



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 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 – 9/19/2024

A regular meeting of the Retirement Board will convene at 9:00 a.m. on Thursday, September 19, 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 may be attending via Zoom which will be broadcast at the meeting.

Enclosed are the agenda items for the September 19, 2024 meeting, and the Minutes for the July 18, 2024 regular meeting. The package also includes the following: **(1) CONSENT items:** Approval of Minutes of the Retirement Board – Regular Meeting of July 18, 2024, Ratifying and Approving Investment Transactions by Retirement Fund Managers for June 2024 and July 2024, Ratifying and Approving the Short-Term Investment Transactions for June 2024 and July 2024, Approving Treasurer’s Statement of Receipts and Disbursements for June 2024 and July 2024; **(2) ACTION items:** Declare Results of the Election of the Retiree Representative to the Retirement Board, Approve Meketa Contract Extension, Authorize Selection of Cheiron to Conduct Actuarial Audit; **INFORMATION items:** Performance Report and Economic Review, Update on Portfolio Transition Plan, HIB Study: Additional Costing Data for Summary of Findings Report, Announcement of 2025 Retirement Board Calendar, August 2024 LRS Pension Gold Implementation Update; **(4) REPORTS FROM THE RETIREMENT BOARD:**

CC:ls

Enclosure

AGENDA
EBMUD EMPLOYEES' RETIREMENT SYSTEM
September 19, 2024

A regular meeting of the Retirement Board will convene at 9:00 a.m. on Thursday, September 19, 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, Jae Park, Max Fefer 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, and Eric Larsen; Segal: Andy Yeung

****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 July 18, 2024
2. Ratifying and Approving Investment Transactions by Retirement Fund Managers for June 2024 and July 2024
3. Ratifying and Approving Short-Term Investment Transactions for June 2024 and July 2024
4. Approving Treasurer's Statement of Receipts and Disbursements for June 2024 and July 2024

ACTION:

5. Declare Results of the Election of the Retiree Representative to the Retirement Board – C. Charan
6. Approve Meketa Contract Extension – S. Skoda

7. Authorize Selection of Chieron to Conduct Actuarial Audit – S. Skoda

INFORMATION:

8. Performance Report and Economic Review – S. Skoda
9. Update on Portfolio Transition Plan – S. Skoda
10. HIB Study: Additional Costing Data for Summary of Findings Report – C. Charan
11. Announcement of 2025 Retirement Board Calendar – C. Charan
12. August 2024 LRS Pension Gold Implementation Update

REPORTS FROM THE RETIREMENT BOARD:

ITEMS TO BE CALENDARED:

MEETING ADJOURNMENT:

The next regular meeting of the Retirement Board will be held on November 21, 2024.

Retirement Board Meetings

- November 21, 2024
- January 23, 2025

APPENDIX

Retirement Board Meeting
Thursday, September 19
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: September 19, 2024 09:00 AM Pacific Time (US and Canada)

Topic: September 19, 2024 EBMUD Retirement Board Meeting

Please click the link below to join the webinar:

<https://ebmud.zoom.us/j/86196716328>

Or One tap mobile :

+16694449171,,86196716328# US

+16699006833,,86196716328# 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: 861 9671 6328

International numbers available: <https://ebmud.zoom.us/u/k8WQzpcLw>

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

Meeting Minutes

EBMUD EMPLOYEES' RETIREMENT SYSTEM

July 18, 2024

A regular meeting of the Retirement Board convened at 9:00 a.m. on Thursday, July 18, 2024. This meeting was conducted with Retirement Board Members physically present in the Administration **Training Resource Center**, 375 Eleventh Street, Oakland, California. This location served as the physical location for members of the public who wanted 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. 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 were not able to provide public comment via live audio stream. For instructions regarding meeting participation or providing or providing public comment, please see the Appendix of the Agenda for instructions on joining the Zoom meeting online or by phone. Some Presenters may have attended via Zoom.

****Public Participation****

Please see Appendix at end of Agenda for Public Participation Details

ROLL CALL: Marguerite Young, Board Vice President, opened the meeting and took roll call.

Present: Clifford Chan, Marguerite Young, April Chan, Max Fefer, Jae Park and Elizabeth Grassetti

Staff/Presenters: Lisa Sorani, Valerie Weekly, Cindy Charan, Mae Shepherd, Sophia Skoda, Robert Hannay, Steven Goodman-Leibof, Lourdes Matthews, Andy Yeung (Segal), Mehdi Riazi (Segal) Colin Bebee (Meketa), Eric Larsen (Meketa)

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. There was no public comment at this time.

REGULAR BUSINESS MEETING

CONSENT CALENDAR:

1-5. Consent Items - No consent items were pulled for discussion. Clifford Chan moved consent items 1-5; Max Fefer seconded the motion. The motion passed (5-0) by the following vote AYES (A. Chan, C. Chan, M. Young, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (none).

ACTION:

Jae Park mentioned that item 10 - Resolution Acknowledging Tim McGowan's Service to the Retirement Board would be taken following the informational items.

6. Election of Retirement Board Officers – Lisa Sorani clarified that while the election of a Vice President is not required at this time, a vote for the President is mandatory. Marguerite Young nominated Jae Park, which was seconded by April Chan. The motion passed (5-0) by the

following vote AYES (A. Chan, C. Chan, M. Young, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (none).

- 7. Approve Portfolio Transition Plan** – Colin Bebee from Meketa presented a proposed plan for transitioning the Board’s investment portfolio, based on the allocation adopted in the July 2024 meeting. Colin Bebee mentioned that transitioning a billion-dollar plan typically takes 2-5 years. The provided transition plan targets July 1, 2026 as the completion date. This allows for some flexibility to account for potential delays. Staff and Meketa will be working with Northern Trust Management to complete the transition. Transition managers help with the buying and selling of assets as you change mandates. In stage zero, we will be changing benchmarks for two of our managers: Federated and MacKay Shields. In stage 1, which will be completed by 10/1, we will redeem Van Hulzen and CenterSquare which will be shifted to US equity. During this stage, Meketa will launch RFPs for high yield and bank loans. On 7/1/2025, the high yield and bank loans manager will be selected and the RFP for private debt will commence with the expectation of manager selection on 4/1/2026. Meketa does intend to provide education which will include one of the managers. Jae Park moved to approve the Portfolio Transition Plan, which was seconded by April Chan. The motion passed (4-0) by the following vote AYES (A. Chan, C. Chan, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (M. Young).

Marguerite Young left the meeting for approximately five minutes, missing the item 7 vote, but rejoined before the item 8 vote.

- 8. Changing Benchmarks for Fixed Income Managers** - Meketa recommended new benchmarks for the 2 non-core fixed income funds managing our high yield and bank loans buckets, Mackay Shields and Federated to industry standard benchmarks that better align with current market conditions. Meketa discussed the differences in the new indexes. Max Fefer moved the item and seconded by Marguerite Young. The motion passed (5-0) by the following vote AYES (A. Chan, C. Chan, M. Young, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (none).

- 9. Approve Final HIB Summary of Findings Report** – Lisa Sorani presented the Health Insurance Benefit (HIB) findings. Several Board members had previously raised concerns about the projected 6-7% increase in premiums, which they felt didn’t align with historical trends. Andy Yeung from Segal explained that while past premiums were lower, the Inflation Reduction Act and rising medical costs, especially for retirees under 65, would impact future rates. Preliminary 2025 rates from Kaiser show significant increases: 11.9% for the Kaiser Senior Advantage High plan and 14% for the Low plan. The Board discussed several scenarios for adjusting the HIB, focusing on how to balance rising costs with funding limitations. Andy Yeung clarified that the HIB funding status is low due to prior benefit improvements. Marguerite Young reminded the Board that increasing current retiree benefits would require additional funding from the District. Marguerite Young noted that this report was missing costing for the scenario of PEPPA members vesting fully at year 15 instead of year 20, which led to discussion about the feasibility of implementing this change in upcoming labor negotiations. Lisa stated that she would work with Segal to bring back costing for this scenario at the September meeting.

Public comment: Diane Eggering urged the Board to ensure that changes to the vesting schedule should also apply to current employees. Lisa Sorani clarified that “future retirees” include current employees who have not yet retired.

Max Fefer raised concerns about rising out-of-pocket medical expenses for retirees and asked about the availability of tax-advantaged accounts. Lisa Sorani explained that Health Savings

Accounts (HSAs) are available but must be paired with high-deductible plans, and unions were not interested when the benefit was initially rolled out. Valerie Weekly mentioned that the IRS does not provide for a lot of tax advantaged plans for medical expenses. There are HRAs (Health Reimbursement Accounts), but those plans can only be funded by the employer, not via employee contributions. Jae Park requested that staff summarize the more complex motions for the Board in the future.

Clifford Chan moved to approve the Final HIB Summary of Findings Report with the requested changes to the vesting schedule, as well as the inclusion of additional cost data in the summary table. Jae Park seconded the motion. The motion passed (5-0) by the following vote AYES (A. Chan, C. Chan, M. Young, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (none).

INFORMATION:

11. Performance Report and Economic Review – Eric Larsen provided a performance report on the Retirement System’s investment portfolio, highlighting that U.S. equities continue to outperform, driven by large-cap growth stocks in the technology sector. Emerging markets, especially China, performed well in the second quarter. It is anticipated that interest rate cuts may occur by September, with additional cuts by year-end. Upcoming political elections could introduce market volatility. The U.S. stock market’s price-to-earnings (PE) ratios remain above historical averages, suggesting possible overvaluation, while emerging markets appear undervalued. Colin Beebe added that while economic growth is slowing, it remains solid due to a strong labor market and income-led expansion. Clifford Chan asked about delinquencies in sectors such as auto loans, and Larsen confirmed there are areas of weakness, though the overall economy remains stable. April Chan noted the existence of a water index tracking private water companies, and Marguerite Young asked for clarification, which April confirmed.

12. July 2024 LRS Pension Gold Implementation Update – Valerie Weekly explained that testing for Deliverable 2 was currently a heavy lift for the project team and the Retirement Services team. We are experiencing some delays in our timeline. In addition, we began work on Deliverable 3. There are data conversion issues that we continue to find in PeopleSoft and ETS, where corrections need to be made. The project team finds errors and then hands them off to the appropriate HR functional team so they can evaluate and lead any correction effort. Marguerite Young asked how many people may have a changed benefit? That still needs to be examined and the scope of any corrections determined. If significant benefit changes are required, that would come back to the Retirement Board. Looking at the Ordinance, Board Rules and policies and procedures where changes may be needed.

Max Fefer raised concerns about the delay in recruiting for the Product Owner position. Cindy Charan explained that the Pension Gold implementation is part of the HRIS replacement project. She has to think about the Project as a whole, considering competencies and scope of work, to ensure appropriate staffing and support. This work has delayed the recruitment. I spoke with Valerie Weekly and Lisa Sorani, whose team is maxed out. We are also looking to contract out some Retirement Services work to provide the team with more time for the project.

ACTION:

10. Resolution Acknowledging Tim McGowan’s Service to the Retirement Board – Jae Park read the resolution expressing appreciation for Timothy McGowan's service on the Retirement Board from January 4, 2012, to June 2024. Tim McGowan highlighted the Board’s accomplishments during his tenure, including conservative investment strategies and funding increases without placing undue burden on ratepayers or employees. Marguerite Young moved to adopt the resolution, and Clifford Chan seconded the motion. The motion passed (5-0) by the following vote AYES (A. Chan, C. Chan, M. Young, M. Fefer, J. Park), NOES (none), ABSTAIN (none), ABSENT (none).

REPORTS FROM THE RETIREMENT BOARD:

Max Fefer made a data request from staff, asking if they could provide a histogram of pension amounts for current retirees. This would help the Board better understand the median benefit and distribution of those benefits. Staff agreed to gather the requested data and provide to the Board.

ITEMS TO BE CALENDARED:

MEETING ADJOURNMENT:

The next regular meeting of the Retirement Board will be held on September 19, 2024.

Jae Park asked if a motion was required or can he simply adjourn. Lourdes Matthew indicated it is at his discretion. Jae Park adjourned the meeting at 11:45 am.

Retirement Board Meetings

- September 19, 2024
- November 21, 2024

President

ATTEST:

Secretary

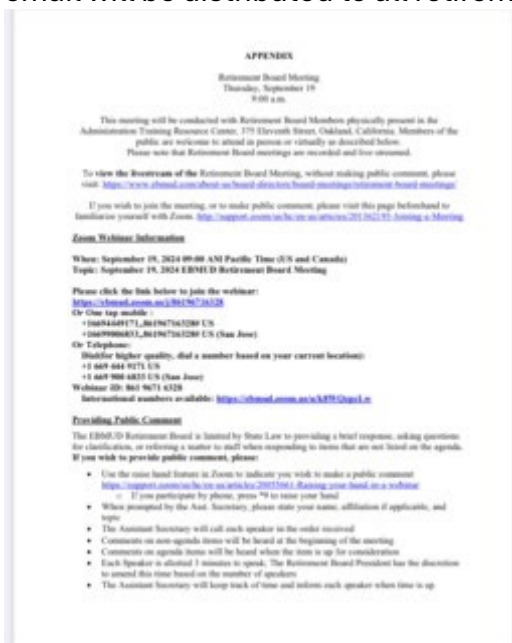
9/19/2024

From: Ivette Pension Rep U <ivettepensionrepu@gmail.com>
Sent: Thursday, September 19, 2024 4:09 AM
To: Cole, Risha <rischa.cole@ebmud.com>; Young, Marguerite <marguerite.young@ebmud.com>; Chan, Clifford <clifford.chan@ebmud.com>; Chan, April B. <april.chan@ebmud.com>; mfefer@sbcglobal.net; Elizabeth Grascetti <eegrass@aol.com>
Cc: McIntosh, Lesa <lesa.mcintosh@ebmud.com>; Patterson, William <william.patterson@ebmud.com>; Linney, Doug <douglas.linney@ebmud.com>; Gomez, Luz <luz.gomez@ebmud.com>; Katz, Andy <andy.katz@ebmud.com>; Apscme 444 <afscme444@gmail.com>; Lisa Davis <lisa.davis@ca.afscme57.org>; Pangelinan, Joseph <joseph.pangelinan@ebmud.com>; Mims, Dana <dana.mims@ebmud.com>; Phifer, Ophelia <ophelia.phifer@ebmud.com>
Subject: Please distribute this email to Retirement Board Members for today's 9/19/2024 Meeting. Fwd: PRR-2024-124 - performance pay data 2023-2024 (I. Rivera)

Some people who received this message don't often get email from ivettepensionrepu@gmail.com. [Learn why this is important](#)

Esteemed Retirement Board Members:

1. Its my understanding this Board is contemplating raising the HIB \$100.00.
2. Please see the attached 2023-2024 Performance Pay list and consider recommending to the full Board Of Directors a standard future merit pay award of \$500.00-\$1,000.00 (cap) in order to fund a significantly higher HIB than the \$100.00 currently considered.
3. The Appendix for today talks about how to provide public comment but does not mention how to provide written comment for today's meeting. Please let me know if this email will be distributed to all retirement board attendees, today.



4. As I stated in the past, a significant number of retirees DO NOT make over \$100,000.00 a year in retirement pay and as the health benefits for these members with 20-30 years of service CONTINUE TO RISE, a significant increase to the HIB is necessary.
5. As I also stated in the past, a portion of retired staff & staff sitting opposite to you make significantly more than AFSCME employees. Subsequently, AFSCME EMPLOYEES subsequently end up paying a much higher portion of their retirement pay towards health benefits, even if they have 20-30 years of service to THE District .
6. Please consider presenting to the full Board of Directors, the viable option of restructuring the Performance Pay system in THIS Negotiations Year, in order to provide a funding source to raise the HIB levels significantly higher than \$100.00, if not 100%.
7. It should come as no surprise that the exodus of EBMUD employees that will leave EBMUD for retirement systems that provide 100% medical for a short vesting period will continue.

Ivette Rivera

2024 Performance Pay Program - Confidential

Org	Last Name	First Name	Program Title	Cash
100	Green	Heather	Office Assistant, General Mgr	\$3,844
115	Duffy	Diana	Executive Assistant II	\$8,848
116	Ojascastro	Devina	Executive Assistant II	\$9,175
120	Hamilton	Jason	Senior Administrative Clk Conf	\$5,852
120	Le Grande	Ramar	Executive Assistant II	\$6,471
130	Chen	Frances	Legal Secretary II	\$7,258
130	Darrow	Corine	Supervising Legal Secretary	\$7,055
130	DeToles-Dugan	Devasta	Paralegal	\$5,898
130	Higginbotham	Venita	Litigation Secretary	\$6,060
130	Rucobo	Alicia	Legal Secretary II	\$4,839
140	Deng	Yu	Executive Assistant II	\$9,503
141	Carlson	Courtney	Human Resources Analyst I	\$8,620
141	Gonzalez	Talia	Human Resources Technician	\$6,538
143	Bourdon	Erin	Human Resources Technician	\$8,606
143	Chan	Tiffany	Human Resources Analyst II	\$5,168
143	Scott	Desiree	Human Resources Technician	\$7,122
200	Billeci	Karyn	Executive Assistant II	\$8,848
250	Preciado	Tanya	Administrative Assistant	\$9,503
331	Benson	Dawn	Executive Assistant II	\$2,357
361	Williams	Rosanna	Executive Assistant II	\$11,111
364	Chiu	Sandra	Human Resources Analyst II	\$9,366
364	Fields	Ayanna	Human Resources Analyst II	\$9,366
364	Garcia	Myla	Human Resources Technician	\$1,506
364	Imel	Brett	Human Resources Analyst II	\$8,268
364	Lima	Susan	Human Resources Technician	\$8,013
364	Noeth	Brian	Human Resources Analyst II	\$9,116
364	Paranguo	Jennifer	Senior Administrative Clk Conf	\$5,852
364	Phifer	Ophelia	Senior Administrative Clk Conf	\$6,452
364	Pittman	Sheena	Human Resources Technician	\$6,266
364	Sloan	Eva	Senior Administrative Clk Conf	\$6,452
364	Ybarra	Paul	Senior Administrative Clk Conf	\$5,852
365	Barraza	Joana	Human Resources Technician	\$1,873
365	Chan	Grace	Human Resources Technician	\$3,264
365	Chen	Qian	HRIS Analyst II	\$7,597
365	Coleman Doan	Chantelle	Human Resources Technician	\$5,935
365	Edgell	James	Senior Administrative Clk Conf	\$1,851
365	Li	Nancy	Human Resources Technician	\$7,390
365	Marino	Stacy	Human Resources Technician	\$5,935
365	Sacramento	Kathryn	Human Resources Technician	\$3,295
365	York	Brett	HRIS Analyst I	\$1,071
366	Gregory	Konana	Human Resources Analyst II	\$6,837
366	Lewis	Jett	Human Resources Analyst II	\$7,597
366	McCree	Judy	Administrative Clerk, Conf	\$1,668
366	Razote-Triana	Hazell	Human Resources Technician	\$8,843
366	Shepherd	Mae	Human Resources Analyst II	\$12,534
368	Padilla	Hilda	Admin Secretary II, Conf	\$829
440	Collier	Dorothy	Executive Assistant II	\$7,070
502	Bricker	Martha	Executive Assistant II	\$9,764
570	Perez	Sonia	Administrative Assistant	\$4,377
760	Bellingham	Gina	Administrative Assistant	\$8,848
790	Delbou	Suzanne	Executive Assistant II	\$8,848
900	Kolidas	Sofia	Executive Assistant II	\$10,814
910	Yee	Bonnie	Administrative Assistant	\$7,865

2024 PERFORMANCE PAY PROGRAM - LOCAL 21

Org	Last Name	First Name	Program Title	Cash
116	Burrell	Dana	Community Affairs Rep II	\$2,473
116	Byrne	Christine	Community Affairs Rep III	\$2,242
116	Campbell	Mary	Community Affairs Rep II	\$1,533
116	Gonzalez	Rolando	Community Affairs Rep II	\$7,091
116	Morales	Tracie	Public Information Rep III	\$7,827
116	Rodriguez	Nelsy	Public Information Rep II	\$7,091
116	Sze	Sunkwong	Community Affairs Rep II	\$4,452
116	Tritto	Christopher	Public Information Rep II	\$4,909
116	Voelker	Joseph	Community Affairs Rep II	\$6,752
116	Wong	Christina	Public Affairs Specialist	\$4,030
122	Mims	Dana	Administrative Svc Sup	\$4,030
140	Baker	Gina	Community Affairs Rep I	\$3,838
142	Wooten	Carlynn	Public Affairs Specialist	\$4,030
201	Ukena	Anthony	Internal Auditor	\$2,802
202	Deleon	Bernadette	Management Analyst II	\$7,091
202	Johnson	Stacey	Management Analyst II	\$2,727
202	Tam	Jenny	Management Analyst II	\$2,802
202	Won	Theresa	Management Analyst II	\$4,909
205	Damico	Kim	Risk Management Analyst	\$5,160
220	Chan	Lisa	Accounting Systems Supervisor	\$6,146
220	Chu	Alan	Senior Acctg/Financial Sys Ana	\$8,639
220	Hsieh	Winsun	Accounting Systems Supervisor	\$3,323
220	Jenner	Victoria	Information Svcs Supervisor	\$6,284
220	Ma	Zhen	Accounting Systems Supervisor	\$5,981
230	Bouslog	Jason	Stores Supervisor	\$7,646
230	Go	Melbourne	Purchasing Contract Supervisor	\$3,086
230	Sharpe	Rebekah	Purchasing Contract Supervisor	\$8,243
232	Correa	David	Material Storage Foreman	\$4,459
232	Gacusan	Arnold	Material Storage Foreman	\$4,339
232	Reinhart	Thomas	Material Storage Supervisor	\$5,032
251	Bessolo	James	Information Svcs Supervisor	\$6,599
251	Gregory	John	Information Svcs Supervisor	\$6,780
251	Parodi	Brian	Information Svcs Supervisor	\$9,794
251	Wells	Wendy	Information Svcs Supervisor	\$9,532
252	Canale	Thomas	Information Svcs Supervisor	\$6,599
252	Cinco	Leo	Information Svcs Supervisor	\$6,780
252	Devadoss	John	Information Svcs Supervisor	\$4,039
252	Szeto	Andrew	Information Svcs Supervisor	\$6,599
255	Fitzsimmons	Kevin	Information Svcs Supervisor	\$9,532
256	Bogatirsky	Nathalie	Information Svcs Supervisor	\$9,532
314	Gondak	Geneva	Supervisor of Wtr Conservation	\$4,624
314	Ray	Whitney	Supervisor of Wtr Conservation	\$8,023
332	Almanza Romo	Jose	Customer Services Supervisor	\$2,536
332	Ibarra	Wendy	Customer Services Supervisor	\$4,792

332	Scott	Donnett	Customer Services Supervisor	\$2,796
332	Wynne	Bridgett	Customer Services Supervisor	\$2,873
333	Galan	Daniel	Information Sys Administrator	\$5,418
334	Ho	Christine	Information Sys Admin II	\$8,639
335	Ison	Juanita	Customer Services Supervisor	\$7,469
338	Hale	Leslie	Customer Services Supervisor	\$2,796
443	Ulloa	Ana	Senior Civil Engineer	\$10,039
444	Jain	Priyanka	Senior Civil Engineer	\$6,951
445	Bray	Benjamin	Senior Civil Engineer	\$9,771
455	Abdullah	Hasan	Senior Civil Engineer	\$6,951
455	Luong	Laura	Community Affairs Rep II	\$7,091
455	Su	Grace	Senior Civil Engineer	\$9,771
455	Wedington	Florence	Senior Civil Engineer	\$10,039
482	Mulchaey	Bert	Supervising F/WLife Biologist	\$8,041
483	Del Real	Severiano	Supervising F/WLife Biologist	\$5,418
486	Liu	Jacob	Ranger Supervisor	\$5,032
487	Silva	Mark	Ranger Supervisor	\$2,873
488	Mendo	Alberto	Ranger Supervisor	\$2,796
491	Cox	Timothy	Ranger Supervisor	\$5,171
492	Wiemerslage	Scott	Ranger Supervisor	\$2,796
493	Mynk	Justin	Ranger Supervisor	\$7,269
502	de Loza Hernandez	Victor	Senior Civil Engineer	\$6,764
502	Young	Meghan	Management Analyst II	\$6,938
521	Rios	Jose	Senior Civil Engineer	\$10,039
522	McGregor	Jennifer	Senior Civil Engineer	\$6,951
523	Mc Gowan	Timothy	Senior Civil Engineer	\$6,951
524	Maggiore	Bill	Senior Civil Engineer	\$10,039
531	Boyce	Marisa	Senior Civil Engineer	\$6,951
532	McMullin	Roberts	Senior Civil Engineer	\$6,764
534	McLeod	Marshall	Senior Civil Engineer	\$6,764
535	La Vallee	Dustin	Senior Civil Engineer	\$9,771
535	Zhang	Tao	Management Analyst II	\$4,909
551	Cicala	Denise	Senior Civil Engineer	\$6,764
553	Lee	Jonathan	Senior Mechanical Engineer	\$6,764
554	Kaguchia	Peter	Senior Electrical Engineer	\$4,682
555	Farajian	Christopher	Senior Electrical Engineer	\$9,771
556	Franceschi	Paul	Senior Civil Engineer	\$6,951
557	Hartlaub	Michael	Senior Civil Engineer	\$6,764
559	Borys	Alexander	Senior Civil Engineer	\$6,951
561	Diego	John	Drafting Supervisor	\$4,690
561	Pritt	Jackson	Graphic Design Supervisor	\$4,345
562	Lee	Sangho	Materials Testing Supervisor	\$2,796
562	Todaro	Sean	Senior Civil Engineer	\$3,758
563	Shaw	Jennifer	Administrative Svc Sup	\$4,030
564	Karaim	Dennis	Drafting Supervisor	\$5,032
565	Lee	Mun	Senior Civil Engineer	\$6,764
566	Bonnarens	Maura	Senior Civil Engineer	\$10,039

572	Dye	Erik	Supervising Construction Inspe	\$5,420
572	McCargar	Jonathan	Supervising Construction Inspe	\$2,056
572	Reza	Jason	Supervising Construction Inspe	\$5,848
572	Fuller	Robert	Supervising Construction Inspe	\$970
573	Burke	James	Asst Land Surveyor Supervisor	\$5,706
573	Mangini	Jim	Land Surveyor Supervisor	\$6,439
573	Roberts	Craig	Asst Land Surveyor Supervisor	\$5,554
573	Wagner	Michael	Asst Land Surveyor Supervisor	\$5,554
574	Monteforte	Ronald	Supervising Plant Inspector	\$5,848
575	Prospero	Javier	Senior Civil Engineer	\$6,951
576	Karlstrand	Timothy	Senior Civil Engineer	\$6,764
577	Tingwald	Karl	Senior Civil Engineer	\$6,764
578	Townley	Benjamin	Senior Civil Engineer	\$6,764
720	Farrell	Nicholas	Assistant Constr & Mtns Supt	\$8,430
722	Hinton	Isaiah	Assistant Constr & Mtns Supt	\$3,242
722	Serrano	Juan	Assistant Constr & Mtns Supt	\$7,855
722	Soares	Mario	Construction/Maintenance Suptd	\$10,039
723	Cronin	Dennis	Assistant Constr & Mtns Supt	\$8,249
723	Le Grande	Boyce	Construction/Maintenance Suptd	\$5,843
723	Sullivan	Joshua	Assistant Constr & Mtns Supt	\$991
724	Ramirez	Raymond	Assistant Constr & Mtns Supt	\$8,430
724	Ricketts-Mann	Benjamin	Construction/Maintenance Suptd	\$6,764
724	Tran	Christopher	Assistant Constr & Mtns Supt	\$7,646
725	Bismillah	Chiam	Assistant Constr & Mtns Supt	\$7,855
725	Lewis	Timothy	Assistant Constr & Mtns Supt	\$551
725	Whites	Charles	Construction/Maintenance Suptd	\$6,951
727	Aguallo	Robert	Maintenance Shift Supervisor	\$7,091
727	Gipson	Bruce	Maintenance Shift Supervisor	\$5,044
727	Gonzalez	Samuel	Maintenance Shift Supervisor	\$4,909
727	Ivey	Michele	Dispatch Center Supervisor	\$6,424
727	Marazzani	Robert	Maintenance Shift Supervisor	\$5,044
727	Walters	Gary	Construction/Maintenance Suptd	\$10,039
746	Bergmark	Bret	General Pipe Supervisor	\$4,217
746	Bush	Wesley	General Pipe Supervisor	\$2,936
746	Carmona	Rafael	General Pipe Supervisor	\$5,285
746	Fierner	Ryan	General Pipe Supervisor	\$7,270
746	Foreman	Perry	General Pipe Supervisor	\$2,936
746	George	Dwight	Assistant Constr & Mtns Supt	\$5,558
746	Hart	Zachary	General Pipe Supervisor	\$7,633
746	Henning	Jeffrey	General Pipe Supervisor	\$7,633
746	Jacobs	Nicholas	Assistant Constr & Mtns Supt	\$8,430
746	Knisley	Dennis	Construction/Maintenance Suptd	\$9,106
746	Stuedeman	Carlton	General Pipe Supervisor	\$7,270
746	Szarka	Donovan	Assistant Constr & Mtns Supt	\$8,661
746	Tate	Bryan	General Pipe Supervisor	\$3,017
746	Traverso	Antonio	General Pipe Supervisor	\$7,633
746	Williams	Gistand	Construction/Maintenance Suptd	\$9,305

746	Williams	Jeremy	General Pipe Supervisor	\$5,285
746	Wolverton	Bryan	General Pipe Supervisor	\$4,767
747	Rangel	Michael	Construction/Maintenance Suptd	\$9,106
747	Shumate	Christian	Assistant Constr & Mtns Supt	\$8,430
753	Harbrecht	Keith	Meter Reading & Maint Supv	\$5,032
753	Lumanlan	Andrew	Meter Reading & Maint Supv	\$5,171
754	Braun	Jeffrey	Meter Repair and Testing Supvr	\$7,844
755	Callahan	Steven	General Pipe Supervisor	\$7,633
756	Baker	Farris	Equipment Supervisor	\$2,936
756	Busch	Scott	Equipment Supervisor	\$5,285
757	Johnson	Elliott	Building Tenant Services Super	\$6,238
758	Walker	Theresa	Janitor Supervisor	\$4,036
733	Bogner	Erick	Carpenter Supervisor	\$5,554
733	Costello	Martin	Instrument Supervisor	\$8,023
733	Mohsin	Jafar	Electrical Supervisor	\$5,706
733	Roybal-Alviz	Danielle	Maintenance Superintendent	\$6,619
733	Silva	Jesse	Mechanical Supervisor	\$5,554
734	Hu	Sharon	Senior Electrical Engineer	\$6,764
735	Gil	Juan	Electrical Supervisor	\$5,706
735	Heath-Delaney	Nalani	Carpenter Supervisor	\$8,023
735	Lyons	Sean	Mechanical Supervisor	\$3,086
735	Smith	Kevin	Maintenance Superintendent	\$6,764
735	Wescott	Andrew	Instrument Supervisor	\$5,554
736	Bettencourt	Edwin	Facility Supervisor	\$7,633
736	Brown	Neal	Mechanical Supervisor	\$5,554
736	Carlson	David	Maintenance Superintendent	\$10,039
739	Chan	Alan	Senior Electrical Engineer	\$9,771
740	Katzev	David	Senior Civil Engineer	\$2,538
761	Potter	Christopher	Senior Civil Engineer	\$6,764
761	Toone	Jeffrey	Supervising Hydrographer	\$7,447
762	Ames	Alan	Power, Treat & Trans Maint Sup	\$5,033
762	Cowan	Dillon	Superintendent of Pardee	\$9,771
762	Hardie	Thomas	Asst Superintendent Aqueduct	\$5,558
762	McGeorge	David	Asst Superintendent Aqueduct	\$5,558
762	Nickell	Justin	Pardee Water/WW Supervisor	\$5,289
762	Rowan	Stephen	Asst Superintendent Aqueduct	\$3,331
762	Taylor	Warren	Power, Treat & Trans Maint Sup	\$7,633
762	Thornburg	Ryan	Power, Treat & Trans Maint Sup	\$5,285
763	Cabihi	Dustin	Power, Treat & Trans Maint Sup	\$5,285
763	Feeney	Michael	Power, Treat & Trans Maint Sup	\$3,484
763	Hooper	Douglas	Asst Superintendent Aqueduct	\$8,430
763	Kelly	Kenneth	Power, Treat & Trans Maint Sup	\$5,285
763	Pon	Vincent	Superintendent of Aqueduct	\$3,861
773	Beyer	David	Senior Civil Engineer	\$10,039
773	LeBlanc	Casey	Senior Civil Engineer	\$6,764
776	Bergstrom	Joshua	Water Distribution Supervisor	\$8,430
776	Fio	Anthony	Water Distribution Supervisor	\$5,836

776	Hom	Damon	Supt Water Treat/Dist/Quality	\$6,951
777	Allan	James	Water Distribution Supervisor	\$5,836
777	Hunt	Cynthia	Supt Water Treat/Dist/Quality	\$6,951
777	Ramos	Javier	Water Distribution Supervisor	\$5,996
778	Battaion	Dustin	Water Treatment Supervisor	\$1,116
778	Brede	Allison	Water Treatment Supervisor	\$900
778	Casey	Justin	Water Treatment Supervisor	\$8,028
778	Gee	Kenton	Water Treatment Supervisor	\$5,711
778	Gluchowski	David	Supt Water Treat/Dist/Quality	\$6,442
778	Littlefield	Jason	Water Treatment Supervisor	\$1,237
778	Miller	Bryan	Water Treatment Supervisor	\$8,661
778	Peralta	Clarence	Supt Water Treat/Dist/Quality	\$10,039
782	Daley	John	Security Shift Supervisor	\$4,909
782	Nichols	David	Security Shift Supervisor	\$4,675
790	Cicala	Augustus	Senior Civil Engineer	\$1,369
790	Pritt	Johanna	Management Analyst II	\$7,091
792	Brown	Brandy	Tech Trng & Writing Administra	\$3,947
792	Foley	Mark	Information Sys Admin II	\$8,877
792	Garcia	Myla	Technical Training Analyst	\$2,896
794	Work Kazimi	Lori	Senior Civil Engineer	\$6,764
818	Spencer	Kent	Assistant Wastewater Shift Sup	\$5,032
900	Carag	Ann	Management Analyst II	\$4,675
901	Dinsmore	Christopher	Senior Civil Engineer	\$9,771
902	Shih	Justin	Senior Civil Engineer	\$9,771
902	Weir	Carol	Wastewater Operations Coord	\$5,171
910	Dickison	Kevin	Wastewater Treatment Suptd	\$7,107
910	Fukuda	Eric	Wastewater Treatment Suptd	\$7,107
910	Kyser	John	Plant Maint Superintendent	\$7,107
911	Angel	Daniel	Plant Electrical Mtnc Suprv	\$8,023
911	Cravens	Jodi	Power Plant Supervisor	\$964
911	Duarte	Jose	Plant Mechanical Mtnc Supv	\$5,554
911	Osborn	Kevin	Plant Mechanical Mtnc Supv	\$5,554
911	Quezada	Ryan	Plant Mechanical Mtnc Supv	\$8,023
911	Steiner	Carl	Plant Electrical Mtnc Suprv	\$8,023
911	Williams	Andre	Instrument Maintenance Supvr	\$5,706
913	Aman	Christopher	Wastewater Shift Supervisor	\$8,028
913	Barge	Joseph	Assistant Wastewater Shift Sup	\$5,032
913	Bruel	Jeffrey	Assistant Wastewater Shift Sup	\$5,171
913	Herrera Jr	Juan	Assistant Wastewater Shift Sup	\$5,032
913	Lee	Jason	Wastewater Operations Coord	\$4,792
913	Loconte	William	Assistant Wastewater Shift Sup	\$5,032
913	Ma	Ken	Assistant Wastewater Shift Sup	\$5,032
913	Rocha	Juan	Assistant Wastewater Shift Sup	\$5,032
913	Schmitz	Mark	Wastewater Shift Supervisor	\$5,836
913	Spencer	Robert	Wastewater Shift Supervisor	\$5,836
913	Starke	Robert	Wastewater Shift Supervisor	\$5,836
913	Verspui	Rochelle	Assistant Wastewater Shift Sup	\$5,032

915	Scholten	Hendrik	Senior Electrical Engineer	\$9,771
926	Hoeft	Matthew	Senior Civil Engineer	\$9,771
927	Chaffer	William	Supervising Construction Inspe	\$8,221
927	Dunstan	Brian	Senior Civil Engineer	\$6,764
927	El-Telbany	Angela	Senior Civil Engineer	\$9,771
928	Russell	Deborah	Senior Civil Engineer	\$6,764
928	Yuen	Derrick	Drafting Supervisor	\$5,032
929	Mac	Robert	Senior Electrical Engineer	\$6,951
934	Chamsi	Antoine	Quality Assurance Officer	\$8,430
934	Dyachenko	Artem	Laboratory Supervisor	\$9,074
934	Lui-Wong	Irene	Laboratory Supervisor	\$9,074
934	Mitchell	Jason	Laboratory Supervisor	\$9,074
941	Kern	Adam	Supervising WW Control Rep	\$5,420
942	Strawder	Angelee	Supervising WW Control Rep	\$5,569
943	Green	Cindy	Senior Civil Engineer	\$5,692

