ret. Board Meeting 2022			3	\$ -
Hours at Ret. Board Meetings 2023			5	\$ -
Total			40	\$ 5,750.00
Tim McGowan	Training Date	Provider/Topic	Hours	Cost
	3/5/2023	Ethics Training (<i>attended as part of General Assembly</i>)	2	\$ -
	3/4 - 3/7/2023	CALAPRS 2023 General Assembly	14	\$ 944.63
Hours at Ret. Board Meeting 2022			3	\$ -
Hours at Ret. Board Meetings 2023			5	\$ -
Total			24	\$ 944.63
Elizabeth Grasseti	Training Date	Provider/Topic	Hours	Cost
	3/6/2022	Ethics Training (<i>attended as part of General Assembly</i>)	2	\$ -
	3/5 - 3/8/2022	CALAPRS 2022 General Assembly	16	\$ 324.87
Hours at Ret. Board Meeting 2022			3	\$ -
Hours at Ret. Board Meetings 2023			4	\$ -
Total			23	\$ 324.87

Ethics Training

Retirement Board

AB 1234 (effective January 1, 2006) requires all elected officials to undergo two hours of ethics training by December 31st of each year. Retirement Board Trustees are required to undergo ethics training within six months of taking office and must renew the training every two years pursuant to California law.

Retirement Board Member	Most Recent Training Date on Record	2020	2021	2022	2023	2024	2025	2026	2027	2028
Clifford Chan	3/13/2024	♣		♣		♣				
Elizabeth Grasseti	3/6/2022		♣	♣		♣				
April Chan (new)	3/04/2024					♣				
Timothy McGowan	3/05/2023		♣		♣					
Jae Park	3/12/2024		♣			♣				
Marguerite Young	12/31/2022	♣		♣		♣				


- ♣ = certificate of completion on file
- ♣ = pending receipt of certificate

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Health Insurance Benefit Study Update

SUMMARY

This memo provides a summary of information presented to date during the Health Insurance Benefit (HIB) Study meetings and updates on additional milestones related to the ongoing study.

DISCUSSION

Below are the highlights of the HIB Study data brought to the Retirement Board in the January and February Retirement Board meetings.

Current Value of HIB:

Staff presented data comparing the current HIB amount to current District retiree health insurance premiums. The data showed that two plans are available for a single retiree that the maximum \$450 benefit could fully cover. The Retirement Board requested to see data including the cost of Medicare Part B premiums. When you compare the current maximum benefit to District health plan premiums plus Medicare Part B, there is only one plan that would be fully covered by the max \$450 benefit.

There were no plans where the maximum married benefit of \$550 could cover the full cost of the health plan alone, or for health plan plus Medicare Part B.

- Maximum single benefit of \$450 meets 100% coverage on at least one plan.
- Maximum married benefit of \$550 does not meet 100% for any plans.
- There is no option for 100% coverage on any plan for those retirees eligible for less than the maximum benefit, which is currently 21% percent of the 1,967 retirees eligible for the HIB due to less than 20 years of service with the District.

Review of Historical and potential Future District Health Plan Premiums:

Staff provided historical and forward-looking District health plan premium trend data. The historical trend showed a run of very low rate increases for retiree health plans over the past ten years. For the forward-looking trend, Alliant used data that was used by the District's actuary, Segal, in the HIB valuation to show health plan premium increases five and ten years out. They also showed the retiree out-of-pocket costs for a health plan and Medicare Part B, assuming no change to the HIB in five and ten years.

In the past ten years, the average annual rate increase was 4.48% for non-Medicare plans and 0.95% for Medicare plans. This has kept the value of the current HIB strong. Looking forward, you see that the current Kaiser Low plan, where the single maximum HIB of \$450 covers 100% of the premium plus Part B today, would instead have \$113 in out-of-pocket cost to the retiree in five years and \$261 in out-of-pocket cost to the retiree in ten years.