2024 Performance Pay Program - Management Salary Plan

Org	Last Name	First Name	Program Title	Program Salary Basis	Program New Salary	Annual Salary Increase	Cash
100	Johnson	Janetta	Assistant To General Manager	\$13,373	\$13,640	\$3,210	\$5,146
115	Michel	Debra	Special Assistant I	\$16,286	\$16,449	\$1,954	\$8,795
115	Viatella	Kathryn	Special Assistant IV	\$23,225	\$23,573	\$4,181	\$5,146
115	Williams	Jennifer	Special Assistant I	\$16,948	\$17,117	\$2,034	\$9,152
116	Favorite-Hill	Mona	Senior Community Affairs Rep	\$16,867	\$17,036	\$2,024	\$6,578
116	Horn	Kathryn	Senior Community Affairs Rep	\$14,656	\$15,362	\$8,472	\$0
116	Pook	Andrea	Senior Public Information Rep	\$17,887	\$17,999	\$1,344	\$7,778
116	Zito	Kelly	Special Assistant IV	\$22,563	\$23,014	\$5,415	\$5,146
120	Cole	Rischa	Secretary of the District	\$17,978	\$18,338	\$4,315	\$5,146
130	Bonheyo	Patricia	Attorney III	\$19,215	\$19,257	\$504	\$8,316
130	Chavez	Nelly	Attorney I	\$13,631	\$13,767	\$1,636	\$4,089
130	Croton	George	Attorney II	\$15,334	\$16,101	\$9,204	\$0
130	Donovan	Karen	Attorney III	\$19,645	\$19,841	\$2,357	\$11,198
130	Grisham	Felicity	Attorney III	\$19,257	\$19,450	\$2,311	\$6,355
130	Kline	Timothy	Attorney II	\$15,622	\$16,403	\$9,372	\$0
130	Matthew	Maria	Assistant General Counsel	\$22,236	\$22,458	\$2,668	\$7,338
130	Salmon	Jonathan	Assistant General Counsel	\$22,456	\$22,681	\$2,695	\$6,737
140	Moten	Derry	Special Assistant III	\$19,450	\$19,839	\$4,668	\$5,146
141	Johnson	Sylvia	Senior Human Resources Analyst	\$13,975	\$13,975	\$0	\$1,155
141	Sambour-Wallace	Jennella	Mgr of Diversity and Inclusion	\$19,669	\$19,866	\$2,360	\$9,441
141	Tate	Katherine	Senior Human Resources Analyst	\$14,820	\$15,116	\$3,557	\$0
142	Johnson	Beverly	Contract Equity Administrator	\$19,378	\$19,378	\$0	\$9,301
143	Salangsang	Laura	Senior Human Resources Analyst	\$14,256	\$14,399	\$1,711	\$6,843
143	Thigpen	Chad	Mgr of EE and ORG Development	\$15,996	\$16,476	\$5,760	\$0
200	Skoda	Sophia	Director of Finance	\$26,296	\$26,822	\$6,311	\$5,146
201	Gardin	Barry	Internal Auditor Supervisor	\$17,718	\$17,718	\$0	\$6,378
202	Feldman	Sam	Manager of Budget	\$17,883	\$18,062	\$2,146	\$9,657
202	Hood	Nathan	Principal Management Analyst	\$15,739	\$15,739	\$0	\$5,666
205	Bessarabov	Vladimir	Manager of Risk Management	\$19,331	\$19,718	\$4,639	\$0
205	Terry	Penny	Workers Comp Manager Risk Spec	\$13,973	\$14,951	\$11,736	\$0
218	Goodman-Leibof	Steven	Principal Management Analyst	\$15,581	\$15,737	\$1,870	\$8,413
218	Grow	Phoebe	Principal Management Analyst	\$15,879	\$16,038	\$1,905	\$4,764
218	Hannay	Robby	Treasury Manager	\$20,338	\$20,745	\$4,884	\$0
218	Lee	Jackie	Principal Management Analyst	\$16,511	\$16,841	\$3,963	\$0
220	Glasser	David	Controller	\$19,026	\$19,216	\$2,283	\$2,957
230	Smith	Kelley	Manager of Purchasing	\$19,450	\$19,645	\$2,334	\$9,336
250	Leon	Orlando	Chief Information Officer	\$23,129	\$23,360	\$2,775	\$5,146
251	Lee	Stanton	Information System Div Manager	\$20,747	\$20,747	\$0	\$7,469
255	Johnson	William	Information System Div Manager	\$22,691	\$22,691	\$0	\$8,169
314	Bohlig	Charles	Manager of Water Conservation	\$15,900	\$16,695	\$9,540	\$0
325	Flynn	Jack	Customer Services Manager	\$16,776	\$16,944	\$2,013	\$8,053
326	Elawady	Matt	Manager of Real Estate Svcs	\$20,443	\$20,443	\$0	\$13,492
331	Lee	Andrew	Director Cust Comm Services	\$24,064	\$24,425	\$4,332	\$5,146
332	King	Latrice	Customer Services Manager	\$18,324	\$18,507	\$2,199	\$7,696
333	Low	Max	Customer Services Manager	\$16,811	\$16,979	\$2,017	\$10,087
339	Tran	Sherilyn	Customer Support Prog Admin	\$15,328	\$15,481	\$1,839	\$4,493
361	Charan	Cindy	Director of Human Resources	\$22,364	\$22,900	\$6,432	\$5,146
364	Fortson	Howard	Senior Human Resources Analyst	\$14,542	\$14,833	\$3,490	\$0
364	James	Vincent	Mgr of Recruitment and Class	\$16,930	\$17,447	\$6,204	\$8,017
364	Worden	Lori	Senior Human Resources Analyst	\$14,982	\$15,282	\$3,596	\$0
365	Love	Wade	Senior HRIS Analyst	\$14,541	\$14,686	\$1,745	\$6,980
365	Sevilla	Theresa	Senior Human Resources Analyst	\$15,902	\$16,061	\$1,908	\$7,633
365	Sorani	Lisa	Mgr of Employee Services	\$19,078	\$19,269	\$2,289	\$13,737
366	Weekly	Valerie	Principal Management Analyst	\$15,739	\$15,896	\$1,889	\$11,332
368	Anderson	Winnie	HR Regulatory Administrator	\$17,257	\$17,430	\$2,071	\$8,283
368	Dadko	Andrew	Senior Human Resources Analyst	\$14,256	\$14,541	\$3,421	\$0
368	Harman	Cristina	Senior Human Resources Analyst	\$13,674	\$13,975	\$3,612	\$7,874
368	Smyer	Adam	Mgr of Employee Relations	\$17,795	\$17,973	\$2,135	\$8,542
440	Tognolini	Michael	Director of Wtr/Natural Resrcr	\$25,782	\$26,298	\$6,188	\$5,146

440	Towey	Alice	Environmental Affairs Officer	\$20,017	\$20,217	\$2,402	\$10,809
441	Ledesma	Bradley	Engineering Manager	\$19,088	\$20,238	\$13,800	\$2,234
455	Hu	Linda	Manager of Water Supply Improv	\$20,851	\$21,060	\$2,502	\$8,132
480	Bauer	Jonathan	Principal Management Analyst	\$15,894	\$16,053	\$1,907	\$6,676
481	Workman	Michelle	Manager of Fisheries & Wild	\$17,280	\$17,453	\$2,074	\$9,331
484	Hill	Scott	Manager Watershed & Recreation	\$18,701	\$18,888	\$2,244	\$7,855
490	Beckman	Charles	Manager Watershed & Recreation	\$15,745	\$16,609	\$10,368	\$2,858
502	Ngo	Kaitlyn	Principal Management Analyst	\$15,427	\$15,736	\$3,702	\$0
502	Yoloye	Olujimi	Director of Engineering&Const	\$25,028	\$25,028	\$0	\$11,153
520	Rehnstrom	David	Engineering Manager	\$21,695	\$21,912	\$2,603	\$10,414
530	Chan	Carlton	Engineering Manager	\$21,695	\$21,912	\$2,603	\$10,414
550	Terentieff	Serge	Engineering Manager	\$22,354	\$22,578	\$2,682	\$10,730

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

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

SUBJECT: Investment Transactions by Retirement Fund Managers for June 2024 and July 2024

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

SDS:RLH:SGL

Attachment: Investment Transactions by Retirement Fund Managers

R.B. RESOLUTION NO. _____

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY FUND MANAGERS
FOR JUNE 2024 AND JULY 2024

Introduced by: _____ ; Seconded by: _____

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 June 2024 and July 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

9/19/2024

INVESTMENT TRANSACTIONS BY RETIREMENT FUND MANAGERS			
June 2024			
	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
C.S. McKee	\$18,881,344	\$15,186,684	\$216,525,400
Federated Bank Loans	\$335,412	\$0	\$57,867,753
Garcia Hamilton Associates	\$923,995	\$0	\$210,651,152
Mackay Shields - HY	\$2,118,080	\$111,119	\$61,473,768
TOTAL	\$22,258,830	\$15,297,803	\$546,518,072
DOMESTIC EQUITY			
Russell 3000 Index Fund	\$0	\$9,566	\$708,236,423
Total Domestic Equity	\$0	\$9,566	\$708,236,423
COVERED CALLS			
Parametric (BXM)	\$6,168,181	\$6,714,529	\$170,292,801
Parametric (Delta-Shift)	\$1,405,188	\$1,374,378	\$182,095,223
Van Hulzen	\$4,032,236	\$3,499,064	\$164,893,086
Total Covered Calls	\$11,605,605	\$11,587,971	\$517,281,110
INTERNATIONAL EQUITY			
ACWI Indexfund	\$0	\$57,549	\$609,493,614
Global Transition	\$0	\$0	\$866,971
Total International Equity	\$0	\$57,549	\$610,360,586
REAL ESTATE EQUITY			
RREEF America II	\$0	\$0	\$54,681,258
CenterSquare	\$2,055,609	\$1,706,012	\$64,176,923
Total Real Estate	\$2,055,609	\$1,706,012	\$118,858,181
TOTAL ALL FUND MANAGERS	\$35,920,043	\$28,658,900	\$2,501,254,371
July 2024			
	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
C.S. McKee	\$15,658,752	\$13,688,759	\$221,660,191
Federated Bank Loans	\$1,016,862	\$0	\$58,150,173
Garcia Hamilton Associates	\$5,742,327	\$4,826,559	\$216,745,393
Mackay Shields - HY	\$1,511,613	\$0	\$62,124,183
TOTAL	\$23,929,553	\$18,515,317	\$558,679,940
DOMESTIC EQUITY			
Russell 3000 Index Fund	\$0	\$0	\$721,373,471
Total Domestic Equity	\$0	\$0	\$721,373,471
COVERED CALLS			
Parametric (BXM)	\$4,622,783	\$4,445,177	\$172,040,880
Parametric (Delta-Shift)	\$1,231,416	\$3,356,565	\$181,263,514
Van Hulzen	\$7,689,069	\$7,317,090	\$167,998,635
Total Covered Calls	\$13,543,268	\$15,118,832	\$521,303,029
INTERNATIONAL EQUITY			
ACWI Indexfund	\$0	\$0	\$622,966,676
Global Transition	\$0	\$0	\$874,837
Total International Equity	\$0	\$0	\$623,841,513
REAL ESTATE EQUITY			
RREEF America II	\$0	\$0	\$54,089,632
CenterSquare	\$3,310,838	\$3,065,473	\$68,477,014
Total Real Estate	\$3,310,838	\$3,065,473	\$122,566,645
TOTAL ALL FUND MANAGERS	\$40,783,659	\$36,699,622	\$2,547,764,598

Prepared By: Sherry Sarcos
 Sherry Sarcos, Accounting Technician

Date: 8/20/2024

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Short Term Investment Transactions for June 2024 and July 2024

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

SDS:RLH:SGL

Attachments: Short Term Investment Transactions June 2024
Short Term Investment Transactions July 2024

R.B. RESOLUTION NO. _____

RATIFYING AND APPROVING SHORT TERM INVESTMENT TRANSACTIONS BY THE
TREASURER FOR JUNE 2024 AND JULY 2024

Introduced by: _____ ; Seconded by:

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 June 2024 and July 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 June 2024 and July 2024 are hereby ratified and approved.

President

ATTEST:

Secretary

9/19/2024

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

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 5,542,000.00	Local Agency Investment Fund	7-Jun-24		4.480
\$ 5,505,000.00	Local Agency Investment Fund	21-Jun-24		4.480
\$ (14,015,000.00)	Local Agency Investment Fund		28-Jun-24	4.480
<u>\$ (2,968,000.00)</u>	Net Activity for Month			
\$ 6,485,317.98	Beginning Balance			
<u>(2,968,000.00)</u>	Net Activity for Month			
<u>\$ 3,517,317.98</u>	Ending Balance			

SUBMITTED BY David Glasser
David Glasser
Controller

DATE Aug 22, 2024

Robert L. Hannay
Robert L. Hannay
Treasury Mgr.

Kevin Ma
Kevin Ma (Aug 22, 2024 16:19 PDT)
Kevin Ma
Acctg. Systems Supvr.
prepared by Ssarcos

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

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 5,522,000.00	Local Agency Investment Fund	5-Jul-24		4.516
\$ 137,062.11	Local Agency Investment Fund	15-Jul-24		4.516
\$ 5,589,000.00	Local Agency Investment Fund	19-Jul-24		4.516
\$ 2,345,000.00	Local Agency Investment Fund	26-Jul-24		4.516
\$ (14,462,000.00)	Local Agency Investment Fund		31-Jul-24	4.516
<u>\$ (868,937.89)</u>	Net Activity for Month			
\$ 3,517,317.98	Beginning Balance			
<u>(868,937.89)</u>	Net Activity for Month			
<u>\$ 2,648,380.09</u>	Ending Balance			

SUBMITTED BY David Glasser
David Glasser
Controller

DATE Aug 22, 2024



Robert L. Hannay
Treasury Mgr.

Kevin Ma
Kevin Ma [Aug 22, 2024 16:19 PDT]

Kevin Ma
Acctg. Systems Supvr.
prepared by Ssarcos

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

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

SUBJECT: Treasurer's Statement of Receipts and Disbursements for June 2024 and July 2024

SUMMARY

The attached Treasurer's Statement of Receipts and Disbursements reports for the months of June 2024 and July 2024 are hereby submitted for Retirement Board approval.

SDS:RLH:SGL

Attachments: Statement of Receipts and Disbursements June 2024
Statement of Receipts and Disbursements July 2024

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

CASH BALANCE at May 31, 2024		\$	4,896,102.83
<u>Receipts</u>			
Employees' Contributions	\$	1,922,901.27	
District Contributions		9,242,108.86	
LAIF Redemptions		14,015,000.00	
Refunds and Commission Recapture		<u>301,787.81</u>	
TOTAL Receipts			25,481,797.94
<u>Disbursements</u>			
Checks/Wires Issued:			
Service Retirement Allowances	\$	12,160,119.87	
Disability Retirement Allowances		160,070.13	
Health Insurance Benefit		1,860,215.96	
Payments to Retiree's Resigned/Deceased		2,945.43	
LAIF Deposits		11,047,000.00	
Administrative Cost		<u>669,826.18</u>	
TOTAL Disbursements			(25,900,177.57)
CASH BALANCE at June 30, 2024		\$	<u>4,477,723.20</u>
LAIF			<u>3,517,317.98</u>
LAIF and CASH BALANCE at June 30, 2024		\$	<u>7,995,041.18</u>
<u>Domestic Equity</u>			
Russell 3000 Index Fund	\$	<u>708,236,423.04</u>	
Subtotal Domestic Equity		708,236,423.04	
<u>Covered Calls</u>			
Parametric (BXM)	\$	170,292,801.14	
Parametric (Delta-Shift)		182,095,223.06	
Van Hulzen		<u>164,893,086.09</u>	
Subtotal Covered Calls		517,281,110.29	
<u>International Equity</u>			
ACWI Index fund	\$	609,493,614.18	
Global Transition		<u>866,971.40</u>	
Subtotal International Equity		610,360,585.58	
<u>Real Estate</u>			
RREEF America REIT II	\$	54,681,257.98	
Center Square		<u>64,176,922.57</u>	
Subtotal Real Estate		118,858,180.55	
<u>Fixed Income</u>			
CS Mckee	\$	216,525,399.75	
Federated Bank Loans		57,867,752.54	
Garcia Hamilton Associates		210,651,151.93	
Mackay Shields-High Yield		<u>61,473,767.57</u>	
Subtotal Fixed Income		546,518,071.79	
Total for Domestic and International Equities			<u>2,501,254,371.25</u>
MARKET VALUE of ASSETS at June 30, 2024		\$	<u>2,509,249,412.43</u>

Respectfully submitted,

David Glasser

David Glasser
Controller

mt Hannay

Robert L. Hannay
Treasury Mgr.

Kevin Ma
Kevin Ma (Aug 22, 2024 16:19 PDT)

Kevin Ma
Acctg Sys Supvr.

prepared by Ssarcos

STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF JULY 2024

CASH BALANCE at June 30, 2024		\$	4,477,723.20
<u>Receipts</u>			
Employees' Contributions	\$		1,921,587.76
District Contributions			9,303,840.21
LAIF Redemptions			14,462,000.00
Northern Trust Redemptions			2,345,000.00
Refunds and Commission Recapture			<u>42,206.16</u>
TOTAL Receipts			28,074,634.13
<u>Disbursements</u>			
Checks/Wires Issued:			
Service Retirement Allowances	\$		12,595,048.12
Disability Retirement Allowances			164,868.41
Health Insurance Benefit			1,375,254.09
Payments to Retiree's Resigned/Deceased			109,903.28
LAIF Deposits			13,456,000.00
Administrative Cost			<u>262,031.09</u>
TOTAL Disbursements			<u>(27,963,104.99)</u>
CASH BALANCE at July 31, 2024		\$	<u>4,589,252.34</u>
LAIF			<u>2,648,380.09</u>
LAIF and CASH BALANCE at July 31, 2024		\$	<u>7,237,632.43</u>
<u>Domestic Equity</u>			
Russell 3000 Index Fund	\$		<u>721,373,470.81</u>
Subtotal Domestic Equity			721,373,470.81
<u>Covered Calls</u>			
Parametric (BXM)	\$		172,040,879.76
Parametric (Delta-Shift)			181,263,513.97
Van Hulzen			<u>167,998,634.91</u>
Subtotal Covered Calls			521,303,028.64
<u>International Equity</u>			
ACWI Index fund	\$		622,966,676.38
Global Transition			<u>874,836.86</u>
Subtotal International Equity			623,841,513.24
<u>Real Estate</u>			
RREEF America REIT II	\$		54,089,631.56
Center Square			<u>68,477,013.88</u>
Subtotal Real Estate			122,566,645.44
<u>Fixed Income</u>			
CS Mckee	\$		221,660,190.71
Federated Bank Loans			58,150,173.01
Garcia Hamilton Associates			216,745,393.15
Mackay Shields-High Yield			<u>62,124,182.67</u>
Subtotal Fixed Income			558,679,939.54
Total for Domestic and International Equities			<u>2,547,764,597.67</u>
MARKET VALUE of ASSETS at July 31, 2024		\$	<u>2,555,002,230.10</u>

Respectfully submitted,

David Glasser

David Glasser
Controller

Robert L. Hannay

Robert L. Hannay
Treasury Mgr.

Kevin Ma

Kevin Ma (Aug 23, 2024 16:19 PDT)

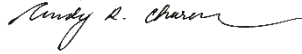
Kevin Ma
Acctg Sys Supvr.

prepared by Ssarcos

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

FROM: Cindy Charan, Secretary to the Retirement Board 

SUBJECT: Declare Results of the Election of the Retiree Representative to the Retirement Board

INTRODUCTION

This memo provides an update on the election of a retiree member to the District Retirement Board. The election and certification process has been completed for the seat currently held by Elizabeth Grassetto.

DISCUSSION

On April 15, 2024, the election process was announced to all retiree members of EBMUDERS by U.S. mail, e-mail, and the Splashes Newsletter. At each stage of the election, communications were sent via U.S. mail and email detailing the status of the election and deadlines for each phase.

As of May 10, 2024, the date the candidacy period closed, three (3) Retirement System participants had submitted an application indicating interest in running. As of the deadline for nominations, Elizabeth Grassetto, Susan Leiga, and Antonio Martinez had all received the required 5 nominations required to be included on the ballot.

A total of 814 votes were cast in the 2024 election of a retiree member to the Retirement Board. Staff reviewed each of the votes and determined that 812 of the votes cast were valid and we received two late votes. At the close of the voting window, it was determined that retirees who retired after April 15, 2024 were not given an opportunity to vote, so a Special Election was held on July 17, 2024 to August 9, 2024 to afford new retirees the opportunity to vote. After the Special Election the total votes cast were 13, with 12 of the votes valid, and we received one duplicate vote.

The total results of the voting were as follows:

- Elizabeth Grassetto 501 votes
- Susan Leiga 131 votes
- Antonio Martinez 192 votes

As Secretary to the Retirement Board, I reviewed the election process and procedures for this election and have certified the results on August 20, 2024.

Declare Results of the Election of Retiree Representative of the Retirement Board
September 19, 2024
Page 2

For a retiree to be elected as the retiree member of the Retirement Board, they must earn the most votes, and be eligible to serve on the Retirement Board. This year, the retiree member who received the most votes, Elizabeth Grassetti, satisfies the criteria to be elected to the Retirement Board retiree member seat.

Therefore, I hereby certify that Elizabeth Grassetti has been elected to the Retirement Board for a two-year term beginning September 24, 2024.

NEXT STEPS

Staff request that Retirement Board declare these results by Resolution.

CC:ls

R.B. RESOLUTION NO. _____

DECLARING THE RESULTS OF AN ELECTION OF AN EMPLOYEE MEMBER OF THE
RETIREMENT BOARD

Introduced by: _____ ; Seconded by: _____

WHEREAS, Section 4(a) of the Retirement Ordinance provides for election by and from membership of the Retirement System to fill a vacancy on the Retirement Board created by the expiration of the term of an elected Retirement Board member, and the Secretary of the Retirement Board has certified that **Elizabeth Grassetti** has been elected by the membership of the Retirement System as a member of the Retirement Board pursuant to an election conducted for said purpose;

NOW, THEREFORE, BE IT RESOLVED that **Elizabeth Grassetti** is hereby declared a member of the Retirement Board and that said member shall serve a period of two years commencing September 24, 2024.

President

ATTEST:


Secretary

09/19/2024

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Extend Consulting Agreement with Meketa Investment Group

RECOMMENDATION

Approve the extension of the consulting agreement for Investment Consulting Services with Meketa Investment Group, Inc. (Meketa) for two years with a one-year option to coincide with the completion of the portfolio transition.

DISCUSSION

Meketa currently serves as the investment consultant to the Retirement System. Meketa provides services under an agreement originally executed in 2005 with Pension Consulting Alliance (PCA), a predecessor firm. The agreement has since been amended and extended several times, providing for services through March 31, 2025.

The assigned representatives at Meketa (and previously at PCA) have provided a high level of professional service and advice to the Retirement Board and Retirement System since 2005. These services have included performance monitoring and reporting, research and training for the Retirement Board and staff, and assistance with regular and ad-hoc projects. These projects include the Asset Allocation Study, investment manager searches, Environmental, Social, and Governance (ESG) efforts and the implementation and ongoing review of proxy voting.

The Retirement System is currently engaged in a portfolio transition plan following the completion of an Asset Allocation Study in May 2024. Meketa is leading the manager search efforts related to the transition plan. This work will involve request for proposals (RFPs) and market research over the next two years. The current consulting agreement expires in the middle of this process. Given this timeline and Meketa's role in running the RFPs and assisting in the selection of finalists, staff recommends that the Retirement Board extend Meketa's contract for two years through March 31, 2027, with an additional option to extend one year at the Retirement System's discretion. The additional two-to-three years will give Meketa and staff the necessary time to complete the portfolio transition according to the plan.

Meketa provided a fee schedule for the proposed two-year extension of the existing agreement. The proposed fee incorporates reasonable \$5,000 annual increases for each year bringing the

Extend Consulting Agreement with Meketa Investment Group

September 19, 2024

Page 2

annual contract amounts to \$195,000, \$200,000 and \$205,000 for 2026, 2027 and 2028 (all years ending on March 31). This represents annual increases of 2.6%, 2.6% and 2.5%, respectively.

Staff recommends extending the Investment Consultant Services contract with Meketa for two years with a one-year option to continue receiving the high level of service from Meketa and ensure completion of the portfolio transition.

SDS:RLH:SGL

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

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

SUBJECT: Authorize Actuarial Audit and Select Actuarial Auditor

RECOMMENDATION

Authorize selection of Cheiron Inc. as the Actuarial Auditor to conduct a full-scope audit of the Retirement System's most recent experience study and actuarial valuations of the pension plan, and Health Insurance Benefit (HIB).

DISCUSSION

According to Board Rule B-13, the Retirement System will conduct an audit of its consulting actuaries every six years. The last actuarial audit was completed in 2018 on the 2016 experience study and the 2017 actuarial valuations. Staff recommends that the Retirement Board authorize a full scope audit of the 2024 valuation report and the updated experience study expected to be completed in early 2025. The expectation is to present the audit report to the Retirement Board at the March 20, 2025 meeting.

Staff recommends using Cheiron Inc. as the actuarial auditor based on the results actuarial Request for Proposals (RFP) completed on March 21, 2024. In the RFP, Cheiron provided a strong proposal and was the second-place finalist behind Segal. Based on the quality of references and work product presented for the actuarial RFP, staff believes that Cheiron is well qualified to conduct the Retirement System's actuarial audit.

Cheiron has submitted a proposal for a full audit, which includes a replication of actuarial valuations, a review of economic and non-economic actuarial assumptions, and an in-person presentation of results.


Cheiron's proposed fee for the audit is \$73,000. Meketa has reviewed the proposal and believes that the proposed fees are reasonable given the extensive proposal. Given Cheiron's performance in the RFP process, the proposed fees, and the extensive scope, staff recommends engaging Cheiron for the Retirement System's actuarial audit.

SDS:SGL

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

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 Retirement Board. The attached report from the Retirement System's investment consultant, Meketa, provides information on portfolio performance through the second quarter 2024.

DISCUSSION

The Retirement System's portfolio had a market value of \$2.5 billion as of June 30, 2024 – stable from the end of the first quarter. The portfolio return was 1.9 percent for the quarter. Over a one-year period, the portfolio return was 12.6 percent, slightly above the total plan benchmark return of 12.2 percent. The portfolio return remains above the plan benchmark by 0.4 percent over a 10-year period.

SDS:SGL

Attachment: Performance Report



East Bay Municipal Utility District Employees' Retirement System

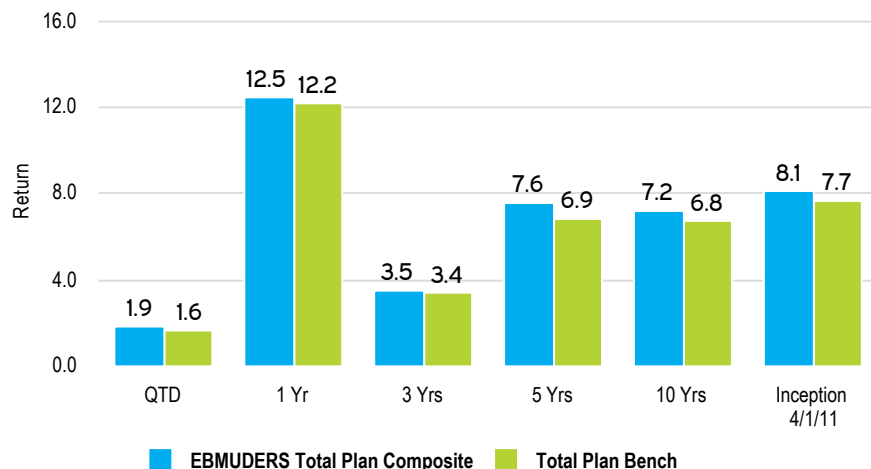
September 19, 2024

Q2 2024 Performance Report

1. Introduction
2. Economic and Market Update as of June 30, 2024
3. Second Quarter Performance Review
4. Manager Watch Screens
5. Manager Compliance Certification Responses
6. Gross of Fees Performance Snapshot as of July 31, 2024
7. Appendix

Introduction

Return Summary



Summary of Cash Flows

	QTD	1 Yr
EBMUDERS Total Plan Composite		
Beginning Market Value	\$2,467,112,853	\$2,248,004,762
Net Cash Flow	-\$8,450,594	-\$24,101,926
Net Investment Change	\$46,366,949	\$281,126,372
Ending Market Value	\$2,505,029,208	\$2,505,029,208

	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
EBMUDERS Total Plan Composite - Net	1.9	12.5	3.5	7.6	7.2	--
EBMUDERS Total Plan Composite - Gross	1.9	12.6	3.6	7.7	7.4	7.6
<i>Total Plan Bench</i>	1.6	12.2	3.4	6.9	6.8	7.2
InvMetrics Public DB > \$1B Median	1.0	10.0	3.2	7.4	6.6	7.0

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

EBMUDERS | As of June 30, 2024

	Market Value \$	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EBMUDERS Total Plan Composite	2,505,029,208	100.0	1.9	6.6	12.5	3.5	7.6	7.2	8.1	Apr-11
<i>Total Plan Bench</i>			<i>1.6</i>	<i>6.7</i>	<i>12.2</i>	<i>3.4</i>	<i>6.9</i>	<i>6.8</i>	<i>7.7</i>	
US Equity Composite	709,103,394	28.3	3.2	13.5	23.1	8.1	14.1	12.3	12.9	Apr-11
<i>Russell 3000 Hybrid</i>			<i>3.2</i>	<i>13.6</i>	<i>23.1</i>	<i>8.1</i>	<i>14.1</i>	<i>12.1</i>	<i>12.9</i>	
Non-US Equity Composite	609,493,614	24.3	1.1	5.8	11.7	0.8	5.9	3.7	6.3	Jul-95
<i>MSCI ACWI xUS (blend)</i>			<i>1.2</i>	<i>6.0</i>	<i>12.2</i>	<i>1.0</i>	<i>6.1</i>	<i>4.3</i>	<i>5.5</i>	
Covered Calls Composite	517,281,110	20.6	3.0	8.6	13.9	6.3	9.2	8.3	9.2	Feb-14
<i>Cboe S&P 500 Buy Write Index</i>			<i>1.5</i>	<i>7.6</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>	<i>5.8</i>	<i>6.3</i>	
Real Estate Composite	118,857,470	4.7	0.2	-3.0	-1.5	1.8	4.4	6.8	5.4	Jan-07
<i>NCREIF NPI Lag</i>			<i>-1.0</i>	<i>-4.0</i>	<i>-7.2</i>	<i>3.6</i>	<i>3.8</i>	<i>6.4</i>	<i>6.2</i>	
Fixed Income Composite	546,776,301	21.8	0.4	0.1	3.8	-0.9	1.0	1.8	2.5	Apr-11
<i>Fixed Income Composite Bench</i>			<i>0.5</i>	<i>0.2</i>	<i>4.0</i>	<i>-1.1</i>	<i>0.9</i>	<i>1.9</i>	<i>2.5</i>	
Cash Composite	3,517,318	0.1	1.1	2.2	4.2	2.6	2.3	1.6	1.3	Aug-10
<i>FTSE 3 Month T-Bill</i>			<i>1.4</i>	<i>2.8</i>	<i>5.6</i>	<i>3.2</i>	<i>2.2</i>	<i>1.5</i>	<i>1.1</i>	

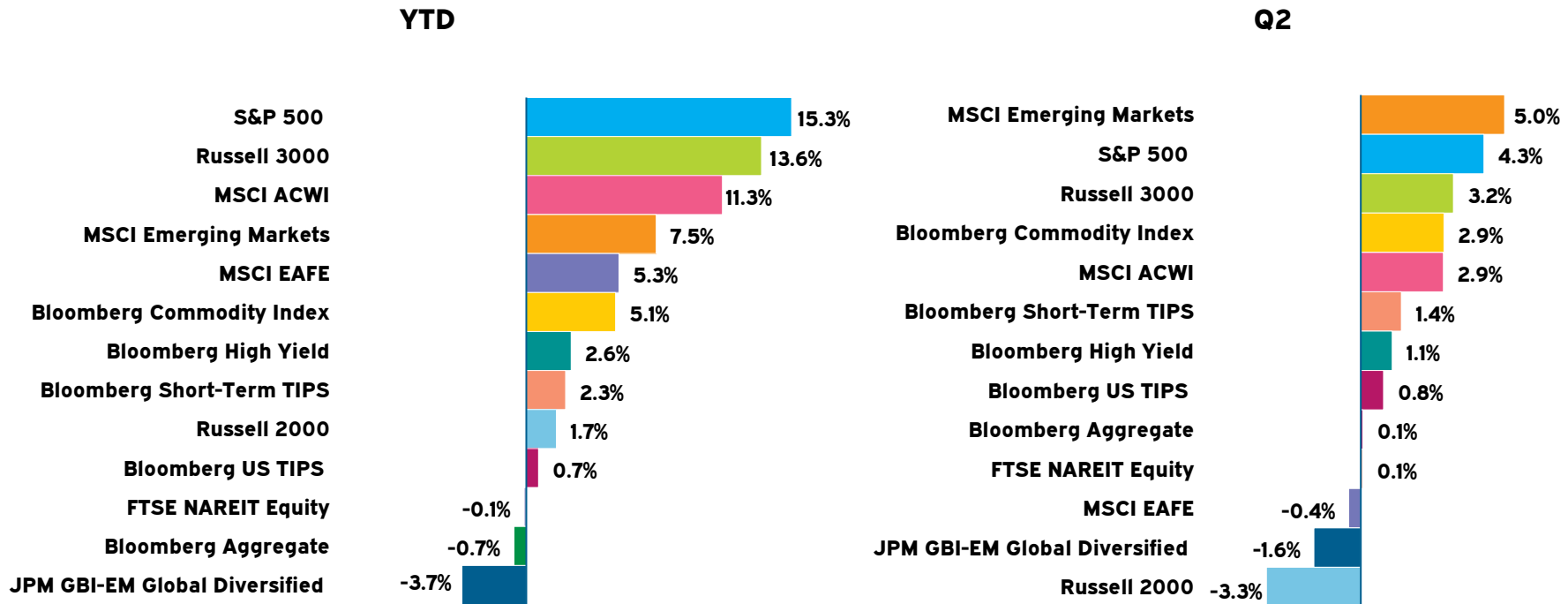
Economic and Market Update

As of June 30, 2024

Commentary

- Softening economic data, increased hopes of interest rate cuts, and ongoing AI optimism drove most asset classes higher in the second quarter.
- While the Fed remains data dependent, improvements in inflation and a cooling labor market may clear the way for several rate cuts this year.
 - Inflation pressures have eased in most countries from their pandemic peaks, but some uncertainty remains and levels are still above most central bank targets. In the second quarter, headline and core inflation measures in the US both fell, with most readings coming in below expectations.
 - The US equity markets (Russell 3000 index) added to its gains in the second quarter, rising 3.2%. Technology continued to drive results in the quarter due to AI demand and investment.
 - Non-US developed equity markets fell in the second quarter (-0.4%) on continued strength in the US dollar and political uncertainty in Europe.
 - Emerging market equities rallied (5.0%), for the quarter. Chinese stocks were up 7.1% as coordinated buying of Chinese exchange traded funds (ETFs) by state-backed financial services companies helped boost stock prices.
 - US interest rates rose over the quarter but finished off their highs. Income offset capital losses though, leading to the broad US bond market rising 0.1% in the second quarter.
- Looking to the rest of this year, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, and the many looming elections will be key factors.

Index Returns¹



→ Declining inflation, resilient growth, and strong corporate earnings supported most asset classes in the second quarter.

→ Mid-way through 2024, US stocks have significantly outperformed other asset classes on a year-to-date basis.

¹ Source: Bloomberg. Data is as of June 30, 2024.

Domestic Equity Returns¹

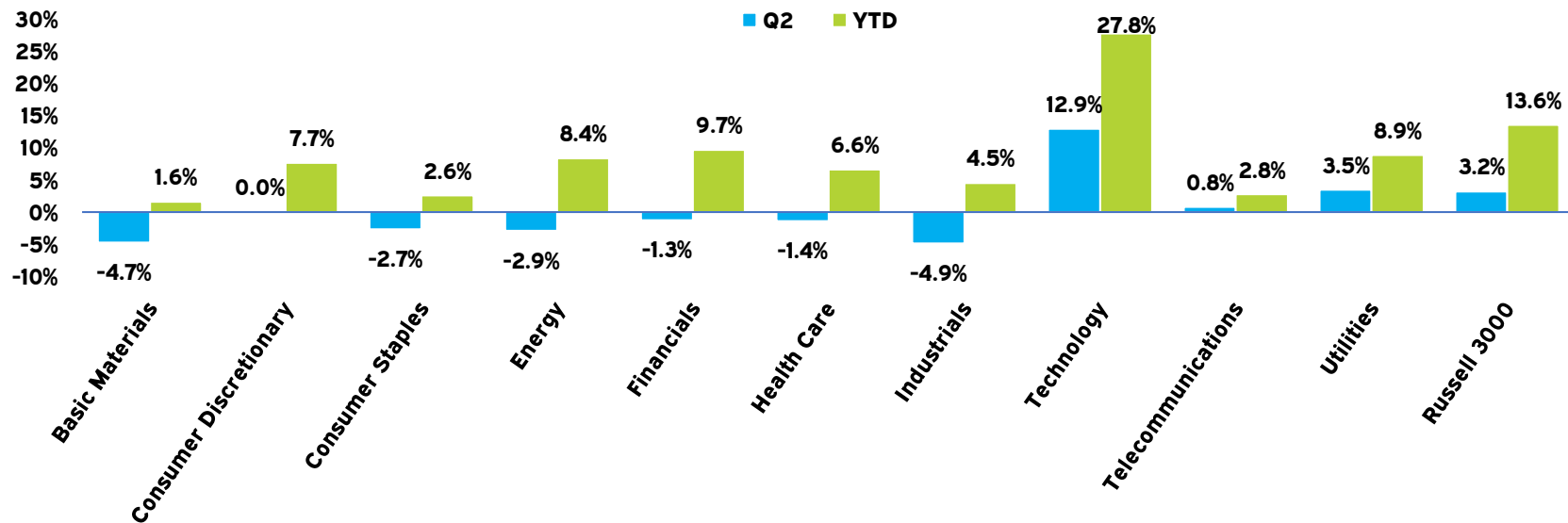
Domestic Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	3.6	4.3	15.3	24.6	10.0	15.1	12.9
Russell 3000	3.1	3.2	13.6	23.1	8.1	14.2	12.1
Russell 1000	3.3	3.6	14.2	23.9	8.8	14.6	12.5
Russell 1000 Growth	6.7	8.3	20.7	33.5	11.3	19.4	16.3
Russell 1000 Value	-0.9	-2.2	6.6	13.1	5.5	9.0	8.2
Russell MidCap	-0.7	-3.3	5.0	12.9	2.4	9.5	9.0
Russell MidCap Growth	1.7	-3.2	6.0	15.1	-0.1	9.9	10.5
Russell MidCap Value	-1.6	-3.4	4.5	12.0	3.7	8.5	7.6
Russell 2000	-0.9	-3.3	1.7	10.1	-2.6	6.9	7.0
Russell 2000 Growth	-0.2	-2.9	4.4	9.1	-4.9	6.2	7.4
Russell 2000 Value	-1.7	-3.6	-0.8	10.9	-0.5	7.1	6.2

US Equities: The Russell 3000 rose 3.2% in the second quarter, bringing the year-to-date results to 13.6%.

- US stocks continued their rise in June driven by on-going AI optimism. Nearly all the quarterly market gains in the S&P 500 were driven by large cap technology stocks, with the S&P 500 equal weighted index down 3.1% for the quarter.
- US large cap stocks continue to outperform small cap stocks. This dynamic is driven by the large technology stocks like NVIDIA, Apple, and Alphabet and the underperformance of small cap biopharma companies and banks.
- Growth outperformed value for the quarter, with the most pronounced outperformance in the large cap space (8.3% versus -2.2%).

¹ Source: Bloomberg. Data is as of June 30, 2024.

Russell 3000 Sector Returns¹



- Unlike first quarter performance, where all sectors gained, the second quarter saw mixed results across the major sectors.
- Technology (+12.9%) continued to drive results fueled by on-going AI optimism. Utilities were a distant second increasing 3.5%, on expectations of increased demand from AI-related companies.
- Many other sectors fell, including financials (-1.3%), health care (-1.4%), consumer staples (-2.7%), energy (-2.9%), materials (-4.7%), and industrials (-4.9%).
- All sectors have positive returns for the year-to-date period. Technology stocks (+27.8%) continue to lead the broader market, followed by financials (9.7%).

¹ Source: Bloomberg. Data is as of June 30, 2024.

Foreign Equity Returns¹

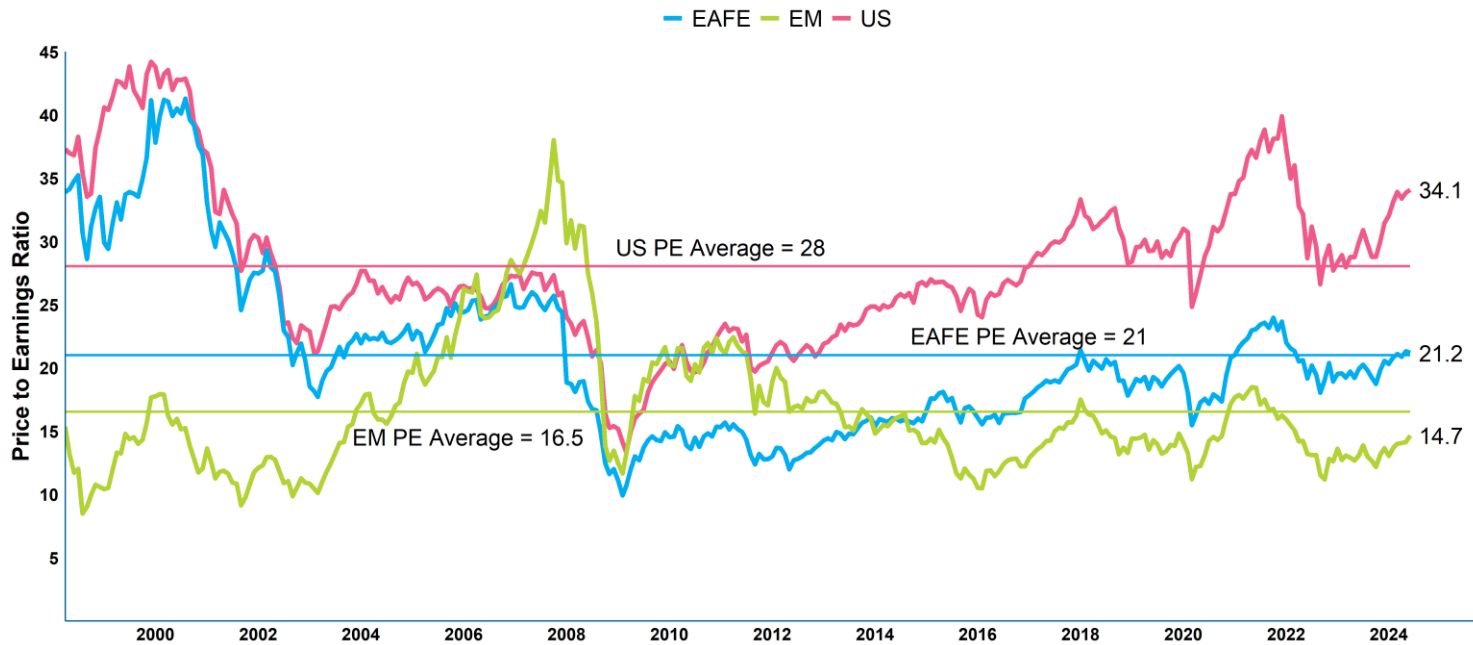
Foreign Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-0.1	1.0	5.7	11.6	0.5	5.6	3.8
MSCI EAFE	-1.6	-0.4	5.3	11.5	2.9	6.5	4.3
MSCI EAFE (Local Currency)	-0.6	1.0	11.1	15.1	8.1	9.0	7.4
MSCI EAFE Small Cap	-3.0	-1.8	0.5	7.8	-3.4	4.2	4.3
MSCI Emerging Markets	3.9	5.0	7.5	12.5	-5.1	3.1	2.8
MSCI Emerging Markets (Local Currency)	4.3	6.2	11.0	15.5	-1.6	5.6	5.8
MSCI EM ex. China	6.1	4.2	8.4	18.5	1.4	6.7	3.9
MSCI China	-1.9	7.1	4.7	-1.6	-17.7	-4.3	1.4

Foreign Equity: Developed international equities (MSCI EAFE) fell 0.4% in the second quarter, while emerging market equities (MSCI Emerging Markets) gained 5.0%.

- For the second quarter, developed market equities declined driven by continued strength in the US dollar and regional political risks particularly in France. UK and Japanese equities made new all-time highs during the quarter, but this was not enough to offset losses in Europe.
- Emerging market equities outpaced developed market equities during the quarter given strong results in China (7.1%). China equities moved into positive territory for the year (4.7%) due to government purchases of shares, improving economic data, and returning foreign investors.

¹ Source: Bloomberg. Data is as of June 30, 2024.

Equity Cyclically Adjusted P/E Ratios¹



- At the end of the second quarter, the US equity price-to-earnings ratio remained elevated and above its 21st century average.
- International equity market valuations remain well below the US. International developed market valuations have increased to slightly above their long-term average, while emerging market equities remain below their long-term average despite recent gains.

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 June 2024. 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.

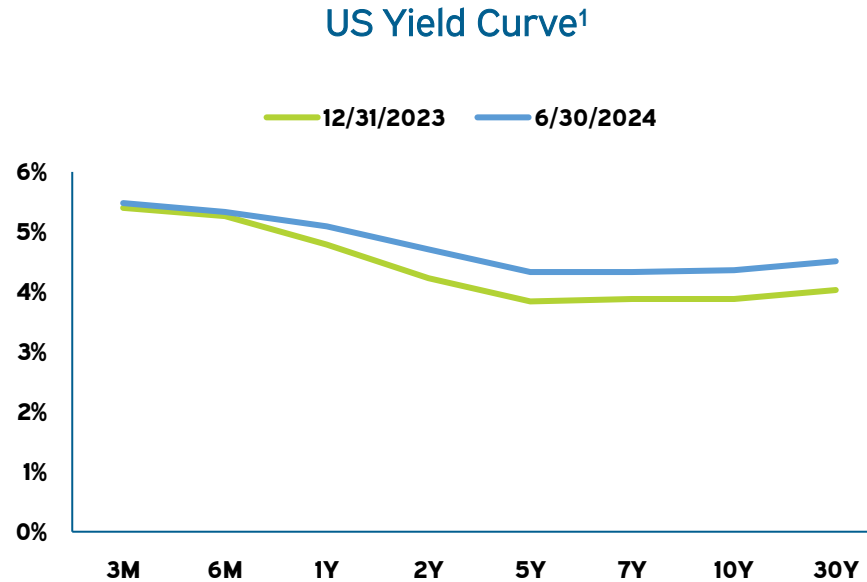
Fixed Income Returns¹

Fixed Income	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.9	0.2	-0.3	3.5	-2.7	0.1	1.6	5.3	6.0
Bloomberg Aggregate	0.9	0.1	-0.7	2.6	-3.0	-0.2	1.3	5.0	6.2
Bloomberg US TIPS	0.8	0.8	0.7	2.7	-1.3	2.1	1.9	4.8	6.6
Bloomberg Short-term TIPS	0.6	1.4	2.3	5.4	2.2	3.2	2.0	5.1	2.4
Bloomberg High Yield	0.9	1.1	2.6	10.4	1.6	3.9	4.3	7.9	3.7
JPM GBI-EM Global Diversified (USD)	-1.1	-1.6	-3.7	0.7	-3.3	-1.3	-0.9	--	--

Fixed Income: The Bloomberg Universal index rose 0.2% in the second quarter, reducing the year-to-date decline to -0.3%.

- Bonds finished the quarter slightly up as May and June gains offset the April declines.
- The broad US bond market (Bloomberg Aggregate) rose 0.1% in the second quarter, with the broad TIPS market gaining 0.8%. The less interest rate sensitive short-term TIPS index increased 1.4% for the quarter, leading to the best results.
- High yield bonds (1.1%) also rose, as risk appetite remains strong.

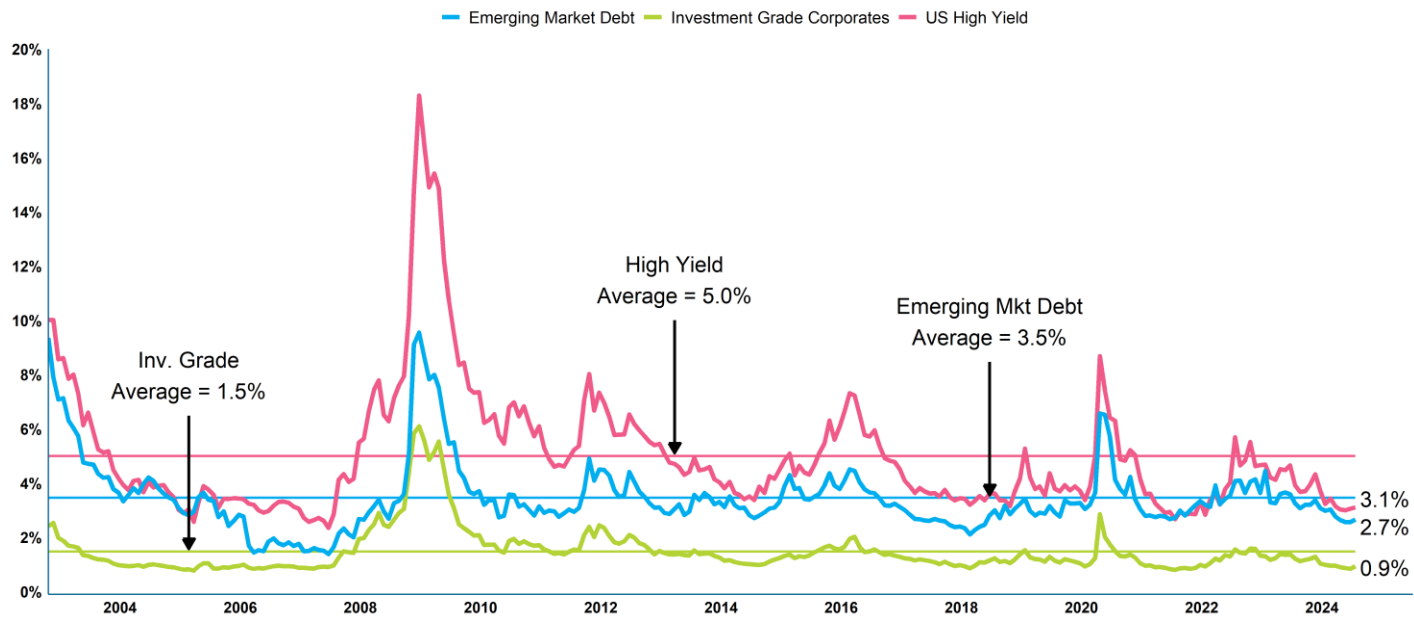
¹ Source: Bloomberg. Data is as of June 30, 2024. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively. JPM GBI-EM data is from J.P. Morgan. Current yield and duration data is not available.



- After rates significantly increased in April on strong inflation data, they then declined in May and June. Chair Powell confirming that the FOMC would not raise rates again this year as economic data appears to be returning to long-run trends led to rates declining from the April highs.
- The more policy sensitive 2-year Treasury yield finished the quarter roughly 0.2% higher at 4.76% but well off its peak of over 5.0%. The 10-year Treasury rose by a similar amount during the quarter finishing at 4.39%; also, off its April peak of 4.68%.
- The yield curve remained inverted at month-end, with the spread between the 2-year and 10-year Treasury at roughly -35 basis points.

¹ Source: Bloomberg. Data is as of June 30, 2024.

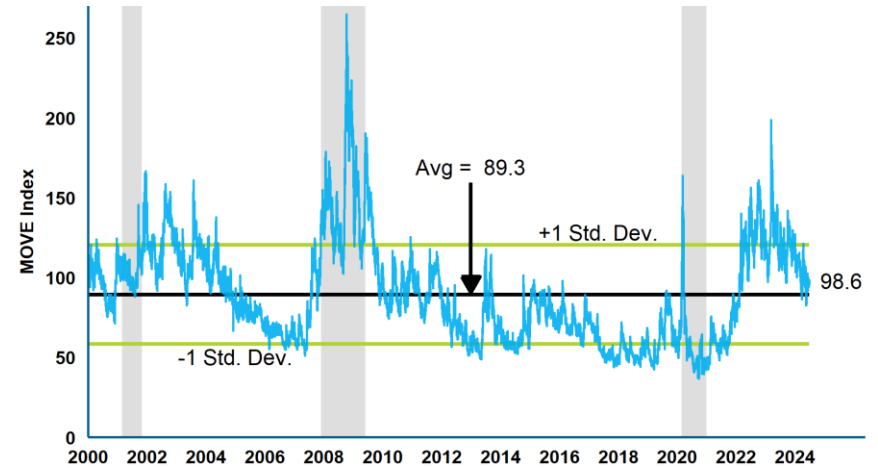
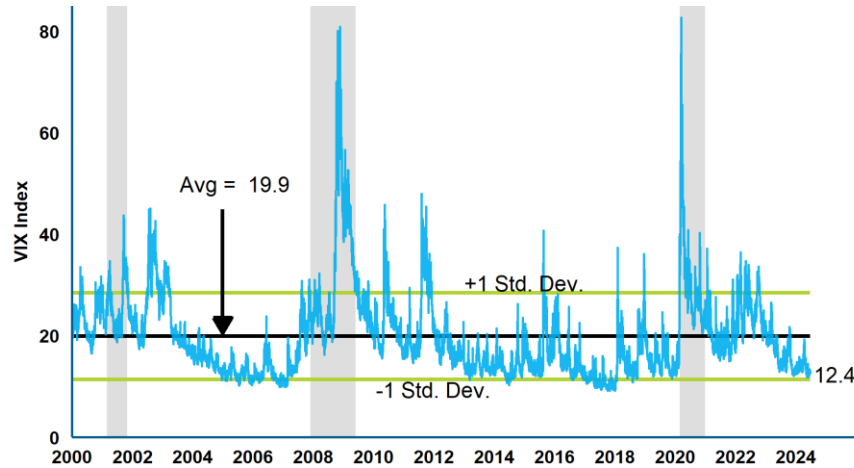
Credit Spreads vs. US Treasury Bonds¹



- Despite rising rates, investor demand for risk exposure in credit markets remained strong in Q2 given measured weakness in the economic outlook and expectations of lower interest rates by year-end.
- Spreads (the yield above a comparable maturity Treasury) stayed relatively steady over the quarter, near post-pandemic lows. All spreads remained below their respective long-run averages, particularly high yield.
- Although spreads are relatively tight, yields remain at above-average levels compared to the last two decades, particularly for short-term issues.

¹ Source: Bloomberg. Data is as of June 30, 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.

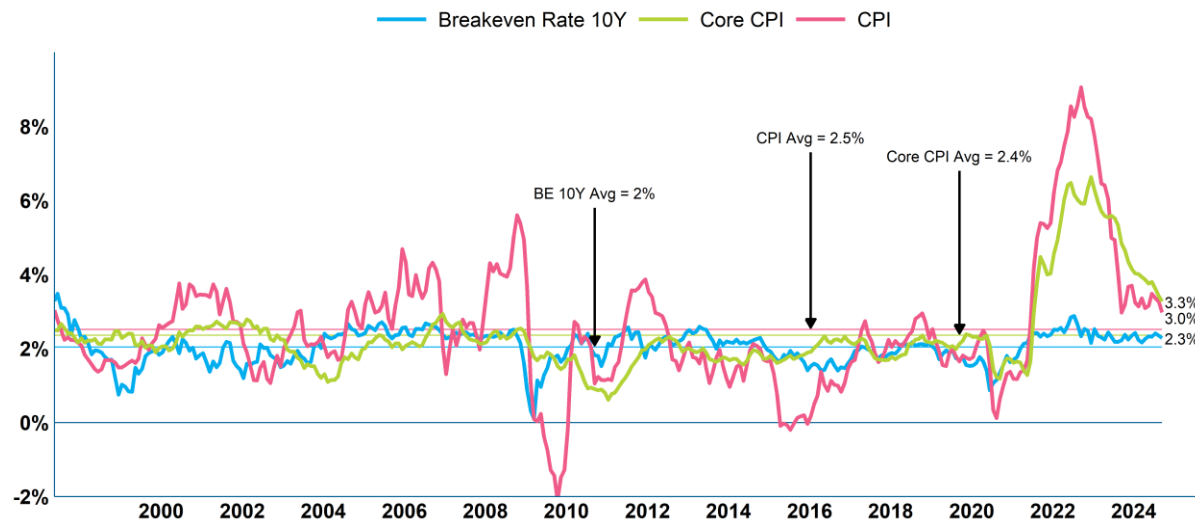
Equity and Fixed Income Volatility¹



- Volatility in equities was around one standard deviation below its long-term average at the end of the quarter as continued strength in technology stocks and weakening economic data has moderated fear in the markets.
- Volatility in bonds (MOVE) ended June higher than where it started the quarter (98.6 versus 86.4) and above its long-run average.

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 June 2024. The average line indicated is the average of the VIX and MOVE values between January 2000 and June 2024.

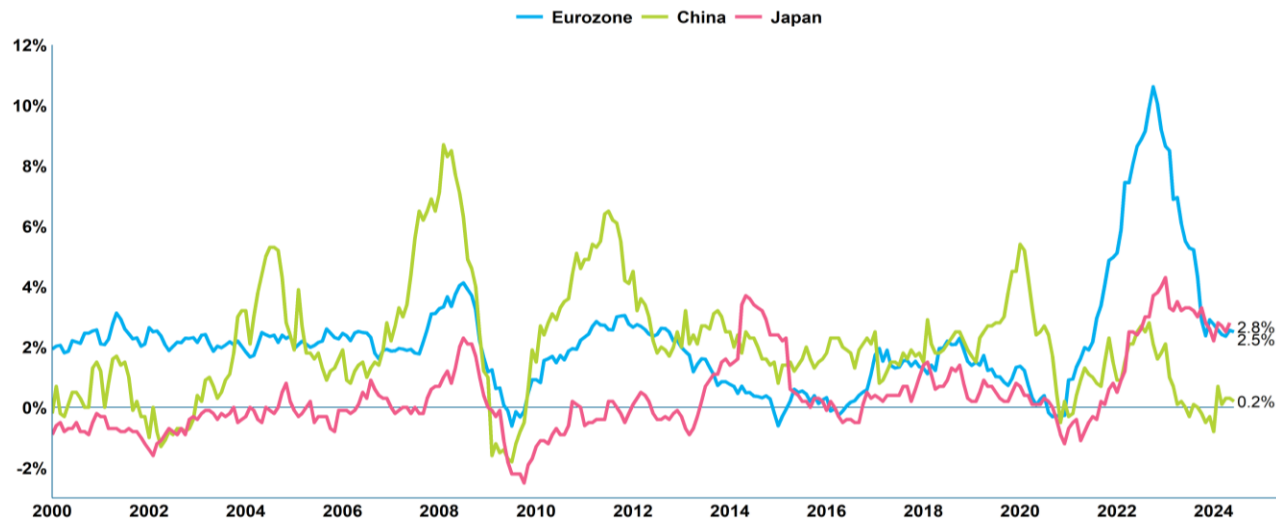
US Ten-Year Breakeven Inflation and CPI¹



- Year-over-year headline inflation continued to fall in June (3.3% to 3.0%) and again came in below expectations. Over the quarter, inflation fell by a total of 0.5%.
- Month-over-month inflation was negative for the first time since March 2020, largely because of price declines in energy and core goods.
- Core inflation (excluding food and energy) also declined in June (3.4% to 3.3%) and came in below expectations. A drop in used car prices, transportation services, and a slowing of the pace of shelter price increases all contributed to the decline.
- Inflation expectations (breakevens) have been volatile, but they finished the quarter largely where they started.

¹ Source: FRED. Data is as June 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.

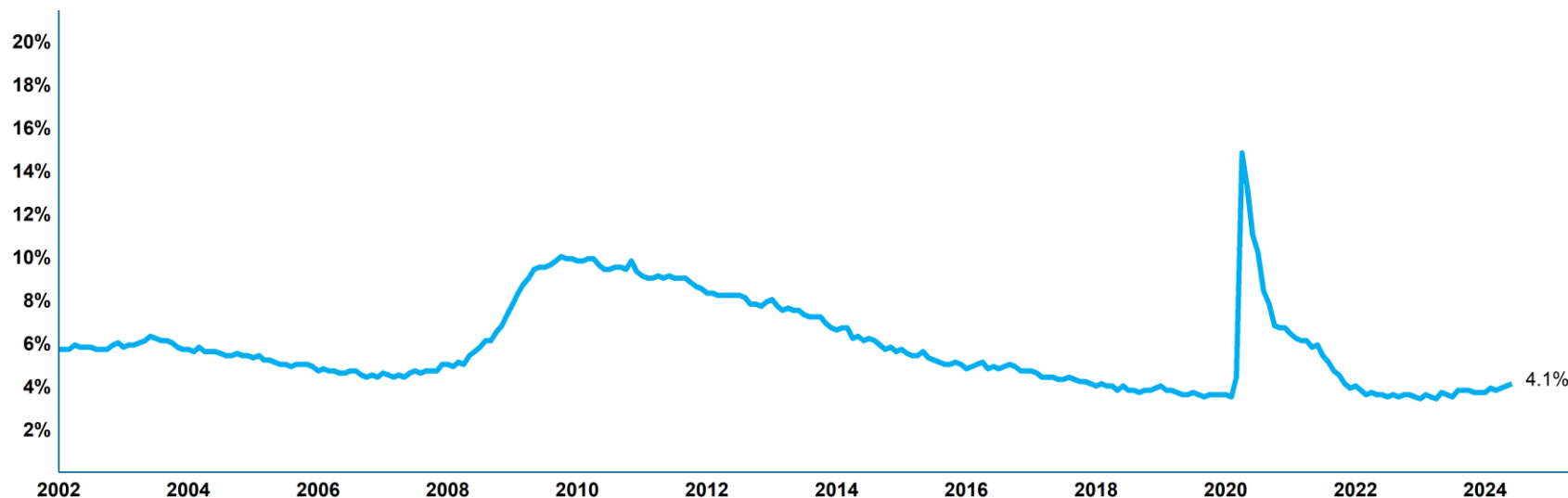
Global Inflation (CPI Trailing Twelve Months)¹



- Outside the US, inflation is also easing from the recent peaks.
- In the eurozone, inflation experienced a dramatic decline last year but remains above the central bank's 2% target. In June, inflation fell slightly from 2.6% to 2.5% year-over-year.
- Inflation in Japan has slowly dropped from the early 2023 peak of 4.3%, but it remains near levels not seen in a decade. In the most recent reading (May), inflation rose modestly from 2.5% to 2.8% as fuel and utility prices increased.
- China appears to have emerged from deflationary pressures, but inflation levels remain well below other major economies due to slowing economic growth. Annual inflation levels have been positive for the last five readings signaling improvement in domestic demand. The June year-over-year number came in at 0.2%, slightly lower than the prior reading of 0.3%.

¹ Source: Bloomberg. Data is June 30, 2024, except Japan which is as of May 31, 2024.

US Unemployment¹

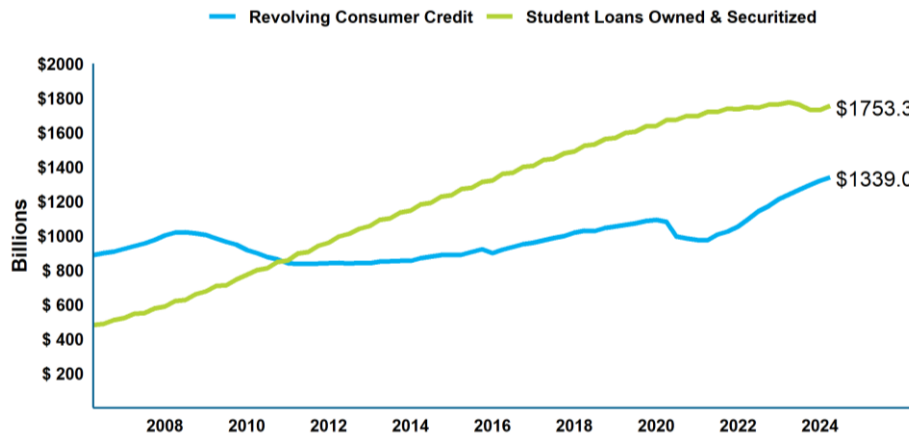


- Overall, the US labor market remains healthy, but there have been some recent signs of softening.
- The unemployment rate came in above expectations in June reaching 4.1%, a level not seen since early 2022. Over the second quarter unemployment increased 0.3%.
- Wage growth remains strong though (around 3.9% annually), and initial claims for unemployment are still subdued.
- Despite significant downward revisions to job gains in April and May, in June the economy added 206,000 jobs (above expectations). The government added the most jobs (70,000), followed by the healthcare sector (49,000).

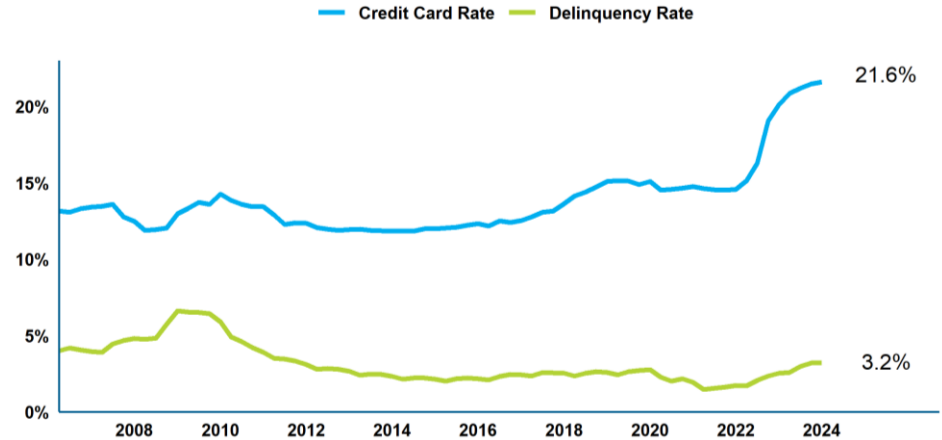
¹ Source: FRED. Data is as June 30, 2024.

US Consumer Under Stress?¹

Revolving Consumer Credit & Student Loans (\$B)



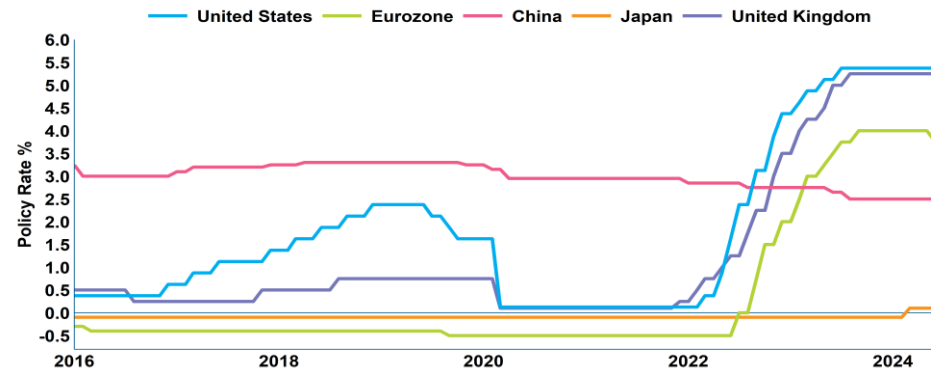
Consumer Credit Card Interest Rates (%)



- Despite the strong labor market and higher wages, pressures are building 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 and auto loans start to increase, particularly for younger people.
- 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.
- It is worth noting though that many people locked in low-rate fixed mortgages before rates increased and many corporations issued debt at extremely low levels, reducing the sensitivity to higher rates.

¹ Source: FRED. Data is as of March 31, 2024. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.

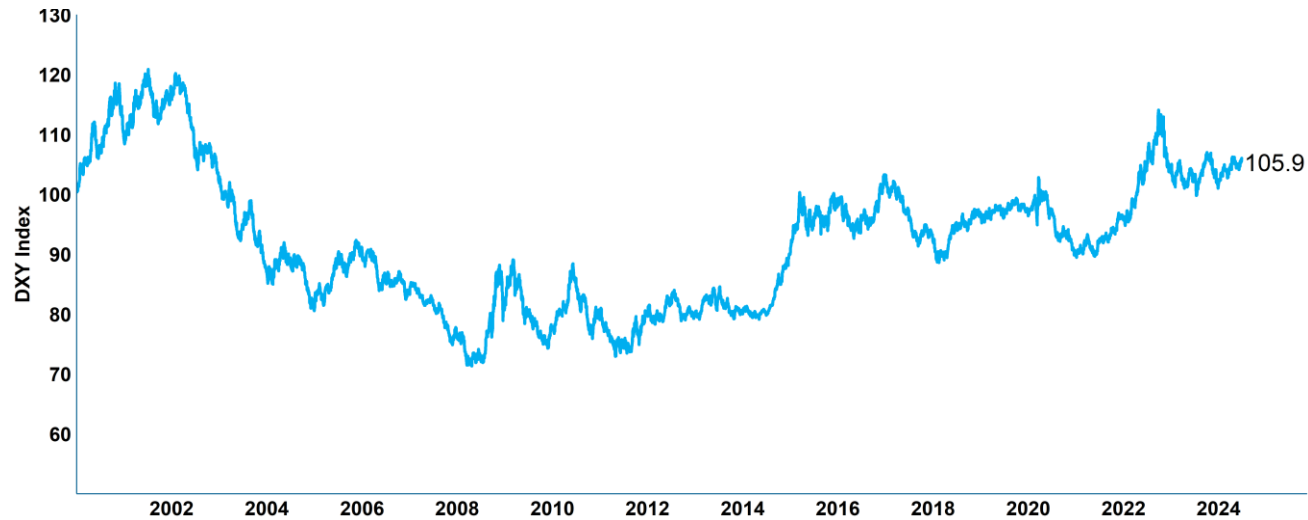
Policy Rates¹



- In the US interest rates have remained at current levels (5.25%-5.50%) for a year now. The most recent “dot plot” (the Fed’s expectation on the path of rates) showed a median expectation of roughly one rate cut this year. Markets are now pricing in two to three rate cuts in 2024 given the improving inflation data with the probability of a cut around 100% in September and slightly over 90% for December.
- The European Central Bank (ECB) cut its policy rate by 25 basis points at the beginning of June, as expected. Like the US, cuts are also anticipated at the September and December meetings.
- After ending the last negative interest rate policy given higher inflation levels, the Bank of Japan (BOJ) has since kept rates at slightly above 0%. Policy is expected to tighten going forward with the BOJ announcing at their recent meeting they would also start reducing their bond purchases. Interest rate futures markets are pricing in roughly two rate hikes (of 10 basis points) through the end of the year.
- The central bank in China has maintained interest rates at record low levels and continues to inject liquidity into the banking system, to support economic growth.

¹ Source: Bloomberg. Data is as of June 30, 2024. United States rate is the mid-point of the Federal Funds Target Rate range. Eurozone rate is the ECB Deposit Facility Announcement Rate. Japan rate is the Bank of Japan Unsecured Overnight Call Rate Expected. China rate is the China Central Bank 1-Year Medium Term Interest Rate. UK rate is the UK Bank of England Official Bank Rate.

US Dollar vs. Broad Currencies¹



- Overall, the dollar rose in the second quarter (104.5 to 105.9) versus a basket of currencies of major trading partners.
- China and the ECB cutting policy rates, stronger relative growth, and the weakening of the Japanese yen, have all collectively helped strengthen the dollar.

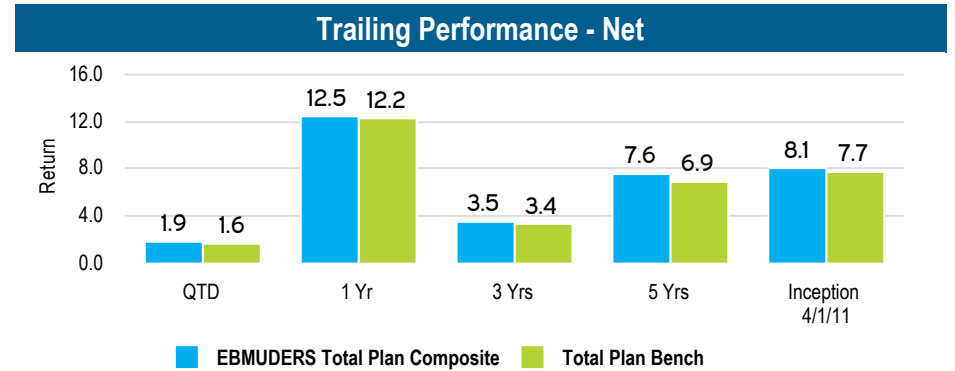
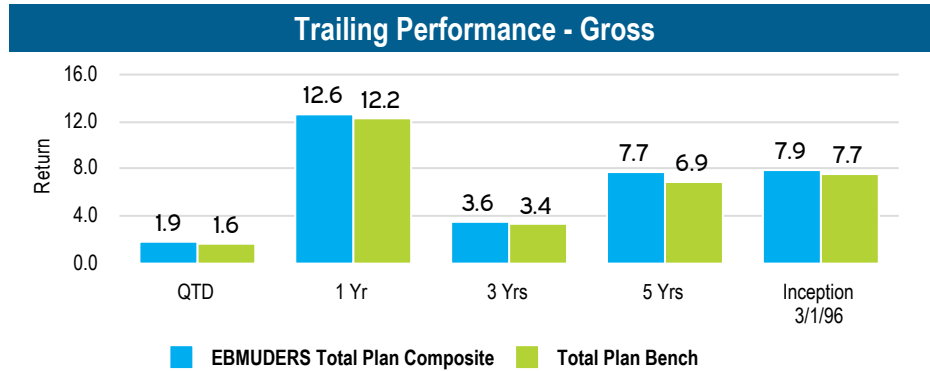
¹ Source: Bloomberg. Data as of June 30, 2024.

Summary

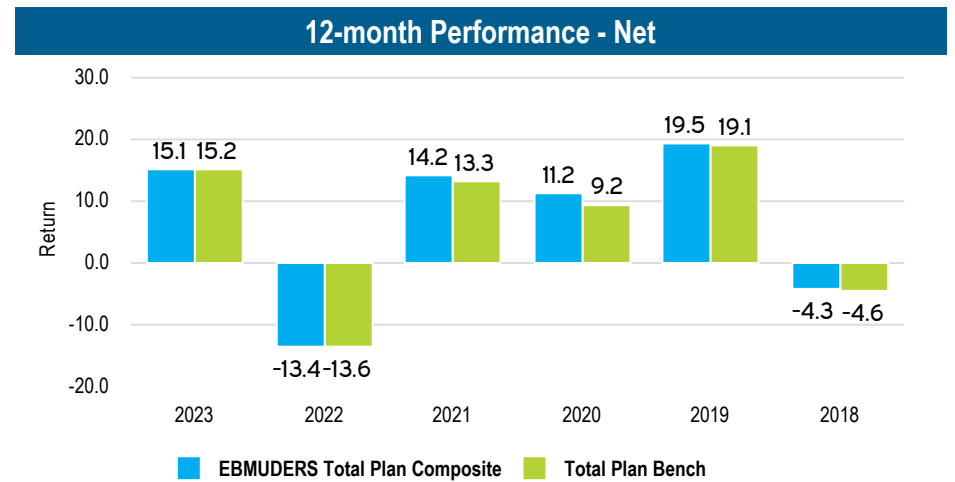
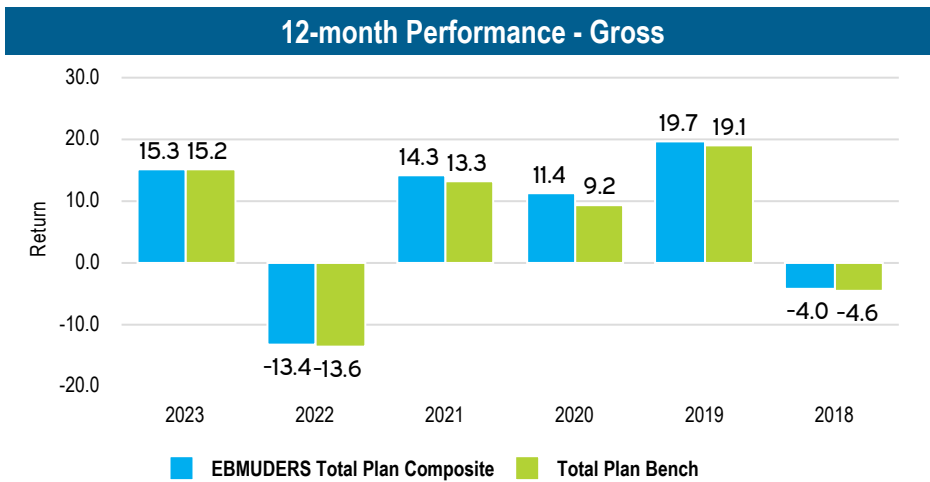
Key Trends:

- According to the International Monetary Fund's (IMF) April report, global growth this year is expected to match the 2023 estimate at around 3.2% with most major economies predicted to avoid a recession. Continued strong economic growth does run the risk of inflation and interest rates staying higher for longer.
- Key economic data in the US has largely weakened and come in below expectations, causing markets to expect between two and three rate cuts this year. Uncertainty remains though regarding the timing and pace of interest rate cuts in the coming year.
- We have started to see some divergences in monetary policy with other central banks, such as the European Central Bank (ECB), starting to cut interest rates while the Fed remains on hold. This disparity will likely influence investment flows and currencies.
- 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 slows. 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 ongoing weakness in the real estate sector. Japan's recent tightening of monetary policy along with changes in corporate governance in the country could influence relative results.