Demographic Data:

Staff have presented demographic data that shows the following about our current retirees and their dependents:

- Most are over age 65. (Average age is 71.5 years old.)
- Most live in California
- 1,976 (97%) of them are eligible for some value of HIB
- A majority of those (1,554) are eligible for the **maximum** HIB.

Understanding Medicare:

Staff shared information about the value and cost of Medicare benefits, how Medicare interacts with District retiree health plans, changes in these since 2004, and the work that staff do to ensure employees and retirees understand the rules and usage of Medicare.

Review of Historic HIB improvements:

The Retirement Board asked for two additional sets of data during the February HIB Study meeting. One was to show HIB as a percentage of the health plan premiums at the time the benefit decision was made. The second request was to convert historical HIB values to 2024 dollars to better compare benefit changes over time. Today, staff are providing the HIB as a percentage of the insurance premiums at each of the improvement dates. The present value data will be brought to the April HIB Study meeting.

Use of Segal Data to Forecast Future Health Plan Premiums:

During the February HIB Study meeting, the Retirement Board had a question about the health plan premium trend numbers used in the presentation. Alliant noted that they utilized the health plan trends used by the District actuary, Segal, in their June 30, 2023 HIB valuation. The Retirement Board requested that staff review the trend information with Segal and confirm that they agree with using their trend information this way. Staff spoke with Segal the following

HIB Study Update
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week, and Andy Yeung at Segal agreed with the way the future trend data was used in Alliant's slides.

NEXT STEPS

A letter was sent to retirees on Tuesday, March 5, 2024, giving them early notice about several upcoming communications including those regarding the Retirement Board elections, the new HIB outsourcing, and the HIB survey. The Retiree HIB survey was updated and reviewed by Retirement Board members Marguerite Young and Elizabeth Grasseti and was sent to retirees on March 15, 2024. 1,806 were sent by email and 207 were sent by U.S. Post. Retirement staff will provide an update on the outcome of the survey on April 16, 2024.

HIB Study Schedule - Remaining Meetings

Meeting Date	HIB Study Topic
April 16, 2024 (special) 9:00 a.m. – 12:00 p.m.	<i>Review and discuss detailed benchmark data related to District HIB vs. competitor retiree health benefits, additional retiree benchmark data, Board of Director guidance.</i>
June 4, 2024 (special) 9:00 a.m. – 12:00 p.m.	<i>Working session to consider and build HIB proposals for final costing.</i>
July 18, 2024 8:30 a.m. – 1:00 p.m.	<i>Authorize proposal to send to Board of Directors</i>

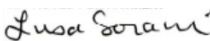
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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 21, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: HIB Study: Historical Review of Health Insurance Benefit Value as Percentage of Health Plan Premiums

SUMMARY

This memo provides information requested by the Retirement Board showing the value of the Health Insurance Benefit (HIB) as a percentage of the insurance premiums at each change date.

DISCUSSION

At the February 6, 2024 Retirement Board meeting, the Board requested historical health plan premiums to see alongside the HIB increases. The attached document shows the dollar amount of the health plan premium plus the Medicare Part B premium for each of five retiree health plans at each date that the HIB was either created or increased between 1989 and 2004. The number in the column to the left of each premium represents the percentage of that particular health plan premium covered by the HIB in that year. This report only includes data on the single tier maximum benefit except for one line in 2004 showing the introduction of the married tier. Highlights of the data are.

- In 1989, when the HIB was created as \$50 per month, this amount did not cover 100% of any of the five retiree health plans.
- In 2004, when the married \$550 benefit was created, the benefit did not allow for 100% coverage on any health plan.
- In the 14 years between 1990 and 2004, the HIB was increased 4 times; and in these years the maximum HIB covered 100% on between two and five health plans.
- In the 14 years between 2005 and 2018, when there were low health plan rate increases, the HIB offered 100% coverage for at least two plans each year. However, by 2019, only one health plan was covered 100%.
- In 2024, there is still one plan where the maximum single HIB of \$450 offers 100% coverage.