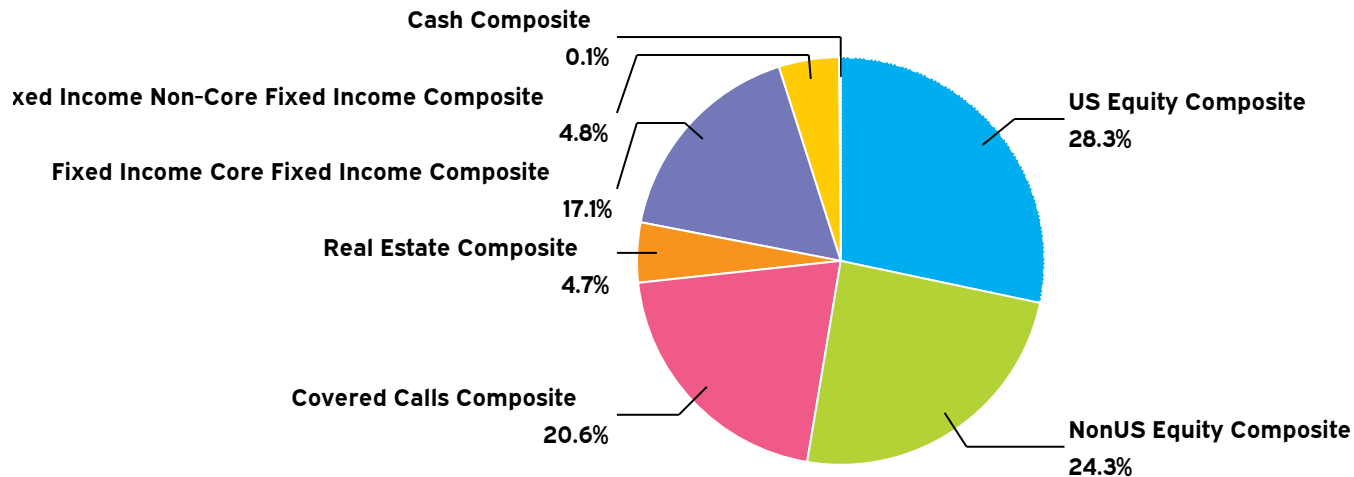
First Quarter Performance Review



	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)
EBMUDERS Total Plan Composite	1.9	12.5	3.5	7.6	7.2	15.1	-13.4	14.2	11.2	19.5	-4.3
EBMUDERS Total Plan Composite	1.9	12.6	3.6	7.7	7.4	15.3	-13.4	14.3	11.4	19.7	-4.0
<i>Total Plan Bench</i>	1.6	12.2	3.4	6.9	6.8	15.2	-13.6	13.3	9.2	19.1	-4.6
InvMetrics Public DB > \$1B Median	1.0	10.0	3.2	7.4	6.6	11.4	-10.4	15.6	11.7	17.2	-3.2

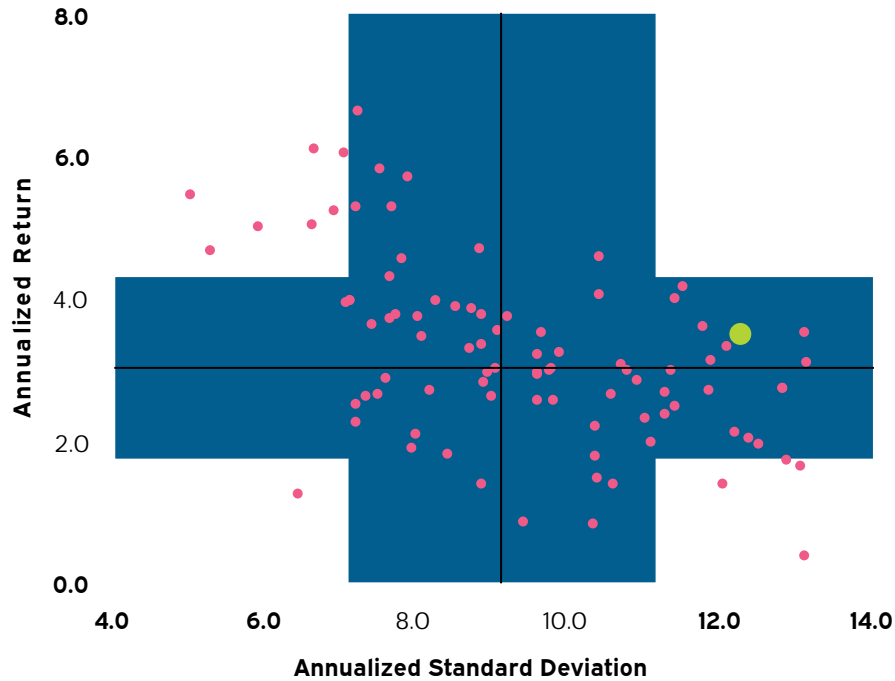


Allocation vs. Targets and Policy				
	Current Balance (\$)	Current Allocation (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	\$709,103,394	28	20 - 30	Yes
International Equity	\$609,493,614	24	20 - 30	Yes
Covered Calls	\$517,281,110	21	17 - 23	Yes
Real Estate	\$118,857,470	5	3 - 7	Yes
Core Fixed Income	\$427,176,552	17	17 - 23	Yes
Non-Core Fixed Income	\$119,599,750	5	3 - 7	Yes
Cash	\$3,517,318	0	0 - 5	Yes
Total	\$2,505,029,208	100		



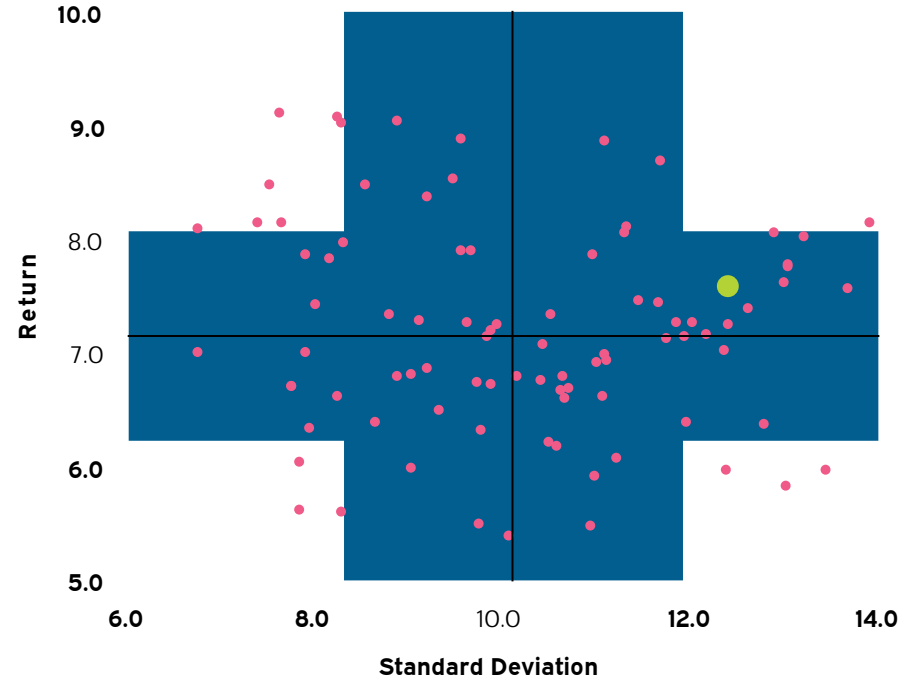
EBMUDERS | As of June 30, 2024

Annualized Return vs. Annualized Standard Deviation
3 Years Ending June 30, 2024



- InvMetrics All Public DB Plans > \$1B
- EBMUDERS Total Plan Composite

Annualized Return vs. Annualized Standard Deviation
5 Years Ending June 30, 2024



- InvMetrics All Public DB Plans > \$1B
- EBMUDERS Total Plan Composite

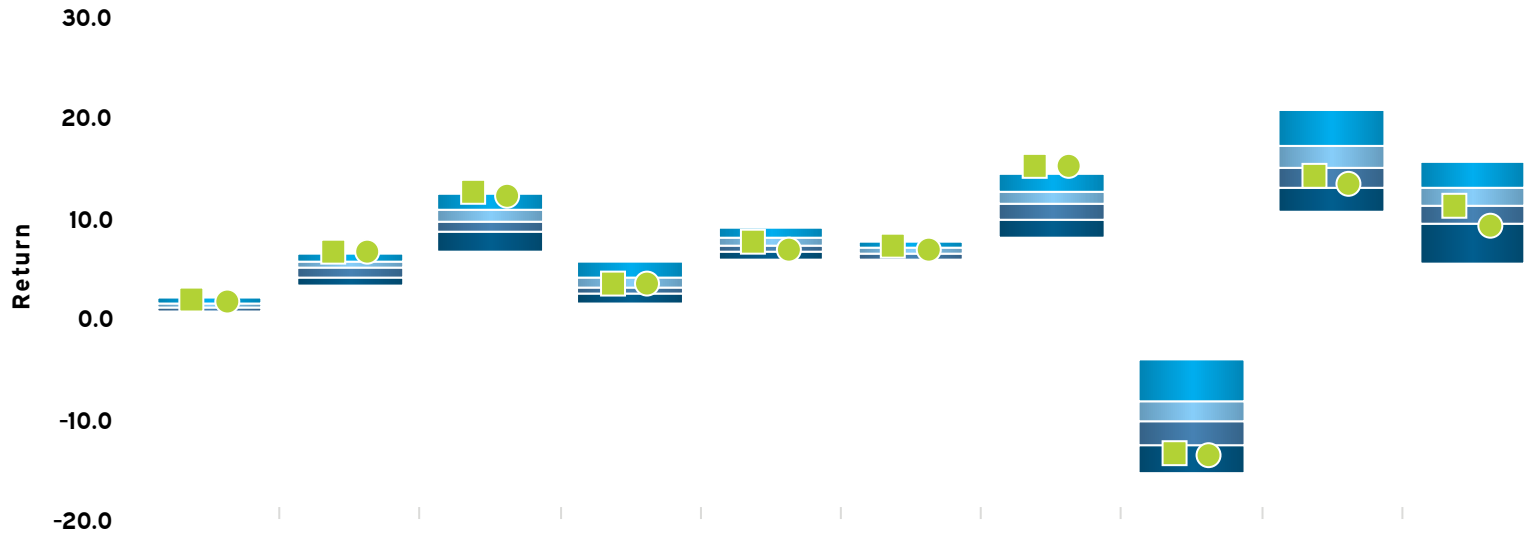
3 Years Ending June 30, 2024

	Return	Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	3.5	12.2	0.1
Total Plan Bench	3.4	11.6	0.1

5 Years Ending June 30, 2024

	Return	Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	7.6	12.4	0.5
Total Plan Bench	6.9	12.3	0.4

InvMetrics Public Plans > \$1B Return Comparison June 30, 2024



	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2023	2022	2021	2020
■ EBMUDERS Total Plan Composite	1.9 (7)	6.6 (4)	12.5 (5)	3.5 (39)	7.6 (32)	7.2 (18)	15.1 (4)	-13.4 (84)	14.2 (60)	11.2 (50)
● Total Plan Bench	1.6 (13)	6.7 (4)	12.2 (8)	3.4 (40)	6.9 (62)	6.8 (30)	15.2 (4)	-13.6 (85)	13.3 (72)	9.2 (77)
5th Percentile	2.0	6.4	12.4	5.6	8.9	7.6	14.3	-4.0	20.7	15.5
1st Quartile	1.4	5.6	10.8	3.9	7.9	6.9	12.5	-8.2	17.2	13.0
Median	1.0	5.0	9.6	3.0	7.2	6.3	11.3	-10.3	15.0	11.1
3rd Quartile	0.7	4.1	8.6	2.4	6.6	5.8	9.7	-12.7	12.9	9.3
95th Percentile	0.3	3.3	6.6	1.3	5.7	5.5	7.9	-15.5	10.5	5.5
Population	96	96	96	91	88	83	174	173	206	220

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,505,029,208	1.9	12.6	3.6	7.7
<i>Total Plan Bench</i>		<i>1.6</i>	<i>12.2</i>	<i>3.4</i>	<i>6.9</i>
US Equity Composite	709,103,394	3.2	23.1	8.1	14.1
<i>Russell 3000 Hybrid</i>		<i>3.2</i>	<i>23.1</i>	<i>8.1</i>	<i>14.1</i>
Northern Trust Russell 3000	708,236,423	3.2	23.2	8.1	14.1
<i>Russell 3000 Index</i>		<i>3.2</i>	<i>23.1</i>	<i>8.1</i>	<i>14.1</i>
Non US Equity Composite	609,493,614	1.1	11.8	0.9	6.0
<i>MSCI ACWI xUS (blend)</i>		<i>1.2</i>	<i>12.2</i>	<i>1.0</i>	<i>6.1</i>
Northern Trust ACWI ex US	609,493,614	1.1	11.8	0.8	5.7
<i>MSCI AC World ex USA index</i>		<i>1.2</i>	<i>12.2</i>	<i>1.0</i>	<i>6.1</i>

	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Covered Calls Composite	517,281,110	3.0	14.1	6.5	9.4
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Parametric BXM	170,292,801	2.6	12.1	6.6	8.9
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Parametric Delta Shift	182,095,223	4.5	18.2	8.4	13.3
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Van Hulzen	164,893,086	2.0	12.0	4.3	5.9
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>

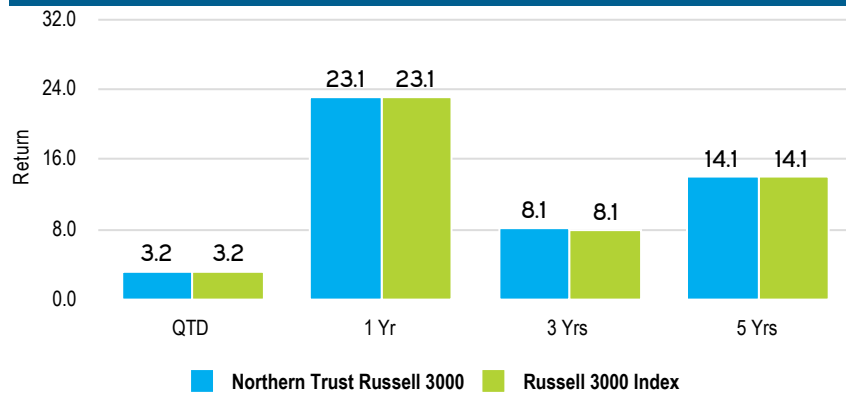
	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Core Fixed Income Composite	427,176,552	0.0	2.6	-2.0	0.3
<i>Fixed Income Core Composite Bench</i>		<i>0.4</i>	<i>3.4</i>	<i>-2.1</i>	<i>--</i>
CS McKee	216,525,400	0.1	3.9	-2.6	0.2
<i>Blmbg. U.S. Aggregate Index</i>		<i>0.1</i>	<i>2.6</i>	<i>-3.0</i>	<i>-0.2</i>
Garcia Hamilton	210,651,152	-0.1	1.2	-1.4	--
<i>Blmbg. U.S. Aggregate Index</i>		<i>0.1</i>	<i>2.6</i>	<i>-3.0</i>	<i>-0.2</i>
Non-Core Fixed Income Composite	119,599,750	1.8	9.6	3.9	4.4
<i>Fixed Income Non-Core Composite Bench</i>		<i>2.0</i>	<i>9.7</i>	<i>4.2</i>	<i>4.1</i>
Mackay Shields (HY)	61,473,768	1.6	9.8	4.6	5.5
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>2.3</i>	<i>10.6</i>	<i>3.7</i>	<i>4.2</i>
Federated Investment Counseling (Bank Loans)	58,125,982	2.2	9.4	3.2	3.3
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>1.6</i>	<i>8.8</i>	<i>4.7</i>	<i>4.1</i>

	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Real Estate Composite	118,857,470	0.4	-0.9	2.3	4.9
<i>Real Estate Composite Benchmark</i>		<i>-0.4</i>	<i>0.6</i>	<i>2.6</i>	<i>4.5</i>
RREEF America II Lag	54,680,547	0.0	-9.7	4.0	4.2
<i>NCREIF NPI Lag</i>		<i>-1.0</i>	<i>-7.2</i>	<i>3.6</i>	<i>3.8</i>
CenterSquare	64,176,923	0.7	8.2	0.8	5.0
<i>FTSE NAREIT Equity REIT Index</i>		<i>0.1</i>	<i>7.8</i>	<i>0.3</i>	<i>3.9</i>

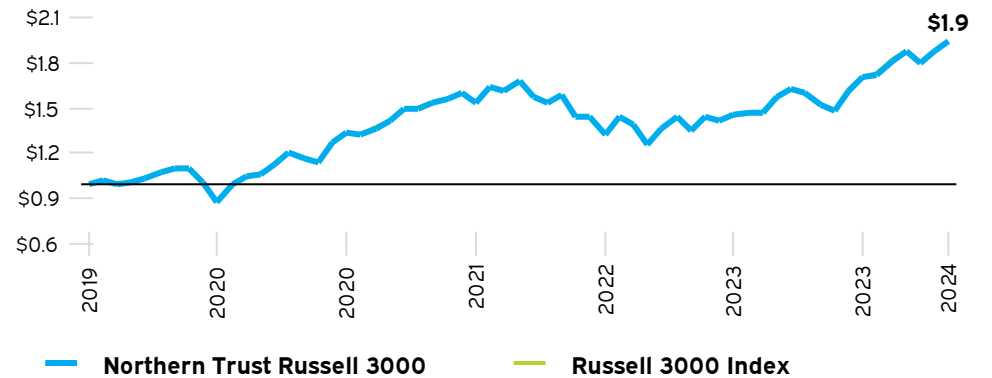
Statistics Summary 5 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust Russell 3000	0.0	1.0	-0.4	0.7	0.1	1.0	99.8	99.8
Russell 3000 Index	0.0	1.0	-	0.7	0.0	1.0	100.0	100.0

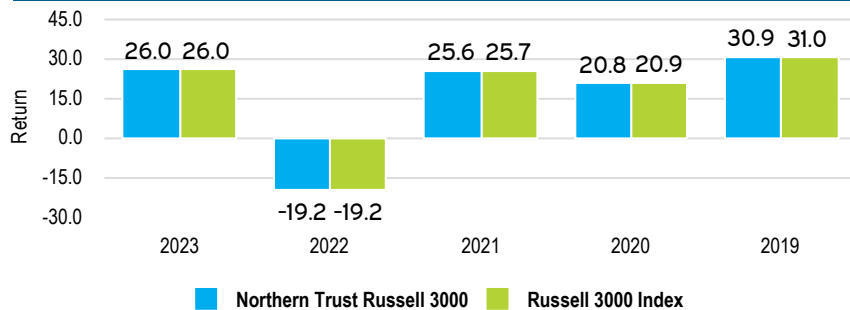
Return Summary



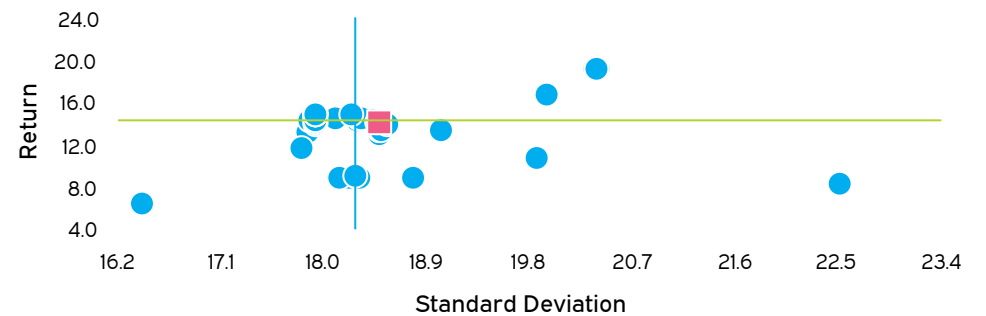
Investment Growth



Return Summary



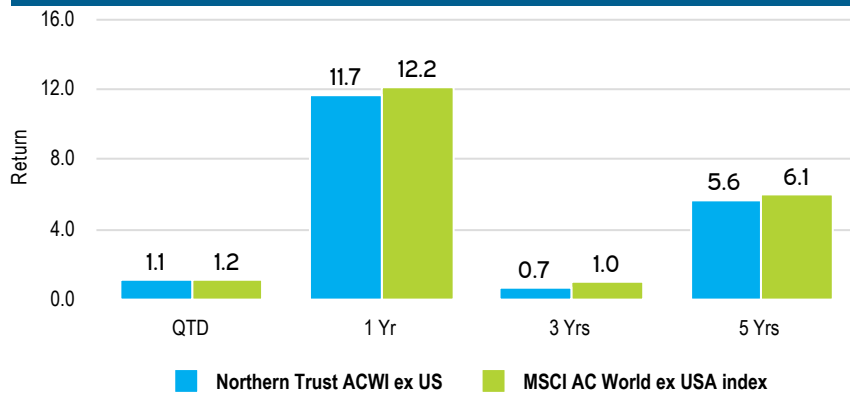
Risk Reward



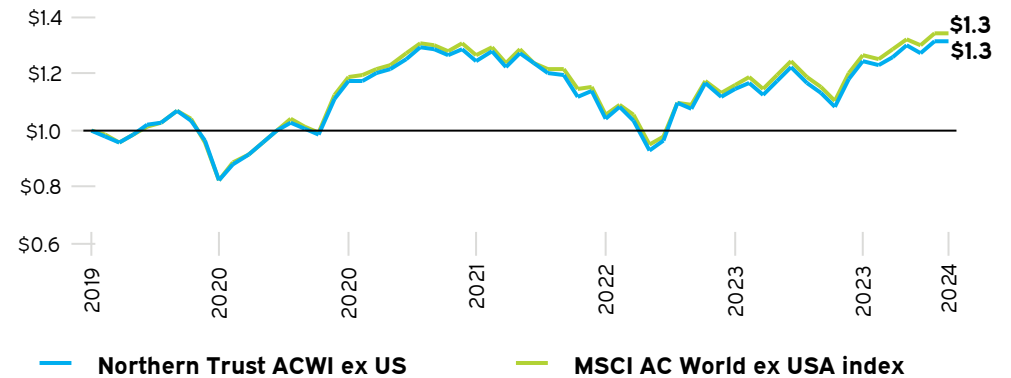
Statistics Summary 5 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust ACWI ex US	-0.4	1.0	-0.2	0.3	1.8	1.0	101.5	103.8
MSCI AC World ex USA index	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0

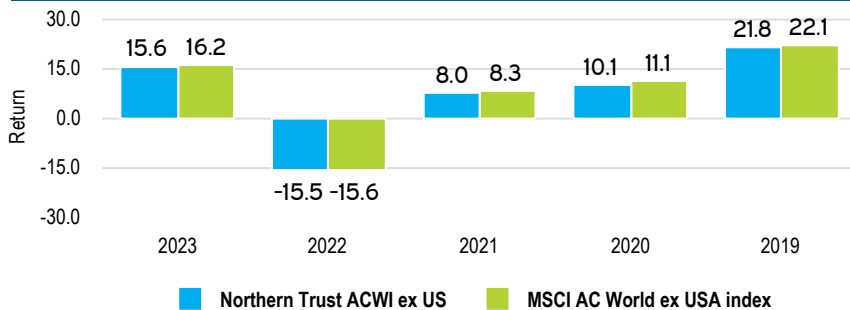
Return Summary



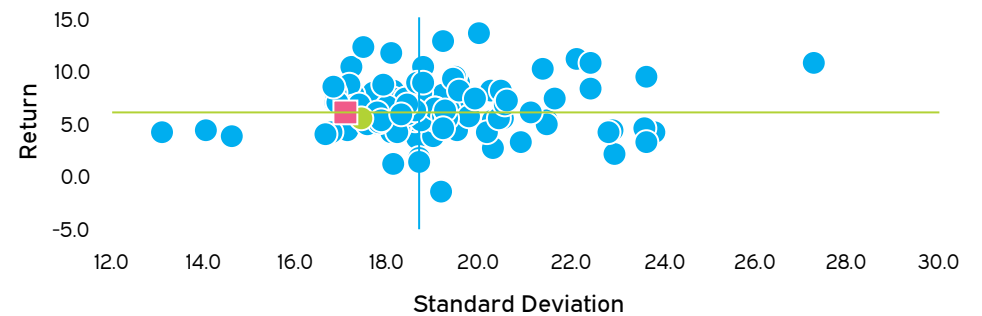
Investment Growth



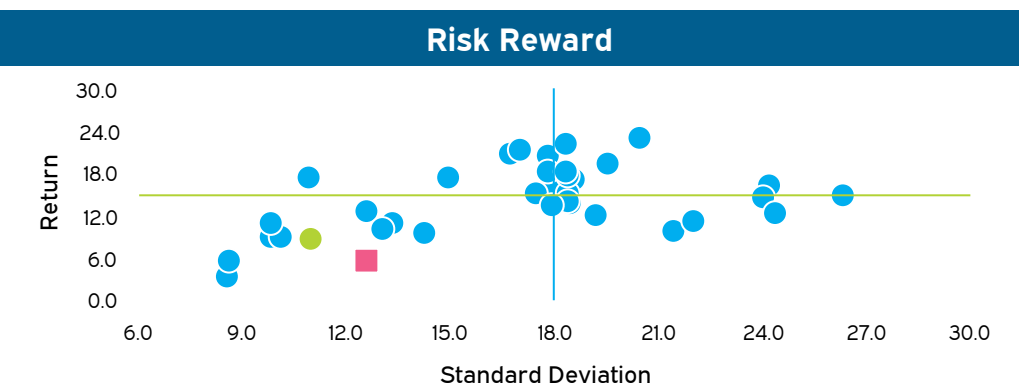
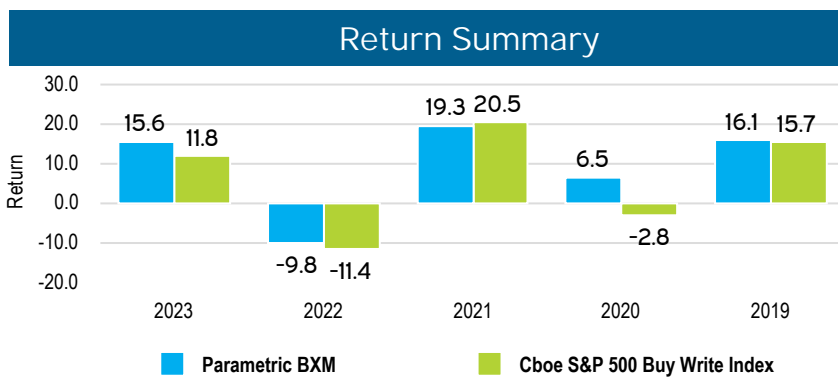
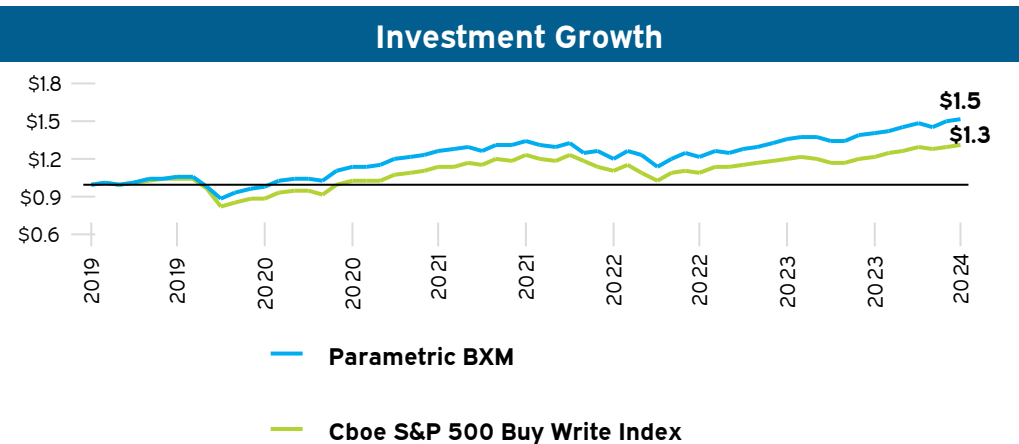
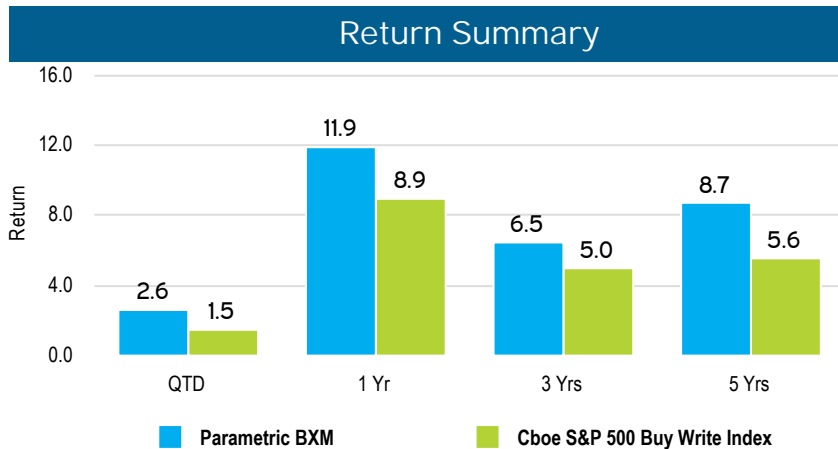
Return Summary



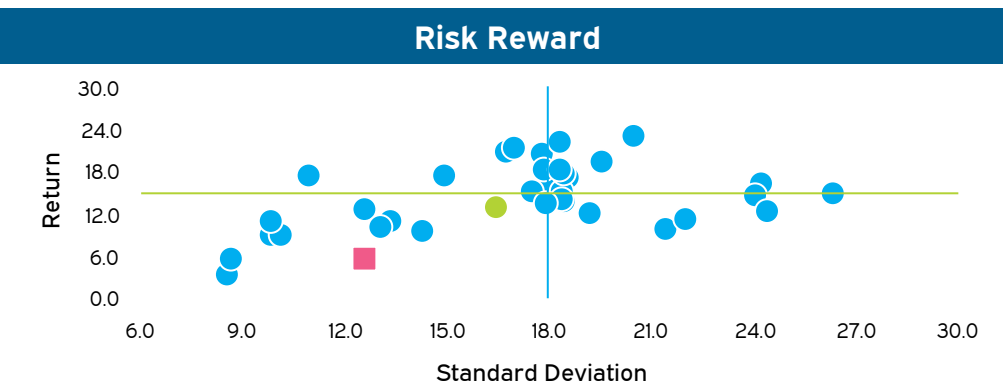
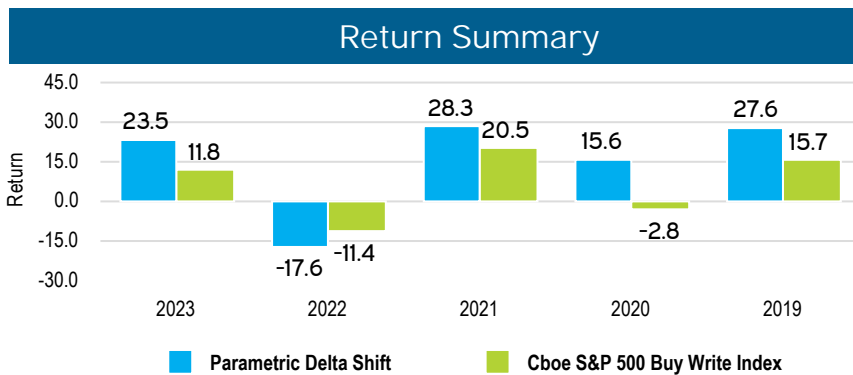
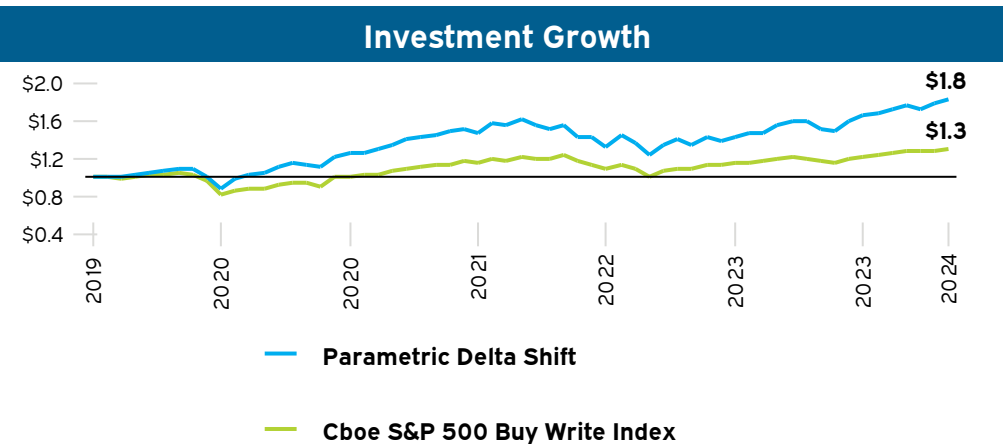
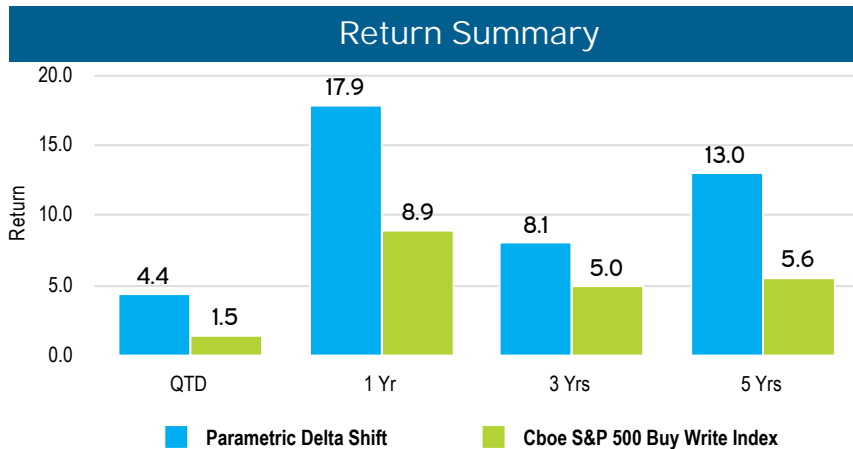
Risk Reward



Statistics Summary 5 Years Ending June 30, 2024									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
Parametric BXM	3.9	0.8	0.7	0.6	4.1	0.9	99.9	78.8	
Cboe S&P 500 Buy Write Index	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0	



Statistics Summary 5 Years Ending June 30, 2024									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
Parametric Delta Shift	6.5	1.2	1.0	0.7	7.4	0.8	155.2	124.9	
Cboe S&P 500 Buy Write Index	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0	



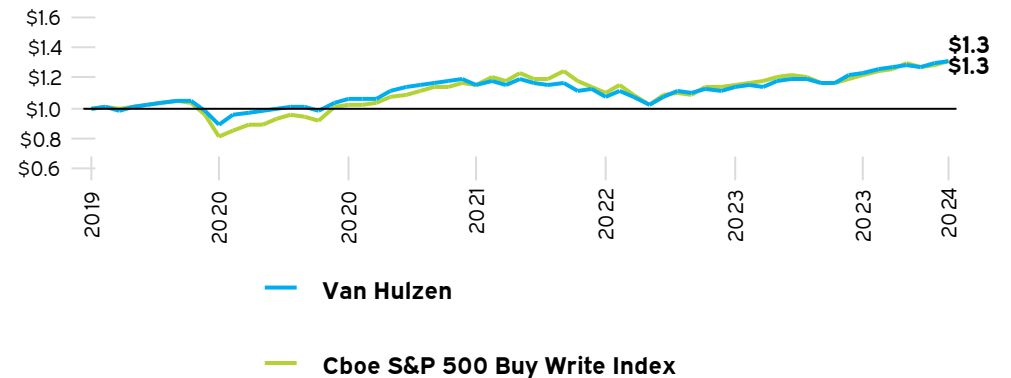
Statistics Summary 5 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Van Hulzen	1.5	0.7	-0.1	0.4	5.4	0.8	84.2	78.8
Cboe S&P 500 Buy Write Index	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0

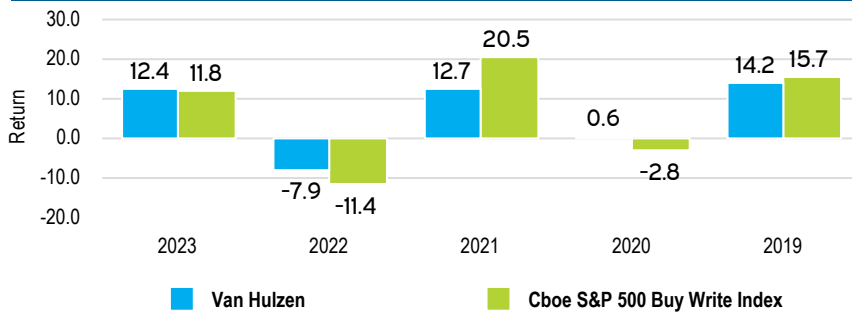
Return Summary



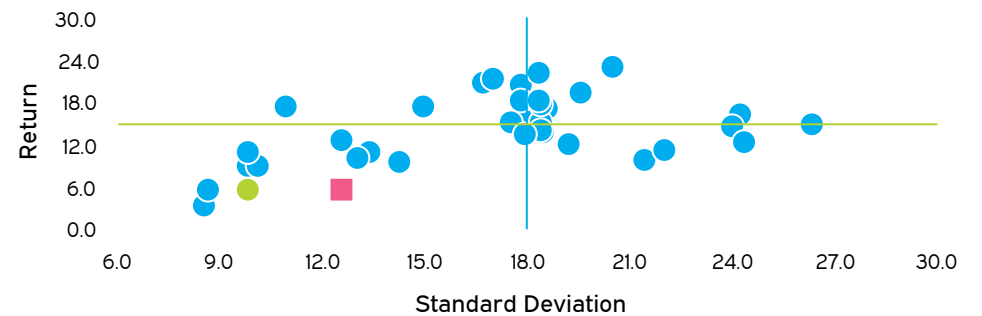
Investment Growth



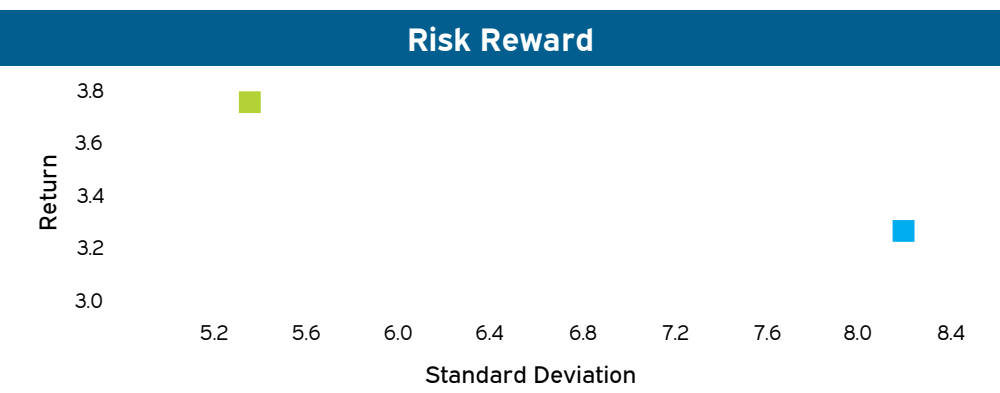
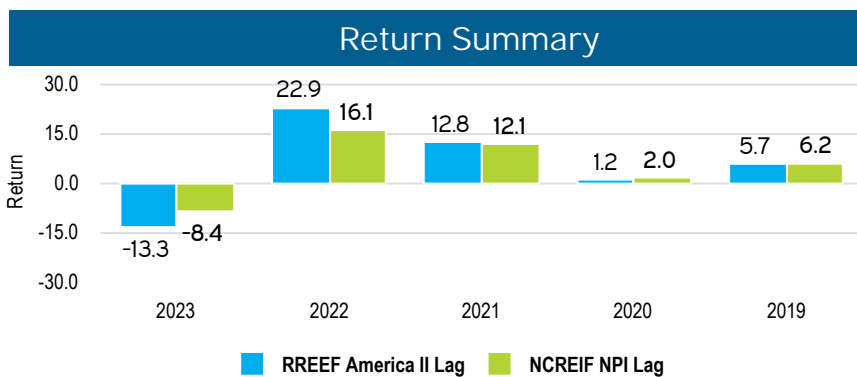
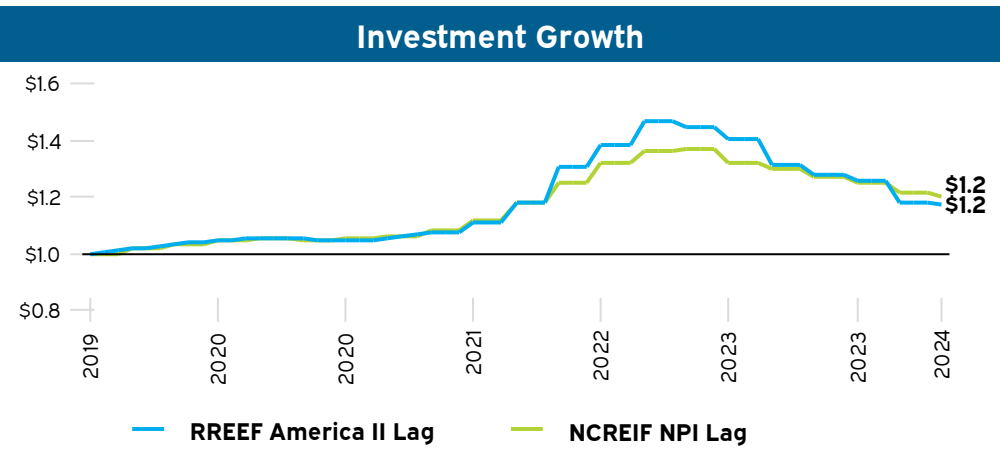
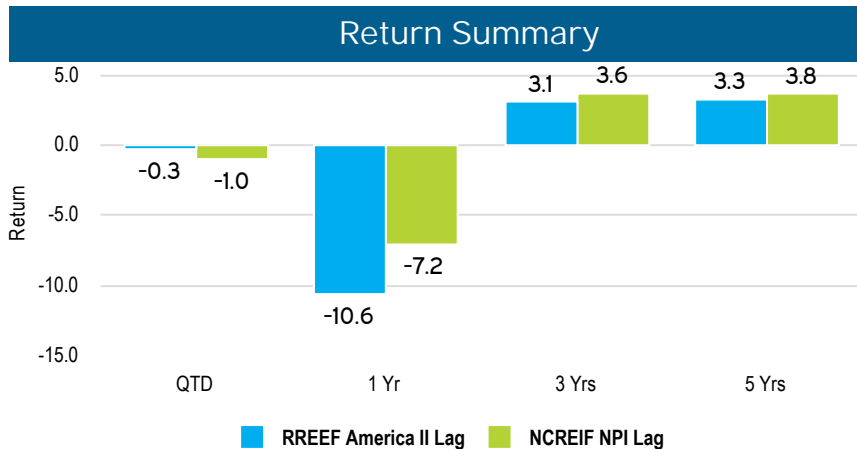
Return Summary



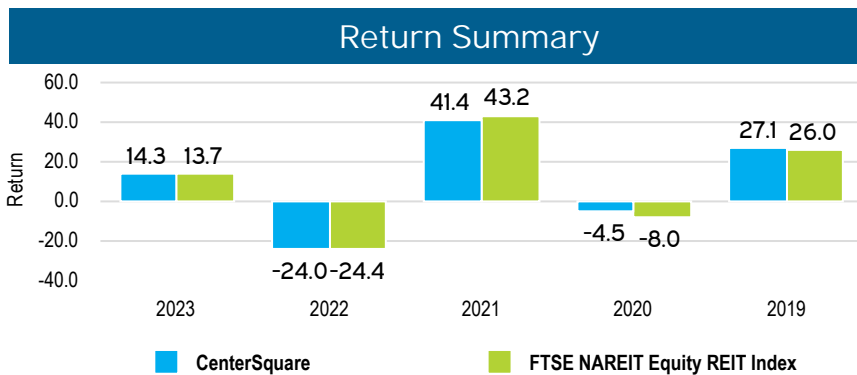
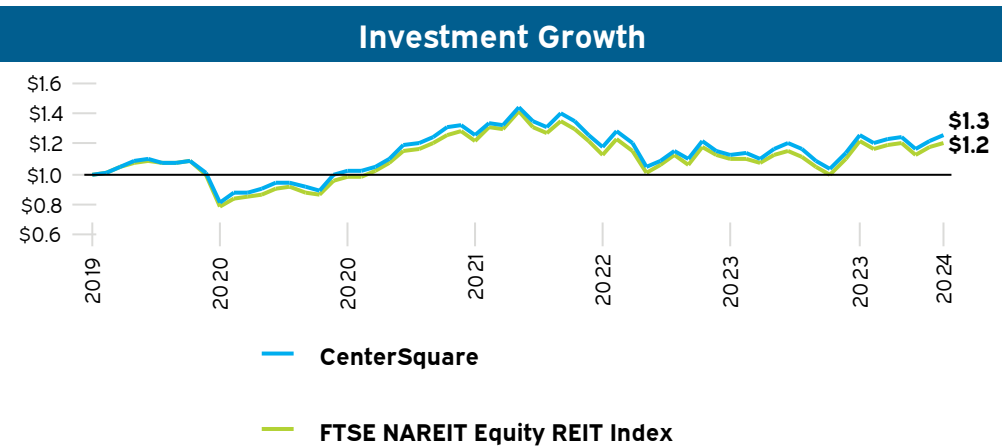
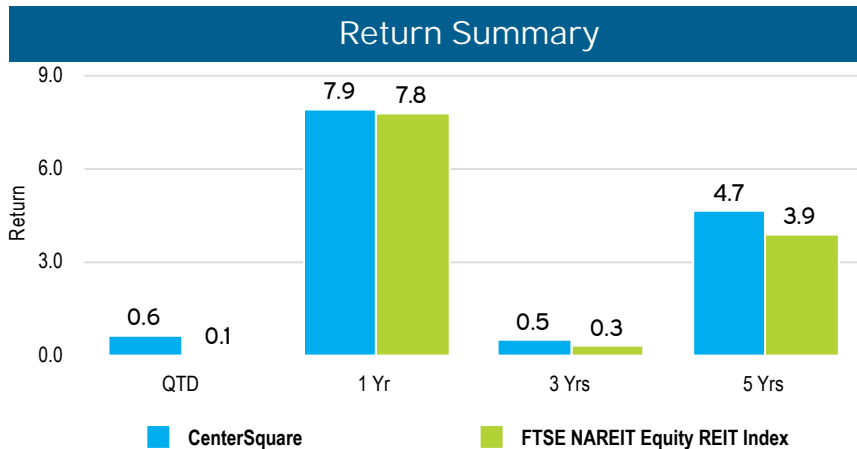
Risk Reward



Statistics Summary									
5 Years Ending June 30, 2024									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
RREEF America II Lag	-1.6	1.3	-0.1	0.2	3.9	0.8	116.5	150.8	
NCREIF NPI Lag	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0	



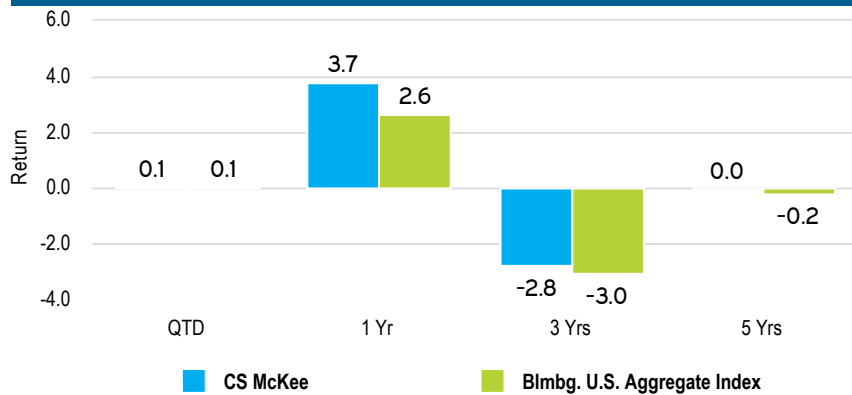
Statistics Summary									
5 Years Ending June 30, 2024									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
CenterSquare	0.8	1.0	0.4	0.2	1.7	1.0	99.9	97.5	
FTSE NAREIT Equity REIT Index	0.0	1.0	-	0.2	0.0	1.0	100.0	100.0	



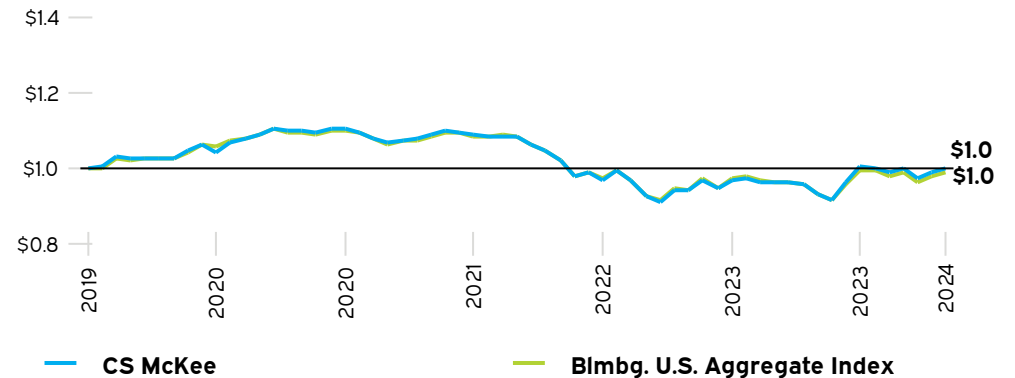
Statistics Summary 5 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
CS McKee	0.3	1.0	0.3	-0.3	0.9	1.0	106.7	103.4
Blmbg. U.S. Aggregate Index	0.0	1.0	-	-0.4	0.0	1.0	100.0	100.0

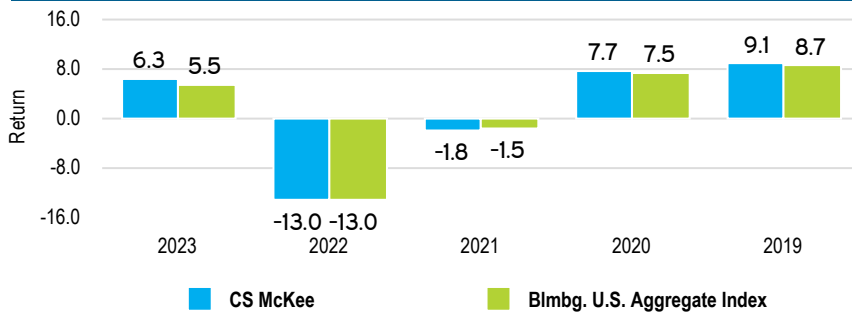
Return Summary



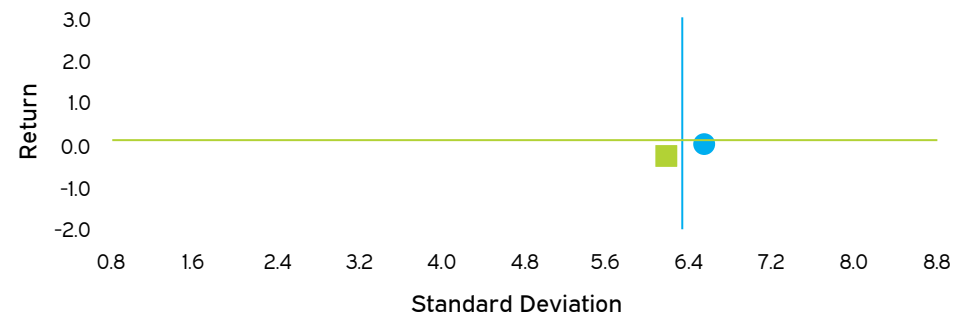
Investment Growth



Return Summary



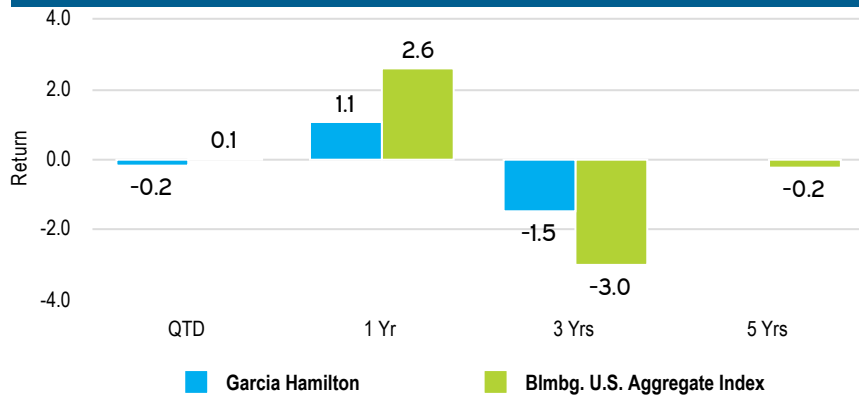
Risk Reward



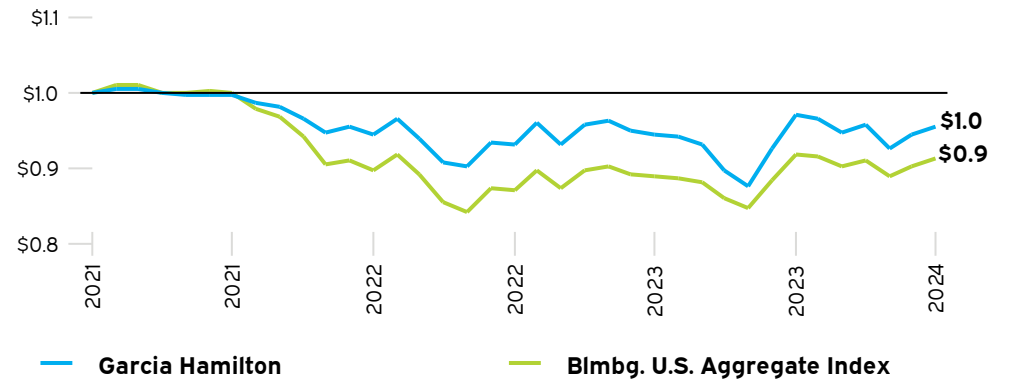
Statistics Summary 3 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Garcia Hamilton	1.5	1.0	0.7	-0.6	2.2	0.9	108.1	92.6
Blmbg. U.S. Aggregate Index	0.0	1.0	-	-0.8	0.0	1.0	100.0	100.0

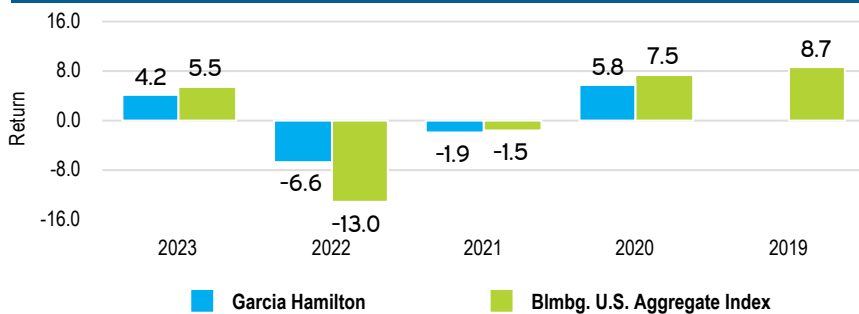
Return Summary



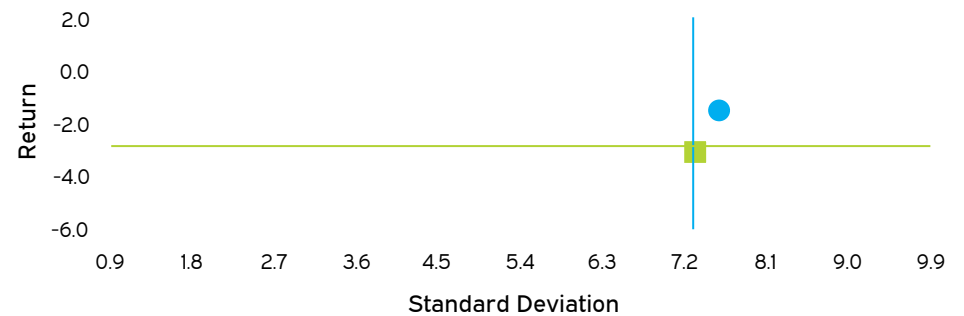
Investment Growth



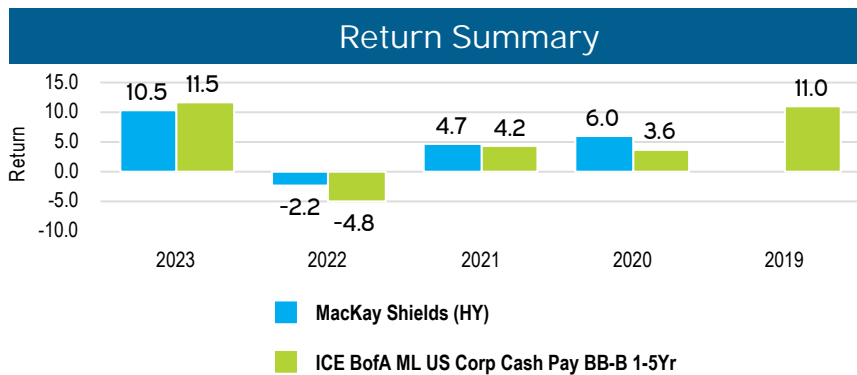
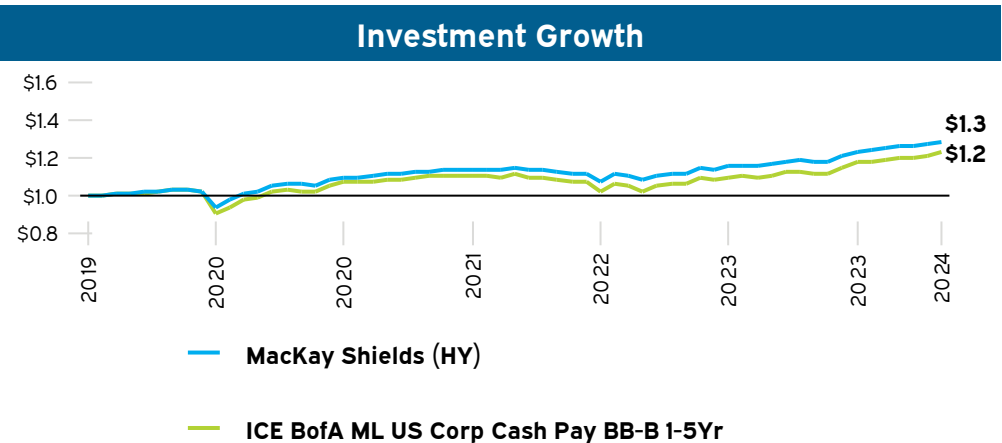
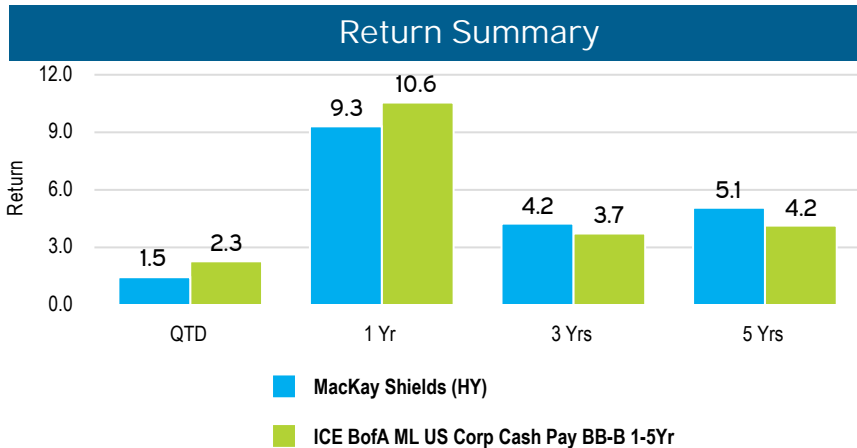
Return Summary



Risk Reward



Statistics Summary									
5 Years Ending June 30, 2024									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
Mackay Shields (HY)	1.9	0.7	0.3	0.5	2.3	1.0	84.2	61.0	
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	0.0	1.0	-	0.3	0.0	1.0	100.0	100.0	

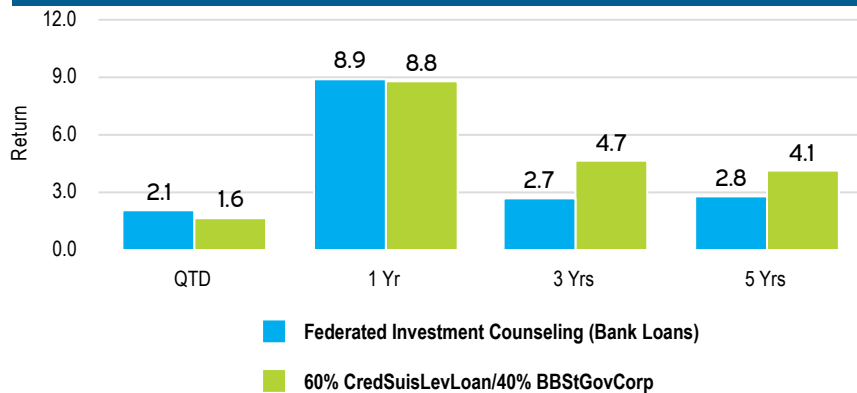


Statistics Summary

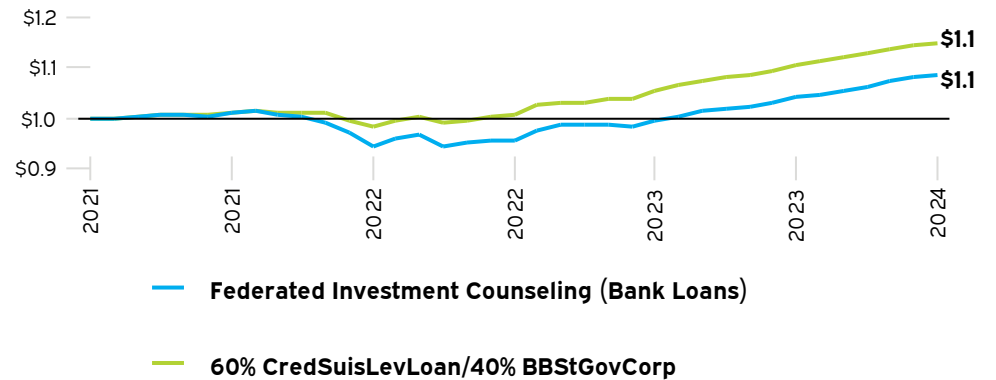
3 Years Ending June 30, 2024

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Federated Investment Counseling (Bank Loans)	-3.5	1.4	-1.2	-0.1	1.5	0.9	90.0	183.5
60% CredSuisLevLoan/40% BBStGovCorp	0.0	1.0	-	0.8	0.0	1.0	100.0	100.0

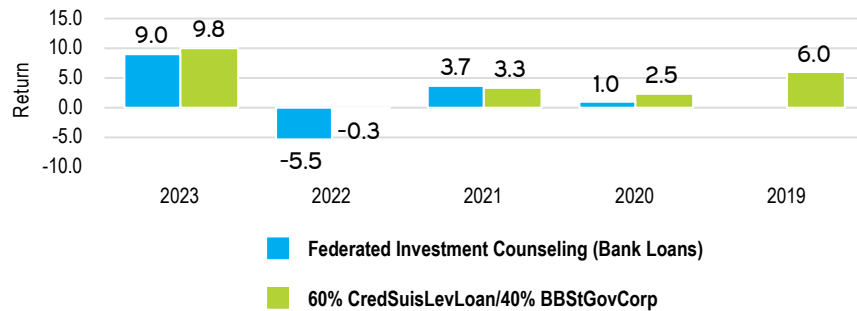
Return Summary



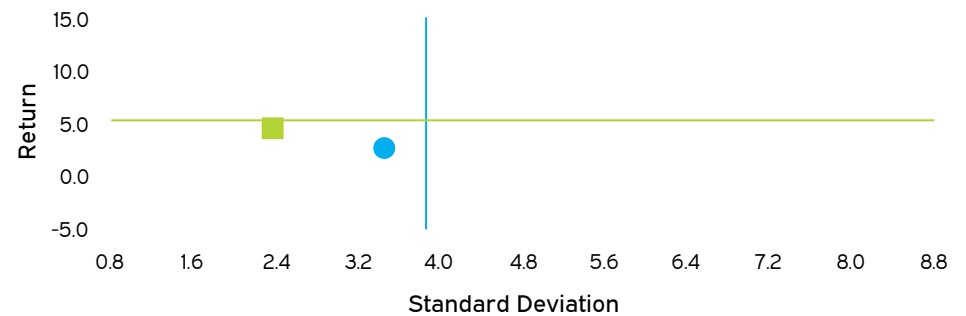
Investment Growth



Return Summary



Risk Reward



	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,505,029,208	1.9	12.5	3.5	7.6
<i>Total Plan Bench</i>		<i>1.6</i>	<i>12.2</i>	<i>3.4</i>	<i>6.9</i>
US Equity Composite	709,103,394	3.2	23.1	8.1	14.1
<i>Russell 3000 Hybrid</i>		<i>3.2</i>	<i>23.1</i>	<i>8.1</i>	<i>14.1</i>
Northern Trust Russell 3000	708,236,423	3.2	23.1	8.1	14.1
<i>Russell 3000 Index</i>		<i>3.2</i>	<i>23.1</i>	<i>8.1</i>	<i>14.1</i>
Non US Equity Composite	609,493,614	1.1	11.7	0.8	5.9
<i>MSCI ACWI xUS (blend)</i>		<i>1.2</i>	<i>12.2</i>	<i>1.0</i>	<i>6.1</i>
Northern Trust ACWI ex US	609,493,614	1.1	11.7	0.7	5.6
<i>MSCI AC World ex USA index</i>		<i>1.2</i>	<i>12.2</i>	<i>1.0</i>	<i>6.1</i>
Covered Calls Composite	517,281,110	3.0	13.9	6.3	9.2
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Parametric BXM	170,292,801	2.6	11.9	6.5	8.7
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Parametric Delta Shift	182,095,223	4.4	17.9	8.1	13.0
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>
Van Hulzen	164,893,086	1.9	11.7	4.1	5.6
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.5</i>	<i>8.9</i>	<i>5.0</i>	<i>5.6</i>

	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Core Fixed Income Composite	427,176,552	0.0	2.4	-2.1	0.2
<i>Fixed Income Core Composite Bench</i>		<i>0.4</i>	<i>3.4</i>	<i>-2.1</i>	<i>--</i>
CS McKee	216,525,400	0.1	3.7	-2.8	0.0
<i>Blmbg. U.S. Aggregate Index</i>		<i>0.1</i>	<i>2.6</i>	<i>-3.0</i>	<i>-0.2</i>
Garcia Hamilton	210,651,152	-0.2	1.1	-1.5	--
<i>Blmbg. U.S. Aggregate Index</i>		<i>0.1</i>	<i>2.6</i>	<i>-3.0</i>	<i>-0.2</i>
Non-Core Fixed Income Composite	119,599,750	1.8	9.1	3.5	4.0
<i>Fixed Income Non-Core Composite Bench</i>		<i>2.0</i>	<i>9.7</i>	<i>4.2</i>	<i>4.1</i>
Mackay Shields (HY)	61,473,768	1.5	9.3	4.2	5.1
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>2.3</i>	<i>10.6</i>	<i>3.7</i>	<i>4.2</i>
Federated Investment Counseling (Bank Loans)	58,125,982	2.1	8.9	2.7	2.8
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>1.6</i>	<i>8.8</i>	<i>4.7</i>	<i>4.1</i>
Real Estate Composite	118,857,470	0.2	-1.5	1.8	4.4
<i>Real Estate Composite Benchmark</i>		<i>-0.4</i>	<i>0.6</i>	<i>2.6</i>	<i>4.5</i>
RREEF America II Lag	54,680,547	-0.3	-10.6	3.1	3.3
<i>NCREIF NPI Lag</i>		<i>-1.0</i>	<i>-7.2</i>	<i>3.6</i>	<i>3.8</i>
CenterSquare	64,176,923	0.6	7.9	0.5	4.7
<i>FTSE NAREIT Equity REIT Index</i>		<i>0.1</i>	<i>7.8</i>	<i>0.3</i>	<i>3.9</i>

	Market Value \$	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Cash Composite	3,517,318	1.1	4.2	2.6	2.3
Cash LAIF	3,517,318	1.1	4.2	2.6	2.3
<i>FTSE 3 Month T-Bill</i>		<i>1.4</i>	<i>5.6</i>	<i>3.2</i>	<i>2.2</i>

Benchmark History

From Date	To Date	Benchmark
EBMUDERS Total Plan Composite		
12/01/2019	Present	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 10.0% Blmbg. Intermed. U.S. Government/Credit, 10.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% 50% BBG EM Hard Cur Agg: Sovereign/50% BBG EM USD Aggregate Corporate TR
07/01/2018	03/01/2019	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
04/01/2014	07/01/2018	2.5% FTSE NAREIT Equity REIT Index, 40.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 10.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
03/01/2014	04/01/2014	2.5% FTSE NAREIT Equity REIT Index, 40.0% Russell 3000 Index, 15.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
11/01/2011	03/01/2014	2.5% FTSE NAREIT Equity REIT Index, 50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 2.5% NCREIF NPI Lag
01/01/2008	11/01/2011	50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 5.0% NCREIF NPI Lag
01/01/2007	01/01/2008	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI AC World ex USA index, 5.0% NCREIF NPI Lag
10/01/2005	01/01/2007	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
04/01/2005	10/01/2005	10.0% Russell 2000 Index, 30.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
09/01/1998	04/01/2005	10.0% Russell 2000 Index, 33.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 30.0% Blmbg. U.S. Aggregate Index, 17.0% MSCI EAFE (Net)
07/01/1978	09/01/1998	30.0% S&P 500 Index, 30.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill, 15.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag, 15.0% Wilshire 5000 Total Market Index

From Date	To Date	Benchmark
Fixed Income Composite		
02/01/2023	Present	80.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
12/01/2019	02/01/2023	40.0% Blmbg. Intermed. U.S. Government/Credit, 40.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
07/01/2018	03/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% Morningstar LSTA U.S. Performing Loans, 10.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
04/01/2014	07/01/2018	25.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 50.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
03/01/2014	04/01/2014	75.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
01/01/2008	03/01/2014	100.0% Blmbg. U.S. Universal Index
01/01/1976	01/01/2008	100.0% Blmbg. U.S. Aggregate Index
Fixed Income Core Fixed Income Composite		
12/01/2019	Present	50.0% Blmbg. Intermed. U.S. Government/Credit, 50.0% Blmbg. U.S. Aggregate Index
Fixed Income Non-Core Fixed Income Composite		
12/01/2019	Present	50.0% 60% CredSuisLevLoan/40% BBStGovCorp, 50.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% 60% CredSuisLevLoan/40% BBStGovCorp, 25.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2014	03/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% Morningstar LSTA U.S. Performing Loans, 25.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
Real Estate Composite		
11/01/2011	Present	50.0% NCREIF NPI Lag, 50.0% FTSE NAREIT Equity REIT Index
10/01/1998	11/01/2011	100.0% NCREIF NPI Lag
04/01/1978	10/01/1998	100.0% NCREIF Property Index

From Date	To Date	Benchmark
Garcia Hamilton		
11/01/2019	Present	Blmbg. U.S. Aggregate Index

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 ^{2,3}
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

→ No managers are 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	3.2	23.1	8.1
Russell 3000 Index	3.2	23.1	8.1

Overall Status:

Acceptable

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)

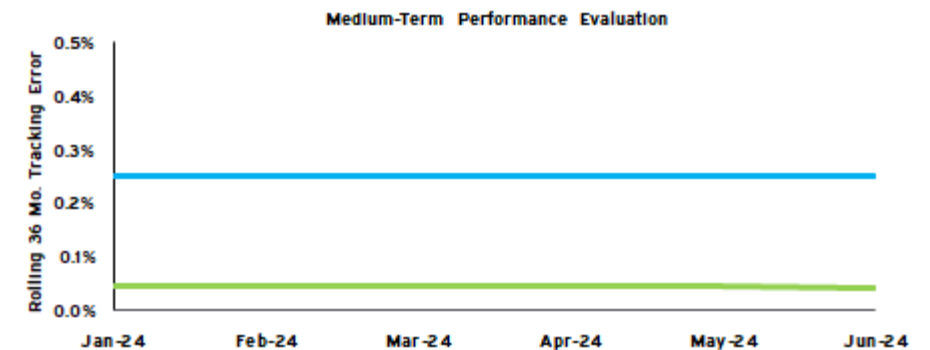
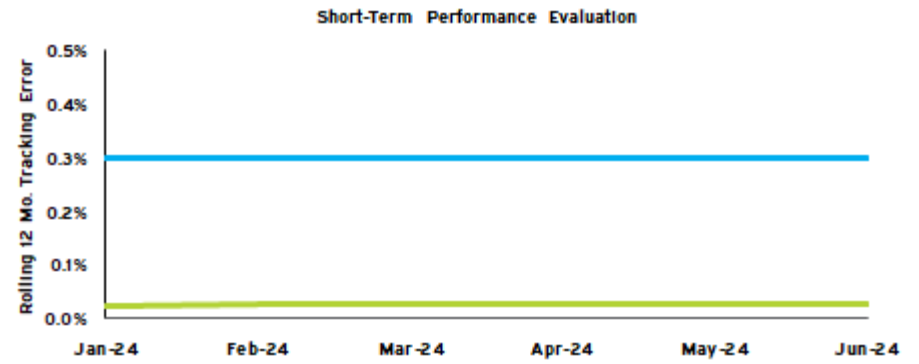
Tracking Error > 0.25% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

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

Current Status: **Not available**



— Northern Trust Russell 3000 — Threshold

Manager Performance			
	QTD	1 Yr	3 Yrs
Northern Trust ACWI ex US	1.1	11.7	0.7
MSCI AC World ex USA index	1.2	12.2	1.0