HIB Study: Historical Review of Health Insurance Benefit (HIB) Value as Percent of Health Plan Premiums
Retirement Board Meeting
March 21, 2024

- These calculations include the cost of Medicare Part B. If that cost is removed from the cost of the health plan premium in the calculations attached, the maximum single HIB of \$450 covers 100% of all three current retiree Medicare health plan premiums.

NEXT STEPS

The Retirement Board also requested to see the historical HIB values as present year values. This information will be provided at the April 16, 2024 meeting.

CC:LS:ls

HIB as a % of Healthcare Plan Premium Plus Medicare Part B Premium at time of Benefit Increase


				Medicare plans available 1989 - 2004									
Date HIB Changed	Action	Monthly Max HIB	Date of Premiums	HIB as a % of Premium	Kaiser Medicare Single + Part B Premium	HIB as a % of Premium	Sen Adv Kaiser Single + Part B Premium	HIB as a % of Premium	HealthNet Medicare Single + Part B Premium	HIB as a % of Premium	Sen Plus HealthNet Single + Part B Premium	HIB as a % of Premium	Anthem Medicare Single + Part B Premium
7/1/1989	Created Max HIB of \$50/month	\$50	1/1/1989	40%	\$124.82	80%	\$62.25	34%	\$146.55	84%	\$59.18	41%	\$123.11
1/1/1991	Increased Max HIB to \$100/month	\$100	1/1/1991	73%	\$137.76	154%	\$65.13	61%	\$162.97	161%	\$62.17	74%	\$135.78
7/1/1996	Increased Max HIB to \$150/month	\$150	1/1/1998	87%	\$173.22	174%	\$86.07	74%	\$203.48	182%	\$82.52	88%	\$170.84
7/23/1999	Increased Max HIB to \$200/month	\$200	1/1/1999	104%	\$191.65	234%	\$85.44	97%	\$205.18	179%	\$112.00	113%	\$177.28
11/1/2000	Increased Max HIB to \$250/month	\$250	1/1/2001	94%	\$267.28	144%	\$173.98	108%	\$231.89	106%	\$236.80	111%	\$225.17
7/1/2002	Increased Max HIB to \$400/month	\$400	1/1/2002	125%	\$319.13	168%	\$237.97	141%	\$284.55	149%	\$268.20	157%	\$254.28
7/1/2003	Increased Max HIB to \$450/month	\$450	1/1/2003	113%	\$398.61	141%	\$318.15	229%	\$196.80	120%	\$375.90	149%	\$301.86
7/1/2004	Increased Max HIB to \$450/month	\$450	1/1/2004	93%	\$483.78	121%	\$370.60	146%	\$308.67	110%	\$407.60	124%	\$364.31
7/1/2004	ADD MARRIED TIER OF \$550	\$450/\$550	1/1/2004	57%	\$967.56	74%	\$741.20	79%	\$698.78	67%	\$815.20	75%	\$728.62
1/1/2014	In 2014 Max was \$450	\$450/\$550	1/1/2014	108%	\$417.80	126%	\$358.35	64%	\$698.78	55%	\$815.20	62%	\$728.62
1/1/2024	In 2024 Max was \$450	\$450/\$550	1/1/2024	94%	\$480.00	104%	\$430.70	N/A	NA	N/A	\$644.52	72%	\$623.75

Notes: Each percentage in green represents that the HIB value set in that year provides for at least 100% coverage of the premium plus Medicare Part B for that plan. 2002 is the first year that the maximum single benefit could cover all plans at 100%. The blue highlighted row is the introduction of the \$550 tier for married retirees. This shows that, at introduction, the benefit did not offer 100% coverage for any health plan.