Overall Status:

Acceptable

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)

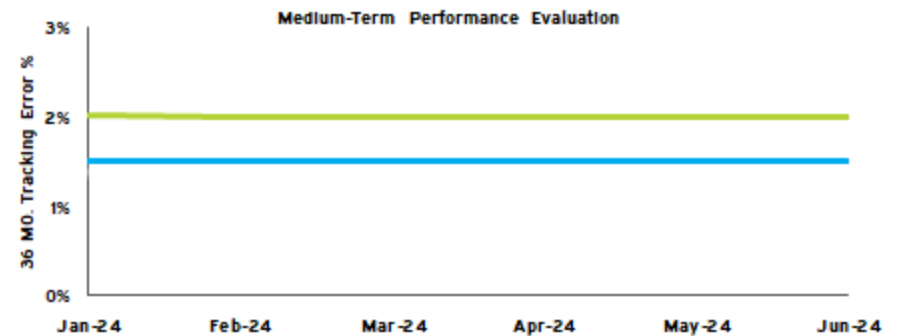
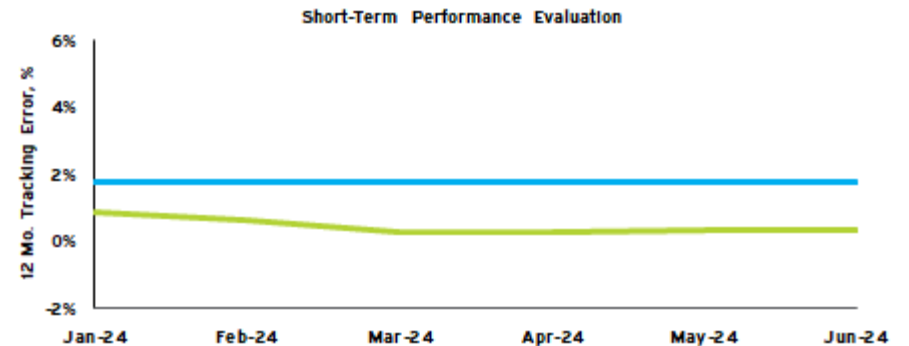
Tracking Error > 1.5% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

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

Current Status: **Not available**



— Northern Trust ACWI ex US — Threshold

Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Parametric BXM	2.6	11.9	6.5	8.7
Cboe S&P 500 Buy Write Index	1.5	8.9	5.0	5.6

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



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs (%)
Parametric Delta Shift	4.4	17.9	8.1	13.0
Cboe S&P 500 Buy Write Index	1.5	8.9	5.0	5.6

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**

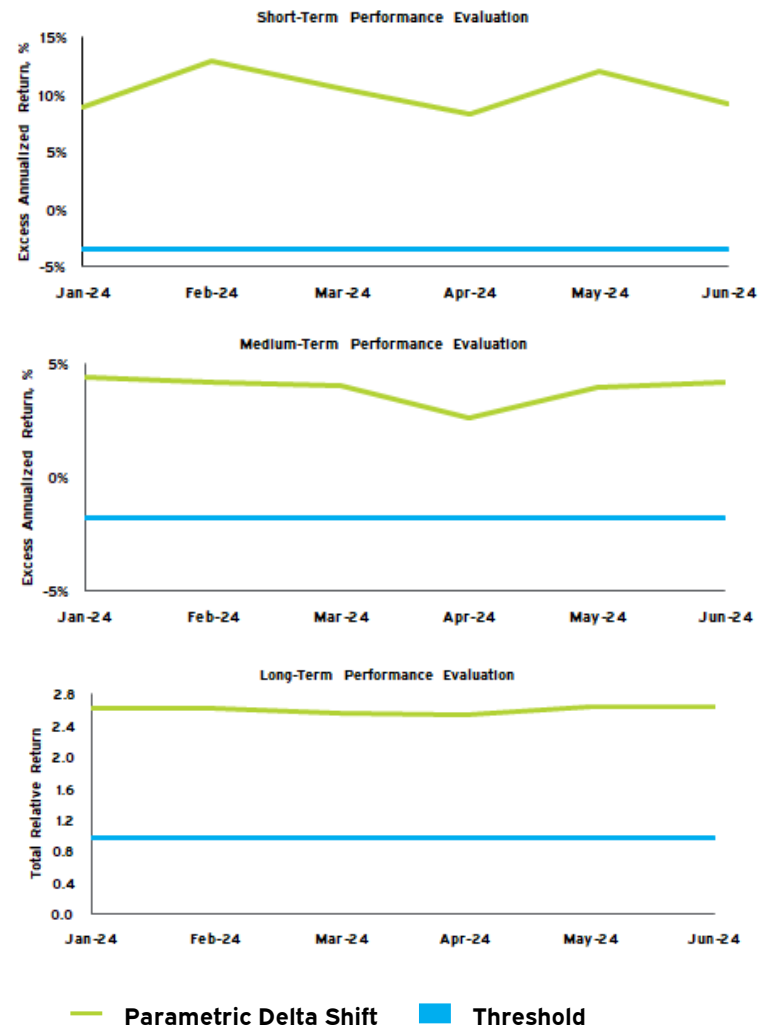
Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**

Overall Status:

Acceptable



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Van Hulzen	1.9	11.7	4.1	5.6
Cboe S&P 500 Buy Write Index	1.5	8.9	5.0	5.6

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**

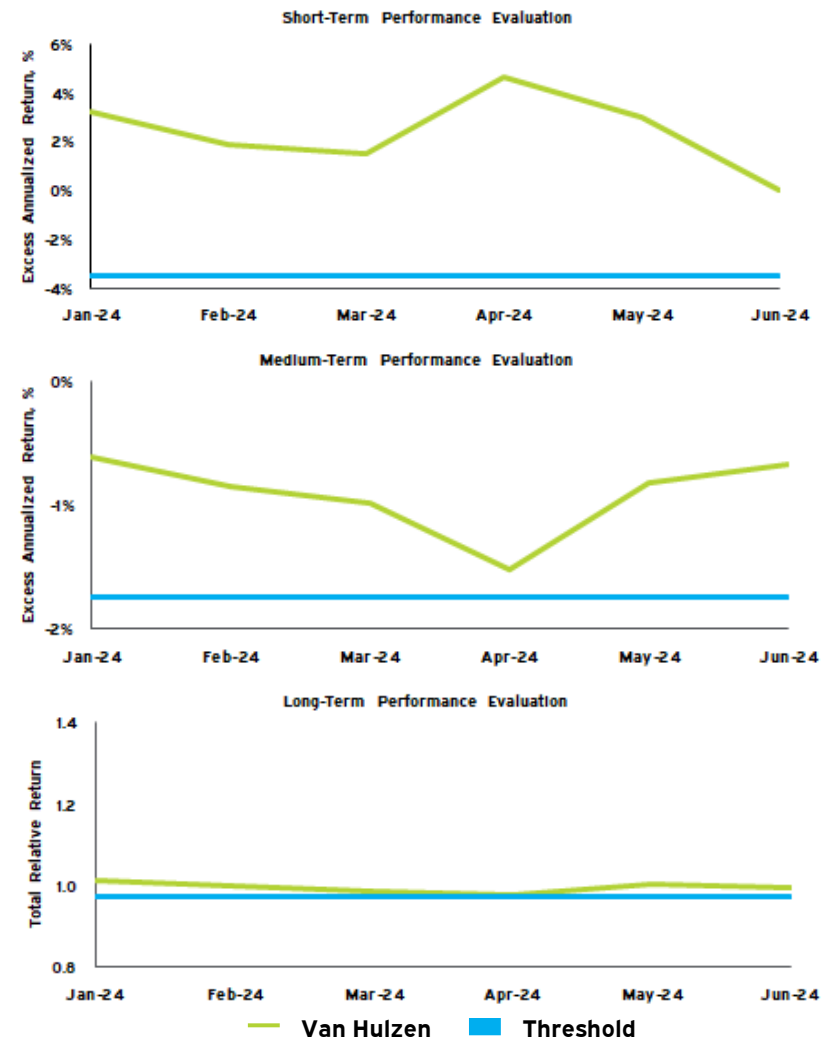
Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

Current Status: **Acceptable**

Overall Status:

Acceptable



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
CS McKee	0.1	3.7	-2.8	0.0
Blmbg. U.S. Aggregate Index	0.1	2.6	-3.0	-0.2

Overall Status:

Acceptable

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)

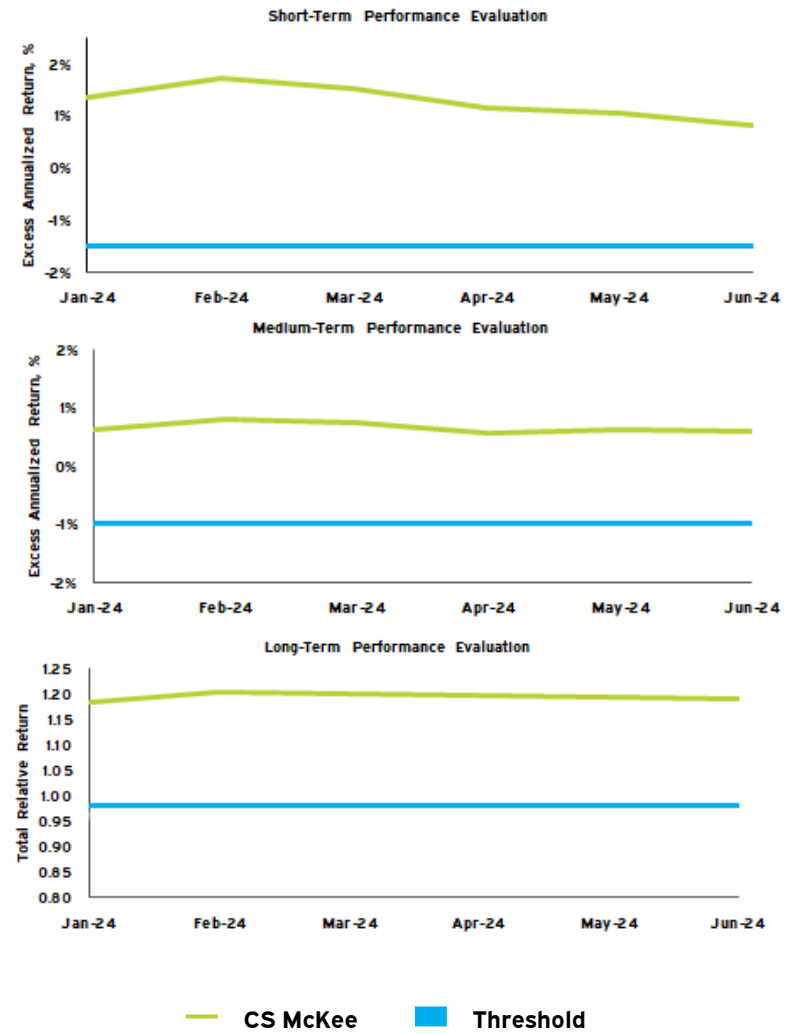
Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

Current Status: **Acceptable**



Manager Performance			
	QTD	1 Yr	3 Yrs
Garcia Hamilton	-0.2	1.1	-1.5
Blmbg. U.S. Aggregate Index	0.1	2.6	-3.0

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**

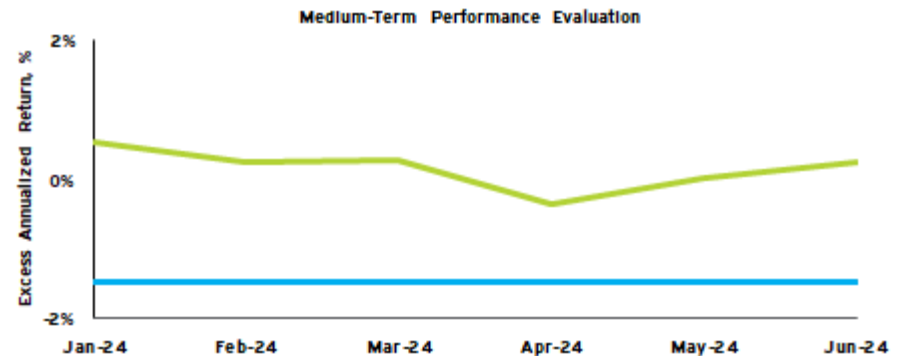
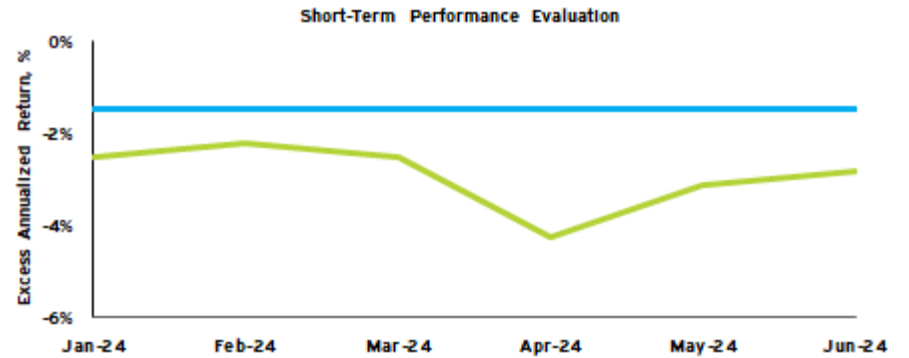
Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

Current Status: Not Applicable

Overall Status:

Acceptable



— Garcia Hamilton ■ Threshold

Manager Performance			
	QTD	1 Yr	3 Yrs
MacKay Shields (HY)	1.5	9.3	4.2
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	2.3	10.6	3.7

Overall Status:

Acceptable

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)

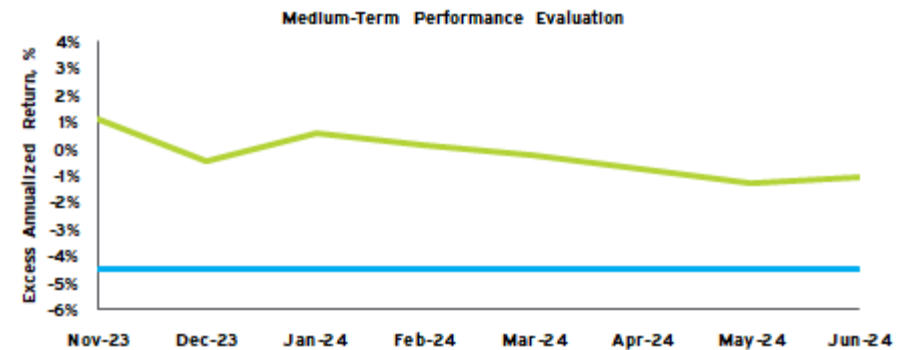
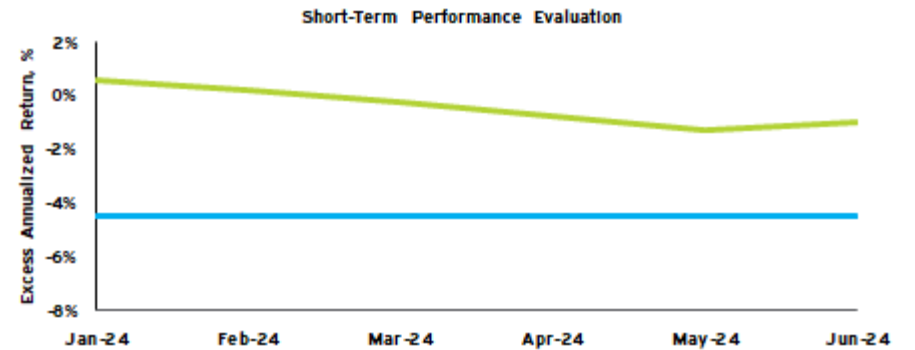
Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: Not Applicable



— MacKay Shields (HY) ■ Threshold

Manager Performance			
	QTD	1 Yr	3 Yrs
Federated Investment Counseling (Bank Loans)	2.1	8.9	2.7
60% CredSuisLevLoan/40% BBStGovCorp	1.6	8.8	4.7

Overall Status:

Acceptable

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)

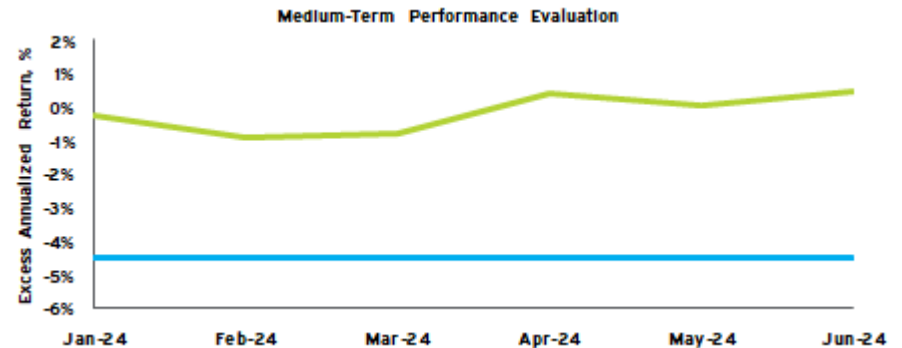
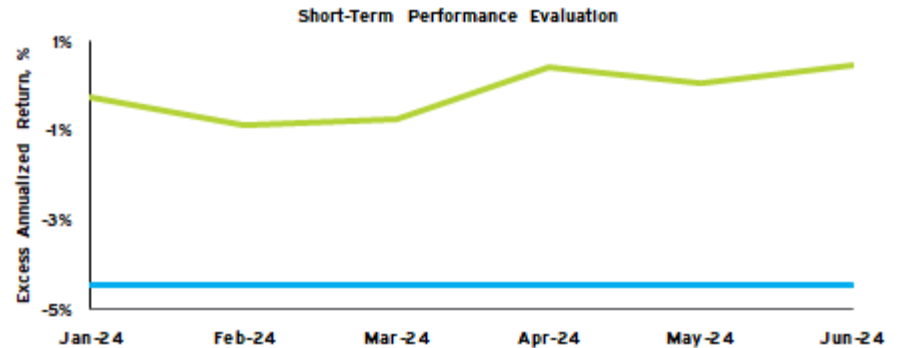
Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**



— Federated Investment Counseling (Bank Loans) ■ Threshold

Manager Performance			
	QTD	1 Yr	3 Yrs
CenterSquare	0.6	7.9	0.5
FTSE NAREIT Equity REIT Index	0.1	7.8	0.3

Overall Status:

Acceptable

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)

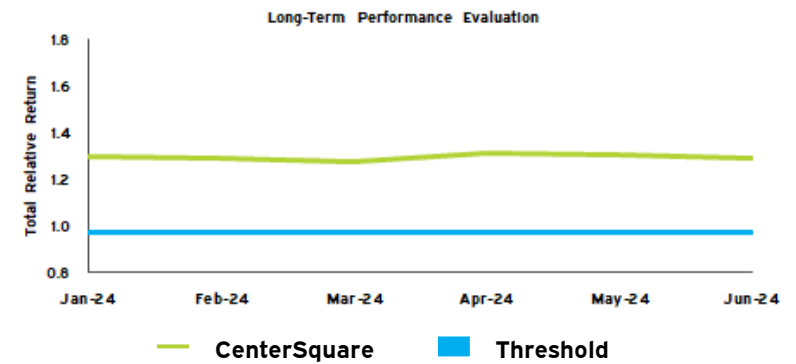
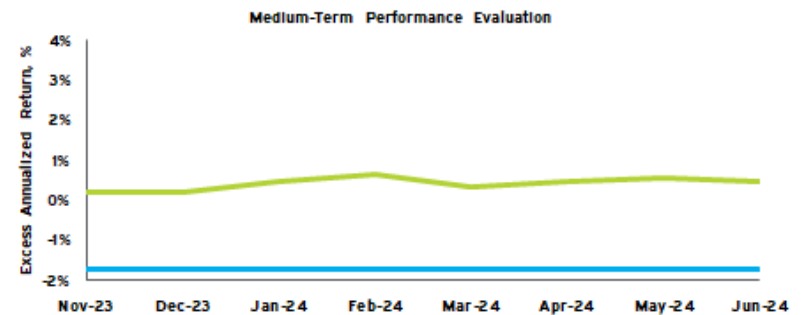
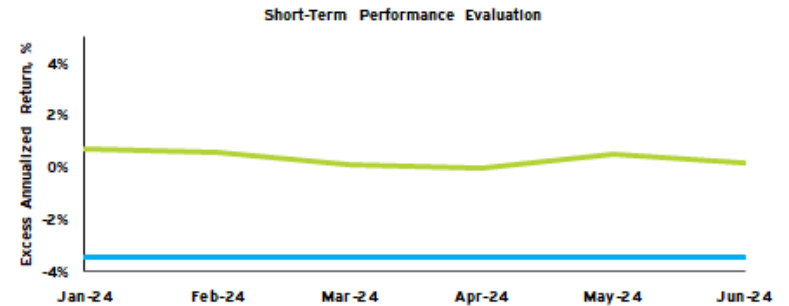
Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**



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	No	Yes*	No	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:

- June; David Abner joined NTAM as Head of Global ETFs & Funds. Dave will oversee the teams responsible for Mutual Fund and ETF product strategy, research & development, product management and capital markets, as well as fund services oversight and treasury functions. He will report to Paula Kar and join NTAM's Product Leadership.
- June; After nine years of service to Northern Trust, Maureen Bromwell, chief marketing officer for Asset Management (NTAM) has decided to leave to pursue other interests. The recruitment process for her successor will begin immediately. In the interim, Kelly Mannard, chief marketing and communications officer, will oversee the NTAM marketing team.
- April; After 37 years in the industry and serving Northern Trust for the past 8 years, John Abunassar, Head of our Global Institutional Client Group (GICG) has announced his decision to retire in June. A recruitment process for a new head of GICG is underway and will be filled by NTAM President, Daniel Gamba in the interim.
- April; Christian Roth, CFA joined NTAM as Chief Investment Officer for Global Fixed Income. Chris brings several years of experience managing fixed income investments and large teams of investment professionals since 1991. He will report directly to Angelo Manioudakis, Global CIO for Asset Management.

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

→ The Parametric Technology team revised its organizational structure to pursue the growing demands of technology to support business growth, integrate further with Morgan Stanley technology policies, and to innovate.

→ The following are key changes that were effective May 1, 2024:

- Alan Moore joined Parametric on April 1, 2024 to lead Architecture, Data and AI for the Radius platform. This team is responsible for AI Engineering, Data Engineering, Data Governance and Services, and Reporting and Workflow Architecture.
- Lane McLaughlin is leading a newly created team focused on Developer Experience with the significant focus on technology process integration with Morgan Stanley. This team is responsible for Platform Engineering, Software Development Lifecycle (SDLC), and Quality Assurance.
- Shivani Patil continues to lead the Platform Solution Management (PSM) and Digital Platform teams.
- Stephanie Nicolai continues to lead the Process Resilience and Execution organization including Production Support, Project Management Office, Business Continuity, Technical Integration, and Controls.
- Vlad Gomelsky is leading the Trading and Core Platform team. This team aims to deliver scalable solutions across asset classes for Trading and Operations and will develop foundational Core services for the Radius platform. This team is responsible for Trading and Surveillance, Operations Technology, Core Radius Services, and Derivatives Investment Systems.
- Christopher Richards is leading the Investment Systems and Client Activities team. This team is responsible for Client Activity, Restrictions and Client Instructions, Onboarding, Fixed Income Investment Systems, Workflow Automation and Management, Equity Investments Systems, and Investment Services. This team will now include Fixed Income Investment systems.

Garcia Hamilton

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

→ Janna Hamilton and Beth McWilliams (CCO) have elected to retire from GH&A after 30 years of service.

CenterSquare

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

→ After more than 21 years of devoted service to CenterSquare David Rabin, Executive Director, Private Real Estate, retired from his position on April 15, 2024.

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.

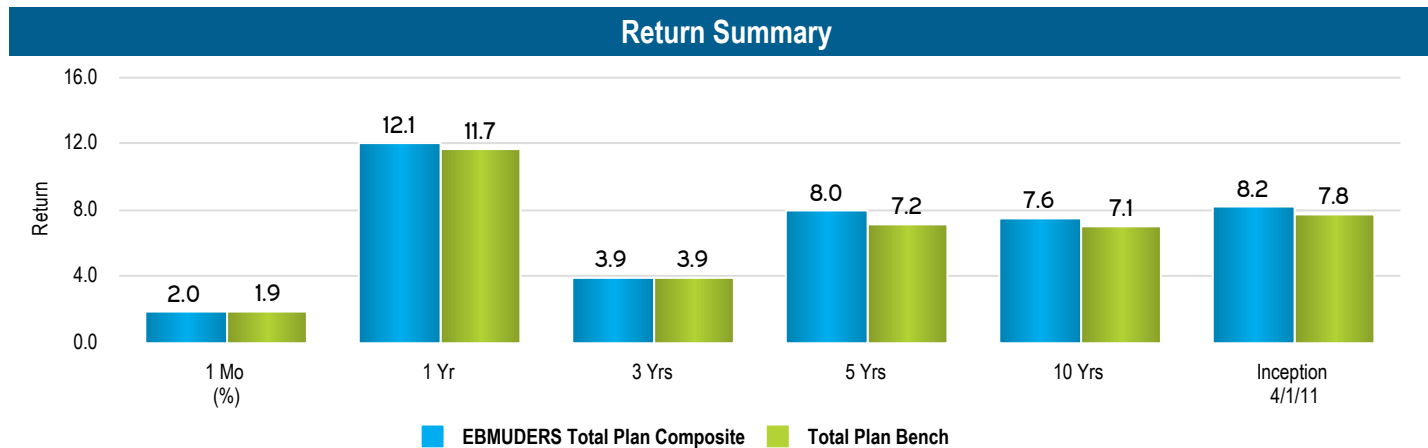
Gross = 6.0% Net = 5.2% (as of December 31, 2023)¹
7. Any other information required to be collected pursuant to Section 7514.7.

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.

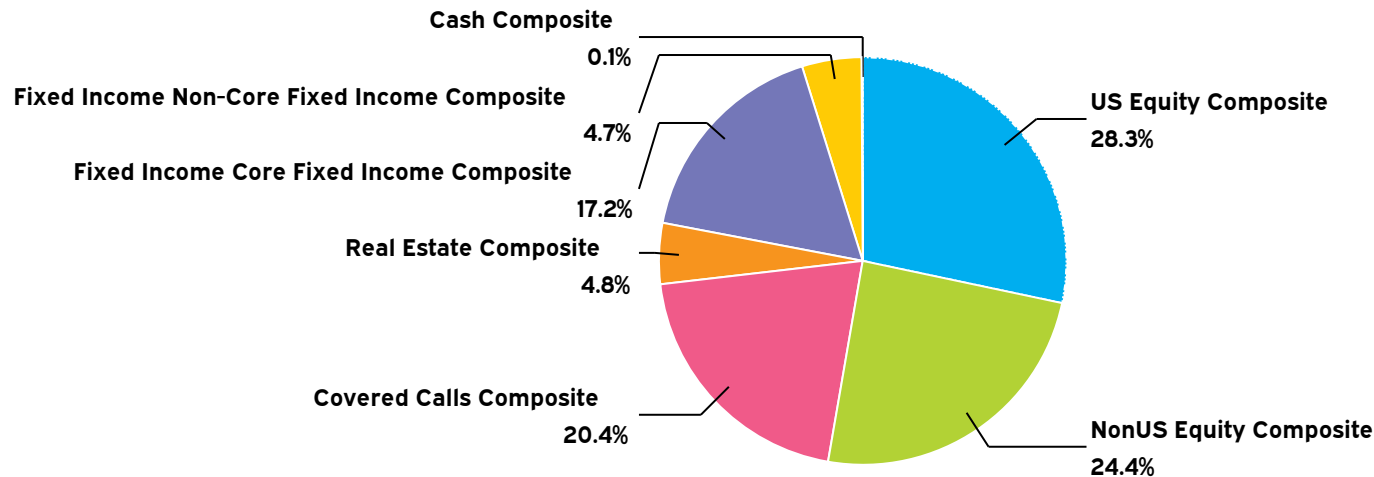
Gross of Fees Performance Snapshot
as of July 31, 2024

Summary of Cash Flows		
	QTD	1 Yr
EBMUDERS Total Plan Composite		
Beginning Market Value	\$2,505,029,208	\$2,298,181,310
Net Cash Flow	-\$3,351,000	-\$24,614,926
Net Investment Change	\$49,325,694	\$277,437,518
Ending Market Value	\$2,551,003,903	\$2,551,003,903



Benchmark definitions are listed at the end of this report.

Allocation vs. Targets and Policy				
	Current Balance (\$)	Current Allocation (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	\$722,248,308	28	20 - 30	Yes
International Equity	\$622,966,676	24	20 - 30	Yes
Covered Calls	\$521,303,038	20	17 - 23	Yes
Real Estate	\$123,157,561	5	3 - 7	Yes
Core Fixed Income	\$438,405,584	17	17 - 23	Yes
Non-Core Fixed Income	\$120,274,356	5	3 - 7	Yes
Cash	\$2,648,380	0	0 - 5	Yes
Total	\$2,551,003,903	100		



EBMUDERS | As of July 31, 2024

	Market Value \$	% of Portfolio	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
EBMUDERS Total Plan Composite	2,551,003,903	100.0	2.0	12.2	4.0	8.1	7.8	7.9	9.5	Aug-84
<i>Total Plan Benchmark</i>			<i>1.9</i>	<i>11.7</i>	<i>3.9</i>	<i>7.2</i>	<i>7.1</i>	<i>7.4</i>	<i>9.6</i>	
US Equity Composite	722,248,308	28.3	1.9	21.1	8.1	14.2	12.8	10.5	11.7	Aug-84
<i>Russell 3000 Hybrid</i>			<i>1.9</i>	<i>21.1</i>	<i>8.1</i>	<i>14.2</i>	<i>12.6</i>	<i>10.5</i>	<i>--</i>	
Non-US Equity Composite	622,966,676	24.4	2.2	9.8	2.0	6.9	4.5	6.6	6.6	Jul-95
<i>MSCI ACWI xUS (blend)</i>			<i>2.3</i>	<i>10.3</i>	<i>2.3</i>	<i>6.8</i>	<i>4.7</i>	<i>6.3</i>	<i>5.5</i>	
Covered Calls Composite	521,303,038	20.4	1.2	13.5	6.4	9.5	8.7	--	9.5	Feb-14
<i>Cboe S&P 500 Buy Write Index</i>			<i>1.1</i>	<i>8.6</i>	<i>5.2</i>	<i>5.6</i>	<i>5.9</i>	<i>5.6</i>	<i>6.4</i>	
Real Estate Composite	123,157,561	4.8	3.6	1.2	2.5	5.5	7.7	--	6.1	Jan-07
<i>Real Estate Composite Benchmark</i>			<i>3.1</i>	<i>2.2</i>	<i>2.8</i>	<i>5.0</i>	<i>7.0</i>	<i>8.0</i>	<i>6.7</i>	
Fixed Income Composite	558,679,940	21.9	2.2	6.3	-0.2	1.6	2.3	3.8	6.6	Aug-84
<i>Fixed Income Composite Benchmark</i>			<i>2.1</i>	<i>6.0</i>	<i>-0.7</i>	<i>1.3</i>	<i>2.2</i>	<i>3.5</i>	<i>6.4</i>	
Cash Composite	2,648,380	0.1	1.3	4.5	3.0	2.3	1.7	2.0	2.9	Apr-96
<i>FTSE 3 Month T-Bill</i>			<i>0.5</i>	<i>5.7</i>	<i>3.3</i>	<i>2.3</i>	<i>1.6</i>	<i>1.6</i>	<i>2.2</i>	

Benchmark definitions are listed at the end of this report.

	Market Value \$	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,551,003,903	2.0	12.2	4.0	8.1
<i>Total Plan Bench</i>		<i>1.9</i>	<i>11.7</i>	<i>3.9</i>	<i>7.2</i>
US Equity Composite	722,248,308	1.9	21.1	8.1	14.2
<i>Russell 3000 Hybrid</i>		<i>1.9</i>	<i>21.1</i>	<i>8.1</i>	<i>14.2</i>
Northern Trust Russell 3000	721,373,471	1.9	21.1	8.1	14.2
<i>Russell 3000 Index</i>		<i>1.9</i>	<i>21.1</i>	<i>8.1</i>	<i>14.2</i>
Non US Equity Composite	622,966,676	2.2	9.8	2.0	6.9
<i>MSCI ACWI xUS (blend)</i>		<i>2.3</i>	<i>10.3</i>	<i>2.3</i>	<i>6.8</i>
Northern Trust ACWI ex US	622,966,676	2.2	9.8	2.1	6.5
<i>MSCI AC World ex USA index</i>		<i>2.3</i>	<i>10.3</i>	<i>2.3</i>	<i>6.8</i>
Covered Calls Composite	521,303,038	1.2	13.5	6.4	9.5
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.1</i>	<i>8.6</i>	<i>5.2</i>	<i>5.6</i>
Parametric BXM	172,040,880	1.0	11.6	6.6	8.9
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.1</i>	<i>8.6</i>	<i>5.2</i>	<i>5.6</i>
Parametric Delta Shift	181,263,514	0.8	16.5	8.0	13.1
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.1</i>	<i>8.6</i>	<i>5.2</i>	<i>5.6</i>
Van Hulzen	167,998,644	1.9	12.3	4.7	6.2
<i>Cboe S&P 500 Buy Write Index</i>		<i>1.1</i>	<i>8.6</i>	<i>5.2</i>	<i>5.6</i>

	Market Value \$	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Core Fixed Income Composite	438,405,584	2.6	5.6	-1.4	0.8
<i>Fixed Income Core Composite Bench</i>		<i>2.1</i>	<i>5.5</i>	<i>-1.7</i>	<i>--</i>
CS McKee	221,660,191	2.4	6.6	-2.1	0.6
<i>Blmbg. U.S. Aggregate Index</i>		<i>2.3</i>	<i>5.1</i>	<i>-2.6</i>	<i>0.2</i>
Garcia Hamilton	216,745,393	2.9	4.6	-0.6	--
<i>Blmbg. U.S. Aggregate Index</i>		<i>2.3</i>	<i>5.1</i>	<i>-2.6</i>	<i>0.2</i>
Non-Core Fixed Income Composite	120,274,356	0.6	9.1	4.1	4.4
<i>Fixed Income Non-Core Composite Bench</i>		<i>1.1</i>	<i>9.7</i>	<i>4.6</i>	<i>4.3</i>
Mackay Shields (HY)	62,124,183	1.1	9.7	5.0	5.6
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>1.5</i>	<i>10.9</i>	<i>4.2</i>	<i>4.4</i>
Federated Investment Counseling (Bank Loans)	58,150,173	0.1	8.6	3.3	3.1
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>0.7</i>	<i>8.5</i>	<i>4.9</i>	<i>4.2</i>
Real Estate Composite	123,157,561	3.6	1.2	2.5	5.5
<i>Real Estate Composite Benchmark</i>		<i>3.1</i>	<i>2.2</i>	<i>2.8</i>	<i>5.0</i>
RREEF America II Lag	54,680,547	0.0	-9.7	4.0	4.1
<i>NCREIF NPI Lag</i>		<i>0.0</i>	<i>-7.2</i>	<i>3.6</i>	<i>3.8</i>
CenterSquare	68,477,014	6.7	12.1	1.2	6.1
<i>FTSE NAREIT Equity REIT Index</i>		<i>6.2</i>	<i>11.3</i>	<i>0.7</i>	<i>4.9</i>

	Market Value \$	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Cash Composite	2,648,380	1.3	4.5	3.0	2.3
Cash LAIF	2,648,380	1.3	4.5	3.0	2.3
<i>FTSE 3 Month T-Bill</i>		<i>0.5</i>	<i>5.7</i>	<i>3.3</i>	<i>2.3</i>

Benchmark History

From Date	To Date	Benchmark
EBMUDERS Total Plan Composite		
12/01/2019	Present	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 10.0% Blmbg. Intermed. U.S. Government/Credit, 10.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% 50% BBG EM Hard Cur Agg: Sovereign/50% BBG EM USD Aggregate Corporate TR
07/01/2018	03/01/2019	2.5% FTSE NAREIT Equity REIT Index, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
04/01/2014	07/01/2018	2.5% FTSE NAREIT Equity REIT Index, 40.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 10.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
03/01/2014	04/01/2014	2.5% FTSE NAREIT Equity REIT Index, 40.0% Russell 3000 Index, 15.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
11/01/2011	03/01/2014	2.5% FTSE NAREIT Equity REIT Index, 50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 2.5% NCREIF NPI Lag
01/01/2008	11/01/2011	50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 5.0% NCREIF NPI Lag
01/01/2007	01/01/2008	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI AC World ex USA index, 5.0% NCREIF NPI Lag
10/01/2005	01/01/2007	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
04/01/2005	10/01/2005	10.0% Russell 2000 Index, 30.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
09/01/1998	04/01/2005	10.0% Russell 2000 Index, 33.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 30.0% Blmbg. U.S. Aggregate Index, 17.0% MSCI EAFE (Net)
07/01/1978	09/01/1998	30.0% S&P 500 Index, 30.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill, 15.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag, 15.0% Wilshire 5000 Total Market Index

From Date	To Date	Benchmark
Fixed Income Composite		
02/01/2023	Present	80.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
12/01/2019	02/01/2023	40.0% Blmbg. Intermed. U.S. Government/Credit, 40.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
07/01/2018	03/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% Morningstar LSTA U.S. Performing Loans, 10.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
04/01/2014	07/01/2018	25.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 50.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
03/01/2014	04/01/2014	75.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
01/01/2008	03/01/2014	100.0% Blmbg. U.S. Universal Index
01/01/1976	01/01/2008	100.0% Blmbg. U.S. Aggregate Index
Fixed Income Core Fixed Income Composite		
12/01/2019	Present	50.0% Blmbg. Intermed. U.S. Government/Credit, 50.0% Blmbg. U.S. Aggregate Index
Fixed Income Non-Core Fixed Income Composite		
12/01/2019	Present	50.0% 60% CredSuisLevLoan/40% BBStGovCorp, 50.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% 60% CredSuisLevLoan/40% BBStGovCorp, 25.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2014	03/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% Morningstar LSTA U.S. Performing Loans, 25.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
Real Estate Composite		
11/01/2011	Present	50.0% NCREIF NPI Lag, 50.0% FTSE NAREIT Equity REIT Index
10/01/1998	11/01/2011	100.0% NCREIF NPI Lag
04/01/1978	10/01/1998	100.0% NCREIF Property Index

From Date	To Date	Benchmark
Garcia Hamilton		
11/01/2019	Present	Blmbg. U.S. Aggregate Index

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>

THIS REPORT (THE "REPORT") HAS BEEN PREPARED FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT, AND IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. THE INFORMATION CONTAINED HEREIN, INCLUDING ANY OPINIONS OR RECOMMENDATIONS, REPRESENTS OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND IS SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK, AND THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

THE INFORMATION USED TO PREPARE THIS REPORT MAY HAVE BEEN OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. SOME OF THIS REPORT MAY HAVE BEEN PRODUCED WITH THE ASSISTANCE OF ARTIFICIAL INTELLIGENCE ("AI") TECHNOLOGY. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY, ADEQUACY, VALIDITY, RELIABILITY, AVAILABILITY, OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN, WHETHER OBTAINED EXTERNALLY OR PRODUCED BY THE AI.

THE RECIPIENT SHOULD BE AWARE THAT THIS REPORT MAY INCLUDE AI-GENERATED CONTENT THAT MAY NOT HAVE CONSIDERED ALL RISK FACTORS. THE RECIPIENT IS ADVISED TO CONSULT WITH THEIR MEKETA ADVISOR OR ANOTHER PROFESSIONAL ADVISOR BEFORE MAKING ANY FINANCIAL DECISIONS OR TAKING ANY ACTION BASED ON THE CONTENT OF THIS REPORT. WE BELIEVE THE INFORMATION TO BE FACTUAL AND UP TO DATE BUT DO NOT ASSUME ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE CONTENT PRODUCED. UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES OR ANY DAMAGES WHATSOEVER, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE, OR OTHER TORT, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS CONTENT. IT IS IMPORTANT FOR THE RECIPIENT TO CRITICALLY EVALUATE THE INFORMATION PROVIDED.


CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD-LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE," OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT.

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

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Portfolio Transition Update

SUMMARY

The Retirement System's investment consultant, Meketa, will provide an update on the progress made on the portfolio transition plan.

DISCUSSION

The attached memo from Meketa provides an update on the transition plan approved by the Retirement Board at the July 19, 2024 meeting following the completion of the Asset Allocation Study in May 2024. This update will cover Stage 0 in which a transition manager is selected, and a proposed transition trading timeline is established for the initial changes to the portfolio. The transition to new indices for the Retirement System's bank loan and high yield strategies are also part of stage 0. This stage prepares the Retirement System's portfolio for Stage 1, which involves the full redemption of the real estate and covered calls mandates managed by CenterSquare and Van Hulzen respectively, with those funds moving to the US public equities Northern Trust Asset Management Russell 3000 mandate. Stage 0 is expected to be completed by the end of the third quarter of 2024.

SDS:SGL

Attachment: Memo – Transition Update

MEMORANDUM

TO: East Bay Municipal District Employees' Retirement System ("EBMUDERS")
FROM: Meketa Investment Group, Inc ("Meketa")
DATE: September 19, 2024
RE: EBMUDERS Evolving Policy Plan – Transition Update as of September 2024

Summary

At the July 18, 2024, Retirement Board Meeting, the Board voted to approve the Evolving Policy Plan as presented by Staff and the Meketa team. The Evolving Policy Plan pertains to the planned transition of the Total Portfolio to the recently approved long-term strategic allocation policy targets.

The Meketa team is pleased to announce that the transition is moving forward according to the Evolving Policy Plan's timeline and tasks within Stage 0 of that plan are in process or complete.

Detail and Update – Stage 0

Stage 0 represents the initial transition phase. During this stage, there are not any allocation (i.e., dollars/assets) changes, however, two important administrative tasks will be completed by Staff and Meketa:

1. In order to assist in the future transition of assets, Meketa and Staff will work with Northern Trust's Transition Management ("NTTM") group to prepare for and plan the impending transitions. Meketa recently reviewed the transition manager universe in early-2024, and NTTM exists as a suitable vendor for the transition activity that EBMUDERS will embark on. Considering EBMUDER's current relationship with Northern Trust as the plan's custodian bank and passive equity asset manager, the relative attractiveness of NTTM as a transition manager is further improved.

Update: Staff and the Meketa team have contacted NTTM and have received a proposal for the transition management to occur just before the start of Stage 1 of the Evolving Policy Plan. This proposal includes transition management for the redemption of Covered Calls manager Van Hulzen and REITs manager CenterSquare. Total assets transitioned will be around \$250 million and will be allocated to the passive Russell 3000 Index strategy managed by Northern Trust Asset Management ("NTAM"). The transition is expected to be completed at the end of September which aligns with the Evolving Policy Plan and the start of Stage 1. In order to facilitate this transition, both Van Hulzen and CenterSquare have been notified of the transition timeline and actions they will need to take to accommodate the transition.

2. Two of EBMUDERS's current non-core fixed income managers will see their benchmarks shifted to more standardized indices. For both Mackay Shields (High Yield) and Federated (Bank Loans), Q3 2024 will exist as a transition period for any portfolio modifications that need to be executed prior to their new benchmarks being in place to start Q4 2024.

Update: In late August, the updated investment guidelines for the High Yield manager (MacKay Shields) was signed by EBMUDERS and countersigned by MacKay Shields. The manager will use the month of September to begin transitioning to the new guidelines (i.e., repositioning the portfolio for the new benchmark). The Bank Loans manager (Federated) has also provided amended investment guidelines as of the end of August with the expectation that they will also be transitioning the portfolio in the month of September. Staff and Meketa have provided comments/edits to the proposed guidelines and are awaiting a final version, however, Federated is on track to finalize the guidelines and transition the portfolio throughout the month of September.

Conclusion

The Evolving Policy Plan is moving forward as scheduled and the Meketa team anticipates completion of Stage 0 by end of the third quarter and the subsequent start to Stage 1 on October 1, 2024. The Meketa team continues to work with Staff to maintain momentum on the transition and will continue to provide relevant updates to the Board.

APPENDIX

The primary contents of the original Evolving Policy Plan memorandum (as presented in July 2024) are provided below.

Evolving Policy Plan

Policy Allocations			
	Stage 0	Stage 1	Stage 2
	Current Policy	Approximately 10/1/2024	Approximately 7/1/2025
US Equity	25.0%	33.5%	35.0%
Non-US Equity	25.0%	25.0%	25.0%
Covered Calls	20.0%	14.0%	7.5%
REITS	2.5%	0.0%	0.0%
Core Private Real Estate	2.5%	2.5%	2.5%
Investment Grade Bonds	20.0%	20.0%	20.0%
High Yield Bonds	2.5%	2.5%	5.0%
Bank Loans	2.5%	2.5%	5.0%
Private Debt	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	100.0%
Expected Long-term Return	8.0%	8.1%	8.1%
Expected Volatility	13.1%	13.2%	13.2%

Change from Prior Period			
	Stage 0	Stage 1	Stage 2
	Current Policy	Approximately 10/1/2024	Approximately 7/1/2025
US Equity	---	8.5%	1.5%
Non-US Equity	---	---	---
Covered Calls	---	-6.0%	-6.5%
REITS	---	-2.5%	---
Core Private Real Estate	---	---	---
Investment Grade Bonds	---	---	---
High Yield Bonds	---	---	2.5%
Bank Loans	---	---	2.5%
Private Debt	---	---	---

Evolving Policy Plan (continued)

Policy Allocations			
	Stage 3	Stage 4	Stage 5
	<i>Approximately 1/1/2026</i>	<i>Approximately 4/1/2026</i>	<i>Approximately 7/1/2026</i>
US Equity	35.0%	35.0%	35.0%
Non-US Equity	25.0%	25.0%	25.0%
Covered Calls	5.0%	2.5%	0.0%
REITS	0.0%	0.0%	0.0%
Core Private Real Estate	2.5%	2.5%	2.5%
Investment Grade Bonds	20.0%	20.0%	20.0%
High Yield Bonds	7.5%	7.5%	7.5%
Bank Loans	5.0%	5.0%	5.0%
Private Debt	0.0%	2.5%	5.0%
TOTAL	100.0%	100.0%	100.0%
Expected Long-term Return	8.1%	8.1%	8.2%
Expected Volatility	13.2%	13.0%	12.9%

Change from Prior Period			
	Stage 3	Stage 4	Stage 5
	<i>Approximately 1/1/2026</i>	<i>Approximately 4/1/2026</i>	<i>Approximately 7/1/2026</i>
US Equity	---	---	---
Non-US Equity	---	---	---
Covered Calls	-2.5%	-2.5%	-2.5%
REITS	---	---	---
Core Private Real Estate	---	---	---
Investment Grade Bonds	---	---	---
High Yield Bonds	2.5%	---	---
Bank Loans	---	---	---
Private Debt	---	2.5%	2.5%

Description of Stages

Stage 0 (Q3 2024)

- Stage 0 represents the initial transition phase. During this stage, there are not any allocation (i.e., dollars/assets) changes, however, two important administrative tasks will be completed by Staff and Meketa:
1. In order to assist in the future transition of assets, Meketa and Staff will work with Northern Trust’s Transition Management (“NTTM”) group to prepare for and plan the impending transitions. Meketa recently reviewed the transition manager universe in early-2024, and NTTM exists as a suitable vendor for the transition activity that EBMUDERS will embark on. Considering EBMUDER’s current relationship with Northern Trust as the plan’s custodian bank and passive equity asset manager, the relative attractiveness of NTTM as a transition manager is further improved.
 2. As discussed in a separate memorandum, two of EBMUDERS’s current non-core fixed income managers will see their benchmarks shifted to more standardized indices. For both Mackay Shields (High Yield) and Federated (Bank Loans), Q3 2024 will exist as a transition period for any portfolio modifications that need to be executed prior to their new benchmarks being in place to start Q4 2024.

Stage 1 (approximately 10/1/2024)

- Stage 1 will contain both actual portfolio transition activity as well as concurrent manager searches:
- At the end of Q3 2024, assets will be shifted from Covered Calls (by 6.0%) and REITS (by 2.5%) to fund the higher US Equity allocation (increased by 8.5% during this stage). It is expected that Van Hulzen will be redeemed in full as part of this transition. Depending on market and cash flow movements between now and the end of Q3, this may result in a higher amount redeemed from the Covered Calls asset class than the 6.0% that is earmarked for Stage 1. As of May 31, 2024, Van Hulzen managed approximately 6.5% of the Total Portfolio. Additionally, this stage will represent the full redemption of the REITS mandate managed by CenterSquare (as of May 31, 2024, this mandate equated to 2.5% of the Total Portfolio).
- In order to prepare for the larger allocations to High Yield and Bank Loans, manager searches for two new managers (one for High Yield and one for Bank Loans) will commence at the beginning of Q4 2024.

Stage 2 <i>(approximately 7/1/2025)</i>
<ul style="list-style-type: none"> - Stage 2 will see an additional drawdown of the Covered Calls asset class which will fund an additional allocation to US Equity as well as the new High Yield and Bank Loans managers (which are anticipated to be selected in the first half of 2025). - Moreover, Stage 2 will also see the launch of a Private Debt RFP. If desired, additional education on this asset class will be provided.
Stage 3 <i>(approximately 1/1/2026)</i>
<ul style="list-style-type: none"> - Stage 3 will see an additional allocation to High Yield (funded by an additional redemption from Covered Calls) as well as the selection of Private Debt manager(s). - It is expected that EBMUDERS will utilize 1-2 evergreen funds for the Private Debt allocation. Evergreen funds are open-ended and similar to those used in Core Private Real Estate.
Stage 4 <i>(approximately 4/1/2026)</i>
<ul style="list-style-type: none"> - While the Private Debt manager(s) are expected to be selected in Stage 3, it is unlikely that they will be funded during that stage. Stage 4 (and Stage 5) represent reasonable estimates for when capital will actually be called by the Private Debt managers. Given the lack of control that EBMUDERS (and any other private fund investors) have with respect to the timing of contributions to private markets mandates, the timing of this stage may vary. Moreover, if the Private Debt managers are capable of taking the entire allocation by EBMUDERS in one funding, Stage 5 will not be needed. - Funding will come from an additional redemption from Covered Calls.
Stage 5 <i>(approximately 7/1/2026)</i>
<ul style="list-style-type: none"> - Stage 5 represents a tentative stage that may not be needed. As indicated in Stage 4, funding will come from Covered Calls and will be transitioned to Private Debt. - At the completion of this Stage, EBMUDERS will have reached the new long-term strategic allocation policy targets.

EAST BAY MUNICIPAL UTILITY DISTRICT

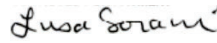
DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources



FROM: Lisa Sorani, Manager of Employee Services



SUBJECT: HIB Study: Additional Costing Data for Summary of Findings Report

SUMMARY

This memorandum provides information regarding the updated and additional costing data received from Segal related to the Retirement Board's requested Health Insurance Benefit (HIB) change considerations as part of the final HIB study Summary of Findings report

DISCUSSION

At the July 18, 2024, Retirement Board meeting, the Retirement Board reviewed and approved the Summary of Findings report related to the HIB study. The final report included costing estimates for various changes to the HIB.

During the meeting the Retirement Board requested that the costing details be organized in a different way that would allow for easier review of the key impact details for each scenario such that description of each scenario include;

- Increase in Annual Employer Contribution Rate
- Increase in Annual Employer Normal Cost
- Increase in Annual Employer UAAL Cost

Also at the July 18, 2024 meeting, the Retirement Board requested that each of the five scenarios in the original costing report be costed with the additional benefit change such that PEPRAs members would vest into the HIB 100% at 15 years of service instead of 100% at 20 years of service. Segal created a third report for this data and used the same layout as used on the amended first report noted above.

Attached are the two requested reports from Segal. Both reports will be included as part of the Summary of Findings report.

NEXT STEPS

Segal will be in attendance at the September 19th meeting to address any questions from the Retirement Board regarding the additional costing report.

Attachment: 1) East Bay Municipal Utility District Employees' Retirement System Cost estimates for possible improvement to the Health Insurance Benefit (HIB)
ADDENDUM LETTER

2) East Bay Municipal Utility District Employees' Retirement System Cost estimates for possible improvements to the Health Insurance Benefit (HIB) under alternative HIB vesting schedule for the 2013 Tier

CC;ls



East Bay Municipal Utility District Employees' Retirement System

Health Insurance Benefit (HIB) Cost Studies

September 19, 2024 Board Meeting

Overview of Study Scenarios

Category	Description (\$ Monthly Amounts)
Current Plan	Single: \$450 Married or with Registered Domestic Partners: \$550
Scenario 1 & 1A	Single: \$550 Married or with Registered Domestic Partners: \$750
Scenario 2 & 2A	Single: Kaiser Senior Advantage (KSA) High Option Plan premium (\$304.56 in 2024, adjusted annually with trend; or \$450 if greater) Married or with Registered Domestic Partners: Double KSA High Option Plan premium (\$609.12 in 2024, adjusted annually with trend)
Scenario 3 & 3A	Single: Kaiser Senior Advantage (KSA) Low Option Plan premium (\$245.71 in 2024, adjusted annually with trend; or \$450 if greater) Married or with Registered Domestic Partners: Double KSA Low Option Plan premium (\$491.42 in 2024, adjusted annually with trend; or \$550 if greater)
Scenario 4 & 4A	In addition to the current HIB subsidy, 2013 Tier participants will receive reimbursement for the standard Medicare Part B premium for single coverage (\$174.70 in 2024)
Scenario 5 & 5A	In addition to the current HIB subsidy, reimbursement for dental and vision premiums, adjusted annually with trend: Single: \$37.41 for dental and \$7.53 for vision in 2024 Married or with Registered Domestic Partners: \$67.32 for dental and \$15.05 for vision in 2024

In each scenario, a surviving spouse or surviving registered domestic partner would receive the benefit the retired member had been receiving immediately prior to death. In addition, the maximum HIB subsidy, or additional benefit, presented in each scenario would be subject to service-based proration.

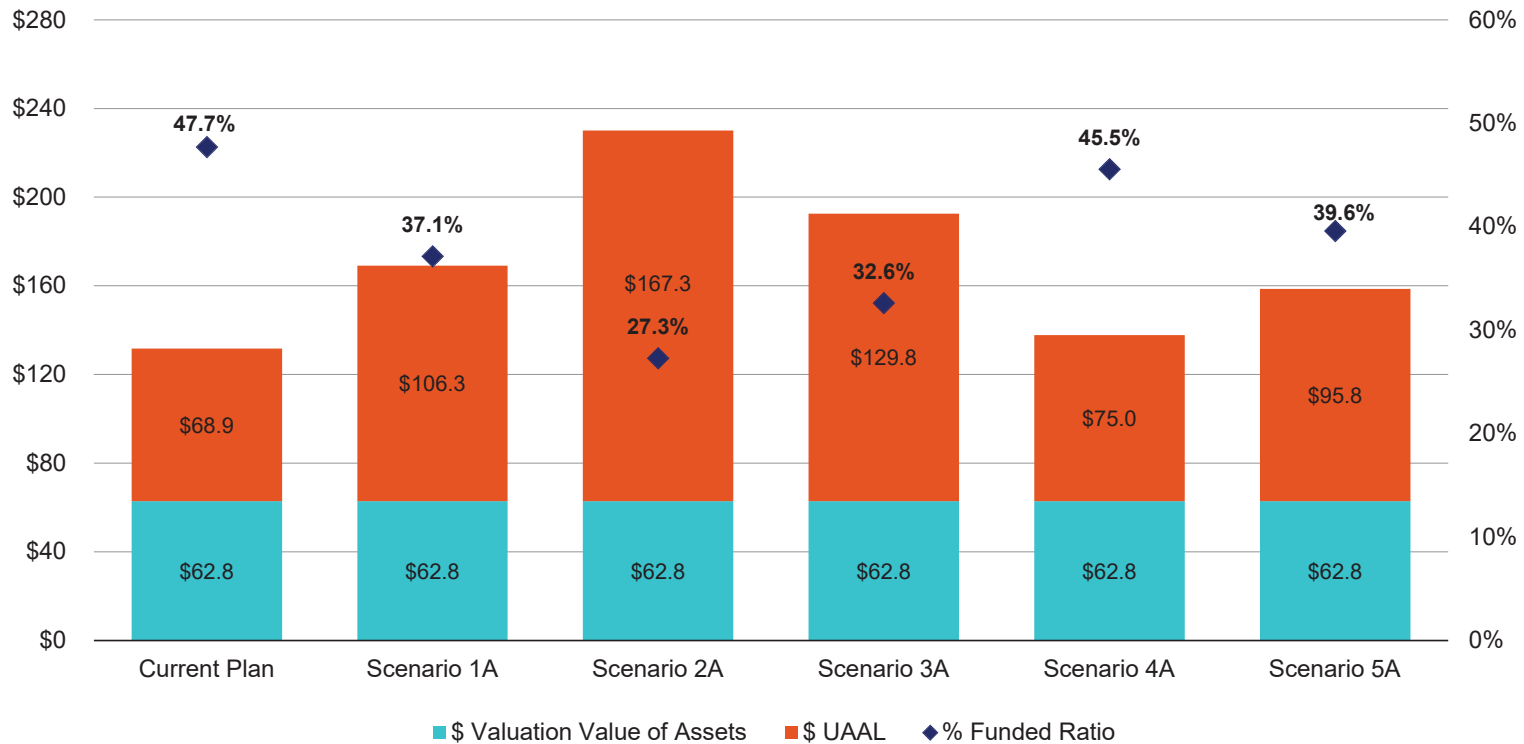
Current and Alternative Vesting Schedules for 2013 Tier

As requested by the Retirement Board when we presented the results of our health insurance benefit (HIB) analyses on July 18, 2024, we have updated the results after applying the alternative HIB vesting schedule as shown in the following chart for Scenarios 1 through 5.

Years of Full-time Service	Current Vesting Schedule Percent of HIB for 2013 Tier Future Retirees	Alternative Vesting Schedule Percent of HIB for 2013 Tier Future Retirees
Less than 5	0%	0%
5-9	25%	25%
10-14	50%	50%
15-19	75%	100%
20 or more	100%	100%

Except for the alternative vesting schedule for the 2013 Tier future retirees, all of the other improvements we have included under the five new scenarios are the same as those described on the previous slide. The scenarios are labeled with a letter "A" to denote they are under the "Alternative" vesting schedule. For example, the only difference between Scenario 1 and Scenario 1A is the improved vesting schedule for the 2013 Tier.

UAAL (\$ in Millions) and Funded Ratio as of June 30, 2023 – Alternative Vesting Schedule for 2013 Tier



The UAAL for Scenarios 1A through 5A are between \$0.5 million and \$1.1 million higher than the respective UAAL from the original Scenarios 1 through 5.

Employer Contribution Rates as % of Payroll

as of June 30, 2023 – Alternative Vesting Schedule for 2013 Tier



The Total Employer Rate for Scenarios 1A through 5A are between 0.05% and 0.13% percentage points higher than the respective Total Employer Rate from the original Scenarios 1 through 5.

Summary of Changes from Current Plan

		Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers*,**	Current and Future Retirees All Tiers*,**
Scenario 1A	Increase in UAAL	\$2,186,261	\$10,771,483	\$26,665,253	\$37,436,736
	Change in Funded Ratio	(0.78%)	(3.61%)	(8.03%)	(10.56%)
	Increase in Annual Cost	\$616,000	\$1,741,000	\$2,331,000	\$4,072,000
Scenario 2A	Increase in UAAL	\$14,116,135	\$49,341,879	\$49,148,338	\$98,490,217
	Change in Funded Ratio	(4.62%)	(13.00%)	(12.96%)	(20.41%)
	Increase in Annual Cost	\$4,211,000	\$8,896,000	\$4,297,000	\$13,193,000
Scenario 3A	Increase in UAAL	\$10,362,478	\$33,835,477	\$27,094,946	\$60,930,423
	Change in Funded Ratio	(3.48%)	(9.75%)	(8.14%)	(15.09%)
	Increase in Annual Cost	\$3,114,000	\$6,263,000	\$2,369,000	\$8,632,000
Scenario 4A	Increase in UAAL	\$6,127,727	N/A	\$57,051	\$6,184,778
	Change in Funded Ratio	(2.12%)	N/A	(0.02%)	(2.14%)
	Increase in Annual Cost	\$1,784,000	N/A	\$5,000	\$1,789,000
Scenario 5A	Increase in UAAL	\$2,449,762	\$9,457,888	\$17,476,630	\$26,934,518
	Change in Funded Ratio	(0.87%)	(3.20%)	(5.59%)	(8.10%)
	Increase in Annual Cost	\$708,000	\$1,641,000	\$1,528,000	\$3,169,000

Please refer to Exhibit 6 of our September 9, 2024 letter for the changes to the Total Employer Rate and also for the changes to the normal cost rates by Tier (as a ratio of each Tier's payroll).

* Scenario 4 only applies to the 2013 Tier members.

** We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

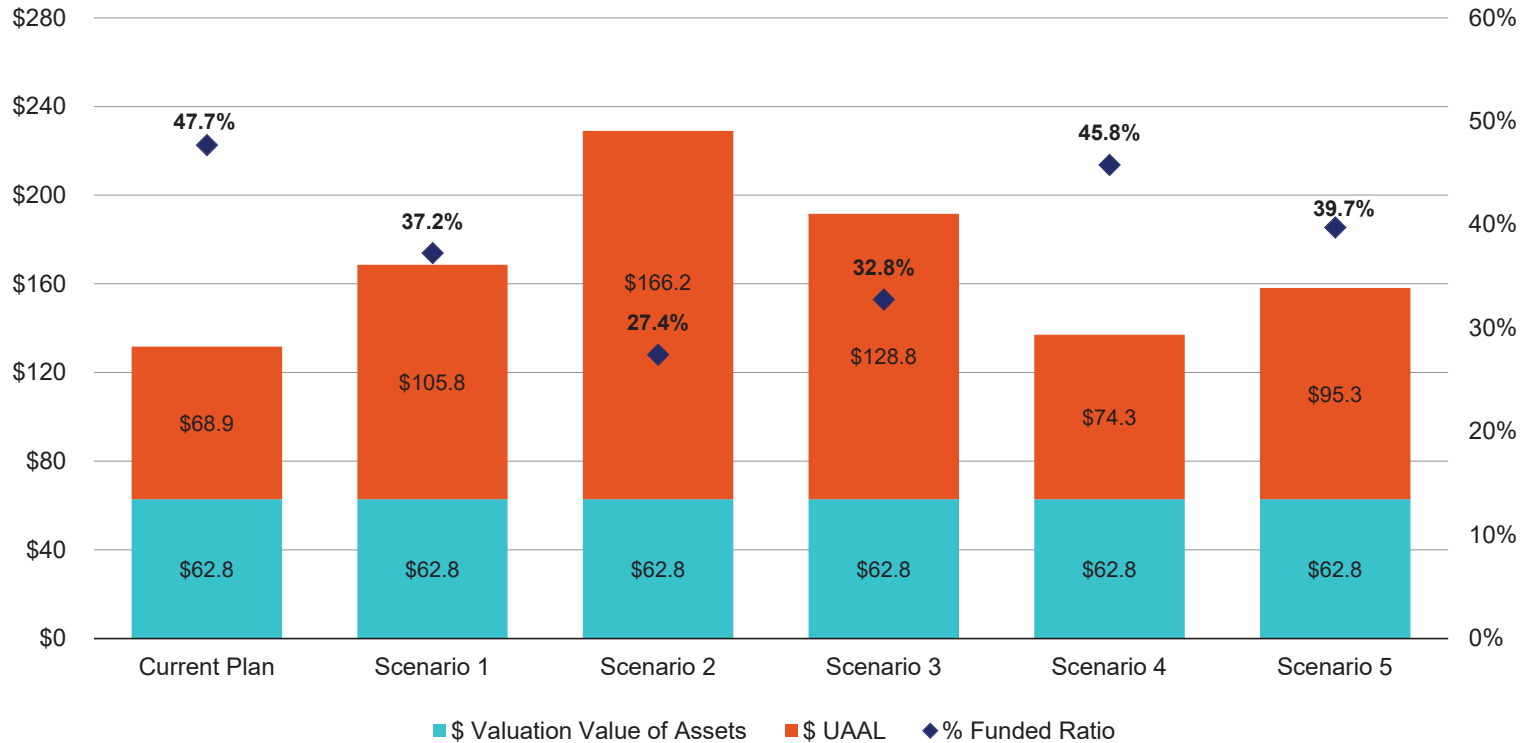
Overview of Study Scenarios

Category	Description (\$ Monthly Amounts)
Current Plan	Single: \$450 Married or with Registered Domestic Partners: \$550
Scenario 1	Single: \$550 Married or with Registered Domestic Partners: \$750
Scenario 2	Single: Kaiser Senior Advantage (KSA) High Option Plan premium (\$304.56 in 2024, adjusted annually with trend; or \$450 if greater) Married or with Registered Domestic Partners: Double KSA High Option Plan premium (\$609.12 in 2024, adjusted annually with trend)
Scenario 3	Single: Kaiser Senior Advantage (KSA) Low Option Plan premium (\$245.71 in 2024, adjusted annually with trend; or \$450 if greater) Married or with Registered Domestic Partners: Double KSA Low Option Plan premium (\$491.42 in 2024, adjusted annually with trend; or \$550 if greater)
Scenario 4	In addition to the current HIB subsidy, 2013 Tier participants will receive reimbursement for the standard Medicare Part B premium for single coverage (\$174.70 in 2024)
Scenario 5	In addition to the current HIB subsidy, reimbursement for dental and vision premiums, adjusted annually with trend: Single: \$37.41 for dental and \$7.53 for vision in 2024 Married or with Registered Domestic Partners: \$67.32 for dental and \$15.05 for vision in 2024

In each scenario, a surviving spouse or surviving registered domestic partner would receive the benefit the retired member had been receiving immediately prior to death. In addition, the maximum HIB subsidy, or additional benefit, presented in each scenario would be subject to the same service-based proration as the current maximum HIB subsidy for retirees with less than 20 years of full-time service.

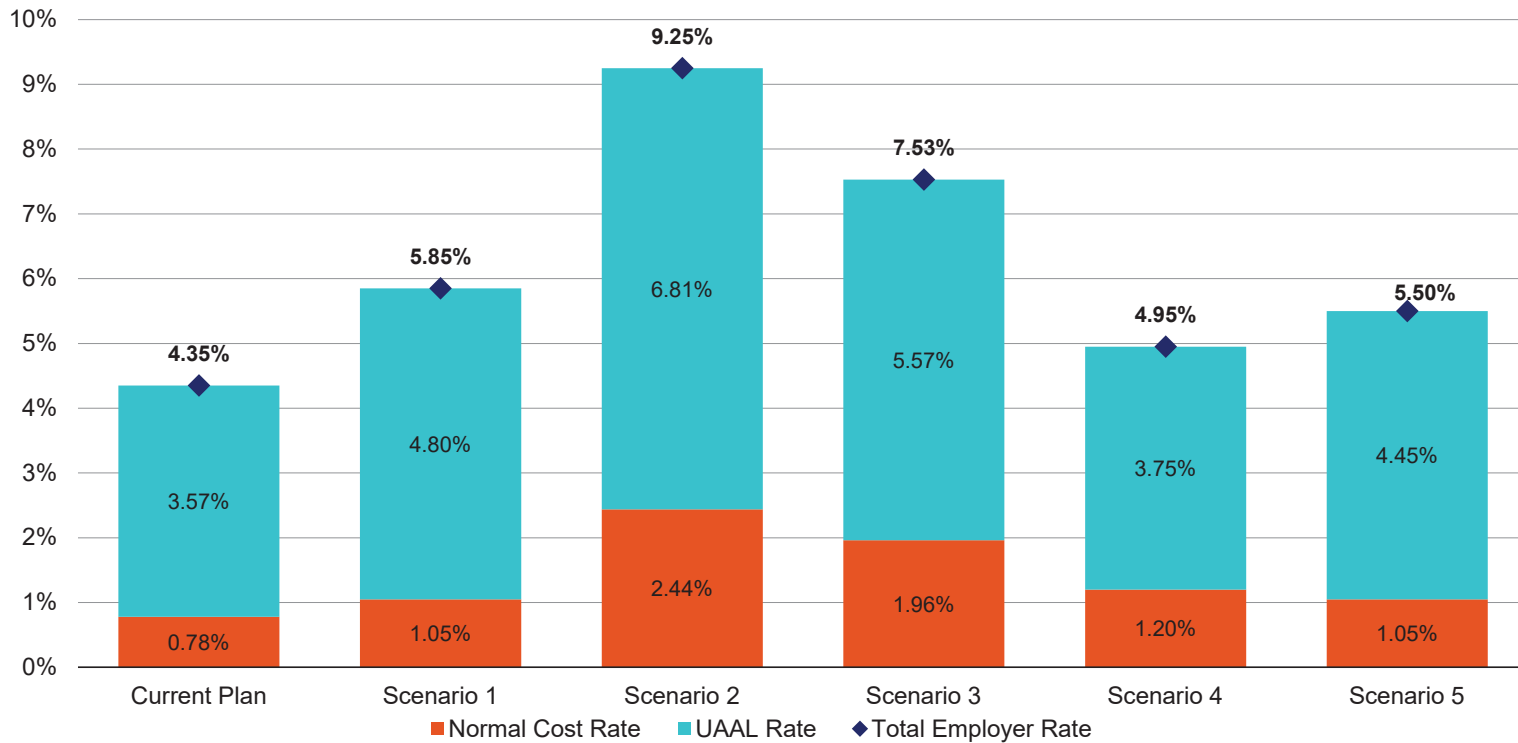
UAAL (\$ in Millions) and Funded Ratio

as of June 30, 2023 – Includes Current and Future Retirees



Employer Contribution Rates as % of Payroll

as of June 30, 2023 – Includes Current and Future Retirees



Summary of Changes from Current Plan

		Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers*,**	Current and Future Retirees All Tiers*,**
Scenario 1	Increase in UAAL	\$1,654,791	\$10,240,013	\$26,665,253	\$36,905,266
	Change in Funded Ratio	(0.59%)	(3.44%)	(8.03%)	(10.44%)
	Increase in Annual Cost	\$473,000	\$1,599,000	\$2,331,000	\$3,930,000
Scenario 2	Increase in UAAL	\$12,951,129	\$48,176,873	\$49,148,338	\$97,325,211
	Change in Funded Ratio	(4.27%)	(12.78%)	(12.96%)	(20.27%)
	Increase in Annual Cost	\$3,876,000	\$8,561,000	\$4,297,000	\$12,858,000
Scenario 3	Increase in UAAL	\$9,421,177	\$32,894,176	\$27,094,946	\$59,989,122
	Change in Funded Ratio	(3.19%)	(9.53%)	(8.14%)	(14.93%)
	Increase in Annual Cost	\$2,840,000	\$5,989,000	\$2,369,000	\$8,358,000
Scenario 4	Increase in UAAL	\$5,392,281	N/A	\$57,051	\$5,449,332
	Change in Funded Ratio	(1.88%)	N/A	(0.02%)	(1.90%)
	Increase in Annual Cost	\$1,582,000	N/A	\$5,000	\$1,587,000
Scenario 5	Increase in UAAL	\$1,917,279	\$8,925,405	\$17,476,630	\$26,402,035
	Change in Funded Ratio	(0.68%)	(3.03%)	(5.59%)	(7.97%)
	Increase in Annual Cost	\$565,000	\$1,499,000	\$1,528,000	\$3,027,000

* Scenario 4 only applies to the 2013 Tier members.

** We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

Key Assumptions and Methods

Category	Assumption	Comments*
Scenario 2		
2024 Kaiser High Option Plan Premiums	<i>Single:</i> \$304.56 per month <i>2-Party:</i> \$609.12 per month	The HIB maximum for single coverage will remain \$450 per month until the Kaiser single High Option Plan premium exceeds \$450 per month (estimated 2030). The HIB maximum for two-person coverage will immediately increase to the Kaiser two-person premium.
Trend	See Table A	
Scenario 3		
2024 Kaiser Low Option Plan Premiums	<i>Single:</i> \$245.71 per month <i>2-Party:</i> \$491.42 per month	The HIB maximum for single coverage will remain \$450 per month until the Kaiser single Low Option Plan premium exceeds \$450 per month (estimated 2035). The HIB maximum for two-person coverage will remain \$550 until the two-party Kaiser Low Option Plan premium exceeds \$550 per month (estimated 2026).
Trend	See Table A	

*Assumptions are consistent with Health Insurance Benefit Valuation as of June 30, 2023, unless otherwise noted. No change was made to the 95% participation rate assumption for future eligible retirees nor the assumption that no retirees who are currently eligible but not electing HIB coverage would join the plan for the first time in the future.

Table A

Trend Assumptions for Kaiser Senior Advantage Premiums in Scenario 2 & Scenario 3

Calendar Year	Original Medicare Trend Rate Applied to Calculate Following Year Premium in Current Valuation	Updated Medicare Trend Rate Applied to Calculate Following Year Kaiser Premium in Scenarios 2 & 3
2024 to 2025	6.50%	10.00%*
2025 to 2026	6.25%	7.00%**
2026 to 2027	6.00%	6.75%
2027 to 2028	5.75%	6.50%
2028 to 2029	5.50%	6.25%
2029 to 2030	5.25%	6.00%
2030 to 2031	5.00%	5.75%
2031 to 2032	4.75%	5.50%
2032 to 2033	4.50%	5.25%
2033 to 2034	4.50%	5.00%
2034 to 2035	4.50%	4.75%
2036 and later	4.50%	4.50%

* The 10% trend assumption incorporates the anticipated impact of the Inflation Reduction Act (IRA) on the 2025 premiums. Expected Medicare plan increases for a large California public employees' retirement system ranged from a low of 5.62% to a high of 49.85%, with several increases in the 20%-30% range.

** The 7.00% trend assumption effective 1/1/2026 is a combination of 4.00% assumed medical trend and 10.00% assumed Rx trend. The KSA premiums decreased for several years (\$350.55 per month in 2020 to \$271.01 per month in 2023), before increasing by 12.4% in 2024 (\$304.56 per month). The KSA premiums are highly sensitive to revenues received from the Federal Government.

Key Assumptions and Methods (cont'd)

Category	Assumption	Comments*
Scenario 4		
Medicare Part B Premium	\$174.70 per month in 2024	For 2013 Tier members only
Trend on Part B	5.00% annually graded down linearly to an ultimate rate of 4.50% over 5 years	
Scenario 5		
2024 Dental Premiums	<i>Single</i> : \$37.41 per month <i>2-Party</i> : \$67.32 per month	
2024 Vision Premiums	<i>Single</i> : \$7.53 per month <i>2-Party</i> : \$15.05 per month	
Trend on Dental and Vision	4.00%	

*Assumptions are consistent with Health Insurance Benefit Valuation as of June 30, 2023, unless otherwise noted.



Via Email

August 13, 2024

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

**Re: East Bay Municipal Utility District Employees' Retirement System
Cost estimates for possible improvements to the Health Insurance Benefit (HIB) –
ADDENDUM LETTER**

Dear Sophia:

As requested by the Retirement Board when we presented the results of our health insurance benefit (HIB) analyses on July 18, 2024, we have expanded the results provided in Exhibit 6 of our attached July 11, 2024 letter to include the following contribution rate breakdown for Scenarios 1 through 5 as defined in that letter:

- The increase in the aggregate employer contribution rate expressed as a percentage of combined payroll for the 1955/1980 Plan and 2013 Tier, including a breakdown between the normal cost rate and unfunded actuarial accrued liability (UAAL) rate.
- The increase in each of the Plan and the Tier's normal cost rates based on the payrolls of the Plan and the Tier, respectively.