EAST BAY MUNICIPAL UTILITY DISTRICT
Office of the General Counsel

DATE: March 15, 2024

MEMO TO: Retirement Board

FROM: Lourdes Matthew, Assistant General Counsel 

SUBJECT: Item 16 -- Amending the Retirement Ordinance to Modify Accrual of Service Credit by Board Members

SUMMARY

At the request of Retirement Board member, Marguerite Young, below is information regarding options to amend the Retirement Ordinance to more accurately reflect the service accrual of members of the Board of Directors as less-than-full time members of the Retirement System.

This memorandum discusses: (1) options for modifying the terms in which elected Board members are eligible to participate in the Retirement System and accrue service credit; (2) specific Retirement Ordinance amendments that would be required to effectuate those modifications; (3) legal considerations and issues; and (4) steps needed to implement those changes.

DISCUSSION

I. *Background Information*

As previously advised, the Municipal Utility District Act (MUD Act) authorized the Board to establish a retirement system “for the officers, whether elective or appointed, or both, and employees of the District and provide for payment of annuities, pensions, retirement allowances, disability payments, and death benefits, or any of them.”¹ Pursuant to this authority, the Board enacted the Retirement Ordinance No. 40 in 1937 to establish the Retirement System.

Board members were excluded from participation in the Retirement System until 1987. In 1986, the state legislature amended the MUD Act to allow officers “whether elective or appointed, or both” to become members of the Retirement System. Accordingly, the Board amended the Retirement Ordinance to allow Board members to become members of the Retirement System and recognize their service as full-time employees. Thus, while Board members do not work a

¹ MUD Act § 12301.

full-time schedule for the District, they are able to accrue service on the same basis as full-time employees.²

To allow Board members to participate in the Retirement System, Section 5(k) was added to the Ordinance to state: “Every Director in office on January 1, 1987 shall become a Member of the Retirement System on that date. All persons thereafter assuming the office of Director shall become Members on the date of assumption of office.” To recognize Board members as “full time” employees, Section 2(b) was amended to state “Employee shall also include persons holding an elective office as Director of the District” and Section 2(g) to state: “[f]or purposes of this Ordinance, a Director shall be considered as being in the District service at all times during which the office of Director is held.”

II. *Options for Modifying the Terms for Board Members*

Section 12331 of the MUD Act provides the Board considerable latitude in determining the terms governing the amount of pension to which Board members may be entitled. Note that the 1986 amendment to the MUD Act did not *require* elected Board members to become members of the Retirement System, but rather permitted the Board to allow elected Board members to participate. Thus, the Board would have a range of options for modifying pension benefits for the Board.

a. *Board Members Become Ineligible to Participate in the Retirement System*

One option could be to revert back to precluding Board members from participating in the Retirement System. Under this option, Board members would not be eligible to receive a retirement allowance from the District, which would preclude eligibility for reciprocity. This option would allow employees who retire from the District to become members of the Board without being subject to provisions under the California Public Employees’ Pension Reform Act (PEPRA), which will be more fully discussed below. Finally, this option would require the least administrative changes to the operations of the Retirement System.

b. *Less than Full-Time Service for Purposes of Calculating the Retirement Allowance*

Another option under consideration is to calculate service for Board members on a less than full-time basis to reflect the part-time nature of the Board members. Based on the amount of time a Board member spends on District service, the Board could prorate service that would be counted as creditable service for the purpose of calculating a Board member’s pension. As an example, for every full year of service, a Board member would receive 0.25 years of service.

² Retirement Ordinance Section 2(b): “‘Employee’ shall also include persons holding an elective office as Director of the District.” (see also Section 2(i), which states: “For purposes of this Ordinance, a Director shall be considered as being in the District service at all times during which the office of Director is held.”)

The prorated amount would only apply to how service is calculated for purposes of determining the amount of retirement allowance a Board member would be entitled. Section 12 of the Retirement Ordinance provides: “When the District Service of any Member is terminated, except by death or retirement, and prior to the completion of five years of Continuous Employment, he or she shall cease to be a Member of the Retirement System.” For purposes of calculating the years of service to determine whether a member may remain in the Retirement System, the Board could have the option of continuing to treat one year of service on the Board as a full year and not prorate that service.