Because the 1955/1980 Plan is a closed group and its payroll is decreasing over time, the UAAL amortization component of the employer rate is based on all combined payroll. However, differences in normal cost rate by Plan and Tier are expressed using the payrolls of the Plan and the Tier, respectively.

While the financial impacts for all five scenarios are summarized on a single page in the original Exhibit 6, the expanded disclosures attached to this report are now broken down on a separate page for each of the five scenarios.

Other considerations

The results included in this letter have been derived based on the methods, financial statements, membership data, and actuarial assumptions as defined in our July 11, 2024 letter.

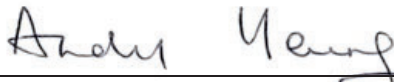
This document has been prepared for the exclusive use and benefit of EBMUD Employees' Retirement System, based upon information provided by the Retirement System or otherwise made available to Segal at the time this document was created. Segal makes no representation or warranty as to the accuracy of any forward-looking statements and does not guarantee any particular outcome or result. This document should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the Plan. This document does not constitute legal, tax or investment advice or create or imply a fiduciary relationship. You are encouraged to discuss any issues raised with your legal, tax and other advisors before taking, or refraining from taking, any action.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuaries.

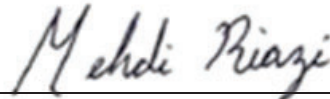
These calculations were supervised by Andy Yeung, ASA, MAAA, FCA, EA and Mehdi Riazi, FSA, MAAA, FCA, EA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions on this information.

Sincerely,



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



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

Attachment (5882323)

cc: Lisa Sorani
Valerie Weekly
Robert Hannay
Steven Goodman-Leibof
Cindy Charan

Exhibit 6 - Expanded
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 1				
Increase in UAAL	\$1,654,791	\$10,240,013	\$26,665,253	\$36,905,266
Change in Funded Ratio	(0.59%)	(3.44%)	(8.03%)	(10.44%)
Increase in Annual Employer Cost	\$473,000	\$1,599,000	\$2,331,000	\$3,930,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	0.25%	0.25%	0.00%	0.25%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.29%	0.00%	0.29%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.13%	0.27%	0.00%	0.27%
• Increase in UAAL over all Payroll	0.05%	0.34%	0.89%	1.23%
– Increase in Total Rate over all Payroll	0.18%	0.61%	0.89%	1.50%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6 - Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 2				
Increase in UAAL	\$12,951,129	\$48,176,873	\$49,148,338	\$97,325,211
Change in Funded Ratio	(4.27%)	(12.78%)	(12.96%)	(20.27%)
Increase in Annual Employer Cost	\$3,876,000	\$8,561,000	\$4,297,000	\$12,858,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	2.07%	2.07%	0.00%	2.07%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	1.24%	0.00%	1.24%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	1.05%	1.66%	0.00%	1.66%
• Increase in UAAL over all Payroll	0.43%	1.60%	1.64%	3.24%
– Increase in Total Rate over all Payroll	1.48%	3.26%	1.64%	4.90%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6 - Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 3				
Increase in UAAL	\$9,421,177	\$32,894,176	\$27,094,946	\$59,989,122
Change in Funded Ratio	(3.19%)	(9.53%)	(8.14%)	(14.93%)
Increase in Annual Employer Cost	\$2,840,000	\$5,989,000	\$2,369,000	\$8,358,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	1.52%	1.52%	0.00%	1.52%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.84%	0.00%	0.84%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.77%	1.18%	0.00%	1.18%
• Increase in UAAL over all Payroll	0.31%	1.09%	0.91%	2.00%
– Increase in Total Rate over all Payroll	1.08%	2.27%	0.91%	3.18%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ Scenario 4 only applies to the 2013 Tier members.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6 - Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ^{1,2}	Current and Future Retirees All Tiers ^{1,2}
Scenario 4				
Increase in UAAL	\$5,392,281	N/A	\$57,051	\$5,449,332
Change in Funded Ratio	(1.88%)	N/A	(0.02%)	(1.90%)
Increase in Annual Employer Cost	\$1,582,000	N/A	\$5,000	\$1,587,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ³	0.84%	N/A	0.00%	0.84%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ³	0.00%	N/A	0.00%	0.00%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ³				
• Increase in Employer Normal Cost over all Payroll	0.42%	N/A	0.00%	0.42%
• Increase in UAAL over all Payroll	0.18%	N/A	0.00%	0.18%
– Increase in Total Rate over all Payroll	0.60%	N/A	0.00%	0.60%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ Scenario 4 only applies to the 2013 Tier members.

² We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

³ Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6 - Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 5				
Increase in UAAL	\$1,917,279	\$8,925,405	\$17,476,630	\$26,402,035
Change in Funded Ratio	(0.68%)	(3.03%)	(5.59%)	(7.97%)
Increase in Annual Employer Cost	\$565,000	\$1,499,000	\$1,528,000	\$3,027,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	0.30%	0.30%	0.00%	0.30%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.25%	0.00%	0.25%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.15%	0.27%	0.00%	0.27%
• Increase in UAAL over all Payroll	0.06%	0.29%	0.59%	0.88%
– Increase in Total Rate over all Payroll	0.21%	0.56%	0.59%	1.15%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Via Email

September 9, 2024

Ms. Sophia Skoda
Director of Finance
East Bay Municipal Utility District
375 Eleventh Street
Oakland, CA 94607-4240**Re: East Bay Municipal Utility District Employees' Retirement System
Cost estimates for possible improvements to the Health Insurance Benefit (HIB)
under alternative HIB vesting schedule for the 2013 Tier**

Dear Sophia:

As requested by the Retirement Board when we presented the results of our health insurance benefit (HIB) analyses on July 18, 2024, we have updated the results of our attached July 11, 2024 letter (and related addendum letter dated August 13, 2024) after applying the alternative HIB vesting schedule as shown in the following chart for Scenarios 1 through 5 as defined in that letter.

Years of Full-time Service	Current Vesting Schedule Percent of HIB for 2013 Tier Future Retirees	Alternative Vesting Schedule Percent of HIB for 2013 Tier Future Retirees
Less than 5	0%	0%
5-9	25%	25%
10-14	50%	50%
15-19	75%	100%
20 or more	100%	100%

Except for the alternative vesting schedule for the 2013 Tier future retirees, all of the other improvements we have included in this letter under five scenarios are the same as those included in our July 11, 2024 letter. The five scenarios are as follows:

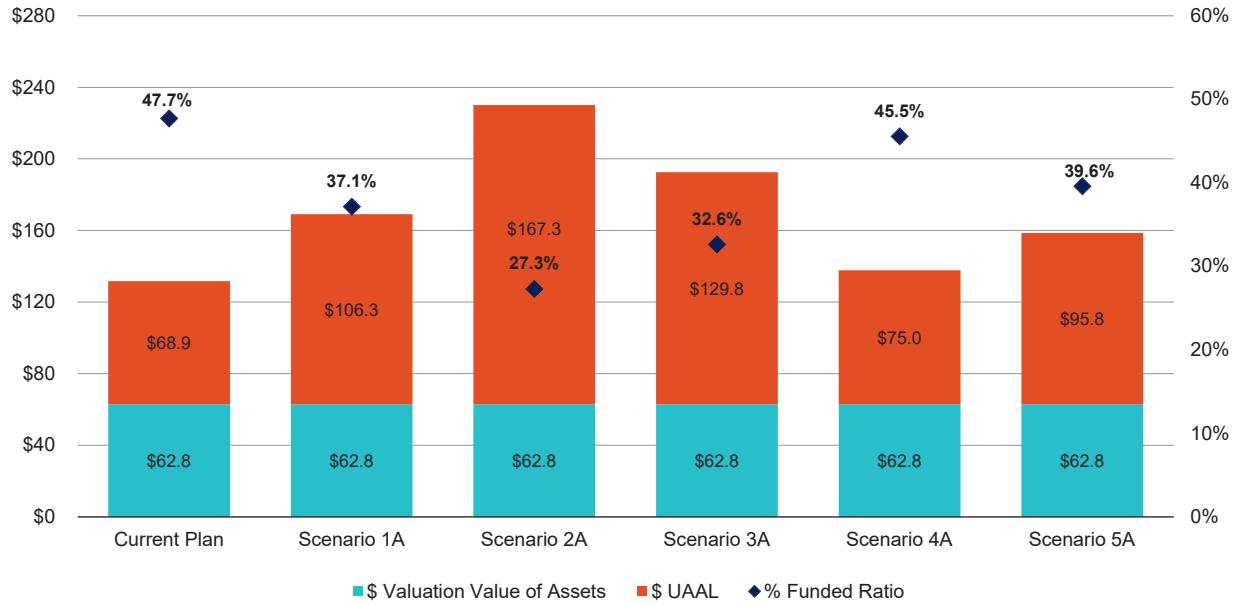
- **Scenario 1** – The current maximum subsidy will increase from \$450 to \$550 per month for single coverage, and from \$550 to \$750 per month for married retirees and retirees with registered domestic partners.

- **Scenario 2** – The maximum subsidy for single coverage will be based on the Kaiser Senior Advantage (KSA) High Option Plan premium, which is \$304.56 per month in 2024. The HIB maximum will remain at \$450 per month until the KSA High Option Plan premium (adjusted annually with trend) exceeds \$450 per month. The maximum subsidy for married retirees and retirees with registered domestic partners will increase from \$550 per month to double the KSA High Option Plan premium (\$609.12 per month in 2024).
- **Scenario 3** – The maximum subsidy for single coverage will be based on the Kaiser Senior Advantage (KSA) Low Option Plan premium, which is \$245.71 per month in 2024. The HIB maximum will remain at \$450 per month until the KSA Low Option Plan premium (adjusted annually with trend) exceeds \$450 per month. The maximum subsidy for married retirees and retirees with registered domestic partners will increase from \$550 per month to double the KSA Low Option Plan premium (\$491.42 per month in 2024) once the two-party KSA Low Option Plan premium exceeds \$550 per month.
- **Scenario 4** – In addition to the current HIB subsidy, 2013 Tier participants will receive reimbursement for the standard Medicare Part B premium for single coverage (\$174.70 per month in 2024).
- **Scenario 5** – In addition to the current HIB subsidy, participants will receive reimbursement for dental and vision premiums for single or married/domestic partner coverage. Single coverage dental and vision premiums were assumed to be \$37.41 and \$7.53 per month, respectively, in 2024. Two-person dental and vision premiums were assumed to be \$67.32 and \$15.05 per month, respectively, in 2024.

The following tables summarize the impact on the Unfunded Actuarial Accrued Liability (UAAL), the Funded Ratio, and the Aggregate Employer Contribution Rate if the scenarios are applied to current and future retirees and beneficiaries. Further details for each scenario, including the results applied to future retirees and beneficiaries only, are found in the attached Exhibits.

The scenarios presented in this letter are labeled with a letter "A" to denote they are the "Alternative" to those provided in our July 11, 2024 letter. For example, the only difference between Scenario 1 from the original letter and Scenario 1A in this letter is the improved vesting schedule for the 2013 Tier.

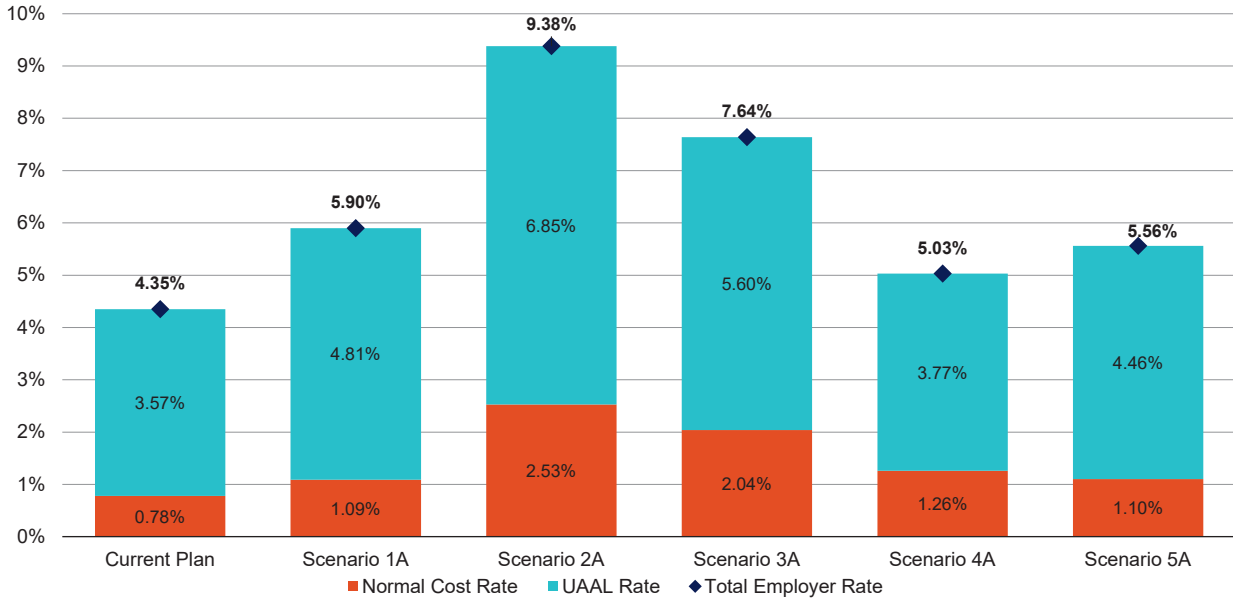
UAAL (\$ in Millions) and Funded Ratio as of June 30, 2023



Impact on Funding Measures

Funding Scenario	UAAL	Change from Current Plan	Funded Ratio	Change from Current Plan
Current Plan	\$68,858,196		47.69%	
Scenario 1A	106,294,932	\$37,436,736	37.13%	(10.56%)
Scenario 2A	167,348,413	98,490,217	27.28%	(20.41%)
Scenario 3A	129,788,619	60,930,423	32.60%	(15.09%)
Scenario 4A	75,042,974	6,184,778	45.55%	(2.14%)
Scenario 5A	95,792,714	26,934,518	39.59%	(8.10%)

Employer Contribution Rates as % of Payroll as of June 30, 2023



Impact on Aggregate Employer Contribution Rate

Funding Scenario	Annual Aggregate Employer Contribution ¹	Change from Current Plan	Aggregate Employer Contribution Rate (% of Payroll) ²	Change from Current Plan
Current Plan	\$11,403,000		4.35%	
Scenario 1A	15,475,000	\$4,072,000	5.90%	1.55%
Scenario 2A	24,596,000	13,193,000	9.38%	5.03%
Scenario 3A	20,035,000	8,632,000	7.64%	3.29%
Scenario 4A	13,192,000	1,789,000	5.03%	0.68%
Scenario 5A	14,572,000	3,169,000	5.56%	1.21%

¹ Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

² Payable at the end of each pay period.

Impact on UAAL and Normal Cost Rates

Funding Scenario	UAAL Cost (% of Payroll)	Change from Current Plan	Normal Cost (% of Payroll)	Change from Current Plan
Current Plan	3.57%		0.78%	
Scenario 1A	4.81%	1.24%	1.09%	0.31%
Scenario 2A	6.85%	3.28%	2.53%	1.75%
Scenario 3A	5.60%	2.03%	2.04%	1.26%
Scenario 4A	3.77%	0.20%	1.26%	0.48%
Scenario 5A	4.46%	0.89%	1.10%	0.32%

In determining the employer rates, we have assumed the current member rate of 0.09% of payroll applies in each scenario (i.e., there will be no increase in the 0.09% member rate as a result of any improvement to the HIB Plan). If considered, any increase in contributions paid by the active members would result in a reduction in Normal Cost contributions required to be paid by the employer. Based on the System's amortization policy for plan changes, the amortization of the increase in UAAL would last 15 years. Depending on the scenario, this 15-year UAAL amortization payment would represent an additional 0.20% to 3.28% of payroll. On the other hand, the change to the Employer Normal Cost would be an ongoing cost. The Employer Normal Cost, which finances the benefits being earned by current employees, would increase from between 0.32% and 1.75% of payroll depending on the scenario. The combined impact of the 15-year UAAL amortization payment and increase to normal cost would increase the aggregate employer contribution by 0.68% to 5.03% of payroll, depending on the scenario.

Further details for each of Scenarios 1A through 5A, including the results applied to future retirees only, are found in the attached Exhibits 1 through 5, respectively. In Exhibit 6, we have compared the results under all 5 scenarios. In addition, Exhibit 6 includes a breakdown of the change in UAAL, funded ratio, and contribution amounts for (a) future retirees only from 2013 Tier only, (b) future retirees only from all tiers, (c) current retirees only from all tiers,* and (d) current and future retirees from all tiers.

Because the 1955/1980 Plan is a closed group and its payroll is decreasing over time, the UAAL amortization component of the employer rate is based on all combined payroll. However, differences in normal cost rate by Plan and Tier are expressed using the payrolls of the Plan and the Tier, respectively.

* It should be noted that as of the June 30, 2023 valuation, there were only 10 retirees from the 2013 Tier.

Assumptions and methods

The results included in this letter have been derived based on the methods, financial statements, membership data, and actuarial assumptions as defined in our July 11, 2024 letter except for the change in HIB vesting schedule for future retirees of the 2013 Tier.

In particular, Scenario 2A and Scenario 3A used the same trend rate assumptions for Kaiser Senior Advantage High Option Plan and Kaiser Senior Advantage Low Option Plan premiums, respectively, as used in our July 11, 2024 letter. The plan's 2025 premium renewals were released shortly after we provided the July 11, 2024 letter. Based on discussions with staff, we agreed that no update to the trend assumptions used in the July 11, 2024 letter are necessary.

Other considerations

This document has been prepared for the exclusive use and benefit of EBMUD Employees' Retirement System, based upon information provided by the Retirement System or otherwise made available to Segal at the time this document was created. Segal makes no representation or warranty as to the accuracy of any forward-looking statements and does not guarantee any particular outcome or result. This document should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the Plan. This document does not constitute legal, tax or investment advice or create or imply a fiduciary relationship. You are encouraged to discuss any issues raised with your legal, tax and other advisors before taking, or refraining from taking, any action.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuaries.

These calculations were supervised by Andy Yeung, ASA, MAAA, FCA, EA and Mehdi Riazi, FSA, MAAA, FCA, EA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions on this information.

Sincerely,



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



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

Attachment (5882323, 5898194)

cc: Lisa Sorani
Valerie Weekly
Robert Hannay
Steven Goodman-Leibof
Cindy Charan

Exhibit 1
Scenario 1A: Estimated Impact of Maximum HIB Increased to \$550/\$750
as of June 30, 2023

	Current Plan	Scenario 1A: Future Retirees Only	Change from Current Plan	Scenario 1A: Current and Future Retirees	Change from Current Plan
Funding Measures					
Valuation Value of Assets (VVA)	\$62,769,259	\$62,769,259		\$62,769,259	
Actuarial Accrued Liability (AAL)					
• Current recipients AAL	\$97,330,438	\$97,330,438	\$0	\$123,995,691	\$26,665,253
• Future recipients AAL	34,297,017	45,068,500	10,771,483	45,068,500	10,771,483
– Total AAL	\$131,627,455	\$142,398,938	\$10,771,483	\$169,064,191	\$37,436,736
UAAL (Total AAL – VVA)	\$68,858,196	\$79,629,679	\$10,771,483	\$106,294,932	\$37,436,736
Funding ratio (VVA / Total AAL)	47.69%	44.08%	(3.61%)	37.13%	(10.56%)
Aggregate Employer Contribution Rate (% of Payroll)					
• Employer Normal Cost	0.78%	1.09%	0.31%	1.09%	0.31%
• UAAL	3.57%	3.92%	0.35%	4.81%	1.24%
– Total Rate	4.35%	5.01%	0.66%	5.90%	1.55%
• Estimated Annual Amount ^{1*}	\$11,403,000	\$13,144,000	\$1,741,000	\$15,475,000	\$4,072,000

* Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 2
Scenario 2A: Estimated Impact of Maximum HIB Increased to Kaiser Senior Advantage High Option Plan Premium
as of June 30, 2023

	Current Plan	Scenario 2A: Future Retirees Only	Change from Current Plan	Scenario 2A: Current and Future Retirees	Change from Current Plan
Funding Measures					
Valuation Value of Assets (VVA)	\$62,769,259	\$62,769,259		\$62,769,259	
Actuarial Accrued Liability (AAL)					
• Current recipients AAL	\$97,330,438	\$97,330,438	\$0	\$146,478,776	\$49,148,338
• Future recipients AAL	34,297,017	83,638,896	49,341,879	83,638,896	49,341,879
– Total AAL	\$131,627,455	\$180,969,334	\$49,341,879	\$230,117,672	\$98,490,217
UAAL (Total AAL – VVA)	\$68,858,196	\$118,200,075	\$49,341,879	\$167,348,413	\$98,490,217
Funding ratio (VVA / Total AAL)	47.69%	34.69%	(13.00%)	27.28%	(20.41%)
Aggregate Employer Contribution Rate (% of Payroll)					
• Employer Normal Cost	0.78%	2.53%	1.75%	2.53%	1.75%
• UAAL	3.57%	5.21%	1.64%	6.85%	3.28%
– Total Rate	4.35%	7.74%	3.39%	9.38%	5.03%
• Estimated Annual Amount ^{1*}	\$11,403,000	\$20,299,000	\$8,896,000	\$24,596,000	\$13,193,000

* Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 3
Scenario 3A: Estimated Impact of Maximum HIB Increased to Kaiser Senior Advantage Low Option Plan Premium
as of June 30, 2023

	Current Plan	Scenario 3A: Future Retirees Only	Change from Current Plan	Scenario 3A: Current and Future Retirees	Change from Current Plan
Funding Measures					
Valuation Value of Assets (VVA)	\$62,769,259	\$62,769,259		\$62,769,259	
Actuarial Accrued Liability (AAL)					
• Current recipients AAL	\$97,330,438	\$97,330,438	\$0	\$124,425,384	\$27,094,946
• Future recipients AAL	34,297,017	68,132,494	33,835,477	68,132,494	33,835,477
– Total AAL	\$131,627,455	\$165,462,932	\$33,835,477	\$192,557,878	\$60,930,423
UAAL (Total AAL – VVA)	\$68,858,196	\$102,693,673	\$33,835,477	\$129,788,619	\$60,930,423
Funding ratio (VVA / Total AAL)	47.69%	37.94%	(9.75%)	32.60%	(15.09%)
Aggregate Employer Contribution Rate (% of Payroll)					
• Employer Normal Cost	0.78%	2.04%	1.26%	2.04%	1.26%
• UAAL	3.57%	4.69%	1.12%	5.60%	2.03%
– Total Rate	4.35%	6.73%	2.38%	7.64%	3.29%
• Estimated Annual Amount ^{1*}	\$11,403,000	\$17,666,000	\$6,263,000	\$20,035,000	\$8,632,000

* Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 4
Scenario 4A: Estimated Impact of Adding Medicare Part B Reimbursement
for 2013 Tier Participants
as of June 30, 2023

	Current Plan	Scenario 4A: Future Retirees Only	Change from Current Plan	Scenario 4A: Current and Future Retirees	Change from Current Plan
Funding Measures					
Valuation Value of Assets (VVA)	\$62,769,259	\$62,769,259		\$62,769,259	
Actuarial Accrued Liability (AAL)					
• Current recipients AAL	\$97,330,438	\$97,330,438	\$0	\$97,387,489	\$57,051
• Future recipients AAL	34,297,017	40,424,744	6,127,727	40,424,744	6,127,727
– Total AAL	\$131,627,455	\$137,755,182	\$6,127,727	\$137,812,233	\$6,184,778
UAAL (Total AAL – VVA)	\$68,858,196	\$74,985,923	\$6,127,727	\$75,042,974	\$6,184,778
Funding ratio (VVA / Total AAL)	47.69%	45.57%	(2.12%)	45.55%	(2.14%)
Aggregate Employer Contribution Rate (% of Payroll)					
• Employer Normal Cost	0.78%	1.26%	0.48%	1.26%	0.48%
• UAAL	3.57%	3.77%	0.20%	3.77%	0.20%
– Total Rate	4.35%	5.03%	0.68%	5.03%	0.68%
• Estimated Annual Amount ^{1*}	\$11,403,000	\$13,187,000	\$1,784,000	\$13,192,000	\$1,789,000

* Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 5
Scenario 5A: Estimated Impact of Adding Dental & Vision Reimbursement
as of June 30, 2023

	Current Plan	Scenario 5A: Future Retirees Only	Change from Current Plan	Scenario 5A: Current and Future Retirees	Change from Current Plan
Funding Measures					
Valuation Value of Assets (VVA)	\$62,769,259	\$62,769,259		\$62,769,259	
Actuarial Accrued Liability (AAL)					
• Current recipients AAL	\$97,330,438	\$97,330,438	\$0	\$114,807,068	\$17,476,630
• Future recipients AAL	34,297,017	43,754,905	9,457,888	43,754,905	9,457,888
– Total AAL	\$131,627,455	\$141,085,343	\$9,457,888	\$158,561,973	\$26,934,518
UAAL (Total AAL – VVA)	\$68,858,196	\$78,316,084	\$9,457,888	\$95,792,714	\$26,934,518
Funding ratio (VVA / Total AAL)	47.69%	44.49%	(3.20%)	39.59%	(8.10%)
Aggregate Employer Contribution Rate (% of Payroll)					
• Employer Normal Cost	0.78%	1.10%	0.32%	1.10%	0.32%
• UAAL	3.57%	3.87%	0.30%	4.46%	0.89%
– Total Rate	4.35%	4.97%	0.62%	5.56%	1.21%
• Estimated Annual Amount ^{1*}	\$11,403,000	\$13,044,000	\$1,641,000	\$14,572,000	\$3,169,000

* Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6—Expanded
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 1A				
Increase in UAAL	\$2,186,261	\$10,771,483	\$26,665,253	\$37,436,736
Change in Funded Ratio	(0.78%)	(3.61%)	(8.03%)	(10.56%)
Increase in Annual Employer Cost	\$616,000	\$1,741,000	\$2,331,000	\$4,072,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	0.33%	0.33%	0.00%	0.33%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.29%	0.00%	0.29%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.16%	0.31%	0.00%	0.31%
• Increase in UAAL over all Payroll	0.07%	0.35%	0.89%	1.24%
– Increase in Total Rate over all Payroll	0.23%	0.66%	0.89%	1.55%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6— Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 2A				
Increase in UAAL	\$14,116,135	\$49,341,879	\$49,148,338	\$98,490,217
Change in Funded Ratio	(4.62%)	(13.00%)	(12.96%)	(20.41%)
Increase in Annual Employer Cost	\$4,211,000	\$8,896,000	\$4,297,000	\$13,193,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	2.25%	2.25%	0.00%	2.25%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	1.24%	0.00%	1.24%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	1.13%	1.75%	0.00%	1.75%
• Increase in UAAL over all Payroll	0.47%	1.64%	1.64%	3.28%
– Increase in Total Rate over all Payroll	1.60%	3.39%	1.64%	5.03%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6— Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 3A				
Increase in UAAL	\$10,362,478	\$33,835,477	\$27,094,946	\$60,930,423
Change in Funded Ratio	(3.48%)	(9.75%)	(8.14%)	(15.09%)
Increase in Annual Employer Cost	\$3,114,000	\$6,263,000	\$2,369,000	\$8,632,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	1.67%	1.67%	0.00%	1.67%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.84%	0.00%	0.84%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.85%	1.26%	0.00%	1.26%
• Increase in UAAL over all Payroll	0.34%	1.12%	0.91%	2.03%
– Increase in Total Rate over all Payroll	1.19%	2.38%	0.91%	3.29%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

² Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6— Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ^{1,2}	Current and Future Retirees All Tiers ^{1,2}
Scenario 4A				
Increase in UAAL	\$6,127,727	N/A	\$57,051	\$6,184,778
Change in Funded Ratio	(2.12%)	N/A	(0.02%)	(2.14%)
Increase in Annual Employer Cost	\$1,784,000	N/A	\$5,000	\$1,789,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ³	0.95%	N/A	0.00%	0.95%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ³	0.00%	N/A	0.00%	0.00%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ³				
• Increase in Employer Normal Cost over all Payroll	0.48%	N/A	0.00%	0.48%
• Increase in UAAL over all Payroll	0.20%	N/A	0.00%	0.20%
– Increase in Total Rate over all Payroll	0.68%	N/A	0.00%	0.68%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ Scenario 4A only applies to the 2013 Tier members.

² We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

³ Based on June 30, 2023 projected annual payroll as shown below:

Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

Exhibit 6— Expanded (continued)
Summary of Scenario Changes from Current Plan
as of June 30, 2023

	Future Retirees Only 2013 Tier Only	Future Retirees Only All Tiers	Current Retirees Only All Tiers ¹	Current and Future Retirees All Tiers ¹
Scenario 5A				
Increase in UAAL	\$2,449,762	\$9,457,888	\$17,476,630	\$26,934,518
Change in Funded Ratio	(0.87%)	(3.20%)	(5.59%)	(8.10%)
Increase in Annual Employer Cost	\$708,000	\$1,641,000	\$1,528,000	\$3,169,000
Increase in 2013 Tier Employer Normal Cost Rate (% of 2013 Tier Payroll) ²	0.38%	0.38%	0.00%	0.38%
Increase in 1955/1980 Tier Employer Normal Cost Rate (% of 1955/1980 Plan Tier Payroll) ²	0.00%	0.25%	0.00%	0.25%
Increase in Aggregate Employer Contribution Rate (% of Combined Payroll) ²				
• Increase in Employer Normal Cost over all Payroll	0.19%	0.32%	0.00%	0.32%
• Increase in UAAL over all Payroll	0.08%	0.30%	0.59%	0.89%
– Increase in Total Rate over all Payroll	0.27%	0.62%	0.59%	1.21%

Each scenario was valued independently from the other scenarios, with the impact of each compared to the June 30, 2023 valuation results.

¹ We note that as of June 30, 2023, there were only 10 retirees from the 2013 Tier.

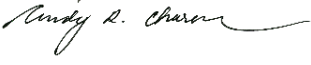
² Based on June 30, 2023 projected annual payroll as shown below:


Tier	Projected Payroll
1955/1980 Plan	\$129,488,164
2013 Tier	132,784,436
Combined	\$262,272,600

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: 2025 Retirement Board Meeting Calendar

The following are the proposed dates for 2025 Retirement Board Meetings. Consistent with the Board's longstanding schedule, most of these dates fall on the third Thursday of the odd-numbered months. The Retirement Board approved a resolution allowing the Retirement Board to meet on a different Thursday of the month when the third Thursday conflicts with the District Board meeting. The third Thursday of July 2025 falls in the middle of the Board of Directors' vacation period July 9, 2025 through August 11, 2025. Two Retirement Board members have requested that the July Retirement Board meeting be held July 10, 2025.

- January 23, 2025 – 4th Thursday
- March 20, 2025
- May 22, 2025 – 4th Thursday
- July 10, 2025 – 2nd Thursday
- September 18, 2025
- November 20, 2025

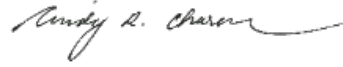
CC:LS:vw

EAST BAY MUNICIPAL UTILITY DISTRICT

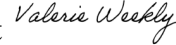
DATE: September 19, 2024

MEMO TO: Members of the Retirement Board

THROUGH: Cindy Charan, Director of Human Resources



FROM: Valerie Weekly, Principal Management Analyst, Retirement



SUBJECT: PensionGold (LRS) Implementation Project Update

SUMMARY

This memo provides ongoing status updates for the PensionGold (LRS) implementation project.

DISCUSSION

PROJECT SPONSOR UPDATE

HR Management is making strides in the following areas to build capacity and ensure that the project has the staffing support it needs:

- Engagement with an external consultant specializing in large technology transitions and implementations.
- Discussions on appropriate project resourcing with ISD and the Finance teams.

PRODUCT OWNER UPDATE

The project team continues to make progress, but the timeline has been delayed for reasons outlined below. The Project and Retirement Service teams are currently testing Software Deliverable Two: Pension Calculation and Communications. Software Deliverable Three: Pension Payroll design documents have been reviewed by the Payroll Team and will be reviewed by the Project team once testing is complete.

JULY AND AUGUST TASKS

- The Project team and Retirement Services are performing user acceptance testing on PensionGold's pension calculation functionality. Testing is taking longer than scheduled for a few reasons:
 - The complexity of testing the multitude of factors and scenarios included in the pension calculation.
 - Additional testing beyond the basic vendor test scripts to ensure the system is functioning properly.

- Insufficient detail in the test scripts and training materials provided by LRS. This has been communicated to LRS, and they have committed to providing better resources for future deliverables.
- The team has identified significant configuration setup issues and bugs during the testing, which we want resolved before exiting testing.
- Continued data clean-up, data conversion improvements and requested documentation improvements. This will be an ongoing activity.
- Continued escalations regarding plan administration and ordinance clarification.

PLANNED TASKS FOR SEPTEMBER

- Complete testing of Software Deliverable Two.
- Complete correspondence testing.
- Retest vendor solutions for issues identified in Software Deliverable One.
- Creation of data files from scanned images. This effort is essential to fill gaps in the data housed in PeopleSoft.
- Anticipated change control items surrounding the 401(h)/HIB configuration and customization and benefit changes for new Board of Directors, which were recently adopted.
- Future-state business process design regarding reinstatement, service purchase, plan-to-plan transfers and employer reporting.
- Testing for customizations approved and now developed for Software Deliverable One.

OPEN ISSUES

- Interviews have been conducted for the Product Owner (IS Business Systems Analyst position). A limited number of successful candidates were interviewed. The panel selected top candidates to meet the project team. An offer is pending.
- The HRIS Analyst II position should be available to the project team at the end of December 2024 so recruitment activities can begin.
- The Classification and Compensation unit are assessing the current project Analyst positions from an equity lens to determine if the current positions that are used interchangeably are equitable.

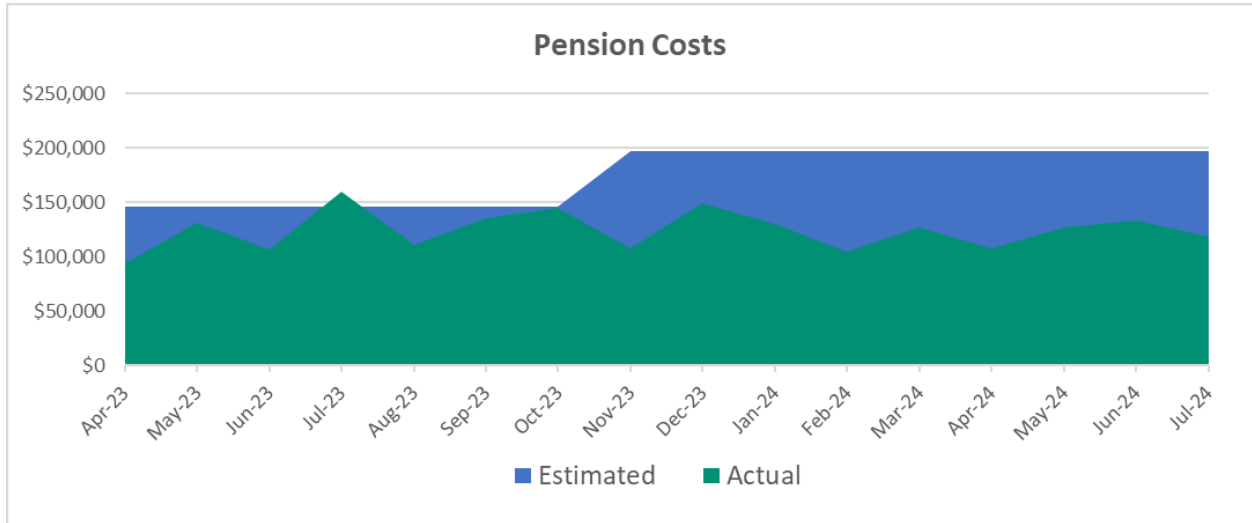
ACTIVE RISKS AND BUILDING STAFFING CAPACITY

The need for the HRIS Analyst II and IS Administrator positions continue to be acute.

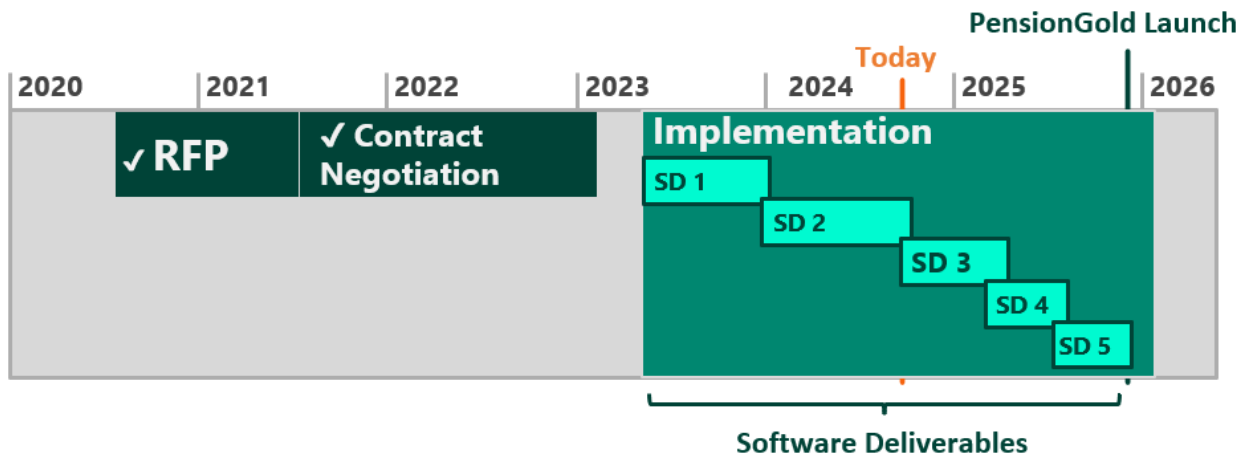
BUDGET UPDATE

Total Funding	June Expenses	Balance	
HRIS Capital \$11,575,000	\$ 0	\$5,683,000	No capital budget activity

Retirement \$10,500,000	\$ 113,000	\$6,392,000	Staffing costs
----------------------------	------------	-------------	----------------



SCHEDULE UPDATE



NEXT STEPS

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

CC:vw