To illustrate: Board member A serves a full four-year term and is not re-elected for a second term. Board member A would accrue four years of service for purposes of determining their eligibility under Section 12, however, they would not be permitted to remain in the Retirement System because Board member A did not achieve five years of Continuous Employment, thus, Board member A would not be eligible for any pension benefits. Nor would they be eligible for the Health Insurance Benefit (HIB) for medical expenses.

In another example, Board member B serves two four-year terms and decides to retire after eight years of serving on the Board at age 67.³ Board member B would have two years of service (8 years x 0.25) for purposes of determining the retirement allowance but eight years of service for the purposes of determining their eligibility to remain a member of the Retirement System. Thus, if Board member B left the Board and decided to defer retirement, Board member B could do so and remain a member of the Retirement System. When Board member B ultimately retires, they would be eligible for a pension based on two years of service. However, Board member B would also not be eligible to receive an HIB, which would require at least 5 years of continuous service.⁴

Pro-rating the amount of service as less than full-time would require the development of new procedures by the Retirement System. Additionally, the Retirement System would be required to re-formulate its method of calculating the member’s contribution rate since the normal cost of the benefit for the Board member would not be the same as that of full-time members. If a Board member were a PEPRA tier member, they would also be required to pay at least 50 percent of the normal cost of the benefit, and tailored calculations of contributions would need to be developed by staff and the Retirement System actuaries. The pro-rating option would require significant administrative changes to implement.

Additionally, the Retirement Ordinance currently expressly excludes employees employed solely on a part-time basis, limited term employees, temporary employees, and temporary construction employees. These changes would create a new class of members for Directors.

³ Pursuant to PEPRA and Section 42 of the Retirement Ordinance, the retirement multiplier of 2.5% may be applied only upon attaining age 67.

⁴ See Section 36(d) of the Retirement Ordinance.

c. Alternative Benefit

If the Board decides to exclude Board members from joining the Retirement System, the Board could, in theory, offer another benefit, if such a benefit was also offered to District employees. Government Code section 53208.5 permits members of a legislative body to participate in any plan of health or welfare benefits, provided that they are not greater than that received by the employees of the agency. Currently, Board members are eligible to participate in the District's 457 and 401k Deferred Compensation plans.⁵

III. Proposed Amendments to Reflect Each Option

Below are examples of language amending the Retirement Ordinance to reflect the proposed modifications.

a. Formalize the definition of "Director"

The term "Director" as used in Section 5(k) of the Retirement Ordinance is not currently defined. For clarity and consistency in applying the term "Director" throughout the Retirement Ordinance, it is recommended that the following definition be added to Section 2:

Director shall mean an individual elected or appointed to serve on the East Bay Municipal Utility District Board of Directors.

b. Board Members Become Ineligible to Participate in the Retirement System

Section 5(k) of the Retirement Ordinance currently states:

Every director in office on January 1, 1987 shall become a Member of the Retirement System on that date. All persons thereafter assuming the office of Director shall become Members on the date of assumption of office.

To effectuate a change that would exclude members of the Board from membership, Section 5(k) would be amended as follows:

Every Director in office on January 1, 1987 shall become a Member of the Retirement System on that date. All persons thereafter assuming the office of Director shall become Members on the date of assumption of office. **A director who assumes office on or after July 1, 2024 shall not become a Member of the Retirement System.**

⁵ There are significant limitations on the ability of new directors covered by PEPRA to be provided additional retirement benefits that may make it impractical to provide additional benefits under the District's 401(k) or 457(b) deferred compensation plans. If the Board wishes to pursue the possibility of offering some additional benefit, additional review could be undertaken to determine any feasible options for additional benefits.

c. Less Than Full-Time Service for Purposes of Calculating the Retirement Allowance

To reflect the modification to the rate of accrual of service, Section 2(g) would be amended. Section 2(g) defines “District Service” and states, in part:

For purposes of this Ordinance, a Director shall be considered as being in the District service at all times during which the office of Director is held.

This portion of Section 2(g) would be amended as follows (using the 25% option as an example):

For purposes of this Ordinance, a Director **who became a member before July 1, 2024** shall be considered as being in the District service at all times during which the office of Director is held.

For the purpose of determining the retirement allowance pursuant to Section 15 or Section 42, a Director, who becomes a Member of the Retirement System on or after July 1, 2024, shall accrue District Service at a rate of ¼ or 25% of each year of service on the Board of Directors, such that a Director who serves a four-year term shall accrue one year of District Service.

Section 2(jj) defining “Continuous Employment” for purposes of Section 12(a) which allows a member to remain in the Retirement System after five years of service should be amended to add:

For purposes of Section 12(a) only “Continuous Employment” for a Director, who becomes a Member of the Retirement System on or after July 1, 2024, shall mean the period of time that a Director maintains continuous and unbroken service on the Board of Directors calculated on the basis of the anniversary date the Director took office on the Board of Directors and every year thereafter the Director holds such office.

Section 5(k), which authorizes members of the Board to become members would remain unchanged.

d. Amendments to Address Retiree Elected on the Board and PEPRA

Another consideration is when an employee who retires from the District is elected to the Board. PEPRA expressly states: “[a] retired person shall not serve, be employed by, or be employed

through a contract directly by a public employer in the same public retirement system from which the retiree receives the benefit without reinstatement from retirement.”⁶

In the event a retiree is elected or appointed to serve on the Board, the retiree would be required to be reinstated to the Retirement System and the Retirement System must suspend the payment of retirement benefits for the time the retiree sits on the Board.

Thus, it is also recommended that a provision in the Retirement Ordinance be added to expressly provide that a retiree who is elected or appointed to Director shall be reinstated into the Retirement System and that such reinstatement would require the suspension of their pension benefits. Currently, Section 13 of the Retirement Ordinance provides that if an employee separates employment and withdraws their contributions, and such employee reinstates employment and redeposits the contributions as provided under the Ordinance, such employee may receive credit for all service prior to the date of separation in the same manner as if he or she had never left District Service and the two periods of service shall be deemed a single period for purposes of monthly allowances. Under these provisions, a retiree may be able to add the years of service rendered as a Board member to their Retirement Allowance once they cease their term as Director. However, further actuarial evaluation of the cost of the benefit which would be extended by additional service as a Director and its impact on the benefits received would need additional evaluation. Additionally, to operationally implement this term could require adoption of new Retirement Board Rules.

Accordingly, Section 13 of the Retirement Ordinance could be amended by adding a new paragraph at the beginning to read as follows:

If a retiree returns to District Service as a Director, such retiree shall be reinstated in the Retirement System. Reinstatement in the Retirement System by a retiree under this provision shall require the Retirement System to suspend the payment of the retiree’s Retirement Allowance until such time as the retiree ceases to be a Director. The retiree shall accrue District Service and Continuous Employment on the same basis as a Director. The two periods of service shall be deemed a single period for purposes of the Retirement Allowance.

If Board members are excluded from participation in the Retirement System, retirees would not be required to reinstate and suspend their retirement allowances while serving on the Board.

NEXT STEPS

As I understand, the goal is to have any modifications to the Retirement Ordinance to take effect by July 1, 2024. For the amendments to take effect on that date, the Board must adopt the amendments no later than May 28, 2024 and notice of the adoption of the ordinance must be

⁶ Cal. Govt. Code § 7522.56(b).

Retirement Board

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published within 15 days of its enactment. This means that the first reading of the ordinance must take place no later than May 7, 2024.

LM:vsh

cc: Clifford C. Chan, General Manager
Derek McDonald, General Counsel
Cindy R. Charan, Director of Human Resources
Sophia D. Skoda, Director of Finance